INDIANA
FIRE CODE

2003 EDITION
675 IAC 22-2.3
Indiana Fire Code, 2003 Edition

Adoption by reference

Sec. 1. That a certain document being titled the International Fire Code, 2000 Edition, fourth printing, as published by the International Fire Code Institute and the International Code Council, Inc., 5203 Leesburg Pike, Suite 708, Falls Church, Virginia 22041-3401, is hereby adopted by reference as if fully set out in this rule save and except those revisions made in sections 3 through 342 of this rule.

(675 IAC 22-2.3-1) Eff: May 17, 2003

Section 101.1; title; availability

Sec. 2. Delete Section 101.1 in its entirety and substitute the following: 101.1 Title; Availability.

(a) This rule shall be known as the 2003 Indiana Fire Code, and shall be published, except incorporated documents, by the Department of Fire and Building Services for general distribution and use under that title. Wherever the term "this code" is used throughout this rule, it shall mean the 2003 Indiana Fire Code.

(b) This rule and incorporated documents therein are available to review and as reference at the Department of Fire and Building Services, Indiana Government Center-South, 402 West Washington Street, Room W246, Indianapolis, Indiana 46204.

(675 IAC 22-2.3-2) Eff: May 17, 2003

Section 101.2; scope

Sec. 3. Delete Section 101.2 and substitute the following: The provisions of this code shall apply to existing conditions as well as to conditions arising after the adoption thereof. Buildings, systems, and uses legally in existence at the adoption of this code shall be permitted to continue so long as they are maintained in a condition that is equivalent to the quality and fire resistive characteristics that existed when the building was constructed, altered, added to, or repaired.

(675 IAC 22-2.3-3) Eff: May 17, 2003

Section 101.3; intent

Sec. 4. Delete Section 101.3 in its entirety and substitute to read as follows: 101.3 Intent. The intent of this code is to prescribe maintenance, new construction requirements and operational rules for the safeguarding to a reasonable degree, of life and property from the hazards of fire or explosion arising from the storage, handling, or use of substances, materials, and devices.

(675 IAC 22-2.3-4) Eff: May 17, 2003

Section 102; applicability

Sec. 5. Delete Section 102.1, Section 102.2, Section 102.3, Section 102.4, Section 102.5, Section 102.7, Section 102.8, and Section 102.9 without substitution.

(675 IAC 22-2.3-5) Eff: May 17, 2003

Section 103; department of fire prevention

Sec. 6. Delete Section 103; Department of Fire Prevention.

(675 IAC 22-2.3-6) Eff: May 17, 2003

Sections 104.1, 104.2, 104.3, 104.3.1, 104.4, 104.5, 104.6, 104.6.1, 104.6.2, 104.6.3, 104.6.4; general, applications and permits, right of entry, warrant, identification, notices and orders, official records, approvals and variances, inspections, fire records, administrative

Sec. 7. Delete Sections 104.1 through 104.6 without substitution.

(675 IAC 22-2.3-7) Eff: May 17, 2003

Section 104.7; approved materials and equipment

Sec. 8. Delete the text of Section 104.7 and substitute the following: 104.7 Approval. Wherever in this code the State Fire Marshal, his deputies, or the chief of the fire department or code official are authorized to approve any location, method, material, system, or product in achieving compliance with this code, that decision shall be based on the following:

(1) Investigation or tests conducted by recognized authorities; or
(2) Investigation or tests conducted by technical or scientific organizations; or 
(3) Accepted principles.
The investigation, tests or principles shall establish that the materials, equipment and types of construction are safe for their intended purpose. (675 IAC 22-2.3-8) Eff: May 17, 2003

Section 104.7.1; material and equipment reuse

Sec. 9. Delete Section 104.7.1. (675 IAC 22-2.3-9) Eff: May 17, 2003

Section 104.7.2; technical assistance

Sec. 10. In Section 104.7.2, delete the last sentence. (675 IAC 22-2.3-10) Eff: May 17, 2003

Sections 104.8, 104.9, 104.10, 104.10.1; modifications, alternative materials and methods, fire investigations, assistance from other agencies

Sec. 11. Delete Sections 104.8 through 104.10.1 without substitution. (675 IAC 22-2.3-11) Eff: May 17, 2003

Section 105; permits

Sec. 12. Delete Section 105 without substitution. (675 IAC 22-2.3-12) Eff: May 17, 2003

Section 106; inspections

Sec. 13. Delete Section 106 without substitution. (675 IAC 22-2.3-13) Eff: May 17, 2003

Section 107.1; maintenance of safeguards

Sec. 14. Delete Section 107.1 without substitution. (675 IAC 22-2.3-14) Eff: May 17, 2003

Section 107.2; test and inspection records

Sec. 15. Amend Section 107.2.1 Test and Inspection Records to read as follows: Written records of maintenance, test, and inspections shall be maintained on the premises where the equipment is located, or at a corporate central office and shall be made immediately available to the inspection authority on request. (675 IAC 22-2.3-15) Eff: May 17, 2003

Sections 108, 109, 110, 111; board of appeals, violations, unsafe buildings, stop work order

Sec. 16. Delete Sections 108 through 111 without substitution. (675 IAC 22-2.3-16) Eff: May 17, 2003
Section 201.3; terms defined in other codes

Sec. 17. Delete the text of Section 201.3 Terms defined in other codes and substitute to read as follows: Where terms are not defined in this code and are defined in the Indiana Building Code (675 IAC 13), Indiana Electrical Code (675 IAC 17), Indiana Fuel Gas Code (675 IAC 25), Indiana Mechanical Code (675 IAC 18), or Indiana Plumbing Code (675 IAC 16), such terms shall have the meanings ascribed to them as in those codes. (675 IAC 22-2.3-17) Eff: May 17, 2003

Section 201.3.1; terms defined in other codes

Sec. 18. Add Section 201.3.1 to read as follows:
201.3.1. Terms defined in other codes.

1. ICC ELECTRICAL CODE. Refers to the Indiana Electrical Code (675 IAC 17).
2. INTERNATIONAL BUILDING CODE refers to the INDIANA BUILDING CODE (675 IAC 13).
3. INTERNATIONAL MECHANICAL CODE refers to the INDIANA MECHANICAL CODE (675 IAC 18).
4. INTERNATIONAL FUEL GAS CODE refers to the INDIANA FUEL GAS CODE (675 IAC 25).
5. INTERNATIONAL PLUMBING CODE refers to the INDIANA PLUMBING CODE (675 IAC 16).

(675 IAC 22-2.3-18) Eff: May 17, 2003

Section 202; general definitions

Sec. 19. In Section 202, change the following definitions to read:

1. APPROVED. As to materials, equipment, design, and types of construction, acceptance by the code official by one of the following methods:
   (1) Investigation or tests conducted by recognized authorities; or
   (2) Investigation or tests conducted by technical or scientific organizations; or
   (3) Accepted principles.
The investigation, tests or principal shall established that the materials, equipment and types of construction are safe for the intended purpose.
2. AUTOMOTIVE SERVICE STATION to read MOTOR FUEL DISPENSING FACILITY. See Section 2202.1.
3. CODE OFFICIAL. The office of the state building commissioner as authorized under IC 22-15-2-7; the office of the state fire marshal as authorized under IC 22-14-2-10; the local building official as authorized under IC 36-7-2-9 and local ordinance; the fire department as authorized under IC 36-8-17-9.
4. FACILITY. A building or use in a fixed location, including exterior storage areas for flammable and combustible substances and hazardous materials, piers, wharves, tank farms and similar uses.
5. HIGH VOLATILE LIQUID. A liquefied compressed gas with a boiling point of less than 65°F (20°C).
6. MARINE SERVICE STATION. MARINE MOTOR FUEL DISPENSING FACILITY. See Section 2202.1.
7. OCCUPANCY CLASSIFICATION. Occupancy classification shall be as specified in the Building Code in effect at the time of construction, alteration, or change of occupancy.
8. REGISTERED DESIGN PROFESSIONAL. An architect who is registered under IC 25-4 or professional engineer registered under IC 25-31. If a registered design professional is not required by 675 IAC 12-6 or 675 IAC 15, then it means the owner.

(675 IAC 22-2.3-19) Eff: May 17, 2003

Section 202; general definitions

Sec. 20. In Section 202, delete the following definitions: CONSTRUCTION DOCUMENTS, FIRE ALARM, AND SPECIAL AMUSEMENT BUILDING. (675 IAC 22-2.3-20) Eff: May 17, 2003

Section 202; general definitions

Sec. 21. In Section 202, add the following definitions:

1. BUILDING CODE. The building code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of a structure.
2. CHIEF: See CODE OFFICIAL.
3. COMMISSION is the Indiana Fire Prevention and Building Safety Commission as set forth at IC 22-12-2-1.
4. COMPATIBLE is approved equipment which functions effectively with other approved equipment within an alarm system.
5. CONTROL UNIT is a combination of equipment which contains the primary and secondary power supplies, receives signals from initiating devices, transmits signals to signaling devices, and electrically supervises the system circuitry.
6. ELECTRICAL CODE is the electrical code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of a structure.
FIRE ALARM SYSTEM. A Combination of approved equipment which with operation of an alarm initiating device produces an alarm signal.

FLAME RESISTANT MATERIAL is material that has been modified in its chemical composition by impregnation, coating or has inherent composition that makes the material resistant to ignition and combustion when exposed to a small ignition source.

FLAME RETARDANT. An approved chemical, chemical compound or mixture which, when applied in an approved manner to any fabric or other material, will render such fabric or material incapable of supporting combustion.

INSPECTION AUTHORITY. See CODE OFFICIAL.

MECHANICAL CODE. The mechanical code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of a structure.

PLUMBING CODE. The plumbing code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of a structure.

QUALIFIED INDIVIDUAL is a person who has successfully completed instruction related to the equipment being installed, serviced, or repaired.

SERVICING FIRE DEPARTMENT: See CODE OFFICIAL.

TRAINED PERSONNEL (Individual): See QUALIFIED PERSONNEL (Individual).

(675 IAC 22-2.3-21) Eff: May 17, 2003
Section 301.2; permits

Sec. 22. Delete Section 301.2 Permits without substitution. (675 IAC 22-2.3-22) Eff: May 17, 2003

Section 304.2; storage

Sec. 23. Amend Section 304.2 Storage to read as follows: Storage of combustible rubbish shall not produce conditions that will create a fire hazard that endangers the safety of persons or property. (675 IAC 22-2.3-23) Eff: May 17, 2003

Section 307.2; permits

Sec. 24. Amend Section 307.2 to read as follows: Notification. Prior to commencement of open burning, the fire department having jurisdiction shall be notified. (675 IAC 22-2.3-24) Eff: May 17, 2003

Section 307.2.1; authorization

Sec. 24.1. Delete Section 307.2.1. (675 IAC 22-2.3-24.1) Eff: May 17, 2003

Section 307.2.2; prohibited open burning

Sec. 25. Amend Section 307.2.2 to read as follows: Discontinuance. The chief is authorized to require open burning be immediately discontinued if such fires constitute a hazardous condition. (675 IAC 22-2.3-25) Eff: May 17, 2003

Section 307.2.3; material restrictions

Sec. 26. Add Section 307.2.3 to read as follows: Material restrictions. Open burning of rubbish containing paper products is prohibited. (675 IAC 22-2.3-26) Eff: May 17, 2003

Section 307.4; attendance

Sec. 27. Amend Section 307.4 to read as follows: Burning material shall be constantly attended by a person knowledgeable in the use of the fire-extinguishing equipment required by this section and familiar with any limitations which restrict open burning. An attendant shall supervise the burning material until the fire has been extinguished. (675 IAC 22-2.3-27) Eff: May 17, 2003

Section 308.3; open flame

Sec. 28. Amend Section 308.3 by deleting "obtaining a permit in accordance with Section 105.6" and substituting "notifying the fire department having jurisdiction". (675 IAC 22-2.3-28) Eff: May 17, 2003

Section 308.3.4; religious ceremonies

Sec. 29. In section 308.3.4, delete "in the opinion of the code official, adequate" and substitute "approved". (675 IAC 22-2.3-29) Eff: May 17, 2003

Section 308.4.1; approval

Sec. 30. Amend Section 308.4.1 to read as follows: Prior to using a torch or flame-producing device to remove paint from a structure, the fire department having jurisdiction shall be notified. (675 IAC 22-2.3-30) Eff: May 17, 2003

Section 308.5; open-flame devices

Sec. 31. Amend Section 308.5 to read as follows: In the first sentence, delete all text after "hazardous fire areas, except" and substitute "when approved". (675 IAC 22-2.3-31) Eff: May 17, 2003

Section 310.2; prohibited areas

Sec. 32. Amend Section 310.2 to read as follows: Whenever smoking constitutes a fire hazard in any area of piers, wharfs, warehouses, stores, industrial plants, institutions, schools, places of assembly, and in open spaces where combustible materials are stored or handled, the chief is authorized to order the owner or occupant to post approved NO SMOKING signs in each building, structure, room, or place in which smoking is prohibited. Such signs shall be conspicuously and suitably located and shall be maintained.

EXCEPTIONS: 1. Buildings or structures which are smoke-free environments and are posted as such at all public and employee entrances.
2. No visible evidence of prohibited smoking exists within the building or structure. (675 IAC 22-2.3-32) Eff: May 17, 2003

Section 311.1.1; abandoned premises

Sec. 32.1. Delete Section 311.1.1. (675 IAC 22-2.3-32.1) Eff: May 17, 2003

Section 311.2.2; fire protection
Sec. 33. Amend Section 311.2.2 by deleting exceptions 1 and 2. (675 IAC 22-2.3-33) Eff: May 17, 2003

Section 313.1; vehicle storage

Sec. 34. Amend Section 313.1, Exception 1 by deleting "See Section 8-4 of NFPA 58 (675 IAC 22-2.2-14)" and substituting "Section 15 of this code". (675 IAC 22-2.3-34) Eff: May 17, 2003

Section 315.1; general

Sec. 35. Amend Section 315.1 by deleting the last sentence. (675 IAC 22-2.3-35) Eff: May 17, 2003

Section 316; outdoor carnivals and fairs

Sec. 36. Add Section 316 Outdoor Carnivals and Fairs to read as follows:

SECTION 316. CARNIVALS AND FAIRS
316.1 General. The grounds of carnivals and fairs, including concession booths, shall be in accordance with Section 316.
316.2 Grounds.
316.2.1 General. Grounds shall be in accordance with Section 316.2.
316.2.2 Access. Fire apparatus access roads shall be provided in accordance with Section 316.2.
316.2.3 Fire appliances. 316.2.3.1 General. Fire appliances shall be provided for the entire midway, as required by the chief.
316.2.3.2 Location. Maximum travel distance to a portable fire extinguisher shall not exceed seventy-five (75) feet (22,860 mm).
316.2.4 Electrical equipment. Electrical equipment and installations shall comply with the Electrical Code (675 IAC 17).
316.3 Concession Stands.
316.3.1 General. Concession stands shall be in accordance with Section 316.3.
316.3.2 Location. Concession stands utilized for cooking shall have a minimum of ten (10) feet (3,048 mm) of clearance on two (2) sides and shall not be located within ten (10) feet (3,048 mm) of amusement rides or devices.
316.3.3 Fire extinguishers. A 40-B:C-rated dry chemical fire extinguisher shall be provided where deep-fat fryers are used.
316.4 Internal Combustion Power Sources.
316.4.1 General. Internal combustion power sources, including motor vehicles, generators and similar equipment, shall be in accordance with Section 316.4.

315.4.2 Fueling. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Refueling shall be conducted only when the ride is not in use.
316.4.3 Protection. Internal combustion power sources shall be isolated from contact with the public by either physical guards, fencing or an enclosure.
316.4.4 Fire extinguishers. A minimum of one (1) fire extinguisher with a rating of not less than 2-A:10-B:C shall be provided. (675 IAC 22-2.3-36) Eff: May 17, 2003
Section 408.7.3; notification

Sec. 37. Change Section 408.7.3 to read as follows: Provisions shall be made for residents in Use Conditions 3, 4, and 5 as defined in the Indiana Building Code (675 IAC 13) Section 308.4 to immediately notify staff of an emergency. (675 IAC 22-2.3-37) Eff: May 17, 2003

Section 408.8.1; evacuation diagrams

Sec. 37.1 Amend Section 408.8.1 by adding "in accordance with Appendix A-1" after "diagram" and before "depicting". (675 IAC 22-2.3-37.1) Eff: May 17, 2003
Section 501.2; permits
Sec. 38. Delete Section 501.2 without substitution. (675 IAC 22-2.3-38) Eff: May 17, 2003

Section 501.3; construction documents
Sec. 39. In Section 501.3, delete "and approval" without substitution. (675 IAC 22-2.3-39) Eff: May 17, 2003

Section 503.1.1; buildings and facilities
Sec. 40. Change Section 503.1.1 as follows: Delete the EXCEPTION and substitute the following: EXCEPTION: Buildings protected throughout by a supervised automatic fire sprinkler system and not used for high-piled combustible storage in excess of twelve thousand (12,000) square feet. (675 IAC 22-2.3-40) Eff: May 17, 2003

Section 503.1.2; additional access
Sec. 41. Delete Section 503.1.2. (675 IAC 22-2.3-41) Eff: May 17, 2003

Section 503.1.4; lumber storage
Sec. 42. Add Section 503.1.4 to read as follows: For exterior lumber storage, see Section 1903.6. (675 IAC 22-2.3-42) Eff: May 17, 2003

Section 503.2.2; authority
Sec. 43. Change Section 503.2.2 to read as follows: Vertical clearances or widths required by this section shall be increased when vertical clearances or widths do not provide fire apparatus access for the largest vehicle available to the servicing fire department. (675 IAC 22-2.3-43) Eff: May 17, 2003

Section 503.2.3; surface
Sec. 44. Change Section 503.2.3 to read as follows: Fire apparatus access roads shall be designed and constructed to support the imposed live loads of the heaviest piece of fire department apparatus available to the servicing fire department and shall be provided with a surface so as to provide all-weather driving capabilities. (675 IAC 22-2.3-44) Eff: May 17, 2003

Section 503.2.4; turning radius
Sec. 45. Change Section 503.2.4 to read as follows: The turning radius of a fire apparatus access road shall be determined after consultation with the servicing fire department and shall be at least equal to the minimum required radius for the fire apparatus. Such roads shall be designed and constructed to permit turning of the longest piece of fire apparatus available to the servicing fire department. (675 IAC 22-2.3-45) Eff: May 17, 2003

Section 503.2.5; dead ends
Sec. 46. Change Section 503.2.5 to read as follows: Dead-end fire apparatus access roads in excess of one hundred fifty (150) feet in length shall be designed and constructed so as to allow the turning around of the longest piece of fire apparatus available to the servicing fire department. (675 IAC 22-2.3-46) Eff: May 17, 2003

Section 503.2.6; bridges and elevated surfaces
Sec. 47. Amend Section 503.2.6 to read as follows: (1) In the third sentence, delete "when required by the code official". (2) Amend the last sentence to read as follows: Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers or approved signs shall be installed. (675 IAC 22-2.3-47) Eff: May 17, 2003

Section 503.2.7; grade
Sec. 48. Change Section 503.2.7 to read as follows: The gradient for all fire apparatus access roads shall not exceed the maximum that the apparatus available to the servicing fire department can accommodate. (675 IAC 22-2.3-48) Eff: May 17, 2003

Section 503.3; marking
Sec. 49. Change Section 503.3 to read as follows: When required by local ordinance, signs, or other notices shall be provided and maintained for the fire apparatus access roads to identify such roads and prohibit the obstruction thereof. (675 IAC 22-2.3-49) Eff: May 17, 2003

Section 503.5; required gates or barricades
Sec. 50. Amend Section 503.5 by adding to the beginning "When required by local ordinance". (675 IAC 22-2.3-50) Eff: May 17, 2003
Section 504.1; required access

Sec. 51. In Section 504.1, delete the last sentence. (675 IAC 22-2.3-51) Eff: May 17, 2003

Section 504.2; maintenance of exterior doors and openings

Sec. 52. In Section 504.2, change the first sentence to read as follows: Exterior doors and their function shall be maintained in accordance with 675 IAC 12-4-9. (675 IAC 22-2.3-52) Eff: May 17, 2003

Section 506; key boxes

Sec. 53. Delete the text of Section 506 and substitute to read as follows: 506.1. When Required. Whenever the servicing fire department has instituted a key box emergency access system, a key box compatible with that system shall be installed in an accessible location if:

1. the building is protected with an automatic sprinkler system equipped with a local or transmitted water-flow alarm, or
2. the building is provided with any fire alarm system equipped with an outside audible/visual signaling device, or
3. the building is provided with any fire alarm system where the alarm is transmitted to an off-site location, or to the fire alarm center for the servicing fire department.

506.2 Responsibility for Key Box. Key boxes are to be provided by the building owner and shall contain such keys necessary to access all protected areas of the building. Multi-tenant buildings may share an owner-provided box, and the building owner shall assume responsibility for insuring that keys are updated as appropriate. Tenant-provided boxes may not be shared with any other tenant, and the tenant assumes responsibility for key updates for the subject tenant space.

EXCEPTION: Key boxes for apartment houses are not required to contain keys to individual apartment dwelling units.

