CHAPTER 1

ADMINISTRATION

SECTION 101 GENERAL

- 101.1 Title. These regulations shall be known as the North Carolina Fire Code as approved by the North Carolina Building Code Council on September 13, 2005, to be effective July 1, 2006. References to the *International Code* shall mean the North Carolina Codes. References ICC A117.1 shall mean the North Carolina Accessibility Code. The North Carolina amendments to the *International Codes* are underlined.
- **101.2 Scope.** This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:
- 1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
- 2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises;
- 3. Fire hazards in the structure or on the premises from occupancy or operation;
 - 4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.
 - **101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted by the local governing authority having jurisdiction or referenced in this code.
 - **101.3 Intent.** The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises and to provide safety to fire fighters and emergency responders during emergency operations.
 - **101.4 Severability.** If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.
 - **101.5** Validity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions hereof, which are determined to be legal; and it shall be presumed that this code would have been adopted without such illegal or invalid parts or provisions.

SECTION 102 APPLICABILITY

- **102.1 Construction and design provisions.** The construction and design provisions of this code shall apply to:
 - 1. Structures, facilities and conditions arising after the adoption of this code.

- 2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
- 3. When the current North Carolina Building Codes require certain safety to life requirements for existing buildings, those requirements shall apply.
- 4. Existing structures, facilities and conditions which, in the opinion of the code official, constitute a distinct hazard to life or property.
- **102.2** Administrative, operational and maintenance provisions. The administrative, operational and maintenance provisions of this code shall apply to:
 - Conditions and operations arising after the adoption of this code.
 - 2. Existing conditions and operations.
- <u>102.3</u> Change of use or occupancy. The provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes shall apply to all buildings undergoing a change of occupancy.
- **102.4 Application of building code.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **102.5 Historic buildings.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **102.6 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 45 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.
- 102.7 Subjects not regulated by this code. Where no applicable standards or requirements are set forth in this code, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards, as approved, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the fire code official to determine compliance with codes or standards for those activities or installations within the code official's jurisdiction or responsibility.
- **102.8 Matters not provided for.** Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code shall be determined by the fire code official.

- **102.9 Conflicting provisions.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- **102.10 Exceptions to applicability.** The provisions of this code shall not apply to the following:
 - 1. Occupancy of one- and two-family dwellings.
 - 2. Farm buildings located outside the building rules jurisdiction of any municipality.
 - **Exception:** All buildings used for sleeping purposes shall conform to the provisions of the technical codes.
 - 3. The design, construction, location, installation or operation of equipment for storing, handling, and transporting liquefied petroleum gases for fuel purposes up to the first stage regulator, liquefied natural gases, and anhydrous ammonia or other liquid fertilizers.
 - 4. The design, construction, location, installation or operation of equipment or facilities of a public utility, as defined in General Statute 62-3, or an electric or telephone membership corporation, including without limitation poles, towers, and other structures supporting electric or communication lines from the distribution network up to the meter location.
 - **Exception:** All buildings owned and operated by a public utility or an electric or telephone membership corporation shall meet the provisions of the code.
 - 5. The Storage and Handling of Hazardous Chemicals Right to Know Act, North Carolina General Statute 95-173 through 95-218.
 - 6. Open burning pursuant to General Statute 113-60.21 through 113-60.31 under the jurisdiction of the Department of Environmental, Health and Natural Resources.

SECTION 103 DEPARTMENT OF FIRE PREVENTION

- **103.1 General.** The department of fire prevention is established within the jurisdiction under the direction of the fire code official. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.
- **103.2 Appointment.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **103.3 Deputies.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **103.4** Liability. See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
 - **103.4.1 Legal defense.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