506.3 Existing Buildings. When a design release is issued by the office of the state building commissioner or a permit by local government when a design release is not required for construction, buildings constructed prior to April 30, 1998 shall not be required to provide a key box or key boxes under this section. Any new tenancy within a space previously occupied by a different tenant shall require that a key box be provided in accordance with Sections 506.1 and 506.2. Existing buildings required to install a key box or key boxes by this section shall not be in violation of this section until one (1) year after the effective date of this code. (675 IAC 22-2.3-53) Eff: May 17, 2003

Section 507.2.1; exterior access to shaftways

Sec. 54. In Section 507.2.1, delete "from the outside of the building". (675 IAC 22-2.3-54) Eff: May 17, 2003

Section 508.1, Section 508.2; required water supply, type of water supply

Sec. 55. Delete Sections 508.1 and 508.2 and substitute the following: Required Water Supply for Fire Protection. A water supply capable of supplying the required fire flow, for firefighting purposes, as determined by local ordinance, shall be provided to all premises upon which a Class 1 building or a portion of Class 1 buildings are hereafter constructed. The water supply shall be provided as follows:

1. When a public water supply is available to a premises, there shall be provided fire hydrants and mains capable of supplying the required fire flow.
2. When a public water supply is not available to a premises, the water supply shall consist of a pond, stream, river, canal, lake, reservoir, quarry, pressure tank, elevated tank, swimming pool, other fixed systems, or fire department delivered portable system capable of providing the required fire flow. The on-site water supply shall be accessible to the fire department and be located within one hundred fifty (150) feet of the Class 1 building or structure being protected with an automatic fire-extinguishing system. If the on-site water supply is not within one hundred fifty (150) feet of the structure being protected, the water supply shall be connected to on-site fire hydrants and mains capable of supplying the required fire flow. The owner shall verify the water supply requirements with the servicing fire department prior to final design and construction.
3. As provided in Section 508.2.1 and Section 508.2.2. (675 IAC 22-2.3-55) Eff: May 17, 2003

Section 508.3; fire flow

Sec. 56. Change Section 508.3 to read as follows: Local ordinance may adopt Appendix B to set
requirements for fire flow. *(675 IAC 22-2.3-56)* *Eff:* May 17, 2003

**Section 508.5.1; where required**

Sec. 57. In Section 508.5.1, delete "where required by the code official". *(675 IAC 22-2.3-57)* *Eff:* May 17, 2003

**Section 508.5.2; inspection, testing and maintenance**

Sec. 58. In Section 508.5.2, delete the first sentence. *(675 IAC 22-2.3-58)* *Eff:* May 17, 2003

**Section 509.1; features**

Sec. 59. In Section 509.1, change the fifth sentence to read as follows: A layout of the fire command center and all features required by this section shall be submitted to the fire department having jurisdiction prior to installation. *(675 IAC 22-2.3-59)* *Eff:* May 17, 2003
Section 601.2; permits

Sec. 60. Delete Section 601.2 without substitution. 
(675 IAC 22-2.3-60) Eff: May 17, 2003

Section 603.3.1: maximum outside fuel oil storage above ground

Sec. 61. In Section 603.3.1, delete "NFPA 31" and insert "Chapter 34 of this code". 
(675 IAC 22-2.3-61) Eff: May 17, 2003

Section 603.3.3; underground storage of fuel oil

Sec. 62. In Section 603.3.3, delete "NFPA 31" and insert "Chapter 34 of this code". 
(675 IAC 22-2.3-62) Eff: May 17, 2003

Section 603.4; portable unvented heaters

Sec. 63. Change Section 603.4 to read as follows: 603.4 Portable unvented heaters. The use of listed portable unvented oil-burning heating appliances shall be limited to supplemental heating in detached single family residences. 
EXCEPTION: Upon approval of the code official, portable unvented oil-burning heating appliances may be permitted in any occupancy during the construction process when such is necessary for the construction and the use does not represent a hazard of life or property. 
(675 IAC 22-2.3-63) Eff: May 17, 2003

Section 603.8.5; discontinuance

Sec. 64. Delete the text of Section 603.8.5 and substitute to read as follows: The chief is authorized to require incinerator use to be immediately discontinued if the use of the incinerator constitutes a hazardous condition. 
(675 IAC 22-2.3-64) Eff: May 17, 2003

Section 604.1; installation

Sec. 65. In Section 604.1, delete "NFPA 110 and NFPA 111". 
(675 IAC 22-2.3-65) Eff: May 17, 2003

Section 604.1.1; stationary generators

Sec. 66. In Section 604.1.1, delete "comply" and insert "be listed in accordance with". 
(675 IAC 22-2.3-66) Eff: May 17, 2003

Section 605.3; working space and clearance

Sec. 67. In Section 605.3, delete EXCEPTION 2. 
(675 IAC 22-2.3-67) Eff: May 17, 2003

Section 605.5.1; power supply

Sec. 68. In Section 605.5.1, delete "power tap or multiplug adapter" and. 
(675 IAC 22-2.3-68) Eff: May 17, 2003

Section 606.5; access

Sec. 69. In Section 606.5, delete "as required by the code official". 
(675 IAC 22-2.3-69) Eff: May 17, 2003

Section 606.6.1; periodic testing

Sec. 70. In Section 606.6.1, delete "and as required by the code official". 
(675 IAC 22-2.3-70) Eff: May 17, 2003

Section 606.11.3; ammonia refrigerants

Sec. 71. Amend Section 606.11.3 by adding Exception 2 to read as follows: 2. When the code official determines, upon review of an engineering analysis prepared in accordance with Section 104.7.2, that a fire or explosion hazard would not result from discharging ammonia directly to atmosphere. 
(675 IAC 22-2.3-71) Eff: May 17, 2003

Section 606.13; notification of discharges

Sec. 72. Amend Section 606.13 Notification of discharges to read as follows: 606.13 Notification of refrigerant discharges. The code official shall be notified immediately when a discharge becomes reportable under Section 2703.3.1. 
(675 IAC 22-2.3-72) Eff: May 17, 2003

Section 607; elevator recall and maintenance

Sec. 73. Delete the text of Section 607 and substitute to read as follows: See the Indiana Elevator Code (675 IAC 21). 
(675 IAC 22-2.3-73) Eff: May 17, 2003

Section 609; commercial kitchen hoods

Sec. 74. Delete the text of Section 609 and substitute to read: See the Indiana Mechanical Code (675 IAC 18). 
(675 IAC 22-2.3-74) Eff: May 17, 2003
Section 703.2; opening protectives

Sec. 75. Amend the first sentence of Section 703.2 to read as follows: Opening protectives shall be maintained in accordance with the rules of the commission. (675 IAC 22-2.3-75) Eff: May 17, 2003

Section 703.2.1; signs

Sec. 76. Change Section 703.2.1 to read as follows: A sign shall be displayed permanently near or on each required fire door in letters not less than one (1) inch (25.4 mm) high to read as follows:
(1) For doors designed to be kept normally open: FIRE DOOR - DO NOT BLOCK.
(2) For doors designed to be kept normally closed: FIRE DOOR - KEEP CLOSED.
For the purposes of this section, fire door means an assembly which is part of an area or occupancy separation. (675 IAC 22-2.3-76) Eff: May 17, 2003

Section 704; floor openings and shafts

Sec. 77. Delete Section 704 without substitution. (675 IAC 22-2.3-77) Eff: May 17, 2003
Section 804.5; a natural cut tree

Sec. 78. Add Section 804.5 to read as follows:
804.5 A natural cut tree. At least two (2) working
days prior to placing a natural cut tree in a public
building the fire department having jurisdiction shall
be notified. (675 IAC 22-2.3-78) Eff: May 17, 2003

Section 806.2; wall and ceiling finish

Sec. 79. Amend Section 806.2 by adding "Section
803 of" after "with" and before "the" in the first
sentence. (675 IAC 22-2.3-79) Eff: May 17, 2003
Section 901.2; construction documents

Sec. 80. Amend Section 901.2 to read as follows: Complete plans and specifications for fire alarm systems; fire-extinguishing systems, including automatic sprinklers and wet dry standpipes; halon systems and other special types of automatic fire-extinguishing systems; basement pipe inlets; and other fire-protection systems and appurtenances thereto shall be submitted for review prior to system installation in accordance with 675 IAC 12-6 and with the local unit of government where required by local ordinance. Plans and specifications for fire alarm systems shall include, but not be limited to, a floor plan; location of all alarm-initiating and alarm-signaling devices; alarm control and trouble-signaling equipment; annunciator; power connection; battery calculations; conductor type and sizes; voltage drop calculations; and manufacturer, model numbers and listing information for all equipment, devices and materials. (675 IAC 22-2.3-80) Eff: May 17, 2003

Section 901.2.1; statement of compliance

Sec. 81. In Section 901.2.1, delete "where required by the code official". (675 IAC 22-2.3-81) Eff: May 17, 2003

Section 901.3; permits

Sec. 82. Delete Section 901.3 without substitution. (675 IAC 22-2.3-82) Eff: May 17, 2003

Section 901.4; installation

Sec. 83. In Section 901.4, delete text after the first sentence and substitute to read as follows: Alterations to fire protection systems shall be done in accordance with the applicable rules of the commission. (675 IAC 22-2.3-83) Eff: May 17, 2003

Section 901.4.3; additional fire protection systems

Sec. 84. Delete Section 901.4.3 without substitution. (675 IAC 22-2.3-84) Eff: May 17, 2003

Section 901.5; installation acceptance testing

Sec. 85. In Section 901.5, delete "and as approved by the code official". (675 IAC 22-2.3-85) Eff: May 17, 2003

Section 901.7; systems out of service

Sec. 86. In Section 901.7, delete "where required by the code official". (675 IAC 22-2.3-86) Eff: May 17, 2003

Section 902; definitions

Sec. 87. In Section 902, make the following changes:

(1) Change the definitions to read as follows:

ALARM SIGNAL. An audible or visual signal, indicating the existence of an emergency requiring immediate action.

FIRE ALARM SYSTEM. A Combination of approved equipment which with operation of an alarm initiating device produces an alarm signal.

(2) Add the following definition to read as follows:

LABELED. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection or production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

(3) Delete the definition of RECORD DRAWINGS. (675 IAC 22-2.3-87) Eff: May 17, 2003

Section 903.3.1.1; exempt locations

Sec. 88. Change Section 903.3.1.1 Exempt Locations as follows: Delete item 5 and substitute the following: Elevator equipment rooms and hoistways used exclusively for the operation of elevators and which are separated from the remainder of the building by two (2) hour fire resistive construction. Penetrations between machine rooms and hoistways necessary for the safe operation of an elevator and vents required by Section 3004 of this code need not be fire-rated. (675 IAC 22-2.3-88) Eff: May 17, 2003

Section 903.3.1.2; NFPA 13R sprinkler systems

Sec. 89. In Section 903.3.1.2, add "Occupancies" after "Group R". (675 IAC 22-2.3-89) Eff: May 17, 2003

Section 903.3.5.1.1; limited area sprinkler systems

Sec. 90. In the EXCEPTION for Section 903.3.5.1.1 limited area sprinkler systems, delete "an
approved" to and insert "a listed". (675 IAC 22-2.3-90) Eff: May 17, 2003

Section 903.3.6; hose threads

Sec. 91. Amend Section 903.3.6 to read as follows: Fire hose threads used in connection with automatic sprinkler systems shall be compatible with the equipment used by the servicing fire department. (675 IAC 22-2.3-91) Eff: May 17, 2003

Section 903.3.7; fire department connections

Sec. 92. Change Section 903.3.7 Fire department connections to read as follows: The servicing fire department shall be consulted before placing the fire department hose connections at specific locations or the connections shall be placed as required by local ordinance. (675 IAC 22-2.3-92) Eff: May 17, 2003

Section 903.4.2; alarms

Sec. 93. Change Section 903.4.2 Alarms to read as follows: Listed audible and visible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building facing the public street, road or highway that is in accordance with its legal address. Where buildings are not directly facing the public street, road or highway or are in excess of 250 feet from the public street, road or highway, the servicing fire department shall be consulted in determining a location prior to the installation of the exterior audible and visible device. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

EXCEPTION: Sprinkler systems which are monitored by an approved supervisory station are not required to have the listed audible and visible device located on the exterior wall facing the public street, road or highway. (675 IAC 22-2.3-93) Eff: May 17, 2003

Section 903.4.3; floor control valves

Sec. 94. Change Section 903.4.3 Floor control valves as follows:
(1) Change "approved" to "a listed".
(2) Change "high-rise buildings" to "buildings 4 stories or more in height".

(675 IAC 22-2.3-94) Eff: May 17, 2003

Section 903.6; existing buildings

Sec. 95. Delete Section 903.6 without substitution. (675 IAC 22-2.3-95) Eff: May 17, 2003

Section 904.2; where required

Sec. 96. In Section 904.2, delete "approved by the code official" and insert "in accordance with the rules of the commission". (675 IAC 22-2.3-96) Eff: May 17, 2003

Section 904.2.1; hood system suppression

Sec. 97. In Section 904.2.1, delete "this code" and insert "Indiana Mechanical Code (675 IAC 18)". (675 IAC 22-2.3-97) Eff: May 17, 2003

Section 904.11; commercial cooking systems

Sec. 98. Delete the last sentence of Section 904.11 Commercial cooking systems and substitute as follows: Automatic fire-extinguishing systems, for new installations, shall be installed in accordance with the Indiana Mechanical Code (675 IAC 18). (675 IAC 22-2.3-98) Eff: May 17, 2003

Section 904.11.1, Section 904.11.2, Section 904.11.3,
Section 904.11.4; manual system operation, system interconnection, carbon dioxide systems, special provisions for automatic sprinkler systems

Sec. 99. Delete Sections 904.11.1 through 904.11.4 and substitute: See the Indiana Mechanical Code (675 IAC 18). (675 IAC 22-2.3-99) Eff: May 17, 2003

Section 904.11.5; commercial cooking equipment

Sec. 100. Delete the text of Section 904.11.5 and substitute to read as follows: Alkaline dry chemical-type portable fire extinguishers shall be installed in the kitchen area for the protection of the cooking equipment. Extinguishers shall have a minimum rating of forty (40) B (sodium bicarbonate or potassium bicarbonate base) and shall be conspicuously located and readily accessible along exit paths from the area. The extinguishers shall be a minimum of ten (10) feet and maximum of twenty (20) feet from the cooking equipment. The top of the
Extinguishers shall be a maximum of five (5) feet above the floor and shall be protected from physical damage. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.

EXCEPTION: If portable fire extinguishers were not required at the time of installation of the cooking equipment, they shall be installed in accordance with the current Indiana Mechanical Code (675 IAC 18).

(675 IAC 22-2.3-100) Eff: May 17, 2003

Section 904.11.6.1, 904.11.6.2, 904.11.6.3, 904.11.6.4,
904.11.6.5; ventilation system, grease extractors, cleaning, extinguishing system service, fusible link and sprinkler head replacement

Sec. 101. Delete Sections 904.11.6.1 through 904.11.6.5 and substitute to read as follows:

904.11.6.1 If grease extractors are installed, they shall be operated when the commercial food heat-processing equipment is used. Extinguishing systems shall be inspected and serviced at least every six (6) months or after activation of the system. Inspection and servicing shall be by qualified individuals, and a service and inspection report shall be left at the site. A Certificate of Inspection shall be forwarded to the chief of the fire department having jurisdiction upon completion of servicing or inspection. All inspections performed shall be to the code in effect at the time of installation, alteration, or modification. Fusible links, sprinklers, and automatic spray nozzles shall be replaced at least annually, or more frequently if necessary, to ensure proper operation of the system, and other protection devices shall be serviced or replaced in accordance with the manufacturer's instructions.

EXCEPTION 1. Frangible bulbs need not be replaced annually.

EXCEPTION 2. When automatic bulb-type sprinklers or spray nozzles are used and an annual examination shows no buildup of grease or other material on the sprinkler or spray nozzle. Hoods, grease-removal devices, fans, ducts, and other appurtenances shall be cleaned at frequent intervals in accordance with section 1006.1.

904.11.6.2 Exhaust systems with Type I hoods shall be installed in accordance with the mechanical code in effect at the time of installation or alteration, and maintained in accordance with the conditions of labeling (if labeled), the manufacturer's instructions and the following:

1. A cleaning schedule shall be posted on site for every exhaust system with a Type I hood. The schedule shall indicate methods of cleaning and the time interval between cleaning.

2. Surfaces subject to oil or grease deposits shall be cleaned to bare metal at intervals frequent enough to prevent oil or grease deposits from exceeding a thickness of twenty-five thousandths (0.025) inch. Exhaust systems with Type I hoods shall be inspected by a qualified person at least every six (6) months.

3. Flammable solvents or other flammable cleaning agents shall not be used.

4. Care shall be taken not to apply cleaning chemicals to fusible links or other detection devices of the fire-extinguishing equipment.

5. At the start of the cleaning process, electrical switches shall be locked out. WHEN CLEANING PROCEDURES ARE COMPLETED, ALL ELECTRICAL SWITCHES, DETECTION DEVICES, AND SYSTEM COMPONENTS SHALL BE RETURNED TO AN OPERABLE CONDITION BY QUALIFIED PERSONNEL.

6. Records of cleaning, maintenance, and inspections shall be maintained on site for a period of three (3) years, and a certificate of inspection shall be forwarded to the chief of the fire department having jurisdiction upon completion.

EXCEPTION: Where the local health official or the Indiana Department of Health has more stringent cleaning requirements than those stated above, they shall take precedence over these requirements.

904.11.6.2.1 Existing Equipment. Exhaust systems with Type I hoods installed prior to the effective date of this code shall be maintained in accordance with the mechanical code in effect when the exhaust system with a Type I hood was installed.

EXCEPTION: All exhaust systems with Type I hoods shall be cleaned in accordance with the requirements of this section.

904.11.6.3 Where Required. Fire-extinguishing equipment for Type I hoods shall be installed in accordance with the Indiana Mechanical Code (675 IAC 18) in effect at the time of installation, and maintained in accordance with section 904.11.6.1 of this code.

EXCEPTION: Fire-extinguishing systems for Type I hoods that serve deep fat fryers and other cooking appliances shall be either a system listed for application with such equipment or an automatic
fire-extinguishing system that is specifically designed for such application. (675 IAC 22-2.3-101) Eff: May 17, 2003

Section 905.2; installation standards

Sec. 102. Add an exception to 905.2 to read as follows: Exception: In other than high rise buildings where buildings are sprinklered in accordance with Section 903.3.1.1, the water supply pressure for the standpipe system is not required to exceed the pressure requirements for the sprinkler system. (675 IAC 22-2.3-102) Eff: May 17, 2003

Section 905.2.1; fire department connections

Sec. 103. Add Section 905.2.1 after 905.2 to read as follows: 905.2.1 Fire Department connections. The location of fire department connections shall be in accordance with Section 903.3.7. (675 IAC 22-2.3-103) Eff: May 17, 2003

Section 905.3.5.1; hose and cabinet

Sec. 104. Delete Section 905.3.5.1 Hose and cabinet and substitute to read as follows: Proper cap and chain shall be provided for the hose connection valve assembly. Hose connection valve assembly shall comply with the provisions in Section 903.3.6. (675 IAC 22-2.3-104) Eff: May 17, 2003

Section 905.4; location of Class I standpipe connections

Sec. 105. Change Section 905.4 Location of Class I standpipe hose connections as follows: (1) Delete item 1 and substitute as follows: 1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors. Where there are multiple intermediate floor landings between floors, hose connections shall be located at the landing closest to being midway between floors. If intermediate floor level landings are not provided in the required stairway, the hose connection shall be located on the floor-level landing. (2) Delete item 6 and substitute as follows: 6. Where the most remote portion of a non-sprinklered floor or story is more than 150 feet from a hose connection or the most remote portion of a sprinklered floor or story is 200 feet from a hose connection, additional hose connections shall be provided in exit passageways which are 1-hour rated. (675 IAC 22-2.3-105) Eff: May 17, 2003

Section 905.8; dry standpipes

Sec. 106. Change Section 905.8 Dry standpipes to read as follows: In buildings requiring standpipes, dry standpipes complying with NFPA 14 (675 13-1-1) are permitted when, the building or structure is unheated and the standpipe is subject to freezing temperatures. (675 IAC 22-2.3-106) Eff: May 17, 2003

Section 906.1; where required

Sec. 107. Delete Section 906.1 and substitute to read as follows: Portable fire extinguishers shall be installed where required by TABLE 906.1 and where required by local ordinance. (675 IAC 22-2.3-107) Eff: May 17, 2003

Section 907.1.1; construction documents

Sec. 108. Delete the text of Section 907.1.1 Construction documents and substitute to read as follows: See the General Administrative Rules (675 IAC 12-6). (675 IAC 22-2.3-108) Eff: May 17, 2003

Section 907.2.1.1; system initiation in Group A occupancies with an occupant load of 1,000 or more

Sec. 109. Delete the Exception to Section 907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more. (675 IAC 22-2.3-109) Eff: May 17, 2003

Section 907.2.3; Group E

Sec. 110. Change Section 907.2.3 Group E as follows: (1) Delete EXCEPTION 2.3 and substitute to read as follows: 2.3 Shops and laboratories involving dust or vapors are protected by heat detectors or other listed detection devices. (2) Delete in EXCEPTION 2.6, ", except in locations specifically designated by the building official". (675 IAC 22-2.3-110) Eff: May 17, 2003

Section 907.2.10.1.1; R1 hotels and motels
Sec. 111. Add Section 907.2.10.1.1 after Section 907.2.10.1.1 as follows: 907.2.10.1.1 R1 Hotels and Motels.

(1) This Section only applies to hotels and motels.
(2) All hotels and motels must have functional smoke detectors and comply with this Section and Section 907.2.10.1.1
(3) Except as provided in (6), a detector must be installed in all interior corridors adjacent to sleeping rooms and must be spaced no further apart than thirty (30) feet on center or more than fifteen (15) feet from any wall.
(4) The detectors must be hard wired into a building's electrical system, except as provided in (6).
(5) The detectors must be wired in a manner that activates all the devices in a corridor when one is activated, except as provided in (6).
(6) All single level dwellings, all seasonably occupied dwellings, and all hotels and motels with twelve (12) sleeping rooms or less (and containing no interior corridors) are exempt from the requirements of (3), (4), and (5). In such units:
(A) a detector must be installed in each sleeping room; and
(B) the detector may be battery operated, when allowed by section 907.2.10.2.
If a battery operated detector is installed, it must contain a tamper resistant cover to protect the batteries.

For the purpose of Section 907.2.10.1.1.1, the following definitions shall apply:

DWELLING means a residence with at least one (1) dwelling unit as set forth in IC 22-12-1-4(a)(1)(B) and IC 22-12-1-5(a)(1).
HOTELS AND MOTELS means buildings or structures kept, maintained, used, advertised, or held out to the public as inns or places where sleeping accommodations are furnished for hire for transient guest.
SEASONALLY OCCUPIED DWELLINGS means hotels and motels open to the public for occupancy by guests only during any period of time between April 15 and October 15 each year.
SINGLE LEVEL DWELLING means all single level (no more than one (1) level above ground) hotels and motels that have no interior corridors, and whose individual rooms have exterior exits.

(675 IAC 22-2.3-111) Eff: May 17, 2003

Section 907.2.10.1.2; Groups R-2, R-3, R-4 and I-1

Sec. 112. In Section 907.2.10.1.2, delete "and maintained". (675 IAC 22-2.3-112) Eff: May 17, 2003

Section 907.2.10.1.4; additions, alterations or repairs to Group R

Sec. 113. Change the Exception to Section 907.2.10.1.4 to read as follows: Exception: Repairs are exempt from the requirements of this section. (675 IAC 22-2.3-113) Eff: May 17, 2003

Section 907.2.15; special egress-control devices

Sec. 114. Amend Section 907.2.15 by changing the test to read: When special egress-control devices or systems are installed, such devices or systems shall be maintained in accordance with the building code requirements for the original installation. (675 IAC 22-2.3-114) Eff: May 17, 2003

Section 907.3; where required-retroactive in existing buildings and structures

Sec. 115. Delete in Section 907.3 Where required - retroactive in existing buildings and structures without substitution. (675 IAC 22-2.3-115) Eff: May 17, 2003

Section 907.4.5; protective covers

Sec. 116. Change Section 907.4.5 Protective Covers to read as follows: Listed manual fire alarm box protective covers may be installed when approved. (675 IAC 22-2.3-116) Eff: May 17, 2003

Section 907.8 Presignal system

Sec. 117. Delete Section 907.8 without substitution. (675 IAC 22-2.3-117) Eff: May 17, 2003

Section 907.9.1; zoning indicator panel

Sec. 118. Change Section 907.9.1 Zoning indicator panel to read as follows: A zoning indicator panel and associated controls shall be provided in a location the servicing fire department will use as their main entrance point to the building. The panel shall be identifiable and accessible at all times. The visual zone indication shall lock in until the system is reset and shall not be canceled by the operation of an audible alarm-silencing switch. (675 IAC 22-2.3-118) Eff: May 17, 2003
Section 907.10.1.1; public and common area

Sec. 119. Amend Section 907.1.1 by adding the word "areas" after the word "public". (675 IAC 22-2.3-119) Eff: May 17, 2003

Section 907.15; monitoring

Sec. 120. Change Section 907.15 Monitoring to read as follows: Where required by this chapter or by local ordinance, an approved supervising station in accordance with NFPA 72 (675 IAC 22-2.2-17) shall monitor fire alarm systems. (675 IAC 22-2.3-120) Eff: May 17, 2003

Section 907.16; automatic telephone-dialing devices

Sec. 121. Change Section 907.16 Automatic telephone-dialing devices to read as follows: Automatic telephone-dialing devices used to transmit an emergency alarm shall not be connected to any fire department telephone number unless approved by the code official. (675 IAC 22-2.3-121) Eff: May 17, 2003

Section 907.18; record of completion

Sec. 122. Delete Section 907.18 Record of completion without substitution. (675 IAC 22-2.3-122) Eff: May 17, 2003

Section 907.19; instructions

Sec. 123. Delete Section 907.19 Instructions without substitution. (675 IAC 22-2.3-123) Eff: May 17, 2003

Section 907.20.1; maintenance record

Sec. 124. Change Section 907.20.1 by deleting "applicable NFPA requirements or as directed by the code official" and substituting "the rules of the commission". (675 IAC 22-2.3-124) Eff: May 17, 2003

Section 907.20.2; testing

Sec. 125. In Section 907.20.2, delete all the text after "NFPA 72 (675 IAC 22-2.2-17)". (675 IAC 22-2.3-125) Eff: May 17, 2003

Section 909.2; general design requirements

Sec. 126. Change Section 909.2 General design requirements to read as follows: Buildings, structures, or parts thereof required by this code to have a smoke control system or systems shall have such systems designed in accordance with the applicable requirements of Section 909 and the generally accepted and well-established principles of engineering relevant to the design. Construction documents shall be as required by the General Administrative Rules (675 IAC 12-6). (675 IAC 22-2.3-126) Eff: May 17, 2003

Section 909.3; special inspection and test requirements

Sec. 127. Delete Section 909.3 Special inspection and test requirements and substitute to read as follows: For inspections and testing, see the General Administrative Rules (675 IAC 12-6-6(c)(10)(d). (675 IAC 22-2.3-127) Eff: May 17, 2003

Section 909.10.2; ducts

Sec. 128. In the third sentence of Section 909.10.2 Ducts, delete "nationally" and substitute "approved". (675 IAC 22-2.3-128) Eff: May 17, 2003

Section 909.15; control diagrams

Sec. 129. Change Section 909.15 Control diagrams to read as follows: Identical control diagrams showing all devices in the system and identifying their location and function shall be maintained current and kept on file with the building official, the servicing fire department and in the fire command center in an approved manner and format. (675 IAC 22-2.3-129) Eff: May 17, 2003

Section 909.18.8 and Section 909.18.9; special inspections for smoke control and identification and documentation

Sec. 130. Delete Sections 909.18.8 Special inspections for smoke control; and 909.18.9 Identification and documentation and substitute: See the General Administrative Rules (675 IAC 12-6-6(c)(10)(D). (675 IAC 22-2.3-130) Eff: May 17, 2003

Section 909.19; system acceptance

Sec. 131. Delete the title and text of Section 909.19 System acceptance and substitute to read as follows: 909.19 Acceptance test. Smoke removal systems
shall be tested in accordance with the rules of the commission at the expense of the owner or owner's representative. When requested by the servicing fire department and/or local building official, such tests shall be conducted in their presence. Prior to conducting such tests, the requesting official shall be given at least 48-hour notice. It shall be unlawful to occupy portions of the structure until the required smoke removal system within that portion of the structure has been completed, successfully tested and fully operational with appropriate reports and other documentation provided to the servicing fire department and/or local building official. *(675 IAC 22-2.3-131)* Eff: May 17, 2003

**Section 910.2.1; Groups F-1 and S-1**

Sec. 132. Add an Exception to Section 910.2.1 Groups F-1 and S-1 to read as follows: Exception: Group S-1 Aircraft Hangers. *(675 IAC 22-2.3-132)* Eff: May 17, 2003

**Section 910.3.1.2; sprinklered buildings**

Sec. 133. Delete Section 910.3.1.2 Sprinklered buildings and substitute to read as follows: Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall open by approved manual releases. The servicing fire department shall be consulted in determining location of such manual releases prior to the installation of the smoke and heat vents. *(675 IAC 22-2.3-133)* Eff: May 17, 2003

**Section 910.3.4; curtain boards**

Sec. 134. Add an Exception to the end of Section 910.3.4 Curtain boards to read as follows: Exception: Where areas of buildings are equipped with early suppression-fast response (ESFR) sprinklers, curtains boards shall not be provided within these areas. Curtains boards shall be provided at the separation between the ESFR sprinklers and the conventional sprinklers and in other areas as required by this section. *(675 IAC 22-2.3-134)* Eff: May 17, 2003

**Section 910.4; mechanical smoke exhaust**

Sec. 135. Delete Section 910.4 and substitute to read as follows: In buildings protected throughout with an approved automatic sprinkler system, manually operated exhaust fans may be utilized for fire department mop-up operations. The exhaust rate shall be equal to 1 cfm per square foot of floor area. The fans shall be wired ahead of the main building disconnect switch. Manual controls for the fans shall be provided individually for each fan unit. The servicing fire department shall be consulted in determining the location of the controls for the exhaust fans. *(675 IAC 22-2.3-135)* Eff: May 17, 2003
Section 1001.2; minimum requirements

Sec. 136. Delete Section 1001.2 Minimum requirements and substitute to read as follows: See the General Administrative Rules (675 IAC 12-4-12). (675 IAC 22-2.3-136) Eff: May 17, 2003

Section 1002; definitions


Section 1003.2.2.4; increased occupant load

Sec. 138. Delete Section 1003.2.2.4 Increased occupant load without substitution. (675 IAC 22-2.3-138) Eff: May 17, 2003

Section 1003.2.13.1; general

Sec. 139. Delete in Section 1003.2.13.1 General the words "one or more" and substitute the words "at least one". (675 IAC 22-2.3-139) Eff: May 17, 2003

Section 1003.3.1.1; size of doors

Sec. 140. Delete Exception 8 in Section 1003.3.1.1. Size of doors. (675 IAC 22-2.3-140) Eff: May 17, 2003

Section 1003.3.1.4; floor elevation

Sec. 141. Change in Section 1003.3.1.4 Floor elevation Exception 4 to read as follows: 4. Exterior decks, patios, or balconies that are part of a dwelling unit regulated under part 2 of Chapter 11 of the Indiana Building Code (675 IAC 13) and have impervious surfaces, and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the dwelling unit. (675 IAC 22-2.3-141) Eff: May 17, 2003

Section 1003.3.1.7; door arrangement

Sec. 142. Change in Section 1003.3.1.7 Door arrangement Exception 3 to read as follows: 3. Doors within individual dwelling units in Groups R-2 and R-3 as applicable in Section 1001.1. (675 IAC 22-2.3-142) Eff: May 17, 2003

Section 1003.3.1.8; locks and latches

Sec. 143. Change Section 1003.3.1.8 Locks and latches as follows:

1) In Exception 2.3, delete 2.3 without substitution.
2) Add Exception 5 to read as follows: 5. Licensed Health Care Facilities that comply with IC 22-11-17-2. (675 IAC 22-2.3-143) Eff: May 17, 2003

Section 1003.3.1.8.2; delayed egress locks

Sec. 144. Delete in Section 1003.3.1.8.2 Delayed egress locks the Exception to item 4. (675 IAC 22-2.3-144) Eff: May 17, 2003

Section 1003.3.3; stair treads

Sec. 145. Change Section 1003.3.3 Stair treads and risers as follows:

1) Delete Exception 5 and substitute to read as follows: 5. Within dwelling units in occupancies in Group R-3, as applicable in the Indiana Building Code (675 IAC 13), and within dwelling units in occupancies in Group R-2, as applicable in the Indiana Building Code (675 IAC 13), the maximum riser height shall be 8 inches (210 mm), the minimum tread depth shall be 9 inches (229 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread is less than 11 inches. In occupancies in Group U, which are accessory to an occupancy in Group R-3, as applicable in the Indiana Building Code (675 IAC 13), the maximum riser height shall be 7.75 inches (197 mm) and the minimum tread depth shall be 10 inches (254 mm) and the nosing requirements shall remain the same as above.
2) Amend Exception 6 to read: The replacement of existing stairways shall be in accordance with the General Administrative Rules (675 IAC 12-9). (675 IAC 22-2.3-145) Eff: May 17, 2003

Section 1003.3.9; spiral stairways

Sec. 146. Delete the Exception in Section 1003.3.9 Spiral stairways. (675 IAC 22-2.3-146) Eff: May 17, 2003

Section 1003.3.11.3; handrail graspability

Sec. 147. Add an Exception to the end of Section 1003.3.11.3 to read as follows: Exception: Within Group R-2 dwelling units, the handgrip portion of
handrails shall have a circular cross section of 1 inches (32 mm) minimum to 2 7/8 inches (73 mm) maximum. Other handrail shapes that provide equivalent grasping surface are permissible. Edges shall have a minimum radius of 1/8 inch (3.2 mm). Effective May 17, 2003

Section 1008.10; seat stability

Sec. 148. In Section 1008.10 Seat stability, delete the last sentence of Exception 4. Effective May 17, 2003

Section 1009.6; exterior rescue access

Sec. 149. Add Section 1009.6 Exterior rescue access to the end of Section 1009 to read as follows:

1009.6 Exterior Rescue Access. Exterior access for fire department use in performing rescue operations when emergency escape and rescue openings are required shall comply with Sections 1009.6.1 and 1009.6.2.

1009.6.1 The exterior grade adjacent to emergency escape and rescue openings shall not have a slope of more than 2 inches in 12 inches. The grade requirement shall extend from the structure to a point which will allow the placement of a fire department ground ladder to the sill of the emergency escape and rescue opening when such ladder is placed at a 75 degree angle maximum from the horizontal plane.

1009.6.2 No obstructions such as wire, trees, shrubs, signs, cornices, overhangs, awnings, canopies, parking or other features shall be permitted.

Exception: Canopies and similar types of building features may be used as a portion of the rescue access system, if the slope of the canopy does not exceed 2 inches in 12 inches, and access as required in Section 1009.6.1 is provided from the ground to the top edge of the canopy. Effective May 17, 2003
Section 1101.3; permits

Sec. 150. Delete Section 1101.3 without substitution. (675 IAC 22-2.3-150) Eff: May 17, 2003

Section 1105.3; on welding apparatus

Sec. 151. Amend Section 1105.3 by deleting "10-B:C" and inserting "20-B:C". (675 IAC 22-2.3-151) Eff: May 17, 2003

Section 1106.3.3; dispensing hoses and nozzles

Sec. 152. In the last sentence of Section 1106.3.3, delete "proper" and insert "approved". (675 IAC 22-2.3-152) Eff: May 17, 2003

Section 1106.3.6; accessory equipment

Sec. 153. In Section 1106.3.6, delete "substantially". (675 IAC 22-2.3-153) Eff: May 17, 2003

Section 1106.3.7.1; bonding cables

Sec. 154. Change Section 1106.3.7.1 as follows:
(1) Delete "a substantial heavy-duty" and insert "an approved or listed".
(2) Delete "a suitable" and insert "an approved or listed".
(675 IAC 22-2.3-154) Eff: May 17, 2003

Section 1106.3.7.2; bonding cable protection

Sec. 155. Delete the last sentence of Section 1106.3.7.2. (675 IAC 22-2.3-155) Eff: May 17, 2003

Section 1106.5.2.3; funnels

Sec. 156. In Section 1106.5.2.3, delete "where required". (675 IAC 22-2.3-156) Eff: May 17, 2003

Section 1106.6.4; testing

Sec. 157. Change the last sentence of Section 1106.6.4 to read as follows: The fueling-system operator shall maintain a complete record of the last two (2) tests at all times, and the complete record be made available to the code official upon request. (675 IAC 22-2.3-157) Eff: May 17, 2003

Section 1106.15.1; other areas

Sec. 158. Delete Section 1106.15.1 without substitution. (675 IAC 22-2.3-158) Eff: May 17, 2003

Section 1106.19.2; damaged hose

Sec. 159. Delete the last sentence of Section 1106.19.2 and substitute to read as follows: Hoses removed from service shall not be returned to service until repaired or rendered safe. (675 IAC 22-2.3-159) Eff: May 17, 2003
Section 1201.2; permit required

Sec. 160. Delete Section 1201.2 without substitution. (675 IAC 22-2.3-160) Eff: May 17, 2003

Section 1204.2.1; ventilation

Sec. 161. Delete Section 1204.2.1 and substitute to read as follows: Ventilation shall be in accordance with the Indiana Mechanical Code (675 IAC 18). (675 IAC 22-2.3-161) Eff: May 17, 2003

Section 1205.1.5; equipment maintenance and housekeeping

Sec. 162. Change the first sentence of Section 1205.1.5 to read as follows: Equipment shall be maintained and operated in accordance with the manufacturer's instructions. (675 IAC 22-2.3-162) Eff: May 17, 2003

Section 1206; spotting and pretreating

Sec. 163. Amend Section 1206 Spotting and pretreating as follows:

(1) Add new Section as follows:
   1206.2 Type I solvents. The maximum quantity of Type I solvents permitted at any work station shall be one (1) gallon (4 L). Class I solvents shall be stored in approved safety cans or in sealed DOT-N approved metal shipping containers of not more than one (1) gallon (4 L) capacity. Dispensing shall be from approved cans.

(2) Amend Section 1206.2 as follows:
   1206.3 Type II and III solvents. Scouring, brushing, and spotting and pretreating shall be conducted with Class II or III solvents. The maximum quantity of Type II or III solvents permitted at any work station shall be one (1) gallon (4 L). In other than a Group H-2 occupancy, the aggregate quantities of solvents shall not exceed the maximum allowable quantity per control area for use open.

(3) Renumber subsequent sections.
(675 IAC 22-2.3-163) Eff: May 17, 2003
Section 1301.2; permits

Sec. 164. Delete section 1301.2 without substitution. *(675 IAC 22-2.3-164)* Eff: May 17, 2003
Section 1414.1; where required

Sec. 165. Amend Section 1414.1 to read as follows: 1414.1 Where required. Structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguishers in accordance with Section 905 and sized for not less than ordinary hazard as follows:
(1) At each stairway on all floor levels where combustible materials has accumulated.
(2) In every storage and construction shed.
(3) Additional portable fire extinguishers shall be provided where special hazards exist, such as the storage and use of flammable and combustible liquids.
(675 IAC 22-2.3-165) Eff: May 17, 2003

Section 1416.3; fire extinguishers for roofing operations

Sec. 166. In Section 1416.3, change the second sentence to read as follows: There shall be not less than one multi-purpose portable fire extinguisher with a minimum 3-A 40-B:C rating on the roof being covered or repaired. (675 IAC 22-2.3-166) Eff: May 17, 2003
Section 1501.2; permits

Sec. 167. Delete Section 1501.2 without substitution. *(675 IAC 22-2.3-167) Eff: May 17, 2003*

Section 1504.1.2.5; clear space

Sec. 168. In Exceptions 1 and 2 of Section 1504.1.2.5, delete "adequately" without substitution. *(675 IAC 22-2.3-168) Eff: May 17, 2003*

Section 1505.3.2; bottom drains

Sec. 169. Add Exception 2 to Section 1505.3.2 to read as follows: Exception 2. Bottom drains shall not be required for tanks that are equipped with automatic closing covers in accordance with Section 1505.7. *(675 IAC 22-2.3-169) Eff: May 17, 2003*

Section 1505.8.1; location

Sec. 170. Delete Section 1505.8.1 and substitute to read as follows: Tanks shall be located an approved distance from furnaces and combustible floors and shall not be located on combustible floors. *(675 IAC 22-2.3-170) Eff: May 17, 2003*

Section 1506.8 barriers

Sec. 171. In Section 1506.8, delete "adequately grounded" and insert "grounded in an approved manner". *(675 IAC 22-2.3-171) Eff: May 17, 2003*
Section 1601.2; permits

Sec. 172. Delete Section 1601.2 without substitution. *(675 IAC 22-2.3-172)* Eff: May 17, 2003
Section 1701.2; permits

Sec. 173. Delete Section 1701.2 without substitution. (675 IAC 22-2.3-173) Eff: May 17, 2003

Section 1703.3.1; warning signs

Sec. 174. In the first sentence of Section 1703.3.1, delete the text after "premises". (675 IAC 22-2.3-174) Eff: May 17, 2003
Section 1801.5; permits

Sec. 175. Delete Section 1801.5 without substitution. (675 IAC 22-2.3-175) Eff: May 17, 2003

Section 1803.14.1; where required

Sec. 176. Delete the second sentence of Section 1803.14.1, item 1 without substitution. (675 IAC 22-2.3-176) Eff: May 17, 2003

Table 1804.2.1; quantity limits for hazardous materials in a single fabrication area in group h-5

Sec. 177. Amend TABLE 1804.2.1 footnote (d) by deleting "Tables 2703.1.1(1) and 2704.14" and inserting "Table 2704.14". (675 IAC 22-2.3-177) Eff: May 17, 2003

Table 1805.2.1; maximum quantities of hpm at a workstation

Sec. 178. Amend TABLE 1805.2.1 as follows:
(1) In the MAXIMUM QUANTITY column, make the following changes:
   (A) For "Corrosive Liquid", change to read "Use-open System 25 gallons a".
   (B) For "Corrosive solid", change to read "Use-closed System 150 gallons acf".
(2) Add a sentence to footnote "c" to read as follows: "When Note f also applies, the maximum increase allowed for both Notes c and f shall not exceed 100 percent.
(3) Add footnote "f" to read: f. Quantities shall be allowed to be increased 100 percent for nonflammable, noncombustible corrosive liquids when the materials of construction for workstations are listed or approved for use without internal fire extinguishing or suppression system protection. When Note c also applies, the maximum increase allowed for both Notes c and f shall not exceed 100 percent.
(675 IAC 22-2.3-178) Eff: May 17, 2003

Section 1805.3.4.3; powered carts and trucks

Sec. 179. In Section 1805.3.4.3, delete all text after "intended". (675 IAC 22-2.3-179) Eff: May 17, 2003
Section 1901.2; permit

Sec. 180. Delete Section 1901.2 without substitution. (675 IAC 22-2.3-180) Eff: May 17, 2003

Section 1903.5.2; static electricity and lightning protection

Sec. 181. (a) Change the title of Section 1903.5.2 to read "Static electricity protection.

(b) Delete the last sentence of Section 1903.5.2 without substitution. (675 IAC 22-2.3-181) Eff: May 17, 2003

Section 1903.7; access plan

Sec. 182. In Section 1903.7, delete all text after "submitted" and insert "to the code official". (675 IAC 22-2.3-182) Eff: May 17, 2003

Section 1906.2; cold decks

Sec. 183. Delete the Exception in Section 1906.2. (675 IAC 22-2.3-183) Eff: May 17, 2003

Section 1907.2; size of piles

Sec. 184. Delete the Exception in Section 1907.2. (675 IAC 22-2.3-184) Eff: May 17, 2003

Section 1908.3; size of piles

Sec. 185. Delete the Exception in Section 1908.3. (675 IAC 22-2.3-185) Eff: May 17, 2003

Section 1908.8; fire extinguishers

Sec. 186. In Section 1908.8, delete "2-A:60 B:C" and insert "4-A:60B:C". (675 IAC 22-2.3-186) Eff: May 17, 2003
Section 2001.2; permits


Section 2006.5; kettle controls

Sec. 188. Delete the last two (2) sentences of Section 2006.5 and substitute as follows: The thin-down tank shall have an approved vent. Thinning operations shall be provided with an approved vapor removal system. *(675 IAC 22-2.3-188)* Eff: May 17, 2003

Section 2007.3; support

Sec. 189. In the first sentence of Section 2007.3, delete "adequately" and insert after "physical damage", "in an approved manner". *(675 IAC 22-2.3-189)* Eff: May 17, 2003
Section 2101.2; permits

Sec. 190. Delete Section 2101.2 without substitution. (675 IAC 22-2.3-190) Eff: May 17, 2003

Section 2103.2; exposure

Sec. 191. Delete Section 2103.2 without substitution. (675 IAC 22-2.3-191) Eff: May 17, 2003
Chapter 22; service stations and repair garages

Sec. 192. Change the title of Chapter 22 to read: MOTOR FUEL DISPENSING FACILITIES AND REPAIR GARAGES. (675 IAC 22-2.3-192) Eff: May 17, 2003

Section 2201.1; scope

Sec. 193. Amend Section 2201.1 to read:
2202.1 Scope. Automotive motor fuel dispensing facilities, marine motor fuel dispensing facilities, fleet vehicle motor fuel dispensing facilities and repair garages shall be in accordance with this chapter and the Indiana Fuel Gas Code (675 IAC 25), Indiana Building Code (675 IAC 13) and the Indiana Mechanical Code (675 IAC 18). Such operations shall include both public accessible and private operations.
When the term "service stations" is used, it shall mean "motor fuel dispensing facilities". (675 IAC 22-2.3-193) Eff: May 17, 2003

Section 2201.2; permits

Sec. 194. Delete Section 2201.2 (675 IAC 22-2.3-194) Eff: May 17, 2003

Section 2201.3; construction documents

Sec. 195. Change Section 2201.3 to read as follows: Plans and specifications shall be submitted in accordance with the General Administrative Rules (675 IAC 12-6). (675 IAC 22-2.3-195) Eff: May 17, 2003

Section 2202.1; definitions

Sec. 196. In Section 2202.1, amend the following definitions to read as follows:
AUTOMOTIVE SERVICE STATION to read: AUTOMOTIVE FUEL DISPENSING FACILITY. That portion of property where flammable or combustible liquids or gases used as motor fuels are stored and dispensed from fixed equipment into the fuel tanks of motor vehicles or approved containers.
FLEET VEHICLE SERVICE STATION to read: FLEET VEHICLE FUEL DISPENSING FACILITY. That portion of a commercial, industrial, governmental or manufacturing property where liquids used as fuels are stored and dispensed into fuel tanks of motor vehicles that are used in connection with such businesses, by persons within the employ of such businesses, or a commercial customer of such businesses.
MARINE SERVICE STATION to read: MARINE FUEL DISPENSING FACILITY.
SELF-SERVICE STATION to read: SELF-SERVICE FUEL DISPENSING FACILITY. That portion of a service station where liquid motor fuels are dispensed from fixed approved dispensing equipment into fuel tanks of motor vehicles or approved containers by persons other than a service station attendant.
(675 IAC 22-2.3-196) Eff: May 17, 2003

Section 2204.3.2; dispensers

Sec. 197. Change Section 2204.3.2 Dispensers to read as follows: Dispensing devices shall comply with Section 2206.7. Dispensing devices operated by the insertion of coins or currency may be used provided change or credit can be issued. (675 IAC 22-2.3-197) Eff: May 17, 2003

Section 2204.3.7; quantity limits

Sec. 198. Change Section 2204.3.7 Quantity limits to read as follows: Dispensing equipment used at unsupervised locations shall comply with one (1) of the following:
(1) Dispensing devices for Class I fuel shall be programmed or set to limit uninterrupted fuel delivery to 25 gallons (95 L) and require a manual action to resume delivery; or
(2) The amount of fuel being dispensed shall be limited in quantity by a preprogrammed card.
(675 IAC 22-2.3-198) Eff: May 17, 2003

Section 2204.4; dispensing into portable containers

Sec. 199. Amend Section 2204.4 to read as follows: 2204.4 Dispensing into portable containers. The dispensing of flammable or combustible liquids into portable approved containers shall comply with Section 2204.4.1 through Section 2204.4.3. (675 IAC 22-2.3-199) Eff: May 17, 2003

Section 2205.1.1; delivery vehicle location

Sec. 200. Delete Section 2205.1.1 without substitution. (675 IAC 22-2.3-200) Eff: May 17, 2003

Section 2205.1.2; tank capacity calculation
Sec. 201. Change Section 2205.1.2 to read as follows: 2205.1.1 Tank capacity calculation. The driver, operator or attendant of a tank vehicle shall, before making delivery to a tank, determine the unfilled, available capacity of such tank by a gauging device. *(675 IAC 22-2.3-201)* Eff: May 17, 2003

**Section 2205.1.3; tank fill connections**

Sec. 202. Change Section 2205.1.3 to read as follows: 2205.1.2 Tank fill connections. Delivery of flammable liquids to tanks more than 1,100 gallons in capacity shall be made by means of approved liquid - and vapor-tight connections between the delivery hose and tank fill pipe. Where tanks are equipped with any type of vapor recovery system, all connections required to be made for the safe and proper functioning of the particular vapor recovery process shall be made. Such connections shall be made liquid and vapor tight and remain connected throughout the unloading process. Vapors shall not be discharged at grade level during delivery. *(675 IAC 22-2.3-202)* Eff: May 17, 2003

**Section 2205.2.2; emergency shutoff valves**

Sec. 203. Change Section 2205.2.2 to read as follows: Automatic closing emergency shut-off valves required by Section 2206.7.4 shall be maintained in accordance with the manufacturer's instructions. *(675 IAC 22-2.3-203)* Eff: May 17, 2003

**Section 2206.2; method of storage**

Sec. 204. In Section 2206.2, delete "motor". *(675 IAC 22-2.3-204)* Eff: May 17, 2003

**Section 2206.2.1; underground tanks**

Sec. 205. In Section 2206.2.1, delete "motor". *(675 IAC 22-2.3-205)* Eff: May 17, 2003

**Section 2206.2.1.1; inventory control for underground tanks**

Sec. 206. Change Section 2206.2.1.1 Inventory control for underground tanks to read as follows: Accurate daily inventory records shall be maintained and reconciled on underground fuel storage tanks for indication of possible leakage from tanks and piping. The records shall be kept at the premises or readily available for inspection by the code official upon written request and shall include records for each product showing daily reconciliation between sales, use, receipts and inventory on hand. *(675 IAC 22-2.3-206)* Eff: May 17, 2003

**Section 2206.2.2 aboveground tanks located inside buildings**

Sec. 207. In Section 2206.2.2, delete "motor". *(675 IAC 22-2.3-207)* Eff: May 17, 2003

**TABLE 2206.2.3; minimum separation requirements for aboveground tanks**

Sec. 208. Change TABLE 2206.2.3 as follows:

1. Add a listing to TABLE 2206.2.3 as follows:

<table>
<thead>
<tr>
<th>Tank Type</th>
<th>Capacity</th>
<th>Nearest Building</th>
<th>Nearest Dispenser</th>
<th>Lot Line</th>
<th>Public Way</th>
<th>Between Tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class III Liquids ASTs</td>
<td>Equal or less than 1,100</td>
<td>5</td>
<td>0b</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

(2) Add Footnote b to read: b Class III Fuel Dispensers. *(675 IAC 22-2.3-208)* Eff: May 17, 2003

**Section 2206.2.3; aboveground tanks located outside, above grade**

Sec. 209. Change Section 2206.2.3 as follows: 2206.2.3 Aboveground tanks located outside, above grade. Aboveground tanks shall not be used for the storage and dispensing of Class I, II or IIIA liquid motor fuels except as provided by this section.