SECTION 104 GENERAL AUTHORITY AND RESPONSIBILITIES

- **104.1 General.** The fire code official is hereby authorized to enforce the provisions of this code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code.
- **104.2 Applications and permits.** The fire code official is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.
- **104.3 Right of entry** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
 - **104.3.1 Warrant.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **104.4 Identification.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **104.5 Notices and orders.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **104.6 Official records.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.
- **104.7 Approved materials and equipment.** All materials, equipment and devices approved by the fire code official shall be constructed and installed in accordance with such approval.
 - **104.7.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused or reinstalled unless such elements have been reconditioned, tested and placed in good and proper working condition and approved.
 - 104.7.2 Technical assistance. To determine the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to inspection by the fire code official, the fire code official is authorized to require the owner or agent to provide, without charge to the jurisdiction, a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official and shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to recommend necessary changes. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.
- **104.8 Modifications.** See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

104.9 Alternative materials and methods. See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

104.10 Fire investigations. See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

104.11 Authority at fires and other emergencies. The fire chief or officer of the fire department in charge at the scene of a fire or other emergency involving the protection of life or property or any part thereof, shall have the authority to direct such operation as necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or take any other action necessary in the reasonable performance of duty. In the exercise of such power, the fire chief is authorized to prohibit any person, vehicle, vessel or thing from approaching the scene and is authorized to remove, or cause to be removed or kept away from the scene, any vehicle, vessel or thing which could impede or interfere with the operations of the fire department and, in the judgment of the fire chief, any person not actually and usefully employed in the extinguishing of such fire or in the preservation of property in the vicinity thereof.

104.11.1 Barricades. The fire chief or officer of the fire department in charge at the scene of an emergency is authorized to place ropes, guards, barricades or other obstructions across any street, alley, place or private property in the vicinity of such operation so as to prevent accidents or interference with the lawful efforts of the fire department to manage and control the situation and to handle fire apparatus.

104.11.2 Obstructing operations. No person shall obstruct the operations of the fire department in connection with extinguishment or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

104.11.3 Systems and devices. No person shall render a system or device inoperative during an emergency unless by direction of the fire chief or fire department official in charge of the incident.

SECTION 105 PERMITS

105.1 General. Permits shall be in accordance with Section 105.

105.1.1 Permits required. Permits required by this code shall be obtained from the fire code official. Permit fees, if any, shall be paid prior to issuance of the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official.

105.1.2 Types of permits. There shall be two types of permits as follows:

- 1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.6 for either:
 - 1.1. A prescribed period.
 - 1.2. Until renewed or revoked.

Operational permits listed as mandatory in Section 105.6 shall be obtained from the fire code official and are legally enforceable. For decisions on any appeals of the provisions of mandatory permits, see the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

Operational permits listed as optional in Section 105.6 must be adopted by local ordinance to be legally issued by the fire code official. A permit listed as optional does not make any of the technical provisions of this code optional.

Decisions on any appeals of the provisions of optional permits which are adopted by local ordinance shall be issued by the local governing body having jurisdiction.

Construction permit. A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by Section 105.7.

105.1.3 Permits for the same location. When more than one permit is required for the same location, the fire code official is authorized to consolidate such permits into a single permit provided that each provision is listed in the permit.

105.2 Application. Application for a permit required by this code shall be made to the fire code official in such form and detail as prescribed by the fire code official. Applications for permits shall be accompanied by such plans as prescribed by the fire code official.

105.2.1 Refusal to issue permit. If the application for a permit describes a use that does not conform to the requirements of this code and other pertinent laws and ordinances, the fire code official shall not issue a permit, but shall return the application to the applicant with the refusal to issue such permit. Such refusal shall, when requested, be in writing and shall contain the reasons for refusal.

105.2.2 Inspection authorized. Before a new operational permit is approved, the fire code official is authorized to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required.

105.2.3 Time limitation of application. See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

105.2.4 Action on application. The fire code official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the fire code official shall reject such application in writing, stating the reasons therefor. If the fire code official is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the fire code official shall issue a permit therefore as soon as practicable.

105.3 Conditions of a permit. A permit shall constitute permission to maintain, store or handle materials; or to conduct processes which produce conditions hazardous to life or property; or to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by Section 105.6 or 105.7. Such permission shall not be construed as authority to violate, cancel or set aside any of the provisions of this code or other applicable regulations or laws of the jurisdiction.

105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked or for such a period of time as specified in the permit. Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued.

105.3.2 Extensions. A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The fire code official is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 90 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.