1. INSTALLATION OF TANKS

Tanks shall be installed in accordance with Chapter 34 and shall be installed in special enclosures constructed in accordance with Section 2206.2.4 or in listed and approved tank enclosures or materials providing fire protection of not less than two (2) hours. The following additional criteria shall apply:

(a) Guard posts or other means shall be provided to protect the area where tanks are installed. The design shall be in accordance with Section 312,
(b) Each tank and each special enclosure shall be surrounded by a clear space of not less than three (3) feet to allow for maintenance and inspection,
(c) Warning signs and identification signs shall be installed to clearly identify hazards. The design shall be in accordance with Sections 2205.6, 2209.5.7 and 3404.2.3. Conspicuous signs prohibiting simultaneous tank filling and fuel dispensing shall be posted,
(d) Tanks containing motor fuels shall not exceed a ten thousand (10,000) gallon individual or eighteen thousand (18,000) gallon aggregate capacity. Installations having the maximum allowable aggregate capacity shall be separated from other such installations by not less than one hundred (100) feet, and
(e) Tanks shall be provided with automatic fuel shut-off devices capable of stopping the delivery of fuel when the level in the tank reaches ninety percent (90%) of tank capacity.

EXCEPTIONS: 1. Aboveground storage tanks for motor vehicle fuel-dispensing stations legally installed according to the code in effect at the time of installation and in operation prior to September 7, 1992.
2. Single tank installations where the fuel tank has a capacity of one thousand one hundred (1,100) gallons or less that are in compliance with Chapter 34 of this code.
3. Diesel tanks and dispensing operations when all the following criteria are met:
   A. The distance in feet from any property line when not adjacent to a public way shall be double the distance specified in Table 2206.2.3.
   B. The distance in feet from a property line adjacent to a public way, to include the opposite sides of a public way, shall be double the distance specified in Table 2206.2.3.
   C. The distance in feet from adjacent structures shall be double the distance specified in Table 2206.2.3.
   D. In compliance with Chapter 34 of this code.
   E. The diesel tank shall be double the distance specified in Table 2206.2.3 for the property line including the opposite side of the public way from any non-diesel fuel tank or dispensing operation.

2. INSTALLATION OF DISPENSING SYSTEMS
Dispensing systems shall be installed in accordance with Chapters 22 and 34 except as follows:
(a) Motor fuels shall be transferred from tanks by means of fixed pumps which are designed and equipped to allow control of the flow and to prevent leakage or accidental discharge,
equipped with a manual drain valve that drains into the primary tank. For tanks with a remote fill connection, a portable spill container is allowed. *(675 IAC 22-2.3-212)* Eff: May 17, 2003

**Section 2206.7.4; dispenser emergency valve**

Sec. 213. Change the last sentence of Section 2206.7.4 to read as follows: Emergency shut-off valves shall be installed and maintained in accordance with the manufacturer's instructions and tested at the time of initial installation. *(675 IAC 22-2.3-213)* Eff: May 17, 2003

**Section 2206.7.6.1; special requirements for nozzles**

Sec. 214. Change Section 2206.7.6.1 as follows: Delete Item 2 entirely and renumber Items 3 and 4 accordingly. *(675 IAC 22-2.3-214)* Eff: May 17, 2003

**Section 2206.7.9.1.3; piping**

Sec. 215. Change the last sentence of Section 2206.7.9.1.3 to read as follows: Condensate tanks shall be designed and installed in accordance with the manufacturer's recommendation. *(675 IAC 22-2.3-215)* Eff: May 17, 2003
Section 2301.2; permits

Sec. 216. Delete Section 2301.2 without substitution. (675 IAC 22-2.3-216) Eff: May 17, 2003

Section 2301.3; construction documents

Sec. 217. Amend Section 2301.3 by deleting the first three (3) sentences and substitute to read as follows: Plans including the information specified in Section 2301.3 shall be provided to the fire department having jurisdiction. A copy of the plans shall be maintained on the premises. (675 IAC 22-2.3-217) Eff: May 17, 2003

Section 2301.4; evacuation plan

Sec. 218. Delete Section 2301.4 and substitute to read as follows: An evacuation plan for public accessible areas and a separate set of plans indicating location and width of aisles, location of exits and exit signs, height of storage, and locations of hazardous materials shall be provided to the fire department having jurisdiction for review. Following review of the plans, a copy of the plans shall be maintained on the premises in an approved location. (675 IAC 22-2.3-218) Eff: May 17, 2003

Section 2304.2; designation based on engineering analysis

Sec. 219. In Section 2304.2, delete "NFPA 231 and NFPA 231C" and insert "NFPA 13 (675 IAC 13-1-8)". (675 IAC 22-2.3-219) Eff: May 17, 2003

TABLE 2306.2; GENERAL FIRE PROTECTION AND LIFE SAFETY REQUIREMENTS

Sec. 220. Change TABLE 2306.2 by deleting "when required by the code official" from Footnote d and g. (675 IAC 22-2.3-220) Eff: May 17, 2003

Section 2306.6.1; access doors

Sec. 221. In Section 2306.6.1, add to the last sentence "and shall have landings in accordance with the Indiana Building Code (675 IAC 13) Section 1003.3.1.4. (675 IAC 22-2.3-221) Eff: May 17, 2003

Section 2306.6.1.1; number of doors required

Sec. 222. Add Exception to Section 2306.6.1.1 to read: In buildings having ESFR sprinkler systems, a minimum of one (1) access door shall be provided in each 200 lineal feet (60,960 mm), or fraction thereof, of the exterior walls which face the required fire apparatus access road. Spacing between doors shall not exceed 200 lineal feet. (675 IAC 22-2.3-222) Eff: May 17, 2003

Section 2306.9; aisles

Sec. 223. In Section 2306.9, delete "NFPA 231, NFPA 231C" and insert "NFPA 13 (675 IAC 13-1-8)". (675 IAC 22-2.3-223) Eff: May 17, 2003

Section 2307.2.1; shelf storage

Sec. 224. In Section 2307.2.1, delete "NFPA 231" and insert "NFPA 13 (675 IAC 13-1-8)". (675 IAC 22-2.3-224) Eff: May 17, 2003

Section 2308.2.2(2), Section 2308.2.2.1; racks with solid shelving and fire protection

Sec. 225. In Section 2308.2.2(2) and Section 2308.2.2.1, delete "NFPA 231C" and insert "NFPA 13 (675 IAC 13-1-8)". (675 IAC 22-2.3-225) Eff: May 17, 2003

Section 2308.4; column protection

Sec. 226. In Section 2308.4, delete "NFPA 231C" and insert "NFPA 13 (675 IAC 13-1-8)". (675 IAC 22-2.3-226) Eff: May 17, 2003

Section 2310.1; general

Sec. 227. In Section 2310.1, delete "NFPA 231C" and insert "NFPA 13 (675 IAC 13-1-8)". (675 IAC 22-2.3-227) Eff: May 17, 2003
Section 2401.2; approval required

Sec. 228. Delete Section 2401.2. (675 IAC 22-2.3-228) Eff: May 17, 2003

Section 2401.4; permits

Sec. 229. Delete Section 2401.4. (675 IAC 22-2.3-229) Eff: May 17, 2003

Section 2401.5; use period

Sec. 230. In Section 2401.5, delete "180" and insert "30". (675 IAC 22-2.3-230) Eff: May 17, 2003

Section 2401.6; construction documents

Sec. 23. In Section 2401.6, delete "with each application for approval" and substitute "to the fire department having jurisdiction". (675 IAC 22-2.3-231) Eff: May 17, 2003

Section 2401.7.1; inspection report

Sec. 232. Delete Section 2401.7.1 in its entirety and substitute to read as follows: An inspection report shall be made available to the fire department having jurisdiction and shall consist of maintenance, anchors and fabric inspections. (675 IAC 22-2.3-232) Eff: May 17, 2003

Section 2406.1; flame-resistant treatment

Sec. 233. In Section 2406.1, change as follows:
(1) Delete "before a permit is granted".
(2) Delete "by the permit".
(675 IAC 22-2.3-233) Eff: May 17, 2003

Section 2407.2; fire protection equipment

Sec. 234. Delete Section 2407.2 without substitution. (675 IAC 22-2.3-234) Eff: May 17, 2003

Section 2410.5.1; arrangement and maintenance

Sec. 235. Delete the text of Section 2410.5.1 and substitute to read as follows: A plan indicating the exit ways, aisles and seating shall be provided to the fire department having jurisdiction and a copy shall be maintained on the premises. Aisles shall be maintained clear at all times during occupancy. (675 IAC 22-2.3-235) Eff: May 17, 2003

2411.2; venting

Sec. 236. In Section 2411.1, delete "and shall be approved by the code official" and substitute "in effect at the time the equipment is installed". (675 IAC 22-2.3-236) Eff: May 17, 2003

Sec. 237. Change Section 2411.2 as follows:
(1) At the end of the first sentence, add ", in effect at the time the equipment is installed".
(2) Delete "when required" from the second sentence and substitute "having openings not exceeding inch (6.4 mm) wire mesh. (675 IAC 22-2.3-237) Eff: May 17, 2003

675 IAC 22-2.3-236 Section 2411.1; installation
Section 2501.2; permit required

Sec. 238. Delete Section 2501.2. *(675 IAC 22-2.3-238)* Eff: May 17, 2003

Section 2504.5; fire safety plan

Sec. 239. In the first sentence of Section 2504.5, delete "and approval". *(675 IAC 22-2.3-239)* Eff: May 17, 2003
Section 2601.2; permits

Sec. 240. Delete Section 2601.2 without substitution. *(675 IAC 22-2.3-240)* Eff: May 17, 2003

Section 2601.3; restricted area

Sec. 241. Change Section 2601.3 as follows:
(1) Delete "unless approval has been obtained from the code official".
(2) Delete "4" and "5" without substitution. *(675 IAC 22-2.3-241)* Eff: May 17, 2003

Section 2602.1; definitions

Sec. 242. In Definitions, Section 2602.1, change the definition of HOTWORKS PERMITS by deleting "and prepermitted by the code official". *(675 IAC 22-2.3-242)* Eff: May 17, 2003

Section 2604.1.8; sprinkler protection

Sec. 243. Change the last sentence of Section 2604.1.8 to read: The code official shall be notified where the sprinkler protection is impaired. *(675 IAC 22-2.3-243)* Eff: May 17, 2003

Section 2604.1.9; fire detection systems

Sec. 244. In Section 2604.1.9, delete "approved". *(675 IAC 22-2.3-244)* Eff: May 17, 2003
Section 2701.1; scope
Sec. 245. In Section 2701.1 Scope, add Exception 10 to read as follows: 10. Laboratory use of hazardous chemicals provided a Chemical Hygiene Plan as defined in Section 2702 of the code has been implemented at the facility. (675 IAC 22-2.3-245) Eff: May 17, 2003

Section 2701.2.1; mixtures
Sec. 246. In Section 2701.2.1, delete everything after "reference standards;" and substitute "by a recognized organization, or material safety data sheet (MSDS)". (675 IAC 22-2.3-246) Eff: May 17, 2003

Section 2701.4; permits
Sec. 247. Delete Section 2701.4 without substitution. (675 IAC 22-2.3-247) Eff: May 17, 2003

Section 2701.4.1; hazardous materials management plan
Sec. 248. Change Section 2701.4.1 to read as follows:
Hazardous materials management plan. Regulation by the Emergency Planning and Community Right to Know Act (EPCRA) as set forth at 42 U.S.C. 11001, et seq constitutes compliance with Section 2701.4.1.
For hazardous materials used, stored dispensed, or handled in excess of quantities listed in TABLES 2703.1.1, an owner or operator of a facility not regulated by the Federal Emergency Planning and Community Right to Know Act shall notify the servicing fire department in writing and shall, when asked, allow the fire department to conduct an on-site health hazardous materials inspection of the facility and provide to the fire department specific location information on those hazardous materials. (675 IAC 22-2.3-249) Eff: May 17, 2003

Section 2701.4.2; hazardous materials inventory statement
Sec. 249. Change Section 2701.4.2 to read as follows:
Hazardous materials management plan. This section does not apply to facilities regulated under the Emergency Planning and Community Right to Know Act (EPCRA) as set forth at 42 U.S.C. 11001, et seq.
For hazardous materials used, stored, dispensed, or handled in excess of the quantities listed in TABLES 2703.1.1, an owner or operator of a facility not regulated by the Federal Emergency Planning and Community Right to Know Act shall notify the servicing fire department in writing and shall, when asked, allow the fire department to conduct an on-site health hazardous materials inspection of the facility and provide to the fire department specific location information on those hazardous materials. (675 IAC 22-2.3-249) Eff: May 17, 2003

Section 2701.5.1; temporarily out of service facilities
Sec. 250. In Section 2701.5.1, delete "maintain a permit and". (675 IAC 22-2.3-250) Eff: May 17, 2003

Section 2701.5.2; permanently out of service facilities
Sec. 251. In Section 2701.5.2, change the following:
(1) Delete "permit" and substitute "hazardous materials management plan".
(2) Delete "an approved manner" and substitute "accordance with Section 2701.5.3".
(3) Delete the second and third sentences. (675 IAC 22-2.3-251) Eff: May 17, 2003

Section 2701.5.3; facility closure plan
Sec. 252. Change Section 2701.5.3 to read as follows: Facility closure plan. The owner or operator shall submit a plan to the servicing fire department to terminate storage, dispensing, handling or use of hazardous materials at least 30 days prior to facility closure. The plan shall demonstrate that hazardous materials which were stored, dispensed, handled or used in the facility have been transported, disposed of or reused in a manner that eliminates the need for further maintenance and any threat to public health and safety. (675 IAC 22-2.3-252) Eff: May 17, 2003

Section 2702.1; definitions
Sec. 253. Add the following definitions to Section 2702.1:
CHEMICAL HYGIENE PLAN means a written program developed and implemented at the facility which sets forth procedures, equipment, personal
protective equipment and work practices that are capable of protecting individuals from the health hazards and other hazards presented by hazardous chemicals used at that particular facility. LABORATORY means a facility where the "laboratory use of hazardous chemicals" occurs. It is a facility where relatively small quantities of hazardous chemicals are used on a non-production basis. LABORATORY SCALE means work with substances in which the containers used for reactions, transfers, and other handling of substances are manipulated by one person. "Laboratory scale" excludes those facilities whose function is to produce commercial quantities of materials. LABORATORY USE OF HAZARDOUS CHEMICALS means handling or use of such chemicals in which all of the following conditions are met:
(1) chemical manipulations are carried out on a "laboratory scale";
(2) multiple chemical procedures or chemicals are used;
(3) the procedures involved are not part of a production process; and
(4) laboratory practices and equipment are available and in common use to minimize the potential for employee exposure and to other risks from hazardous chemicals.

Sec. 256. Change Section 2703.3.1 to read as follows: Any unplanned sudden or non-sudden release into the environment of a listed hazardous substance that exceeds in any 24-hour period the reportable quantity for that substance, as identified in TABLE 302.4 of 40 CFR 302 and 40 CFR 355 Appendix A (July 1, 1997), and either causes a fire and/or explosion hazard, such as one that threatens contiguous property or the general public, or causes an injury requiring emergency medical treatment must be immediately reported to the servicing fire department. (675 IAC 22-2.3-256) Eff: May 17, 2003

Section 2703.3.1.1; records

Sec. 257. Change Section 2703.3.1.1 to read as follows: Records shall be provided of the unauthorized discharge of hazardous materials by the owner or the operator. (675 IAC 22-2.3-257) Eff: May 17, 2003

Section 2703.3.1.4; responsibility for cleanup

Sec. 258. Change the title and text of Section 2703.3.1.4 to read as follows: 2703.1.4 Responsibility for control and mitigation. The person, firm, or corporation responsible for an unplanned sudden or non-sudden release shall institute and complete all actions necessary to remedy the effects of such unplanned release at no cost to the servicing fire department. Control and mitigation may be initiated by the fire department or by an authorized individual or firm. Cost associated with such control or mitigation shall be borne by the owner, operator, or other person responsible for the release. (675 IAC 22-2.3-258) Eff: May 17, 2003

Section 2703.4; material safety data sheets

Sec. 259. Delete Section 2703.4 and substitute to read as follows: 2703.4 Material Safety Data Sheets (MSDS) for applicable hazardous materials shall be kept in a location which is acceptable to both the facility operator and the servicing fire department. (675 IAC 22-2.3-259) Eff: May 17, 2003

Section 2703.9.9; shelf storage

Sec. 260. Change Section 2703.9.9 to read as follows: 2703.9.9 Shelf storage. Shelving shall be of substantial construction, adequately braced and anchored. For seismic requirements and the seismic zone in which the material is located, see the building.
code. Shelf storage of hazardous materials shall be maintained in an orderly manner. *(675 IAC 22-2.3-260)*

**Table E 2703.11.1; maximum allowable quantity per indoor and outdoor control area in Groups M and S occupancies, nonflammable solids, nonflammable and noncombustible liquids**

Sec. 261. Amend Table 2703.11.1 as follows:
(1) Change the "Solids (pounds)" column to read "Solids pounds".
(2) Change the "Liquids gallons (pounds)" column to read "Liquid gallons".
*(675 IAC 22-2.3-261)* Eff: May 17, 2003

**Section 2704.10; supervision**

Sec. 262. In Section 2704.10 Supervision, add an EXCEPTION to read: EXCEPTION: A facility that is provided with a watchman service and is provided with an audible fire alarm system that can be heard by the watchman in all areas of the facility. *(675 IAC 22-2.3-262)* Eff: May 17, 2003
Section 2801.2; permits

Sec. 263. Delete Section 2801.2 without substitution. (675 IAC 22-2.3-263) Eff: May 17, 2003

Section 2801.3; material safety data sheets

Sec. 264. In Section 2801.3, delete "at an approved location". (675 IAC 22-2.3-264) Eff: May 17, 2003
Section 2901.1; scope

Sec. 265. Amend Section 2901.1 Scope by deleting the second sentence. (675 IAC 22-2.3-265) Eff: May 17, 2003

Section 2901.3; permits

Sec. 266. Delete Section 2901.3 without substitution. (675 IAC 22-2.3-266) Eff: May 17, 2003

Section 2902.1; definition

Sec. 267. Amend Section 2902.1, by adding ", certain synthetic fibers" after "wastepaper" in the definition of COMBUSTIBLE FIBERS. (675 IAC 22-2.3-267) Eff: May 17, 2003

Section 2903.4; agricultural products

Sec. 268. Change Section 2903.4 to read as follows: 2903.4 Agricultural products and combustible fibers. Combustible fibers, hay, straw, or similar agricultural products shall not be stored adjacent to structures or combustible materials unless a clear horizontal distance equal to the height of a pile is maintained between such storage and structures or combustible materials. Storage shall be limited to stacks of 100 tons (91 metric tons) each. Stacks shall be separated by a minimum of 20 feet (6,096 mm) of clear space. Exterior storage of agricultural products and combustible fibers shall be surrounded with an approved fence. Fences shall be a minimum of 6 feet (1,829 mm) in height. Quantities of hay, straw and other agricultural products shall not be limited or fencing required when stored in or near farm structures located outside closely built areas. A permit shall not be required for agricultural storage. (675 IAC 22-2.3-268) Eff: May 17, 2003

Section 2904.3; storage of 100 cubic feet to 500 cubic feet

Sec. 269. In Section 2904.3, change "approved" to "listed". (675 IAC 22-2.3-269) Eff: May 17, 2003

Section 2904.4; storage of more than 500 cubic feet

Sec. 270. In Section 2904.4, change "approved" to "listed". (675 IAC 22-2.3-270) Eff: May 17, 2003

Section 2905.1; bale size and separation
Section 3001.2; permits

Sec. 272. Delete Section 3001.2 without substitution. (675 IAC 22-2.3-272) Eff: May 17, 2003

Section 3003.3.1; security of areas

Sec. 273. In Section 3003.3.1, delete "in an approved manner". (675 IAC 22-2.3-273) Eff: May 17, 2003

Section 3003.13; lighting

Sec. 274. In Section 3003.13, delete "approved". (675 IAC 22-2.3-274) Eff: May 17, 2003

Section 3006.2; interior supply location

Sec. 274.2. In Section 3006.2, delete the words "the permit amount" and substitute "(504 cubic feet)". (675 IAC 22-2.3-274.2) Eff: May 17, 2003
Section 3101.2; permits

Sec. 275. Delete Section 3101.2 without substitution. (675 IAC 22-2.3-275) Eff: May 17, 2003

Section 3102.1; definitions

Sec. 276. In Section 3102.1, in the definition of CORROSIVE, delete ", Part 173" and insert "173.137". (675 IAC 22-2.3-276) Eff: May 17, 2003
Section 3201.2; permits

Sec. 278. Delete Section 3201.2 without substitution. (675 IAC 22-2.3-277) Eff: May 17, 2003

Section 3202.1; definitions

Sec. 278. In Section 3202.1, in the definition of CRYOGENIC FLUID, delete "liquid" and insert "fluid" (675 IAC 22-2.3-278) Eff: May 17, 2003

Section 3203.1.1; nonstandard containers

Sec. 279. In Section 3203.1.1, delete item 6. (675 IAC 22-2.3-279) Eff: May 17, 2003

Section 3203.11; lighting

Sec. 280. In Section 3203.11, delete "when required,", (675 IAC 22-2.3-280) Eff: May 17, 2003

Section 3204.3.1.3; drainage

Sec. 281. In Section 3204.3.1.3, delete the following from the Exception: "determined by the code official that". (675 IAC 22-2.3-281) Eff: May 17, 2003

Section 3204.3.2.2; drainage

Sec. 282. In Section 3204.3.2.2, delete the exception without substitution. (675 IAC 22-2.3-282) Eff: May 17, 2003

Section 3205.3.2; emergency shutoff valves

Sec. 283. In Section 3205.3.2, delete "available" and substitute "accessible". (675 IAC 22-2.3-283) Eff: May 17, 2003
Chapter 33; explosives and fireworks

Sec. 284. Delete the text of Chapter 33 and substitute as follows: Portions of this work are reproduced from the 1997 edition of the Uniform Fire Code, Article 77 and Article 78, and Appendix VI-F, copyright 1997, with the permission of the publisher, the International Conference of Building Officials. ICBO assumes no responsibility for the accuracy or completion of summaries provided therein.

CHAPTER 33 - EXPLOSIVES AND FIREWORKS

SECTION 3. - GENERAL

3301.1 Scope. Manufacture, possession, storage, sale, transportation and use of explosive materials shall be in accordance with Chapter 33. See Appendix VI-F for excerpts from nationally recognized standards for separation distances for explosives.

Explosives class designations in parentheses refer to new classifications used by DOT. See Appendix VI-F for information on explosives class designations.

EXCEPTIONS: 1. The armed forces of the United States, Coast Guard or National Guard.
2. Explosives in forms prescribed by the official United States Pharmacopoeia.
3. The sale, possession or use of fireworks 1.4G (Class C common fireworks).
4. The possession, transportation, storage and use of small arms ammunition when packaged in accordance with DOT packaging requirements.
5. Commercially manufactured black powder in quantities not to exceed 50 pounds, percussion caps, safety and pyrotechnic fuses, quills, quick and slow matches, and friction primers, if the black powder is intended to be used solely for sporting, recreational or cultural purposes in antique firearms or antique devices.
6. The transportation and use of explosive materials by the United States Bureau of Mines, and federal, state and local law enforcement and fire agencies acting in their official capacities.
7. Special industrial explosive devices which in the aggregate contain less than 50 pounds (22.7 kg) of explosive materials.
8. The possession, transportation, storage and use of blank industrial powder load cartridges when packaged in accordance with DOT packaging regulations.
9. When preempted by federal regulations.
10. The use and handling of fireworks 1.3G (Class B fireworks) as set forth in Chapter 33.

3301.2 Definitions.

3301.2.1 General. Insert the following definitions:

AERIAL SHELL is a pyrotechnic device that functions in the air.

BATF is the Bureau of Alcohol, Tobacco and Firearms.

BLASTING AGENT is a material or mixture consisting of a fuel and oxidizer intended for blasting. The finished product as mixed and packaged for use or shipment cannot be detonated by means of a No. 8 test blasting cap when unconfined. Under Department of Transportation regulations, blasting agents are classified and labeled as 1.5D.

BLASTING CAP is a shell closed at one end and containing a charge of a detonating compound which is ignited by a safety fuse. It is used for detonating explosives.

BINARY EXPLOSIVE is an explosive material composed of separate components, each of which is safe for storage and transportation and would not in itself be considered as an explosive.

BREAK (aerial shell) is an individual effect from an aerial shell, generally either color or noise. Aerial shells can be single break, having only one effect, or multiple break, having two or more effects.

BULLET RESISTANT is a material or method of construction which resists penetration of a bullet of 150 grain (9.75 g) M-2 ball ammunition having a nominal muzzle velocity of 2,700 feet per second (823 m/s) fired from a .30 caliber rifle at a distance of 100 feet (30.5 m). See Section 3302.3.4.

C.F.R is the Code of Federal Regulations of the United States Government.

DEA is the Drug Enforcement Administration of the United States Department of Justice.

DEFLAGRATION is an exothermic reaction, such as the extremely rapid oxidation of a combustible dust or flammable vapor in air, in which the reaction progresses through the unburned material at a rate...
less than the velocity of sound. A deflagration can have an explosive effect.

DESIGNATED LANDING AREA is the area over which aerial shells are fired and into which debris and malfunctioning aerial shells can fall.

DETONATION is an exothermic reaction characterized by the presence of a shock wave in a material which establishes and maintains the reaction. The reaction zone progresses through the material at a rate greater than the velocity of sound. The principal heating mechanism is one of shock compression. Detonations have an explosive effect.

DETONATOR is a component, such as a blasting cap or an electric blasting cap, in an explosive train which is capable of initiating detonation in a subsequent high explosive component.

DOT is the United States Department of Transportation.

ELECTRIC BLASTING CAP is a detonator which consists of a shell closed at one end. The other end contains electric wires which have been sealed into the shell. It contains a charge of detonating compound which is ignited or initiated by applying electric current to the wires protruding from the detonator.

EXPLOSIVE is:
1. A chemical that causes a sudden, almost instantaneous release of pressure, gas and heat when subjected to sudden shock, pressure, or high temperatures, or
2. A material or chemical, other than a blasting agent, that is commonly used or intended to be used for the purpose of producing an explosive effect and is regulated by Chapter 33.

EXPLOSIVE MATERIALS are explosives, blasting agents and detonators including, but not limited to, dynamite and other high explosives; slurries, emulsions and water gels; black powder and pellet powder; initiating explosives; detonators or blasting caps; safety fuses; squibs; detonating cord; igniter cord; igniters and fireworks, 1.3G (Class B special fireworks).

FIREWORKS, 1.4G (Class C, Common) are small firework devices designed primarily to produce visible or audible effects by combustion and which comply with the construction, chemical composition and DOT labeling requirements for fireworks, 1.4G (Class C, common fireworks).

FIREWORKS, 1.3G (Fireworks, Special Class B) are large fireworks designed primarily to produce visible or audible effects by combustion, deflagration or detonation. Fireworks, 1.3G (special fireworks) include, but are not limited to, firecrackers containing more than 2 grains (130 m) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces which exceed the limits for classification as 1.4G (Class C, common fireworks).

Special fireworks formerly classified as Class B explosives are now classified as fireworks, 1.3G by DOT.

FIXED GROUND PIECE is a ground display piece having no movable parts, such as a revolving wheel.

GROUND PIECE is a pyrotechnic device that functions on the ground. Ground pieces include fountains, roman candles, wheels and set pieces.

GUNPOWDER is any of various powders used in firearms and small arms ammunition as propelling charges.

HIGH EXPLOSIVE is explosive material, such as dynamite, which can be caused to detonate by means of a No. 8 test blasting cap when unconfined.

INHABITED BUILDING is a building regularly occupied in whole or in part as a habitation for human beings. Inhabited buildings include churches, schools, railway passenger stations, stores, airport terminals for passengers, and other buildings or structures where people are accustomed to congregate or assemble. Inhabited buildings do not include buildings or structures occupied in connection with the manufacture, transportation, storage or use of explosives and blasting agents.

INTRAPLANT DISTANCE is the minimum distance permitted between two buildings on an explosives manufacturing site, when at least one of the buildings contains or is designed to contain explosives.

LOW EXPLOSIVE is explosive material which will burn or deflagrate when ignited. It is characterized by a rate of reaction that is less than the speed of sound. Examples of low explosives are black powder, safety fuse, igniters, igniter cord, fuse lighters, fireworks, 1.3G (Class B special fireworks), 1.3, propellants
(Class B solid propellants), and fireworks, 1.4G
(Class C common fireworks).

MAGAZINE is a building or structure used for the
storage of explosives.

MASS-DETONATING EXPLOSIVES are high
explosives, black powder, certain propellants, certain
pyrotechnics and other similar explosives, alone or in
combination, or loaded into various types of
ammunition or containers, most of which can be
expected to explode virtually instantaneously when a
small portion is subjected to fire, severe concussion,
impact, the impulse of an initiating agent, or the
effect of a considerable discharge of energy from
without. Such an explosive will normally cause
severe structural damage to adjacent objects. Explosives propagation could occur immediately to
other items of ammunition and explosives stored
sufficiently close to and not adequately protected
from the initially exploding pile with a time interval
short enough so that two or more quantities must be
considered as one for quantity/distance (Q/D)
purposes.

MORTAR is a tube from which aerial shells are
fired.

PERCUSSION CAP is a device used to ignite the
powder charge of small arms ammunition.

PYROTECHNIC OPERATOR is an individual
approved to be responsible for pyrotechnic,
pyrotechnic special effects materials or both.

PYROTECHNIC SPECIAL EFFECTS MATERIAL
(special effect) is a low explosive material, other than
detonating cord, commonly used in motion picture,
television, theatrical or group entertainment
production for which a permit from the chief is
required for use or storage.

READY BOX is a storage container for aerial shells
at the site of a fireworks display.

SAFETY CAP is a paper tube, closed at one end, that
is placed over the end of the fuse of an aerial shell to
protect it from accidental ignition.

SPECIAL INDUSTRIAL EXPLOSIVE DEVICE is
an explosive power-pack containing an explosive
charge in the form of a cartridge or construction
device. The term includes, but is not limited to,
explosive rivets, explosive bolts, explosive charges
for driving pins or studs, cartridges for explosive-
actuated power tools and charges of explosives used
in jet tapping of open-hearth furnaces and jet
perforation of oil well casings.

SPECIAL INDUSTRIAL HIGH-EXPLOSIVE
MATERIALS are sheet, extrusions, pellets and
packages of high explosives containing dynamite,
trinitrotoluol, penaerythritoltetranite,
cyclotrimenthylenetrinitramine or other similar
compounds used for high-energy-rate forming,
expanding and shaping in metal fabrication and for
dismemberment and quick reduction of scrap metal.

SQUIB, ELECTRIC, is a device similar in
appearance to an electric blasting cap which, upon
activation by an electric current, produces a
deflagration instead of a detonation.

TEST BLASTING CAP NO. 8 is a blasting cap
containing 2 grams of a mixture of 80 per cent
mercury fulminate and 20 percent potassium chlorate
or a cap of equivalent strength.

For other fireworks definitions, see also IC 22-11-14.

3301.2.2 Limited application. For the purpose of
Chapter 33, certain terms are defined as follows:

DISPLAY is an outdoor display of aerial shells or
ground display pieces.

FIRE RESISTANT is construction designed to
provide reasonable protection against fire. For
exterior walls of magazines constructed of wood, this
shall mean fire-resistance equivalency provided by
sheet metal of not less than 0.0179 inch (0.45 mm)
(26 manufacturer's standard gage).

HARDWOOD is red oak, white oak, hard maple, ash
or hickory, each of which is free from knots, wind
shakes or similar defects.

PLYWOOD is A-C exterior grade plywood.

SOFTWOOD is Douglas fir, pine or other softwood
of equal bullet-resistance free from loose knots, wind
shakes or similar defects.

STEEL is general purpose, hot- or cold-rolled, low
carbon steel.
TEMPORARY STORAGE is storage of pyrotechnic special effects material on site for a period of time of 72 hours or less.

3301.3 Permits.

3301.3.1 Required. Permits shall be as required in IC 22-14-4 and 675 IAC 12-9-4.

3301.3.2 Unsafe material or practice. Permits for the following materials shall be invalidated and the materials disposed of in an approved, safe manner:

1. Dynamite having an unsatisfactory absorbent or one that permits leakage of a liquid explosive ingredient under any conditions liable to exist during storage.
2. Nitrocellulose in a dry and uncompressed condition in quantity greater than 10 pounds (4.5 kg) net weight in one package.
3. Fulminate of mercury in a dry condition and fulminate of other metals in any condition except as a component of manufactured articles not hereinafter forbidden.
4. Explosive compositions that ignite spontaneously or undergo marked decomposition, rendering the products or their use more hazardous, when subjected for 48 consecutive hours or less to a temperature of 167°F (75°C).
5. New explosive materials until approved by DOT.
6. Explosive materials condemned by DOT.
7. Explosives containing an ammonium salt and a chlorate.

3301.4 Bond. See IC 22-14-4-2.

3301.5 Notice of New St orage and Manufacturing Sites. When a new explosive material storage or manufacturing location, including a temporary job site, is established, the local law enforcement agency, fire department and emergency planning committee shall be notified immediately of the type, quantity and location of explosive materials at the site.

3301.6 Access Road Signs. At the entrance to explosive material manufacturing and storage sites, all access roads shall be posted with the following warning sign or other approved sign:

DANGER
NEVER FIGHT EXPLOSIVE FIRES
EXPLOSIVES ARE STORED ON THIS SITE
CALL________________

The sign shall be weather resistant with a reflective surface and lettering at least 2 inches (50.8 mm) high.

3301.7 Prohibited and Limited Acts.

3301.7.1 Manufacturing. The manufacture of explosives shall be prohibited unless such manufacture is in accordance with IC 35-47.5.

3301.7.2 Limits established by law. Storage of explosive materials is prohibited within the limits established by law as the limits of districts in which such storage is prohibited.

SECTION 4. STORAGE

3302.1 General.

3302.1.1 Magazines required. Explosive materials shall be stored in magazines in accordance with Section 3302.

A competent person shall be in charge of magazines. The person shall be at least 21 years of age and responsible for compliance with all safety precautions.

3302.1.2 Inspection. Magazines containing explosive materials shall be inspected at intervals of not greater than seven days to determine whether there has been an unauthorized entry or attempted entry into a magazine, or unauthorized removal of a magazine or its contents.

3302.1.3 Security. Magazine doors shall be kept locked when the magazine is unattended.

3302.1.4 Posting safety rules. Current safety rules covering the operations of magazines shall be posted on the interior of each magazine in a visible location.

3302.1.5 Rotating stock. When explosive material is removed from a magazine for use, the oldest usable stocks shall be removed first.

3302.1.6 Manner of storage. Corresponding grades and brands shall be stored together and in such a manner that grades and brand marks are visible. Stocks shall be stored so as to be easily counted and checked.

Packages of explosive materials shall be stacked in a stable manner not exceeding 6 feet (1,829 mm) in height.
3302.1.7 Opened stock. Packages of explosive materials which have been opened shall be closed before being placed in a magazine. Packages constructed of materials other than fiberboard or paper shall not be opened in a magazine.

3302.1.8 Damaged material. Packages of damaged explosive materials shall not be unpacked or repacked in or within 50 feet (15,240 mm) of a magazine or inhabited building or in close proximity to other explosive materials.

3302.1.9 Storage with other materials. Magazines shall be used exclusively for the storage of approved explosive materials and other blasting materials. Tools, other than approved conveyors, shall not be stored in magazines.

3302.1.10 Cleaning. Magazine floors shall be swept regularly and shall be kept clean, dry and free of grit, paper and rubbish. Sweepings from floors of magazines shall be disposed of in accordance with the instructions of the manufacturer.

3302.1.11 Deteriorated material handling. When an explosive material has deteriorated to an extent that it is in an unstable or dangerous condition, or when a liquid has leaked from an explosive material, the person in possession of such explosive material shall immediately contact the material’s manufacturer and the chief. The work of destroying explosive materials shall be directed by persons experienced in the destruction of explosive materials. Explosive materials recovered from blasting misfires shall be placed in a magazine until an experienced person has determined the method of disposal.

3302.1.12 Stained floors. Magazine floors stained with liquid shall be dealt with according to instructions obtained from the manufacturer of the explosive materials stored in the magazine.

3302.1.13 Magazine maintenance. When magazines need interior repairs, all explosive materials shall be removed and the floors cleaned before and after making repairs. When making exterior magazine repairs involving the possibility of causing a fire, all explosive materials shall first be removed from the magazine. Explosive materials removed from a magazine under repair shall be placed either in another magazine or placed a safe distance from the magazine, where they shall be properly guarded and protected until repairs have been completed. Upon completion of repairs, the explosive materials shall be promptly returned to the magazine.

3302.1.14 Sources of ignition. Smoking, matches, flame-producing devices, open flames and firearms or cartridges shall not be permitted inside of or within 50 feet (15,240 mm) of magazines.

Where low explosives are sorted in magazines, spark-producing tools shall not be used. Such magazines shall be bonded and grounded.

3302.1.15 Yard maintenance. The land within 25 feet (7,620 mm) of magazines shall be kept clear of rubbish, brush, dried grass, leaves, dead trees, and live trees less than 10 feet (3,048 mm) high.

Combustible materials shall not be stored within 50 feet (15,240 mm) of magazines.

3302.1.16 Premises identification. The premises upon which Types 1, 2, 4 and 5 outdoor magazines are located shall be posted with signs reading EXPLOSIVES KEEP OFF. These signs shall be in contrasting colors with a minimum letter size of 3-inch (76 mm) height with 12.7 mm brush stroke. Signs shall be located so that a bullet passing through the sign will not strike a magazine. Signs shall not be attached to outdoor magazines.

3302.1.17 Location. Types 1, 2, 4, and 5 outdoor magazines shall be located in accordance with nationally recognized standards. See Appendix VI-F.

3302.2 Retail Sales.

3302.2.1 General. Indoor storage and display of gunpowder and ammunition for retail sales shall be in accordance with Section 3302.2.

3302.2.1.1 Storage. The maximum quantities, storage conditions, and fire-protection requirements for gunpowder and ammunition stored in a building shall be as follows:

1. Smokeless powder:
   - 200 pounds (90.7 kg) in a Type 4 magazine, or
   - 400 pounds (181.4 kg) in separate portable Type 4 magazines in a completely sprinklered building. The quantity of product in a magazine shall not exceed 200 pounds (90.7 kg).
2. Commercially manufactured sporting black powder:
   - 25 pounds (11.3 kg) in a separate, portable Type 4 magazine.
3. Small arms primers or percussion caps:
750,000 with not more than 100,000 stored in one pile and piles separated from each other by at least 15 feet (4572 mm), or
Greater than 750,000, when in accordance with the following:
3.1 The storage room shall not be accessible to unauthorized persons,
3.2 Primers or percussion caps shall be stored in a 1-inch (25.4 mm) nominal thickness wood cabinet or equivalent with self-closing doors with not more than 200,000 primers or caps per cabinet,
3.3 Shelves in cabinets shall be vertically separated by at least 2 feet (609.6 mm),
3.4 Cabinets shall be located against walls of the storage room with at least 40 feet (12,192 mm) between cabinets, or with at least 20 feet (6,096 mm) between cabinets when barricades are installed midway between cabinets. Such barricades shall be securely attached to the wall, shall project from the wall at least 10 feet (3,048 mm) and shall be at least twice the height of cabinets. Barricade construction shall be of 0.5-inch (6.4 mm) boiler plate or 2 inches (50.8 mm) of wood, brick or concrete block.
3.5 Primers or percussion caps shall be separated from flammable liquids, flammable solids and oxidizing materials by a distance of 25 feet (7,620 mm) or by a fire partition having a fire-resistant rating of at least one hour, and
3.6 The building shall be protected by an automatic sprinkler system.

3302.2.4 Combined storage. Black powder shall not be stored with small arms primers or percussion caps.

3302.2.5 Bulk repackaging. The bulk repackaging of powder, primers or percussion caps shall not be performed in retail stores.

3302.2.6 Repackaging of damaged containers. Damaged containers shall not be repackaged.

3302.2.7 Separation. Buildings containing gunpowder or ammunition in accordance with Section 3302.2 need not be located as required by Section 3302.3.3.

3302.3 Storage Magazines.

3302.3.1 General. Explosive materials, including special industrial high-explosive materials, shall be stored in magazines which meet the requirements of Section 3302.3.

3302.3.2 Classification and use of magazines. Magazines shall be classed as Type 1, 2, 3, 4 or 5. Magazines shall be constructed and used in accordance with Table 3302.3-A.

3302.2.1.2 Display. The maximum quantities, storage conditions, and fire-protection requirements for gunpowder and ammunition displayed in a building shall be as follows:
1. Smokeless powder: 20 pounds (9.07 kg) in original containers.
2. Black powder: NONE.
3. Small arms primers or percussion caps:
   10,000 in a nonsprinklered building.
   25,000 in a sprinklered building.

3302.2.2 Magazine size. Indoor magazines shall not be of a size greater than the exit door or contain more than 200 pounds (90.7 kg) of explosive materials.

3302.2.3 Powder. The amount of powder stored in an indoor magazine shall not exceed 200 pounds (90.7 kg).
<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>MAGAZINE TYPES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Explosives, 1.1D, (Class A explosives) including dynamites; cap sensitive emulsions; slurries and watergels; cast boosters.</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Black Powder, 1.1D, (Class A explosives). Defined as low explosive by the Bureau of Alcohol, Tobacco and Firearms for storage.</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Detonators, 1.1B, (Class A explosives)</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detonating Cords, 1.1D; 1.2D; 1.4D; 1.4G, (Class A or C explosive)</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Detonators 2, 1.4B; 1.4S, (Class C explosive)</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Safety fuse, electric squibs, igniters and igniter cord 3, 1.4G; 1.4S.</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Blasting Agents, 1.5D, (Blasting Agents)</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Propellants, 1.3C, (Class B explosives). Defined as low explosives by the Bureau of Alcohol, Tobacco and Firearms for storage.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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</tr>
</tbody>
</table>

1 Any of the types indicated by "X" are allowed.
2 Includes electric detonators with leg wires 4 feet (1219 mm) long or longer or detonators with empty plastic tubing 12 feet (3657.6 mm) long or longer that contain not more than 1 gram of explosives (excluding ignition and delay charges).
3 Detonators shall not be stored in the same magazine with other explosive materials, except that 1.4 (Class C) detonators and those described in Footnote 2 are allowed to be stored with safety fuse, electric squibs, igniters or igniter cord in Type 1, 2, 3 or 4 magazines.
3302.3.3 Location. Site magazines for the storage of high explosives and blasting agents shall be located in accordance with Appendix VI-F. Magazines for the storage of low explosives shall be located in accordance with Appendix VI-E. The ground around outdoor magazines shall be graded such that water drains away from the magazines.

3302.3.4 Bullet-resistant construction.

3302.3.4.1 General. Magazines which are required to be bullet resistant shall be constructed using a method specified in Section 3302.3.4. Steel and wood dimensions indicated are actual thicknesses. Concrete block and brick dimensions indicated are the manufacturer's represented thicknesses.

3302.3.4.2 Specified construction. The following methods are acceptable as bullet-resistant construction:

1. Exterior of 5/8 inch (15.9 mm) steel, lined with an interior of any type of nonsparking material.
2. Exterior of 1/4 inch (12.7 mm) steel, lined with an interior of not less than 3/8 inch (9.5 mm) plywood.
3. Exterior of 3/8 inch (9.5 mm) steel, lined with an interior of 2 inches (50.8 mm) of hardwood.
4. Exterior of 3/8 inch (9.5 mm) steel, lined with an interior of 3 inches (76.2 mm) of softwood or 2 1/4 inches (57.2 mm) of plywood.
5. Exterior of 1/4 inch (6.4 mm) steel, lined with an interior of 3 inches (76.2 mm) of hardwood.
6. Exterior of 1/4 inch (6.4 mm) steel, lined with an interior of 5 inches (127 mm) of softwood or 5 1/4 inches (133.4 mm) of plywood.
7. Exterior of 1/4 inch (6.4 mm) steel, lined with an intermediate layer of 2 inches (50.8 mm) of hardwood and an interior lining of 1 inch (38.1 mm) of plywood.
8. Exterior of 3/16 inch (4.8 mm) steel, lined with an interior of 4 inches (101.6 mm) of hardwood.
9. Exterior of 3/16 inch (4.8 mm) steel, lined with an interior of 7 inches (177.8 mm) of softwood or 6 inches (171.4 mm) of plywood.
10. Exterior of 3/16 inch (4.8 mm) steel, lined with an intermediate layer of 3 inches (76.2 mm) of hardwood and an interior lining of 1 inch (19.1 mm) of plywood.
11. Exterior of 1/8 inch (3.2 mm) steel, lined with an interior of 5 inches (127 mm) of hardwood.
12. Exterior of 1/8 inch (3.2 mm) steel, lined with an interior of 9 inches (228.6 mm) of softwood.
13. Exterior of 1/8 inch (3.2 mm) steel, lined with an intermediate layer of 4 inches (101.6 mm) of hardwood and an interior lining of 1 inch (19.1 mm) plywood.
14. Exterior of any type of fire-resistant material which is structurally sound, lined with an intermediate layer of 4 inches (101.6 mm) of solid concrete block or 4 inches (101.6 mm) of solid brick or 4 inches (101.6 mm) of solid concrete, and an interior lining of 1/2 inch (12.7 mm) plywood placed securely against the masonry lining.
15. Standard 8 inch (203.2 mm) concrete block with voids filled with a well-tamped sand/cement mixture.
16. Standard 8 inch (203.2 mm) solid brick.
17. Exterior of any type of fire-resistant material which is structurally sound, lined with an intermediate 6 inch (152.4 mm) space filed with well-tamped dry sand or a well-tamped sand/cement mixture.
18. Exterior of 1/8 inch (3.2 mm) steel, lined with a first intermediate layer of 3/4 inch (19.1 mm) plywood, a second intermediate layer of 3-5/8 inches (92.1 mm) of a well-tamped dry sand or sand/cement mixture and an interior lining of 3/4 inch (19.1 mm) plywood.
19. Exterior of any type of fire-resistant material, lined with a first intermediate layer of 1 inch (19.1 mm) plywood, a second intermediate layer of 3-5/8 inches (92.1 mm) of a well-tamped dry sand or sand/cement mixture, a third intermediate layer of 1 inch (19.1 mm) plywood, and a fourth intermediate layer of 2 inches (50.8 mm) of hardwood or not less than 0.068 inch (1.7 mm) of steel and an interior lining of 1 inch (19.1 mm) plywood.
20. Eight inch thick (203.2 mm) solid concrete.

3302.3.4.3 Tested construction. Methods of construction other than those specified in Section 3302.3.4.2 are acceptable as bullet-resistant construction when tested as prescribed herein. Tests to determine bullet resistance shall be conducted on test panels or empty magazines which shall resist five out of five shots placed independently of each other in an area 3 feet by 3 feet (914.4 mm by 914.4 mm). For ceilings and roofs, the bullet shall be fired at an angle of 45 degrees from the perpendicular. For walls and doors, the bullet shall be fired perpendicular to the wall or door. See BULLET RESISTANT in this section.

3302.3.5 Type 1 magazines.
3302.3.5.1 General. Type 1 magazines shall be constructed in accordance with the Building Code and Section 3302.3.5.

A Type 1 magazine shall be a permanent structure such as a building, igloo, tunnel or dugout. It shall be bullet resistant, fire resistant, weather resistant, theft resistant and ventilated.

3302.3.5.2 Walls. Walls shall be bullet resistant as specified in Section 3302.3.4.

3302.3.5.3 Floors. Floors shall be constructed of wood or other suitable nonsparking materials.

3302.3.5.4 Foundations. Foundations shall be constructed of brick, concrete, cement block, stone or wood posts. If piers or posts are used in lieu of a continuous foundation, the space under the buildings shall be enclosed with fire-resistant materials.