105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the fire code official issuing a permit that indicates that applicable provisions of this code have been met.

105.3.4 Conditional permits. Where permits are required and upon the request of a permit applicant, the fire code official is authorized to issue a conditional permit to occupy the premises or portion thereof before the entire work or operations on the premises is completed, provided that such portion or portions will be occupied safely prior to full completion or installation of equipment and operations without endangering life or public welfare. The fire code official shall notify the permit applicant in writing of any limitations or restrictions necessary to keep the permit area safe. The holder of a conditional permit shall proceed only to the point for which approval has been given, at the permit holder's own risk and without assurance that approval for the occupancy or the utilization of the entire premises, equipment or operations will be granted.

105.3.5 Posting the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official.

105.3.6 Compliance with code. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the fire code official from requiring the correction of errors in the construction documents and other data. Any addition to or alteration of approved construction documents shall be approved in advance by the fire code official, as evidenced by the issuance of a new or amended permit.

105.3.7 Information on the permit. The fire code official shall issue all permits required by this code on an approved form furnished for that purpose. The permit shall contain a general description of the operation or occupancy and its location and any other information required by the fire code official. Issued permits shall bear the signature of the fire code official or other approved legal authorization.

105.4 Construction documents. See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

105.5 Revocation. The fire code official is authorized to revoke a permit issued under the provisions of this code when it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or construction documents on which the permit or approval was based including, but not limited to, any one of the following:

- 1. The permit is used for a location or establishment other than that for which it was issued.
- 2. The permit is used for a condition or activity other than that listed in the permit.
- Conditions and limitations set forth in the permit have been violated.
- 4. There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit.
- 5. The permit is used by a different person or firm than the name for which it was issued.
- 6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.
- The permit was issued in error or in violation of an ordinance, regulation or this code.

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 105.6.47.

105.6.1 Aerosol products. Optional Permit. 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. Mandatory Permit. An operational permit is required to operate a special amusement building.

105.6.3 Aviation facilities. Optional Permit. 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. Mandatory Permit. An operational permit is required to conduct a carnival or fair.

105.6.5 Battery systems. Optional Permit. A permit is required to install stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L).

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

105.6.7 Combustible dust-producing operations. Mandatory Permit. 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.

105.6.8 Combustible fibers. Optional Permit. 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.

105.6.9 Compressed gases. Optional Permit. 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 105.6.9.

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

TABLE 105.6.9
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
Toxic	Any Amount

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

105.6.10 Covered mall buildings. Mandatory Permit. 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.
- The display of liquid- or gas-fired equipment in the mall
- 3. The use of open-flame or flame-producing equipment in the mall.

105.6.11 Cryogenic fluids. Optional Permit. 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 105.6.11.

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 105.6.11
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.

105.6.12 Cutting and welding. Optional Permit. An operational permit is required to conduct cutting or welding operations within the jurisdiction.

105.6.13 Dry cleaning plants. Optional Permit. 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.

105.6.14 Exhibits and trade shows. Mandatory Permit. An operational permit is required to operate exhibits and trade shows.

105.6.15 Explosives. Mandatory Permit. An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of explosive, explosive material, fireworks or pyrotechnic special effects within the scope of Chapter 33.

Exceptions:

- 1. Fireworks allowed by North Carolina General Statute 14-414.
- 2. 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.

105.6.16 Fire hydrants and valves. Optional Permit. 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.

105.6.17 Flammable and combustible liquids. An operational permit is required:

- 1. **Optional Permit.** 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. Optional Permit. 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. Optional Permit. 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. Optional Permit. To remove Class I or Class 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.
- Mandatory Permit. 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.
- 6. Mandatory Permit. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
- 7. Mandatory Permit. To change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than that for which the tank was designed and constructed.
- 8. **Mandatory Permit.**To manufacture, process, blend or refine flammable or combustible liquids.