3302.3.5.5 Bullet-resistant roofs or ceilings. Where it is possible for a bullet to be fired directly through the roof and into the magazine at such an angle that the bullet could strike the explosives within, the magazine roof shall be bullet resistant as specified in Section 3302.3.4 or shall be protected by one of the following methods:

1. A sand tray having a depth of 4 inches (101.6 mm) of sand and located at the top of the inner walls covering the entire ceiling area, except that portion necessary for ventilation.
2. Either not less than 0.033 inch (0.84 mm) (20 gage) steel with 4 inches (101.6 mm) of hardwood or not less than 0.043 inch (1.1 mm) (18 gage) aluminum with 7 inches (177.8 mm) of hardwood.

3302.3.5.6 Doors. Doors shall be bullet resistant as specified in Section 3302.3.4. Hinges and hasps shall be attached to the doors by welding, riveting, or bolting with nuts on the inside of the door. Hinges and hasps shall be installed in such a manner that they cannot be removed when the doors are closed and locked.

3302.3.5.7 Locks. Each door shall be equipped with two mortise locks, two padlocks fastened in separate hasps and staples, a combination of a mortise lock and a padlock, a mortise lock that requires two keys to open, or a three-point or equivalent-type lock that secures the door to the frame at more than one point. Padlocks shall be steel having at least five tumblers and at least a 0.043 inch (9.5 mm) diameter case-hardened shackle. Padlocks shall be protected by not less than 0.097 inch (2.5 mm) steel hoods constructed in a manner which prevents sawing or lever action on the locks, hasps and staples.

EXCEPTION: Magazine doors that are adequately secured on the inside by means of a bolt, lock or bar that cannot be actuated from the outside.

3302.3.5.8 Ventilation. Ventilation shall be provided to prevent dampness and heating of stored explosive materials. Ventilation openings shall be screened to prevent the entrance of sparks. Ventilation openings in side walls and foundations shall be offset or shielded for bullet-resistant purposes. Magazines having foundation and roof ventilators with the air circulating between the side walls and the floors and between the side walls and the ceiling shall have a wooden lattice or equivalent to prevent the packages of explosive materials from being stacked against the side walls and blocking the air circulation.

3302.3.5.9 Exposed metal. Sparking material shall not be exposed to contact with the stored explosive materials. Ferrous metal nails in the floor and side walls, which could be exposed to contact with explosive materials shall be blind nailed, countersunk or covered with a nonsparking latticework or other nonsparking material.

3302.3.6 Type 2 magazines. Type 2 magazines shall be constructed in accordance with Section 3302.3.6.

A Type 2 magazine shall be a box, trailer, semitrailer or other mobile facility.

A Type 2 magazine shall be bullet resistant, fire resistant, weather resistant, theft resistant and ventilated.

Walls, ceiling and roof construction, hinges, hasps, locks, ventilation, and interior construction shall be constructed as required for Type 1 magazines.

Type 2 magazines shall be supported to prevent the floor from having direct contact with the ground. Magazines less than 1 cubic yard (0.76 m³) in size shall be fastened to a fixed object to prevent theft of the entire magazine.

Vehicular magazines shall be immobilized by removing the wheels, locking with a kingpin locking device or other approved methods.

3302.3.7 Type 3 magazines. Type 3 magazines shall be constructed in accordance with Section 3302.3.7.

A Type 3 magazine shall be a "day box" or other portable magazine. Type 3 magazines shall be theft resistant, fire resistant and weather resistant.

Type 3 magazines shall be constructed of not less than 0.097 inch (2.5 mm) (12 gage) steel lined with at least 0.097 inch (12.7 mm) plywood or masonite.
Doors shall overlap sides by at least 1 inch (25.4 mm).
Hinges and hasps shall be attached by welding, riveting or bolting with nuts on the inside. Type 3 magazines shall have one steel padlock having at least five tumblers and a case-hardened shackle of at least inch (9.5 mm) diameter.
Explosive materials shall not be left unattended in a Type 3 magazine. When Type 3 magazines will be left unattended, explosive materials shall first be moved to a Type 1 or 2 magazine.

3302.3.8 Type 4 magazines. Type 4 magazines shall be constructed in accordance with the Building Code and Section 3302.3.8.
A Type 4 magazine shall be a permanent, portable or mobile structure, such as a building, igloo, box, semitrailer or other mobile container, which shall be fire resistant, theft resistant and weather resistant.
Outdoor magazines shall be constructed of masonry, metal-covered wood, fabricated metal, or a combination of these materials. Doors shall be metal or solid wood covered with metal.
Permanent magazines shall be constructed as required for Type 1 magazines with respect to foundations, floors, ventilation and locking devices. Vehicular magazines shall be immobilized when unattended as required for Type 2 magazines.

3302.3.9 Type 5 magazines. Permanent Type 5 magazines shall be constructed in accordance with the Building Code and Section 3302.3.9. Temporary Type 5 magazines shall be constructed in accordance with Section 3302.3.9.
A Type 5 magazine shall be a building, igloo, box, bin, tank, semitrailer, bulk-trailer, tank trailer, bulk truck, tank truck or other mobile container.
Outdoor Type 5 magazines shall be weather resistant and theft resistant. Construction shall be of wood, wood covered with metal, masonry, fabricated metal or a combination of these materials. Doors shall be metal or solid wood.
Permanent Type 5 magazines shall be constructed as required for Type 1 magazines with respect to foundations, floors, ventilation and locking devices. Vehicular magazines shall be immobilized when unattended, as required for Type 2 vehicular magazines.
Over-the-road trucks and semitrailers used for temporary storage shall have each door locked with one steel padlock having at least five tumblers and a case-hardened shackle of at least inch (9.5 mm) diameter. The door hinges and lock hasp shall be securely fastened to the magazine and the door frame.
EXCEPTION: Magazine doors that are adequately secured on the inside by means of a bolt, lock or bar that cannot be actuated from the outside.
Type 5 storage magazines in trailers shall display BLASTING AGENT placards, as required by Section 3303.2.10 on the trailer when any quantity of blasting agents (Explosives, 1.5D - see Appendix VI-F) is contained therein.

3302.3.10 Indoor magazines. Indoor magazines shall be constructed in accordance with Section 3302.3.10. Indoor magazines shall be fire resistant and theft resistant. Indoor magazines constructed of wood shall have sides, bottoms and lids or doors constructed of 2 inch (50.8 mm) wood and shall be well braced at corners. The magazines shall be covered on the exterior with steel not less than 0.016 inch (0.41 mm) (26 gage) thick. Indoor magazines constructed of metal shall have sides, bottoms and lids or doors constructed of not less than 0.097 inch (2.5 mm) (12 gage) steel and shall be lined with a minimum of inch (12.7 mm) of nonsparking material.
EXCEPTION: Type 5 indoor magazines used for the storage of blasting agents (Explosives, 1.5D see Appendix VI-F) need not be fire resistant.
Indoor magazines need not be bullet resistant or weather resistant if the buildings in which they are stored provide protection from the weather and bullet penetration.
Hinges and hasps shall be attached to doors or lids by welding, riveting or bolting with nuts on the inside so that doors or lids cannot be removed when closed and locked.
Each magazine shall be equipped with a steel padlock, which need not be protected by a steel hood, having at least five tumblers with a case-hardened shackle of at least 3/8 inch (9.5 mm) diameter.
Indoor magazines shall have substantial wheels or casters to facilitate removal from a building in case of emergency.
Magazines shall be painted red and the lid or door shall bear in conspicuous white lettering, at least 3 inches (76.2 mm) high, EXPLOSIVES KEEP FIRE AWAY.
The indoor storage of high explosives shall not exceed 50 pounds (22.7 kg). Detonators shall be
stored in a separate magazine from other explosive materials and the total number of detonators stored shall not exceed 5,000.

Indoor magazines containing blasting agents in excess of 50 pounds (22.7 kg) shall be located in accordance with Appendix VI-F.

Indoor storage magazines shall not be located in residences or dwellings.

SECTION 3303 - USE, HANDLING AND TRANSPORTATION

3303.1 Use and Handling.

3303.1.1 Hours of operation. Blasting operations shall be conducted during daylight hours.

3303.1.2 Personnel qualifications. The person in charge of the handling and use of explosive materials shall be at least 21 years of age and possess a valid explosive-use permit issued by the chief.

EXCEPTION: Persons 18 years of age or older are allowed to use and handle explosive materials under the direct personal supervision of a person who possesses a valid explosive-use permit.

3303.1.3 Intoxicants. Explosive materials shall not be handled by persons under the influence of intoxicants, narcotics or DEA-controlled substances.

3303.1.4 Smoking. Smoking and carrying matches while handling explosive materials or while within 50 feet (15, 240 mm) of where explosive materials are being used are prohibited.

3303.1.5 Sources of ignition. The use of matches, lighters, spark-producing devices or the presence of any open flames is prohibited within 50 feet (15,240 mm) of areas where explosives are being used.

EXCEPTION: The lighting of safety fuse in conjunction with approved blasting operations.

3303.1.6 Utilities notification. When blasting is being conducted in the vicinity of gas, electric, water, fire alarm, telephone, telegraph or stream utilities, the blaster shall notify the appropriate representative of such utilities at least 24 hours in advance of blasting specifying the location and intended time of such blasting.

3303.1.7 Other regulations. Blasting operations shall be conducted in accordance with federal, state and local regulations.

3303.1.8 Blasting safeguards. Before a blast is fired, the person in charge shall make certain that surplus explosive materials are in a safe place, that persons and vehicles are at a safe distance or under sufficient cover, and that a loud warning signal has been sounded.

3303.1.9 Premature detonation safeguards. Precautions shall be taken to prevent the premature detonation of explosive materials from lighting, radio frequency energy, extraneous electricity or static electricity caused by dust or snow storms, low humidity or mechanical conditions. Such precautions shall include:

1. The suspension of blasting operations and removal of persons from the blasting area during the approach and progress of a thunderstorm,
2. The posting of signs prohibiting the use of mobile radio transmitters on roads within 1,000 feet (304.8m) of blasting operations where electric detonators are being used, and
3. Periodic checks for static electricity or stray currents in areas where these factors could exceed safe operating limits.

3303.1.10 Nonsparking tools. Tools used for the opening of containers of explosive materials shall be made of nonsparking materials.

EXCEPTION: Slitters of metal are allowed for opening paper, plastic or fiberboard containers.

3303.1.11 Exposure protection. When blasting is performed in a congested area or in close proximity to a building, structure, railway, highway or other installation that could be damaged by material being thrown into the air, the blast shall be covered with an adequate blasting mat.

3303.1.12 Disposal of packaging. Empty boxes and paper, plastic or fiber packing material which have previously contained explosive materials shall not be reused, and shall be disposed of in accordance with manufacturers recommendations or instructions.

3303.1.13 Abandonment. Explosive materials shall not be abandoned.

3303.2 Transportation.

3303.2.1 Public conveyance. Explosive materials shall not be carried or transported in or upon a public conveyance or vehicle carrying passengers for hire.
Interstate transportation of explosives is not regulated by this code.

3303.2.2 Vehicle construction. Vehicles used for transporting explosive materials shall be strong enough to carry the load without difficulty and shall be in good mechanical condition. If vehicles do not have a closed body, a portable, magazine-type container that is reasonably weather and theft resistant, and securely fastened to the vehicle body, shall be used to contain the explosive materials. Vehicles used for the transportation of explosive materials shall have tight floors and any exposed, spark-producing metal on the inside of the body shall be covered with wood or other nonsparking material to prevent contact with explosive materials.

EXCEPTION: Exposed spark-producing metal need not be covered in vehicles in which only blasting agents or oxidizing materials are being transported.

3303.2.3 Authorization. Explosive materials shall be transported on vehicles in accordance with section 3303.2.

3303.2.4 Fire protection. Vehicles used for transporting explosive materials shall be equipped with fire extinguishers according to the following schedule:

1. Vehicle Gross vehicle Weight less than 14,000 pounds (6,350.2 kg).
   At least two multipurpose dry-chemical extinguishers having a combined capacity of not less than 4-A:20-B:C.

2. Vehicle Gross vehicle weight 14,000 pounds (6,350.2 kg) or greater; tractor/semitrailer units
   At least two multipurpose dry-chemical extinguishers having a combined capacity of not less than 4-A:70-B:C.

3303.2.5 Fire extinguisher maintenance and placement. Fire extinguishers shall be securely mounted on vehicles at well-separated, accessible locations. Extinguishers shall be checked monthly to verify that they are filled and in operating condition.

3303.2.6 Vehicle inspection. Vehicles used to transport explosive materials shall be inspected by the person to whom a permit has been issued for such vehicles in order to determine that:
   1. Electric wires are insulated and securely fastened,
   2. The engine chassis and body are reasonably clean and free of excessive grease and oil,
   3. The fuel tanks and fuel lines are securely fastened and not leaking,
   4. Brakes, lights, horn, windshield wipers and steering mechanism are functioning properly.
   5. Tires are properly inflated and free from defects, and
   6. The vehicle is in proper condition for transporting explosive materials.

3303.2.7 Nonsparking tools. Spark-producing metal tools shall not be carried in the cargo compartment of a vehicle transporting explosive materials.

3303.2.8 Sources of ignition. Smoking, carrying matches or other flame-producing devices, carrying firearms or loaded cartridges while in or near a vehicle transporting explosive materials, and driving, loading or unloading any such vehicle in a careless or reckless manner are prohibited.

3303.2.9 Personnel qualifications. Vehicles transporting explosive materials shall be in the custody of drivers who are physically fit; careful; capable; reliable; able to read and write the English language; not addicted to the use or under the influence of intoxicants, narcotics or DEA-controlled substances; and are not less than 21 years of age. They shall be familiar with federal, state and local traffic regulations, and the provisions of Chapter 33 governing the transportation of explosive materials.

3303.2.10 Transportation routes. Vehicles transporting explosive materials shall be routed to avoid congested traffic and heavily populated areas.

3303.2.11 Vehicular tunnels. Explosive materials shall not be transported through completed vehicular tunnels which prohibit the transport of explosive materials.

3303.2.12 Unattended vehicles. Vehicles transporting explosive materials shall not be left unattended.

3303.2.13 Passengers. Persons other than the driver and one assistant, who is at least 18 years of age, shall not ride on vehicles transporting explosive materials.

3303.1.14 Delivery conditions. Delivery of explosive materials shall be made only to authorized persons and into approved storage, handling or use areas.
3303.2.15 Vehicle storage and repair. Vehicles containing explosive materials shall not be taken into a garage or repair shop for repairs or storage.

3303.3 Explosive Materials Terminals.

3303.3.1 Quantities at terminals. The office of the state fire marshal is authorized to designate the location and specify the maximum quantity of explosive materials allowed to be loaded, unloaded, reloaded or temporarily retained at each terminal where such operations are permitted.

3303.3.2 Notification. Carriers shall immediately notify consignees of arrival of explosive materials at terminals.

3303.3.3 Terminal requirements. Truck terminals where explosive materials are loaded, unloaded or transferred shall be in accordance with the following conditions:

1. There shall not be aboveground storage tanks of flammable or combustible liquids or other hazardous materials on the terminal property which would present a significant exposure hazard to the operation of the terminal or to adjacent properties.
2. The terminal property shall be sufficiently large that docking or vehicle storage areas containing explosives shall be a minimum of 75 feet (22,860 mm) from adjoining property lines.
3. Explosives shall be kept in vehicles except during transferring or loading operations.
4. Specific areas of docks shall be designated for the holding of explosive materials for not more than 72 hours during loading or transferring operations. A minimum distance shall be specified and maintained between this designated area and other materials on the dock. Combustible storage and flammable and combustible liquids shall be kept the greatest possible distance from this designated area.
5. At all times, a guard shall be on duty on the terminal property. The guard shall be capable of driving all equipment in the area. At times when there are a substantial number of vehicles carrying explosive materials in the terminal, additional persons capable of driving shall be provided.
6. Adequate security against unauthorized persons entering the terminal area shall be provided. In metropolitan areas, this shall include a fence and gates.
7. The terminal shall be adequately lighted for normal observation of all vehicles containing explosive materials.
8. Approved fire-protection appliances shall be provided for the loading dock near the designated explosive materials area and near the parked vehicles.
9. An approved, isolated area of the terminal property shall be designated for vehicles containing explosive materials.
10. Vehicles containing special inherent hazards shall be kept separated from the area designated for the parking of explosive materials vehicles.
11. Shipments of explosive materials shall be transported without unnecessary delay. Delays shall not exceed 72 hours.

3303.4 Blasting Agents.

3303.4.1 Ammonium nitrate storage. Ammonium nitrate stored at a closer distance to the blasting agent storage area than provided in Section 3303.4.3 shall be calculated in accordance with Appendix VI-F.

3303.4.2 Intraplant separation. Minimum intraplant separation distances between mixing units and the ammonium nitrate storage areas and blasting agent storage areas shall be in accordance with Appendix VI-F.

3303.5 Safety Precautions for Blasting Agents.

3303.5.1 Mixing facilities. Buildings or other facilities used for mixing blasting agents shall be located away from inhabited buildings, passenger railways and public highways in accordance with Appendix VI-F.  
EXCEPTION: Bulk mixing and delivery equipment for shot service delivery.

3303.5.2 Production quantities. Not more than eight hours' production of blasting agents or the limit determined by nationally recognized standards (see Appendix VI-F), whichever is less, shall be located in or near the building used for mixing blasting agents. Larger quantities shall be stored in magazines.

3303.5.3 Construction. Buildings or other facilities used for the mixing of blasting agents shall be designed and constructed in accordance with the Building Code.

3303.5.4 Compounding and mixing. Compounding and mixing of approved formulations of blasting agents shall be conducted in accordance with federal, state and local regulations.
3303.5.5 Sources of ignition. Smoking and open flames shall be prohibited in or within 50 feet (15,240 mm) of buildings or facilities used for the mixing of blasting agents.

3303.5.6 Disposal of oxidizer bags. Empty oxidizer bags shall be disposed in accordance with manufacturers instructions or recommendations.

SECTION 3304 - MANUFACTURING, ASSEMBLING AND TESTING

3304.1 General. Manufacture, assembly, testing and loading of explosives, ammunition, blasting agents (Explosives; Division 1.5 see Appendix VI-F) and fireworks shall be in accordance with Section 3304.

EXCEPTIONS: 1. Section 3304 does not apply to the hand loading of small arms ammunition prepared for personal use and not for resale.
2. Section 3304 does not apply to the mixing and loading of blasting agents (Explosives; Division 1.5 see Appendix VI-F) at blasting sites provided all necessary safety precautions are taken.

3304.2 Required Information.

3304.2.1 General. Prior to manufacturing, assembling, testing or loading explosives, ammunition, blasting agents (Explosives; Division 1.5 see Appendix VI-F) or fireworks, the chief shall be furnished with the following information:
1. The exact location of the place of manufacture.
2. The kind of explosives, ammunition, blasting agents (Explosives; Division 1.5 see Appendix VI-F) or fireworks to be manufactured or processed and the property of hazardous materials to be used.
3. The names and addresses of individual owners, partners or officers of the corporation.
4. A plot plan of the operating premises with the operating buildings indicated in which greater than 1 pound (0.45 kg) of explosives is manufactured, handled, used or stored. The maximum amount of explosives greater than 1 pound (0.45 kg) to be used in each building, number of persons in each operating building, barricade locations and dimensions, and the location and capacity of storage magazines.
5. A copy of the general safety rules which the manufacturer will enforce, including plans for emergency procedures in the event of fire or explosion.

3304.2.2 Retention of plans. A copy of the plans of the plant shall be kept in the office on the premises of each explosive, ammunition, blasting agents (Explosives, Division 1.5 see Appendix VI-F) or fireworks manufacturing plant and shall be made available to the chief upon request.

3304.3 Training. Workers who handle explosives or explosive charges or dispose of explosives shall be trained in the hazards of the materials and processes in which they are to be engaged and in the safety rules governing such materials and processes.

3304.4 Emergency Procedures. Approved emergency procedures shall be developed for each plant. Such procedures shall include personal instruction in any emergency that could be anticipated. Personnel shall be made aware of an emergency warning signal.

3304.5 Intraplant Separation of Operating Buildings. Mass detonating explosives and fireworks manufacturing buildings, including those where explosive charges are assembled, manufactured, prepared or loaded, shall be separated from all other buildings, including magazines, within the confines of the manufacturing plant by a distance not less than those shown in Table 3304.5-A.
<table>
<thead>
<tr>
<th>EXPLOSIVE OR FIREWORKS (pounds)</th>
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<th>MINIMUM DISTANCE (feet) x 0.454 for kg</th>
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1When a building containing explosives is provided with barricades, the intraline distances shown are allowed to be reduced by one half.
3304.6 Buildings and Equipment

3304.6.1 Construction. Operating buildings or rooms which exceed the exempt amounts of explosives specified in the Building Code shall be constructed in accordance with the Indiana Building Code (675 IAC 13).

3304.6.2 Explosive dust. Explosive dust shall not be exhausted to the atmosphere.

When collecting explosive dust, a "wet" collector system shall be used. Wetting agents shall be compatible with the explosives.

Explosive dusts shall be removed from the collection chamber as often as necessary to prevent overloading. The entire system shall be cleaned at a frequency that will eliminate hazardous concentrations of explosive dusts in pipes, tubing or ducts.

3304.6.3 Intrinsically safe ventilation system. Squirrel cage blowers shall not be used for exhausting hazardous fumes, vapors or gases. Nonferrous fan blades shall be used for fans located within the ductwork and through which hazardous materials are exhausted. Motors shall be located outside the duct.

3304.6.4 Workstation protection. Workstations shall be separated by distance, barrier or other approved alternates so that fire in one station will not ignite material in the next workstation. When necessary, each operator shall be protected by a personnel shield located between the operator and the explosive device or explosive material being processed. This shield and its support shall be a tested design to withstand a blast from the maximum amount of explosives allowed behind it.

3304.7 Operations.

3304.7.1 Remote processing. When the type of material and processing warrants, mechanical operations involving explosives in excess of 1 pound (0.45 kg) shall be performed at isolated stations or at intraplant distances, and machinery shall be controlled from remote locations behind substantial barricades or at separations so that workers can remain at a safe distance while machinery is operating.

3304.7.2 Static control. The working area where the screening, grinding, blending and other processing of static-sensitive explosives or pyrotechnic materials are done shall be provided with approved static controls.

3304.7.3 Explosive containers. Bulk explosives shall be kept in approved nonsparking containers when not being used or processed. Explosives shall not be stored or transported in open containers.

3304.7.4 Allowable quantities. The quantity of explosives at a workstation shall not exceed the quantity posted on the load limit signs established by the intraplant distances. See Table 3304.5-A.

3304.7.5 Waste receptacles. Approved receptacles with covers shall be provided for each location for disposing of waste material and debris. These waste receptacles shall be emptied and cleaned as often as necessary but not less than once each day or at the end of each shift.

3304.7.6 Posting of pertinent information. General safety rules and operating instructions governing the particular operation or process carried on at that location shall be available at each location.

3304.7.7 Posted limits. Personnel and explosive limits shall be posted.

3304.7.8 Maintenance. Regular maintenance and repair work shall not be performed in an explosive area until explosives are removed and the area is made safe.

EXCEPTION: Minor adjustments or emergency repairs to secure immediate safety.

3304.7.9 Spills. Spilled or dropped explosives shall be cleaned up at once.

3304.7.10 Contaminated materials. Shipping containers, cleaning rags and other materials contaminated with explosives shall be removed daily and disposed in an approved, safe manner.

3304.7.11 Storage. Fireworks, explosives and explosive charges shall not be stored near sources of heat.

EXCEPTION: Approved curing or drying operation.

3304.8 Explosive Materials Testing Sites.
3304.8.1 Location. Detonation of explosive materials or ignition of fireworks for testing purposes shall be performed only in isolated areas at special sites where distance; protection from missiles, shrapnel or flyrock by barricades, bunkers or adequate shelter; and other safeguards to assure adequate protection to prevent injury to personnel or damage to property are provided. See Section 3304.9.

3304.8.2 Personal protective equipment. Protective clothing and equipment shall be provided to protect persons engaged in the testing, ignition or detonation of explosive materials.

3304.8.3 Test site safeguards. When tests are being conducted or explosives are being detonated, only authorized persons shall be present. Areas where explosives are regularly or frequently detonated or burned shall be fenced and posted with adequate warning signs. Adequate warning devices shall be used before burning or detonating explosives to warn persons who might approach from any direction that they are approaching a danger zone.

3304.9 Disposal of Waste Explosive Materials.

3304.9.1 Disposal site safeguards. Sites for the destruction of explosive materials and fireworks shall be located in accordance with Appendix VI-F. When possible, barricades shall be utilized between the destruction site and inhabited buildings.