- 9. **Mandatory Permit.** To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
- 10. Mandatory Permit. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
- **105.6.18 Floor finishing.** Optional Permit. An operational permit is required for floor finishing or surfacing operations exceeding 350 square feet (33 m²) using Class I or Class II liquids.
- **105.6.19 Fruit and crop ripening.** Optional Permit. An operational permit is required to operate a fruit-, or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.
- **105.6.20 Fumigation and thermal insecticidal fogging. Mandatory Permit.** 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.
- **105.6.21 Hazardous materials.** Optional Permit. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table 105.6.21.
- **105.6.22 HPM facilities. Optional Permit.** An operational permit is required to store, handle or use hazardous production materials.
- **105.6.23 High-piled storage. Optional Permit.** An operational permit is required to use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 m²).
- **105.6.24 Hot work operations. Optional Permit.** An operational permit is required for hot work including, but not limited to:
 - Public exhibitions and demonstrations where hot work is conducted.
 - 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 hazardous fire 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.

105.6.25 Industrial ovens. Optional Permit. An operational permit is required for operation of industrial ovens regulated by Chapter 21.

105.6.26 Lumber yards and woodworking plants. **Optional Permit.** An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft³) (236 m³).

105.6.27 Liquid- or gas-fueled vehicles or equipment in assembly buildings. Mandatory Permit. An operational

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

105.6.28 LP-gas. A permit may be required and issued by the North Carolina Department of Agriculture for LP-gas equipment used for storage, handling, transporting, and utilizing liquefied petroleum gas for fuel purposes.

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

105.6.30 Miscellaneous combustible storage. Optional Permit. An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet

TABLE 105.6.21 PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section 105.6.17
Corrosive materials Gases Liquids Solids	See Section 105.6.9 55 gallons 1000 pounds
Explosive materials	See Section 105.6.15
Flammable materials Gases Liquids Solids	See Section 105.6.9 See Section 105.6.17 100 pounds
Highly toxic materials Gases Liquids Solids	See Section 105.6.9 Any Amount Any Amount
Oxidizing materials Gases Liquids Class 4	See Section 105.6.9
Class 4 Class 3 Class 2	Any Amount 1 gallon ^a 10 gallons
Class 1 Solids	55 gallons
Class 4 Class 3	Any Amount 10 pounds ^b
Class 2 Class 1	100 pounds 500 pounds
Organic peroxides Liquids	
Class I Class II Class III	Any Amount Any Amount
Class III Class IV Class V	1 gallon 2 gallons No Permit Required
Solids Class I	Any Amount
Class II Class III	Any Amount 10 pounds
Class IV Class V	20 pounds No Permit Required

(continued)

(71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.

105.6.31 Open burning. Optional Permit. 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.

105.6.32 Open flames and torches. Optional Permit. An operational permit is required to remove paint with a torch; or to use a torch or open-flame device in a hazardous fire area.

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

105.6.34 Organic coatings. Optional Permit. An operational permit is required for any organic-coating manufac-

turing operation producing more than 1 gallon (4 L) of an organic coating in one day.

105.6.35 Places of assembly. Optional Permit. An operational permit is required to operate a place of assembly.

105.6.36 Private fire hydrants. Mandatory Permit. 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.

105.6.37 Pyrotechnic special effects material. <u>Mandatory Permit.</u> An operational permit is required for use and handling of pyrotechnic special effects material.

105.6.38 Pyroxylin plastics. Optional Permit. 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.

TABLE 105.6.21—continued PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

TYPE OF MATERIAL	AMOUNT
Pyrophoric materials	
Gases	See Section 105.6.9
Liquids	Any Amount
Solids	Any Amount
Toxic materials	
Gases	See Section 105.6.9
Liquids	10 gallons
Solids	100 pounds
Unstable (reactive) materials	
Liquids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	5 gallons
Class 1	10 gallons
Solids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	50 pounds
Class 1	100 pounds
Water-reactive Materials	
Liquids	
Class 3	Any Amount
Class 2	5 gallons
Class 1	55 gallons
Solids	
Class 3	Any Amount
Class 2	50 pounds
Class 1	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.

105.6.39 Refrigeration equipment. Optional Permit. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

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

105.6.41 Rooftop heliports. Optional Permit. An operational permit is required for the operation of a rooftop heliport.

105.6.42 Spraying or dipping. Mandatory Permit. 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 15.

105.6.43 Storage of scrap tires and tire byproducts. Optional Permit. 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.

105.6.44 Temporary membrane structures, tents and canopies. Mandatory Permit. An operational permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of 200 square feet (19 m²), or a canopy in excess of 400 square feet (37 m²).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Fabric canopies open on all sides which comply with all of the following:
 - 2.1. Individual canopies having a maximum size of 700 square feet (65 m²).
 - 2.2. The aggregate area of multiple canopies 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.

105.6.45 Tire-rebuilding plants. Optional Permit. An operational permit is required for the operation and maintenance of a tire-rebuilding plant.

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

105.6.47 Wood products. Optional Permit. 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 105.7.12. See the provisions of the North Carolina Administrative Code and Policies and applica-

ble North Carolina General Statutes for general information concerning construction permits.

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 Compressed gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.9, 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.
- For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan filed pursuant to Section 2701.6.3. The 30-day period is not applicable when approved based on special circumstances requiring such waiver.

105.7.3 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.

105.7.4 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.

105.7.5 Flammable and combustible liquids. A construction permit is required:

- 1. To repair or modify a pipeline for the transportation of flammable or combustible liquids.
- 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.

105.7.6 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

27 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.21.

Exceptions:

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

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

Exceptions:

- 1. 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.
- **105.7.8 LP-gas.** A construction permit required for installation of or modification to an LP-gas system <u>may be required</u> and approved by the North Carolina Department of Agriculture.
- **105.7.9 Private fire hydrants.** A construction permit is required for the installation or modification of private fire hydrants.
- **105.7.10 Spraying or dipping.** A construction permit is required to install or modify a spray room, dip tank or booth.
- **105.7.11 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.
- **105.7.12 Temporary membrane structures, tents and canopies.** A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 200 square feet (19 m²), or a canopy 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. Fabric canopies and awnings open on all sides which comply with all of the following:
 - 3.1. Individual canopies shall have a maximum size of 700 square feet (65 m²).
 - 3.2. The aggregate area of multiple canopies 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.

SECTION 106 INSPECTION SCHEDULES

In order to preserve and to protect public health and safety, and to satisfy the requirements of General Statute 153A-364 and General Statute 160A-424, political subdivisions assuming inspection duties, as set out in General Statute 153A-351 and General Statute 160A-411, shall have a periodic inspection schedule for the purpose of identifying activities and conditions in buildings, structures, and premises that pose dangers of fire, explosion, or related hazards. Such inspection schedule shall be approved by the local governing body and shall be submitted to the Division of Engineering of the Department of Insurance. In no case may inspections be conducted less frequently than described in the schedule below:

Once every year

Hazardous, Institutional,
High-Rise, Assembly except
those noted below, and Residential except one- and twofamily dwellings and only interior common areas of dwelling
units of multifamily occupan-

cies.

(Except public schools)

occupant load less than 100, Business, Mercantile, Storage, Churches, Synagogues, and miscellaneous Group U occu-

pancies.

Frequency rates for inspections of occupancies as mandated by the North Carolina General Statutes shall supersede this schedule. Nothing in this section is intended to prevent a jurisdiction from conducting more frequent inspections than the schedule listed above or the schedule filed with the Engineering Division of the North Carolina Department of Insurance.

On unattended or abandoned structures, the fire official shall affix a letter on the premises in a conspicuous place at or near the entrance to such premises requesting an inspection in accordance with Section 107 of this code. This order of notice shall be mailed by registered or certified mail, with return receipt requested, to the last known address of the owner, occupant, or both. If the owner, occupant or both shall fail to respond to said notice within ten (10) calendar days, these actions by the fire official shall be deemed to constitute an inspection in accordance with this section.

SECTION 107 MAINTENANCE

107.1 Maintenance of safeguards. Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this code, or otherwise installed, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be continuously maintained in accordance with this code and applicable referenced standards.