3304.9.2 Reuse of site. Unless an approved burning site has been thoroughly saturated with water and has passed a safety inspection, 48 hours shall elapse between the completion of a burn and the placement of scrap explosive materials for a subsequent burn.

3304.9.3 Personnel safeguards. Once an explosive burn operation has started, personnel shall relocate to a safe location where adequate protection from air blast and flying debris is provided. Personnel shall not return to the burn area until the person in charge has inspected the burn site and determined that it is safe for personnel to return.

3304.9.4 Standby personnel. When required by the chief, standby personnel shall be provided until such time as the site is determined to be safe. See Section 2416.

SECTION 3305 - FIREWORKS AND PYROTECHNIC SPECIAL EFFECTS MATERIAL-GENERAL

3305.1 Scope. Fireworks and temporary storage, use and handling of pyrotechnic special effects material used in motion pictures, television, and theatrical and group entertainment productions shall be in accordance with Chapter 33 and IC 22-11-14.

3305.2 Permits.

3305.3 Fireworks.

3305.3.1 Manufacturing. It is unlawful for any manufacturer, wholesaler, importer, or distributor to sell at wholesale, or offer to sell at wholesale, or ship or cause to be shipped into Indiana, fireworks, novelties, or trick noisemakers unless he has been issued and holds a valid certificate of compliance issued by the State Fire Marshal. A retailer selling fireworks must apply for a fireworks stand retail sales permit from the State Fire Marshal prior to June 1 of each year.

3305.3.2 Displays. See IC 22-11-14 and IC 22-11-14-3.

SECTION 3306 - FIREWORKS

3306.1 General. Storage, use and handling of fireworks shall be in accordance with Section 3306, Indiana Building Code (675 IAC 13) and IC 22-11-14.

EXCEPTIONS: 1. The use of fireworks by railroads or other transportation agencies for signaling or illumination.
2. The sale or use of blank cartridges for theatrics, signaling or ceremonial purposes.
3. The use of fireworks by the United States Armed Forces.

3306.2 Seizure of Fireworks. The office of the state fire marshal is authorized to seize, take, remove or cause to be removed at the expense of the owner all stocks of fireworks offered or exposed for sale, stored or held in violation of Chapter 33 and IC 22-11-14.
TABLE 3306.3-A - MINIMUM MORTAR SEPARATION DISTANCES

<table>
<thead>
<tr>
<th>MORTAR DIAMETER (inches)</th>
<th>MINIMUM SEPARATION FROM SPECTATOR VIEWING AREAS, VEHICLES AND BUILDINGS (feet)</th>
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<td>x 0.3048 for m</td>
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<td>840</td>
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3306.4 Displays.

3306.4.1 General. Fireworks displays shall be in accordance with Section 3306.4.

3306.4.2 Insurance. The governing body of the municipality shall require a certificate of insurance in accordance with IC 22-11-14-3.

3306.4.3 Mortars for aerial shell displays.

3306.4.3.1 Site criteria. Mortars for aerial displays shall be separated from spectator viewing areas, vehicles and buildings as set forth in Table 3306.3-A.

The designated landing area shall be an approved large, clear, open area. Spectators, vehicles and combustible materials shall not be allowed within the designated landing area. The designated landing area shall not be within 100 feet (30,480 mm) of tents, canopies and membrane structures.

3306.4.3.2 Construction. Mortars shall be approved for use with the aerial shells to be fired. Mortars shall be constructed of heavy cardboard, paper or metal other than cast iron.

3306.4.3.3 Inspection. Prior to placement, mortars shall be inspected for defects such as dents, bent ends, damaged interiors and damaged plugs. Mortars found to be defective shall not be used.

3306.4.3.4 Positioning. Mortars shall be positioned so that aerial shells are directed over the designated landing area and away from ground pieces. Mortars shall not be angled toward spectator viewing areas.

The trajectory of aerial shells shall be arranged such that a minimum clearance of 25 feet (7,620 mm) is maintained from potential obstructions.

Seamed metal mortars shall be placed such that the seam of a mortar faces to the side rather than to the top or bottom.

3306.4.3.5 Securing. Mortars shall be buried to a depth of not less than two thirds of their length, either in the ground or in aboveground troughs or drums. In soft ground, wood not less than 2 inches (50.8 mm) nominal thickness or rock slabs shall be placed beneath mortars which will be used more than once to prevent their sinking or being driven into the ground during firing.

EXCEPTION: Approved securely positioned mortar racks are allowed for the firing of single-break shells 6 inches (152.4 mm) or less in diameter.

3306.4.3.6 Mortar separation. Mortars that are buried in the ground, in troughs or in drums shall be separated from adjacent mortars by a distance equal to or greater than the diameter of the mortar.

EXCEPTION: Electrically fired mortars.

3306.4.3.7 Moisture protection. In damp ground, a weather-resistant bag shall be placed under the bottoms of mortars prior to placement in the ground to protect mortars from moisture. Weather-resistant bags shall be placed over the open end of mortars in damp weather to keep moisture from accumulating on the inside surface of mortars.

3306.4.3.8 Ground burst protection. Sand bags, dirt boxes or other suitable protection shall be placed around mortars on the uprange side to protect the operator from ground bursts.

3306.4.3.9 Paper mortars.

3306.4.3.9.1 Convolute. Paper mortars constructed of convolute wound paper shall be approved for the size aerial shells being discharged having a maximum double break.

3306.4.3.9.2 Spiral wound. Spiral-wound paper mortars shall not be used for greater than 3 inch (76.2 mm) diameter aerial shells with a maximum double break.
3306.4.3.10 Grouping mortars. Mortars of the same diameter, which are to be reloaded during a display, shall be grouped together such that various sized are not intermixed. Groups shall be separated.

3306.4.3.11 Loose gravel and rocks. Loose gravel, rocks and other loose solid objects shall be removed from the area around mortars to prevent such materials from being thrown from ground bursts during firing.

3306.4.3.12 Cleaning tool. When mortars are to be fired more than once during a display, a cleaning tool shall be available for the cleaning of debris from mortars as necessary. For metal mortars, the tool shall be nonsparking.

3306.4.4 Ground pieces.

3306.4.4.1 Location. Ground pieces shall be located not less than 150 feet (45,720 mm) from spectators and vehicles; not less than 100 feet (30,480 mm) from tents, canopies or membrane structures; not less than 100 feet (30,480 mm) from mortars; and outside of the designated landing area.

EXCEPTIONS: 1. Fixed ground pieces are allowed not less than 75 feet (22,860 mm) from spectators and vehicles.
2. Electrically fired ground pieces are allowed in the designated landing area.

3306.4.4.2 Combustibles. The area beneath ground pieces shall be free of dry grass and combustibles.

3306.4.4.3 Securing. Poles for ground pieces shall be securely placed and braced.

3306.4.5 Electrical fire units.

3306.4.5.1 General. Electrical firing units shall be in accordance with Section 3306.4.5.

3306.4.5.2 Wiring. Electrical wiring associated with an electrical firing unit shall be prevented from contacting metal objects in contact with the ground.

3306.4.5.3 Power supply. AC-powered electrical firing units shall be isolated from the power source using an isolation transformer.

3306.4.5.4 Security. Electrical firing units shall require operation of a key-operated switch or other similar device to prevent unauthorized operation.

EXCEPTION: Hand-held electrical firing units connected to fireworks only during a display.

3306.4.5.5 Manually activated firing units. Manually activated electrical firing units shall require two or more distinct actions to apply electric current to an electric match.

3306.4.5.6 Automatic-firing units. Automatic-sequencing-type electrical firing units shall include a momentary contact switch which must be held to cause application of current to an electric match and which will immediately disconnect current to all electric matches upon release.

3306.4.5.7 Testing of firing circuits. The pyrotechnic operator shall ensure that personnel are kept at a safe distance from fireworks which are connected to electrical firing units during testing. Electrical firing units with integral test circuits shall be designed to limit the maximum current output during a test to 0.05 ampere or to 20 percent of the no-fire current of electric matches, whichever is less. Multitesters shall not be used for testing unless the maximum current output has been measured and determined not to exceed the current output limits for integral test circuits.

3306.4.6 Inspection. Fireworks shall be inspected upon delivery to the display site by the pyrotechnic operator. Aerial shells having tears, leaks or broken fuses or showing signs of having been wet shall be properly disposed of.

3306.4.7 Supervision. Fireworks shall not be left unattended or allowed to become wet at the display site.

3306.4.8 Display operation.

3306.4.8.1 General. Display operation shall be in accordance with Section 3306.4.8.

3306.4.8.2 Fire protection. The pyrotechnic operator shall provide portable fire extinguishers for the discharge area and arrange for standby fire apparatus for protection down range.

3306.4.8.3 Monitors. The pyrotechnic operator shall employ monitors whose sole duty shall be the enforcement of crowd control around the display area. Unauthorized persons shall not be allowed to enter the discharge site until the site has been
inspected after the display by the pyrotechnic operator.

3306.4.8.4 Barriers. The chief is authorized to require rope barriers, fences, signs or other devices to be installed around the display area to aid in crowd control.

3306.4.8.5 Display discontinued. If the chief or the pyrotechnic operator determines that there is a lack of crowd control or that the crown is in danger, the display shall be immediately discontinued. If at any time high winds or wet weather creates a danger, the display shall be postponed until the weather conditions are acceptable to the chief.

3306.4.8.6 Illumination. Display operators shall use only flashlights or electric lighting for illumination.

3306.4.8.7 Smoking and open flames. Smoking and use of open flames are prohibited in the aerial shell storage area. NO SMOKING OR OPEN FLAME signs shall be conspicuously posted.

3306.4.8.8 Aerial shells.

3306.4.8.8.1 General. Aerial shell operations shall be in accordance with Section 3306.4.8.8.

3306.4.8.8.2 Ready boxes. Ready boxes shall be located not less than 25 feet (7,620 mm) in an upwind direction from mortars.

3306.4.8.8.3 Transporting. Aerial shells shall be carried to mortars by the shell body. For the purpose of loading mortars, aerial shells shall be held by the thick portion of the fuse and carefully lowered into mortars.

3306.4.8.8.4 Proper fit. Aerial shells shall be checked for proper fit in mortars prior to discharge. The pyrotechnic operator shall inspect all aerial shells to be certain that they are properly seated in mortars prior to firing. Aerial shells that do not fit properly shall not be fired.

3306.4.8.8.5 Safety cap. The safety cap protecting a fuse shall not be removed until immediately before an aerial shell is to be fired.

3306.4.8.8.6 Ignition. Aerial shells shall be ignited by lighting the tips of fuses with a fuse, torch, portfire, electrical ignition source or similar device. Operators shall not place any part of their bodies over the throat of a mortar.

3306.4.8.8.7 Trajectory. The first aerial shell fired shall be carefully observed to determine that its trajectory will carry it into the intended firing range and that the aerial shell will function over and debris will drop into the designated landing area. Mortars shall be reangled or reset if necessary at any time during the display to properly maintain trajectories over the designated landing area.

3306.4.8.8.8 Defective aerial shells. If an aerial shell fails to ignite in a mortar, the mortar shall be left alone for a minimum of 15 minutes, then carefully flooded with water. Immediately following the display, and not less than 5 minutes after flooding the mortar, the mortar shall be emptied into a bucket of water and properly disposed of. Damaged aerial shells shall not be repaired or dismantled.

3306.4.8.8.9 Range inspection. The entire firing range shall be inspected immediately following a display and prior to allowing public access for the purpose of locating unexploded aerial shells. Such shells shall not be handled within 15 minutes of their firing. Such shells shall then be doused with water, allowed to stand for not less than 5 minutes and placed in a bucket of water.

When the firing range cannot be thoroughly inspected due to darkness, the site shall be reinspected the following morning.

3306.4.8.8.10 Record. The pyrotechnic operator shall keep a record of aerial shells that fail to ignite or fail to function.

SECTION 3307 - PYROTECHNIC SPECIAL EFFECTS MATERIAL

3307.1 General. Temporary storage, use and handling of pyrotechnic special effects material used in motion picture, television, theatrical and group entertainment productions shall be in accordance with Section 3307. Permanent storage of pyrotechnic special effects material shall be in accordance with Chapter 33.

3307.2 Classification of Materials. Pyrotechnic special effects material shall be classified in accordance with DOT regulations and procedures. See Appendix VI-F.
EXCEPTION: Pyrotechnic special effects material which is manufactured on-site and which is in storage or use need not be classified.

3307.3 Construction of Magazines. Magazines used for the storage of pyrotechnic special effects material shall be constructed in accordance with Section 3302.3.

3307.4 Storage.

3307.4.1 Fireworks 1.4G. Fireworks 1.4G (Class C common fireworks) shall be stored in accordance with the requirements for low explosives in Chapter 33.

3307.4.2 Other pyrotechnic special effects material.

3307.4.2.1 General. Storage of pyrotechnic special effects material other than fireworks 1.4G (Class C common fireworks) shall be in accordance with the requirements of Sections 3302 and 3307.4.2.

Containers of explosive materials shall be closed when stored.

3307.4.2.2 Storage magazines.

3307.4.2.2.1 Within buildings. Explosives stored within a building shall not exceed 50 pounds (22.7 kg). Low explosives stored within a building shall be stored in a Type 2 or 4 magazine. High explosives shall be stored in a Type 2 magazine.

Detonators shall be stored in a separate Type 2 magazine.

3307.4.2.2.2 Outside of buildings. Pyrotechnic special effects material which is to be stored outdoors shall be stored in a Type 2 or 4 magazine. Pyrotechnic special effects material which is classified as a high explosive, including detonating cord and detonators that will mass detonate, such as fuse caps, shall be stored in a Type 2 magazine.

When a Type 4 magazine is used for outdoor storage, such storage shall be in a constantly attended location or, if unattended, shall have wheels removed or the magazine immobilized by kingpin locking devices or by other approved security measures. When a quantity in excess of 50 pounds (22.7 kg) of explosive materials is stored outside of a building, such storage shall be located in accordance with Appendix VI-F.

3307.4.3 Storage against walls. Explosive materials within a magazine shall not be placed directly against interior walls and shall not interfere with ventilation. To prevent contact of stored explosive materials with walls, a nonsparking lattice-work or other nonsparking material is allowed to be used.

3307.4.4 Marking of containers. Containers of explosive materials shall be stored such that identifying marks are visible. Stocks of explosive materials shall be stored so they can be easily counted and checked upon inspection.

3307.4.5 Unpacking and repacking containers. Containers of explosive materials shall not be unpacked or repacked inside a magazine or within 50 feet (15,240 mm) of a magazine, and shall not be unpacked or repacked close to other explosive materials.

EXCEPTION: Unpacking and repacking of fiberboard and other nonmetallic containers.

3307.4.6 Tools. Tools used for opening or closing containers of explosive materials shall be of nonsparking materials. A wood wedge and a fiber, rubber or wooden mallet shall be used for opening or closing wood containers or explosive materials. Metal tools, other than nonsparking transfer conveyors, shall not be stored in magazines containing high explosives.

EXCEPTION: Metal slitters are allowed to be used for opening fiberboard containers.

3307.5 Smoking and Open Flames. Controls on smoking and open flames shall be in accordance with Sections 3302.1.14, 3303.1.4, and 3303.1.5.

3307.6 Housekeeping. Housekeeping shall be in accordance with Chapter 33.

3307.7 Pyrotechnic Operators. A pyrotechnic operator shall obtain required permits and be responsible for notifying the chief prior to using the pyrotechnic special effects material. The pyrotechnic operator shall have the authority and responsibility for the storage, use and handling of the pyrotechnic special effects materials. The authority of the pyrotechnic operator shall not be assumed by anyone and shall be superseded only by the chief.

3307.8 Use of Pyrotechnic Special Effects Material.

3307.8.1 General precautions.
3307.8.1.1 Demonstration and approval. An approved test shall be conducted to demonstrate the safe use of pyrotechnic special effects material prior to normal use.

The use of pyrotechnic special effects material shall be approved by the pyrotechnic operator in charge.

3307.8.1.2 Preparation. The company or producer shall allocate sufficient time to the pyrotechnic operator to prepare for the transportation, packing, storing and daily securing, and to dispose of or otherwise handle pyrotechnic special effects material in a safe manner.

3307.8.1.3 Crowd control. Onlookers shall be kept at a safe distance from the area where the pyrotechnic special effects material is discharged and so restrained until the area is cleared.

3307.8.2 Smoke control. When pyrotechnic special effects material is fired within a building, the quantity of smoke developed shall not obscure the visibility of exit signs or paths of egress travel.

Provision shall be made to remove smoke from the building that is generated by pyrotechnic special effects material.

3307.8.3 Binary explosives. When binary explosives are used, the compounding and firing shall be performed by a pyrotechnic operator.

3307.8.4 Surplus materials. Surplus materials shall be properly stored until it can be disposed of in a safe manner.

3307.9 Standby Personnel and Equipment. When necessary for the preservation of life and property, the chief is authorized to require the attendance of standby personnel and fire equipment as set forth in Section 2416. *(675 IAC 22-2.3-284)* Eff: May 17, 2003
Section 3401.2; nonapplicability

Sec. 285. In Section 3401.2 delete the words "service station and insert "motor fuel dispensing facilities, repair garages,". (675 IAC 22-2.3-285) Eff: May 17, 2003

Section 3401.4; permits

Sec. 286. Delete Section 3401.4 and substitute to read as follows: 3401.4 Plans. Prior to commencement of construction to store more than 660 gallons (2,498 L) of liquid outside of buildings in drums or tanks, the owner shall notify the servicing fire department, in writing, of the proposed storage and that a copy of the plans released under 675 IAC 12-6 are available upon request. A copy of the released plans shall indicate the method of storage, quantities to be stored, distances from the buildings and property lines, accessways, fire protection facilities, and provisions for spill control, drainage control and secondary containment. (675 IAC 22-2.3-286) Eff: May 17, 2003

Section 3403.2.1; portable fire extinguishers and hose lines

Sec. 287. Amend Section 3403.2.1 to read as follows: Portable fire extinguishers shall be provided in accordance with Section 906 and hose lines in accordance with Section 905. (675 IAC 22-2.3-287) Eff: May 17, 2003

Section 3403.5; labeling and signage

Sec. 288. Change the first sentence of Section 3403.5 to read as follows: The inspection authority is authorized to require warning signs for the purpose of identifying hazards of storing or using flammable liquids, when such storage or usage would cause a fire or explosion hazard. (675 IAC 22-2.3-288) Eff: May 17, 2003

Section 3404.2.2; use of tank vehicles and tank cars as storage

Sec. 289. Change Section 3404.2.2 to read as follows: 3404.2.2 Use of tank vehicles and tank cars as storage tanks. Tank cars and tank vehicles shall not be used as permanent storage tanks. (675 IAC 22-2.3-289) Eff: May 17, 2003

Section 3404.2.3.1; smoking and open flame

Sec. 290. Add EXCEPTION to Section 3404.2.3.1 to read as follows: EXCEPTION: Buildings or structures which are smoke-free environments and are posted as such at all public and employee entrances, and no visible evidence of prohibited smoking exist within the building or structure. (675 IAC 22-2.3-290) Eff: May 17, 2003

Section 3404.2.7.5.5.2; underground tanks

Sec. 291. In Section 3404.2.7.5.5.2, delete "1,000 gallons (3,785 L)" and substitute "1,100 gallons (4,164 L)". (675 IAC 22-2.3-291) Eff: May 17, 2003

Section 3404.2.7.5.8; overfill prevention

Sec. 292. In Section 3404.2.7.5.8, add "underground" after "liquid" and before "storage". (675 IAC 22-2.3-292) Eff: May 17, 2003

Section 3404.2.7.11; tank lining

Sec. 293. Change Section 3404.2.7.11 to read as follows: 3404.2.7.11 Tank lining. Steel tanks may be lined for the purpose of protecting the interior from corrosion or providing compatibility with a material to be stored. Only those liquids tested for compatibility with the lining material are allowed to be stored in lined tanks. (675 IAC 22-2.3-293) Eff: May 17, 2003

Section 3404.2.8.6; vehicle impact protection

Sec. 294. In Section 3404.2.8.6, change "Section 313" to "Section 312". (675 IAC 22-2.3-294) Eff: May 17, 2003

Section 3404.2.10; drainage and diking

Sec. 295. In Section 3404.2.10, delete both EXCEPTIONS and substitute to read as follows: EXCEPTIONS: 1. Aboveground tanks are not required to be provided with diking when the tank complies with the requirements of Section 2206.2.3 Installation of Tanks, including subsections (a), (b), and (c), and secondary containment systems are monitored for leak detection with an automatic alarm system, visual and/or audible. 2. Approved aboveground tanks with a capacity of five hundred (500) gallons or less, utilized solely for the storage of used motor oil, and in compliance with EPA 40 CFR 279.22 and EPA 40
CFR 264.175 are exempt from the requirements of 3404.2.10.
3. Drainage control and diking is not required for listed secondary containment tanks.

(675 IAC 22-2.3-295) Eff: May 17, 2003

Section 3404.2.10.5; equipment, controls and piping in diked areas

Sec. 296. In Section 3404.2.10.5, add EXCEPTION 3 to read as follows: EXCEPTION 3. Tanks storing more than 5,000 gallons of gasoline, diesel fuel or kerosene may have pumps and manifolds attached directly to the tank within diked areas. (675 IAC 22-2.3-296) Eff: May 17, 2003

Section 3404.2.11.4; overfill protection and prevention system

Sec. 297. Delete the text of Section 3404.2.11.4 and substitute to read as follows: 3404.2.11.4 Overfill protection and prevention systems. Fillpipes shall be equipped with a spill container and an overfill prevention system for each tank. The system shall either:

1. Automatically shut off the flow of liquid into the tank when the tank is not more than 95 percent of tank capacity; or
2. Have an alarm which provides an audible and visual signal when the quantity of liquid in the tank reaches 90 percent of the tank capacity; or
3. Restrict flow thirty (30) minutes prior to overfilling, and alert the transfer operator with a high level alarm one minute before overfilling or automatically shut off flow into the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

(675 IAC 22-2.3-297) Eff: May 17, 2003

Section 3404.2.12.2; testing of underground tanks

Sec. 297.1. Change Section 3404.2.12.2 by deleting the words, "in the presence of the code official", and by adding a sentence before the last sentence to read, "A Tank Tightness Test report shall be forwarded to the local code official within forty-eight (48) hours." (675 IAC 22-2.3-297.1) Eff: May 17, 2003

Section 3404.3.1.1; approved containers

Sec. 298. Change the text of Section 3404.3.1.1 to read as follows: Only listed or labeled containers and portable tanks shall be used. (675 IAC 22-2.3-298) Eff: May 17, 2003

Section 3404.3.3.9; idle combustible pallets

Sec. 299. In Section 3404.3.3.9, delete "NFPA 231" and substitute "NFPA 13 (675 IAC 13-1)". (675 IAC 22-2.3-299) Eff: May 17, 2003

Section 3404.3.6.5; storage plan

Sec. 300. In Section 3404.3.6.5, delete "when required by the code official". (675 IAC 22-2.3-300) Eff: May 17, 2003

Section 3404.3.8.4; fire-extinguishing systems

Sec. 301. In Section 3404.3.8.4, delete "and NFPA 231C". (675 IAC 22-2.3-301) Eff: May 17, 2003

Section 3404.3.8.5; warehouse hose line

Sec. 302. Amend Section 3404.3.8.5 by deleting "Chapter 9" and inserting "Section 905". (675 IAC 22-2.3-302) Eff: May 17, 2003

Section 3405.3.1; closure of mixing or blending vessels

Sec. 303. In Section 3405.3.1, delete the EXCEPTION without substitution. (675 IAC 22-2.3-303) Eff: May 17, 2003

Section 3405.3.7.5.1; ventilation

Sec. 304. In Section 3405.3.7.5.1, delete the EXCEPTION without substitution. (675 IAC 22-2.3-304) Eff: May 17, 2003

Section 3405.3.8; use, dispensing and handling outside of buildings

Sec. 305. In Section 3405.3.8, delete "service station" and insert "motor fuel dispensing facilities". (675 IAC 22-2.3-305) Eff: May 17, 2003

Section 3406.2.2; marking of tanks and containers

Sec. 306. Delete the last sentence of Section 3406.2.2 without substitution. (675 IAC 22-2.3-306) Eff: May 17, 2003

Section 3406.2.4.3; location
Sec. 307. In Section 3406.2.4.3, change "50 feet (15,240 mm)" to "10 feet (3,048 mm)" in two (2) places. (675 IAC 22-2.3-307) Eff: May 17, 2003

Section 3406.2.8; dispensing from tank vehicles

Sec. 308. In Section 3406.2.8, change EXCEPTION 1 to read as follows: The tank vehicle is equipped to supply fuel to motor vehicle fuel tanks. (675 IAC 22-2.3-308) Eff: May 17, 2003

Section 3406.2.8.1; location

Sec. 309. In Section 3406.2.8.1, change "50 feet (15,240 mm)" to "25 feet (7,620 mm)". (675 IAC 22-2.3-309) Eff: May 17, 2003

Section 3406.4; bulk plants or terminals

Sec. 310. In Section 3406.4, add a sentence at the end to read as follows: "Also see Section 2206.2.3.1 of this code." (675 IAC 22-2.3-310) Eff: May 17, 2003

Section 3406.4.7; wharves

Sec. 311. Amend Section 3406.4.7 by deleting "service stations" and inserting "motor fuel dispensing facilities". (675 IAC 22-2.3-311) Eff: May 17, 2003

Section 3406.5; bulk transfer and process transfer operations

Sec. 312. Amend Section 3406.5 by deleting "service station" and inserting "motor fuel dispensing facilities". (675 IAC 22-2.3-312) Eff: May 17, 2003

Section 3406.5.1.18; security

Sec. 313. Amend Section 3406.5.1.18 as follows:
(1) Delete "vehicle service station" and insert "fuel dispensing facilities".
(2) Delete EXCEPTION 2 without substitution and renumber EXCEPTION 3 as EXCEPTION 2. (675 IAC 22-2.3-313) Eff: May 17, 2003

Section 3406.5.4.4; fueling of vehicles at farms, construction sites and similar areas

Sec. 314. Change Section 3406.5.4.4 to read as follows: 3406.5.4.4 Fueling of vehicles at construction sites, earth-moving projects, gravel pits and borrow pits is allowed in accordance with Section 3406.2.8. (675 IAC 22-2.3-314) Eff: May 17, 2003

Section 3406.6.2.1; parking near residential, educational and institutional occupancies and other high-risk areas

Sec. 314.1. Delete Section 3406.6.2.1 and substitute to read as follows: (a) Tank vehicles shall not be left unattended on any street, highway, avenue or alley, provided that drivers are not prevented from those necessary absences from the vehicle connected with their normal duties, nor shall this requirement prevent stops for meals or rest stops during the day or night.