- **107.2 Testing and operation.** Equipment requiring periodic testing or operation to ensure maintenance shall be tested or operated as specified in this code.
 - **107.2.1 Test and inspection records.** Required test and inspection records shall be available to the fire code official at all times or such records as the fire code official designates shall be filed with the fire code official.
 - **107.2.2 Reinspection and testing.** Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the fire code official for inspection and testing.
- **107.3 Supervision.** Maintenance and testing shall be under the supervision of a responsible person who shall ensure that such maintenance and testing are conducted at specified intervals in accordance with this code.
- **107.4 Rendering equipment inoperable.** Portable or fixed fire-extinguishing systems or devices and fire-warning systems shall not be rendered inoperative or inaccessible except as necessary during emergencies, maintenance, repairs, alterations, drills or prescribed testing.
- **107.5** Owner/occupant responsibility. Correction and abatement of violations of this code shall be the responsibility of the owner. If an occupant creates, or allows to be created, hazardous conditions in violation of this code, the occupant shall be held responsible for the abatement of such hazardous conditions.
- **107.6 Overcrowding.** Overcrowding or admittance of any person beyond the approved capacity of a building or a portion thereof shall not be allowed. The fire code official, upon finding any overcrowding conditions or obstructions in aisles, passageways or other means of egress, or upon finding any condition which constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected.

SECTION 108 BOARD OF APPEALS

See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

SECTION 109 VIOLATIONS

For violations of the North Carolina Fire Prevention Code or a local Fire Prevention Code that has received prior approval of the Building Code Council, either the local fire official or the State Commissioner of Insurance or other state official with responsibility under General Statute 143-139 may, in addition to other remedies, institute any appropriate action or proceedings, including civil remedies set out in General Statute 160A-175 or General Statute 153A-123, that have been adopted as ordinances within that jurisdiction.

SECTION 110 UNSAFE BUILDINGS

- 110.1 General. If during the inspection of a premises, a building or structure or any building system, in whole or in part, constitutes a clear and inimical threat to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section and shall refer the building to the building department for any repairs, alterations, remodeling, removing or demolition required.
 - 110.1.1 Unsafe conditions. Structures or existing equipment that are or hereafter become unsafe or deficient because of inadequate means of egress or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. A vacant structure which is not secured against unauthorized entry as required by Section 311 shall be deemed unsafe.
 - **110.1.2 Structural hazards.** When an apparent structural hazard is caused by the faulty installation, operation or malfunction of any of the items or devices governed by this code, the fire code official shall immediately notify the building code official in accordance with Section 110.1.
- 110.2 Evacuation. The fire code official or the fire department official in charge of an incident shall be authorized to order the immediate evacuation of any occupied building deemed unsafe when such building has hazardous conditions that present imminent danger to building occupants. Persons so notified shall immediately leave the structure or premises and shall not enter or re-enter until authorized to do so by the fire code official or the fire department official in charge of the incident.
- **110.3 Summary abatement.** Where conditions exist that are deemed hazardous to life and property, the fire code official or fire department official in charge of the incident is authorized to abate summarily such hazardous conditions that are in violation of this code.
- **110.4 Abatement.** The owner, operator, or occupant of a building or premises deemed unsafe by the fire code official shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other approved corrective action.

SECTION 111 STOP WORK ORDER

See the provisions of the North Carolina Administrative Code and Policies and applicable North Carolina General Statutes.

SECTION 112 MAINTAINING A FIRE HAZARD

112.1 Fire hazard. No person shall knowingly maintain a fire hazard.

SECTION 113 LOCAL GOVERNMENT MODIFICATION

113.1 General. General Statute 143-138 (e) allows local governments to regulate activities and conditions that pose dangers of fire, explosion or related hazards. Any regulation adopted by local ordinance shall not conflict with the State Building Code and must be submitted and approved by the Building Code Council before it becomes effective. The Council has adopted the policy not to print all local modifications in the Statewide Fire Prevention Code, but to list the local government and the date the modification was approved. Copies of the Council minutes and the approved modification may be obtained from the local government or from the North Carolina Department of Insurance. Copies obtained from the Department of Insurance will be \$0.50 per sheet.

113.2 Local government modification approved by the Building Code Council.