Exception 1. This shall not apply to an emergency.

Exception 2. This shall not apply to vehicles parked in accordance with (b).

(b) Tank vehicles shall not be parked in congested areas. Such vehicles shall be permitted to be parked off the street in uncongested areas if at least fifty (50) feet (15 m) from any building used for assembly, institutional, or multiple residential occupancy. This requirement shall not prohibit the parking of cargo vehicles of three thousand, five hundred (3,500) gallons (13m³) water capacity or less on streets adjacent to the driver's residence in uncongested residential areas, provided such parking locations are at least fifty (50) feet (15 m) from a building used for assembly, institutional or multiple residential occupancy. (675 IAC 22-2.3-314.1) Eff: May 17, 2003

Section 3406.8; vapor recovery and vapor-processing systems

Sec. 315. Amend Section 3406.8, EXCEPTION 2, by deleting "service station" and inserting "motor fuel dispensing facility". (675 IAC 22-2.3-315) Eff: May 17, 2003
Section 3501.2; permits

Sec. 316. Delete Section 3501.2 without substitution. (675 IAC 22-2.3-316) Eff: May 17, 2003
Section 3601.2; permits

Sec. 317. Delete Section 3601.2 without substitution. *(675 IAC 22-2.3-317)* Eff: May 17, 2003

Section 3606.5.5; electrical equipment

Sec. 318. In Section 3606.5.5, delete "shall be approved types and shall be approved" and substitute "shall be listed". *(675 IAC 22-2.3-318)* Eff: May 17, 2003
Section 3701.2; permits

Sec. 319. Delete Section 3701.2 without substitution. (675 IAC 22-2.3-319) Eff: May 17, 2003

Section 3704.2.2.7; treatment systems

Sec. 320. Amend Section 3704.2.2.7 as follows: In EXCEPTION 2 Toxic gases-use, add "or portable tanks" after "cylinders". (675 IAC 22-2.3-320) Eff: May 17, 2003
Section 3801.2; permits

Sec. 321. Delete Section 3801.2 without substitution. (675 IAC 22-2.3-321) Eff: May 17, 2003

Section 3801.3; construction documents

Sec. 322. At the end of Section 3801.3, insert "in accordance with the General Administrative Rules (675 IAC 12)". (675 IAC 22-2.3-322) Eff: May 17, 2003

Section 3801.4; records

Sec. 323. Delete Section 3801.4 without substitution. (675 IAC 22-2.3-323) Eff: May 17, 2003

Section 3803.2.1.2; construction and temporary heating

Sec. 324. In Section 3803.2.1.2, after "portable" and before "containers", insert "LP gas". (675 IAC 22-2.3-324) Eff: May 17, 2003

Section 3804.1; general

Sec. 325. In Section 3804.1, delete "and be subject to the approval of the code official". (675 IAC 22-2.3-325) Eff: May 17, 2003

Section 3804.2; maximum capacity within established limits

Sec. 326. Delete the Exception in Section 3804.2. (675 IAC 22-2.3-326) Eff: May 17, 2003

Section 3805.2; release to atmosphere

Sec. 327. In Section 3805.2, delete the text after "except" and substitute "as provided by NFPA 58 (675 IAC 22-2.2-17)". (675 IAC 22-2.3-327) Eff: May 17, 2003

Section 3806.1; attendants

Sec. 328. In Section 3806.1, delete "a qualified attendant" and substitute "qualified personnel". (675 IAC 22-2.3-328) Eff: May 17, 2003

Section 3807.2; smoking and other sources of ignition

Sec. 329. Change Section 3807.2 to read as follows: NO SMOKING signs complying with Section 310 shall be posted. Smoking within 25 feet (7,625 mm) of a point of transfer, while filling operations are in progress at containers or vehicles, shall be prohibited. Control of other sources of ignition shall comply with NFPA 58 (675 IAC 22-2.2-17). (675 IAC 22-2.3-329) Eff: May 17, 2003

Section 3809.7; storage in basement, pit or similar location

Sec. 330. In Section 3809.7, after "underfloor" and before "spaces", add "crawl". (675 IAC 22-2.3-330) Eff: May 17, 2003

Section 3809.12; location of storage outside of buildings

Sec. 331. Delete Section 3809.12 and substitute to read as follows: Storage outside of buildings, for containers awaiting use, resale or part of a cylinder exchange program, shall be located and protected in accordance with NFPA 58 (675 IAC 22-2.2-17). (675 IAC 22-2.3-331) Eff: May 17, 2003

Section 3811.2; unattended parking

Sec. 331.1. Delete the text of Section 3811.2 and substitute to read: The unattended parking of LP-gas tank vehicles shall be in accordance with Section 3406.6.2.1. (675 IAC 22-2.3-331.1) Eff: May 17, 2003
Section 3901.2; permits

Sec. 332. Delete 3901.2 without substitution. (675 IAC 22-2.3-332) Eff: May 17, 2003
Section 4001.2; permits

Sec. 333. Delete Section 4001.2 without substitution. *(675 IAC 22-2.3-333)* Eff: May 17, 2003
Section 4101.2; permits

Sec. 334. Delete 4101.2 without substitution. (675 IAC 22-2.3-334) Eff: May 17, 2003
Section 4201.2; permits

Sec. 335. Delete Section 4201.2 without substitution. *(675 IAC 22-2.3-335)* Eff: May 17, 2003
Section 4301.2; permits

Sec. 336. Delete Section 4301.2 without substitution. *(675 IAC 22-2.3-336)* Eff: May 17, 2003
Section 4401.2; permits

Sec. 337. Delete Section 4401.2 without substitution. (675 IAC 22-2.3-337) Eff: May 17, 2003
Appendix A; board of appeals

Sec. 338. Delete Appendix A Board of Appeals.
(675 IAC 22-2.3-338) Eff: May 17, 2003

Appendix A-1; life-safety requirements for existing buildings other than high rise and

appendix A-2; life safety requirements for existing high-rise buildings

Sec. 339. (a) Add Appendix A-1; life-safety requirements for existing buildings other than high rise as follows:

APPENDIX A-1

Appendix A-1 Emergency Escape Plan

Delete title and text of Appendix A-1 and substitute the following:

Appendix A-1
Emergency Escape Plan Sign Sample
(per Section 12.111)
Appendix A-2
Emergency Information Sign Samples
(per Section 12.1111)

Keep Calm - Don’t Panic

(675 IAC 22-2.3-339) Eff: May 17, 2003
Appendices B through G

Sec. 340. The following Appendices are not adopted but may be used for information purposes only:
(1) Appendix B; fire-flow requirements for buildings.
(2) Appendix C; fire hydrant locations and distribution.
(3) Appendix D; fire apparatus access roads.
(4) Appendix E; hazard categories.
(5) Appendix F; hazard ranking
(6) Appendix G; cryogenic fluids weight and volume equivalents.

(675 IAC 22-2.3-340) Eff: May 17, 2003

Appendix VI-F; recommended separation distances for explosives

Sec. 341. (a) Portions of this work are reproduced from the 1997 edition of the Uniform Fire Code, Appendix VI-F, copyright 1997, with the permission of the publisher, the International Conference of Building Officials. ICBO assumes no responsibility for the accuracy or completion of summaries provided therein.

(b) Appendix VI-F to read as follows:

APPENDIX VI-F

RECOMMENDED SEPARATION DISTANCES FOR EXPLOSIVE MATERIALS

(See Chapter 33)

The following information is provided as reference information for application of Chapter 33 and IC 22-11-14.

The information provided in Section 1 is excerpted from federal regulations in 49 C.F.R, Parts 171-173. A discussion of the new regulations is also provided.

Table A-VI-F-5 is reprinted with permission of the Institute of Makers of Explosives with the provision that the entire table, complete with all explanatory footnotes, be printed. Table A-VI-F-5 is used for magazines containing high explosives or a combination of high explosives and low explosives, and for magazines containing blasting agents.

<table>
<thead>
<tr>
<th>DIVISION</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Explosives that have a mass hazard explosion. A mass explosion is one which affects almost the entire load instantaneously. (Examples include dynamite, cap-sensitive water gels, slurries, emulsions and cast boosters.)</td>
</tr>
<tr>
<td>1.2</td>
<td>Explosives that have a projection hazard but not a mass explosion hazard. (Examples include ammunition, projectiles and bombs.)</td>
</tr>
<tr>
<td>1.3</td>
<td>Explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. (Examples include some propellants, some fireworks and flares.)</td>
</tr>
<tr>
<td>1.4</td>
<td>Explosive devices that present a minor explosion hazard. External fire must not cause virtually instantaneous explosion of almost the entire contents of the package. (Examples include some detonators and detonating cords, safety fuse, electric squibs, igniters, igniting cord and some fireworks.)</td>
</tr>
<tr>
<td>1.5</td>
<td>Very insensitive explosives. This division is comprised of substances which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport. (Examples include blasting agents.)</td>
</tr>
<tr>
<td>1.6</td>
<td>Extremely insensitive articles which do not have a mass explosion hazard. This division is comprised of articles which contain only extremely insensitive detonation substances and which demonstrate a negligible probability of accidental initiation or propagation. (This division is not commonly used for commercial explosives.)</td>
</tr>
</tbody>
</table>
**TABLE A-VI-F-3 - COMPARISON OF OLD TO CURRENT EXPLOSIVES CLASSIFICATIONS**

<table>
<thead>
<tr>
<th>CLASS A EXPLOSIVES</th>
<th>May be either DIVISION 1.1 or 1.2 depending of the material</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASS B EXPLOSIVES</td>
<td>May be either DIVISION 1.2 or 1.3 depending of the material</td>
</tr>
<tr>
<td>CLASS C EXPLOSIVES</td>
<td>DIVISION 1.4</td>
</tr>
<tr>
<td>BLASTING AGENTS</td>
<td>DIVISION 1.5</td>
</tr>
<tr>
<td>(NO APPLICABLE CLASS)</td>
<td>DIVISION 1.6</td>
</tr>
</tbody>
</table>

**TABLE A-VI-F-4 - EXPLOSIVES COMPATIBILITY GROUPS**

<table>
<thead>
<tr>
<th>DESCRIPTION OF SUBSTANCES OR ARTICLE TO BE CLASSIFIED</th>
<th>COMPATIBILITY GROUP</th>
<th>CLASSIFICATION CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary explosive substance.</td>
<td>A</td>
<td>1.1A</td>
</tr>
<tr>
<td>Article containing a primary explosive substance and not containing two or more effective protective substances.</td>
<td>B</td>
<td>1.1B, 1.2B, 1.4B</td>
</tr>
<tr>
<td>Propellant explosive substance or other deflagrating explosive substance or article containing such explosive substance.</td>
<td>C</td>
<td>1.1C, 1.2C, 1.3C, 1.4C</td>
</tr>
<tr>
<td>Secondary detonating explosive substance or black powder or article containing a secondary detonating explosive substance, in each case without means of initiation and without a propelling charge, or article containing a primary explosive substance and containing two or more effective protective features.</td>
<td>D</td>
<td>1.1D, 1.2D, 1.4D, 1.5D</td>
</tr>
<tr>
<td>Article containing a secondary detonating explosive substance, without means of initiation, with a propelling charge (other than one containing flammable liquid or hypergolic liquid).</td>
<td>E</td>
<td>1.1E, 1.2E, 1.4E</td>
</tr>
<tr>
<td>Article containing a secondary detonating explosive substance with its means of initiation, with a propelling charge (other than one containing flammable liquid or hypergolic liquid) or without a propelling charge.</td>
<td>F</td>
<td>1.1F, 1.2F, 1.3F, 1.4F</td>
</tr>
<tr>
<td>Pyrotechnic substance or article containing a pyrotechnic substance, or article containing both an explosive substance and an illuminating, incendiary, tear-producing or smoke-producing substance (other than a water-activated article or one containing white phosphorus, phosphide or flammable liquid or gel or hypergolic liquid).</td>
<td>G</td>
<td>1.1G, 1.2G, 1.3G, 1.4G</td>
</tr>
<tr>
<td>Article containing both an explosive substance and white phosphorus.</td>
<td>H</td>
<td>1.2H, 1.3H</td>
</tr>
<tr>
<td>Article containing both an explosive substance and flammable liquid or gel.</td>
<td>J</td>
<td>1.1J, 1.2J, 1.3J</td>
</tr>
<tr>
<td>Article containing both an explosive substance and a toxic chemical agent.</td>
<td>K</td>
<td>1.2K, 1.3K</td>
</tr>
<tr>
<td>Explosive substance or article containing an explosive substance and presenting a special risk (e.g., due to water-activation or presence of hypergolic liquids, phosphides or pyrophoric substances) needing isolation of each type.</td>
<td>L</td>
<td>1.1L, 1.2L, 1.3L</td>
</tr>
<tr>
<td>Articles containing only extremely insensitive detonating substances.</td>
<td>N</td>
<td>1.6N</td>
</tr>
<tr>
<td>Substance or article so packed or designed that any hazardous effects arising from accidental functioning are limited to the extent that they do not significantly hinder or prohibit fire fighting or other emergency response efforts in the immediate vicinity of the package.</td>
<td>S</td>
<td>1.4S</td>
</tr>
<tr>
<td>QUANTITY OF EXPLOSIVE MATERIALS¹ ² ³ ⁴ ⁵</td>
<td>Inhabited Buildings⁹</td>
<td>Public Highways with Traffic Volume of less than 3,000 Vehicles per Day</td>
</tr>
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<td>------------------------------------------</td>
<td>----------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pounds Over x 0.454 Per kg</td>
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<td>Unbarricaded</td>
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</tr>
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<td>900</td>
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TABLE A-VI-F-5 - AMERICAN TABLE OF DISTANCES FOR STORAGE OF EXPLOSIVE MATERIALS - (Continued)
<table>
<thead>
<tr>
<th>QUANTITY OF EXPLOSIVE MATERIALS</th>
<th>DISTANCES IN FEET</th>
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<tbody>
<tr>
<td>Inhabited Buildings^9</td>
<td>Public Highways with Traffic Volume of less than 3,000 Vehicles per Day</td>
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<tr>
<td>x 0.454 Per kg</td>
<td>Barricaded^6</td>
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<tr>
<td>Pounds Over Barricaded^6</td>
<td>Unbarricaded</td>
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<td>QUANTITY OF EXPLOSIVE MATERIALS (^1) (2) (3) (4) (5)</td>
<td>DISTANCES IN FEET</td>
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<td>Inhabited Buildings (^9)</td>
<td>Public Highways with Traffic Volume of less than 3,000 Vehicles per Day</td>
</tr>
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<td>Pounds Over x 0.454 Per kg</td>
<td>Pounds Not Over</td>
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</tbody>
</table>

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TABLE A-VI-F-5 - AMERICAN TABLE OF DISTANCES FOR STORAGE OF EXPLOSIVE MATERIALS - (Continued)

As Revised and Approved by the Institute of Makers of Explosives - June 1991\(^{14}\)
### QUANTITY OF EXPLOSIVE MATERIALS

1. "Explosive materials" means explosives, blasting agents and detonators.
2. "Explosives" means any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. A list of explosives determined to be within the coverage of 18 USC Chapter 40, Importation, Manufacturer, Distribution and Storage of Explosive Materials, is issued at least annually by the director of the Bureau of Alcohol, Tobacco and Firearms of the Department of the Treasury. For quantity and distance purposes, detonating cord of 50 grains per foot (10.7g/m) should be calculated as equivalent to 8 pounds (3.6 kg) of high explosives per 1,000 feet (304.8 m). Heavier or lighter core loads should be rated proportionately.
3. "Blasting agents" means any material or mixture, consisting of fuel and oxidizer, intended for blasting, not otherwise defined as an explosive, provided that the finished product, as mixed for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when unconfined.
4. "Detonator" means any device containing any initiating or primary explosive that is used for initiating detonation. A detonator may not contain more than 10 grams of total explosives by weight, excluding ignition or delay charges. The term includes, but is not limited to, electric blasting caps of instantaneous and delay types, blasting caps for use within safety fuses, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps which use detonating cord, shock tube or any other replacement for electric leg wires. All types of detonators in strengths through No. 8 cap should be rated at 1 1/2 pounds (0.68 kg) of explosives per 1,000 caps. For strengths higher than No. 8 cap, consult the manufacturer.

<table>
<thead>
<tr>
<th>Pounds Over 150,000</th>
<th>Pounds Not Over 150,000</th>
<th>Barricaded <em>6</em> 7<em>8</em></th>
<th>Unbarricaded</th>
<th>Barricaded <em>6</em> 7<em>8</em></th>
<th>Unbarricaded</th>
<th>Barricaded <em>6</em> 7<em>8</em></th>
<th>Unbarricaded</th>
<th>Barricaded <em>6</em> 7<em>8</em></th>
<th>Unbarricaded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
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<td>1180</td>
<td>1662</td>
<td>1,962</td>
<td>255</td>
<td>510</td>
</tr>
<tr>
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<tr>
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<td>2,000</td>
<td>670</td>
<td>1340</td>
<td>1950</td>
<td>2,000</td>
<td>360</td>
<td>720</td>
</tr>
<tr>
<td>275,000</td>
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<td>690</td>
<td>1380</td>
<td>2000</td>
<td>2,000</td>
<td>385</td>
<td>770</td>
</tr>
</tbody>
</table>

---

1. "Explosive materials" means explosives, blasting agents and detonators.
2. "Explosives" means any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. A list of explosives determined to be within the coverage of 18 USC Chapter 40, Importation, Manufacturer, Distribution and Storage of Explosive Materials, is issued at least annually by the director of the Bureau of Alcohol, Tobacco and Firearms of the Department of the Treasury. For quantity and distance purposes, detonating cord of 50 grains per foot (10.7g/m) should be calculated as equivalent to 8 pounds (3.6 kg) of high explosives per 1,000 feet (304.8 m). Heavier or lighter core loads should be rated proportionately.
3. "Blasting agents" means any material or mixture, consisting of fuel and oxidizer, intended for blasting, not otherwise defined as an explosive, provided that the finished product, as mixed for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when unconfined.
4. "Detonator" means any device containing any initiating or primary explosive that is used for initiating detonation. A detonator may not contain more than 10 grams of total explosives by weight, excluding ignition or delay charges. The term includes, but is not limited to, electric blasting caps of instantaneous and delay types, blasting caps for use within safety fuses, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps which use detonating cord, shock tube or any other replacement for electric leg wires. All types of detonators in strengths through No. 8 cap should be rated at 1 1/2 pounds (0.68 kg) of explosives per 1,000 caps. For strengths higher than No. 8 cap, consult the manufacturer.

5. "Magazine" means any building, structure or container, other than an explosives manufacturing building, approved for the storage of explosive materials.
6. "Natural barricade" means natural features of the ground such as hills, or timber of sufficient density that the surrounding exposure which require protection cannot be seen from the magazine when the trees are bare of leaves.
"artificial barricade" means an artificial mound or revetted wall of earth of a minimum thickness of 3 feet (914.4 mm).

"Barricaded" means the effective screening of a building containing explosive materials from the magazine or other building, railway or highway by a natural

"Inhabited building" means a building regularly occupied in whole or part as a habitation for human beings, or any church, schoolhouse, railroad station, store or other structure where people are accustomed to assemble, except any building or structure occupied in connection with the manufacture, transportation, storage or use of explosive materials.

"Railway" means any steam, electric or other railroad or railway which carries passengers for hire.

"Highway" means any public street, public alley or public road.

When two or more storage magazines are located on the same property, each magazine must comply with the minimum distances specified from inhabited buildings, railways and highways, and in addition, they should be separated from each other by not less than the distances shown for "Separation of Magazines," except that the quantity of explosive materials contained in detonator magazines shall govern in regard to the spacing of said detonator magazines from magazines containing other explosive materials. If any two or more magazines are separated from each other by less than the specified "Separation of Magazines" distances, then such two or more magazines, as a group, must be considered as one magazine, and the total quantity of explosive materials stored in such group must be treated as if stored in a single magazine located on the site of any magazine of the group, and must comply with the minimum of distances specified from other magazines, inhabited buildings, railways and highways.

Storage in excess of 300,000 pounds (136,077.6 kg) of explosive materials in one magazine is generally not required for commercial enterprises.

This table applies only to the manufacture and permanent storage of commercial explosive materials. It is not applicable to transportation of explosives or any handling or temporary storage necessary or incidental thereto. It is not intended to apply to bombs, projectiles or other heavily encased explosives.

When a manufacturing building on an explosive materials plant site is designed to contain explosive materials, such building shall be located from inhabited buildings, public highways and passenger railways in accordance with Table A-VI-F-5 based on the maximum quantity of explosive materials permitted to be in the building at one time.

NOTE: The American Table of Distances (Table A-VI-F-5) is reprinted by permission of the Institute of Makers of Explosives with the provision that the entire table, complete with all explanatory footnotes, be printed.
<table>
<thead>
<tr>
<th>DONOR WEIGHT</th>
<th>MINIMUM SEPARATION DISTANCE OF ACCEPTOR WHEN BARRICADED* (feet)</th>
<th>MINIMUM THICKNESS OF ARTIFICIAL BARRICADES** (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pounds Over</td>
<td>Pounds Not Over</td>
<td>X 304.8 Per mm</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>300</td>
<td></td>
</tr>
<tr>
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</tr>
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<tr>
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</tr>
</tbody>
</table>

TABLE A-VI-F-6 - TABLE OF RECOMMENDED SEPARATION DISTANCES OF AMMONIUM NITRATE AND BLASTING AGENTS FROM EXPLOSIVES OR BLASTING AGENTS³ ⁶
### NITRATE AND BLASTING AGENTS FROM EXPLOSIVES OR BLASTING AGENTS

1  Recommended separation distances to prevent explosion of ammonium nitrate and ammonium nitrate-based agents by propagation from nearby stores of high explosives or blasting agents referred to in Table A-VI-F-6 as the "donor." Ammonium nitrate, by itself, is not considered to be a donor when applying Table A-VI-F-6, Ammonium nitrate, ammonium nitrate-fuel oil or combination thereof are acceptors. If stores of ammonium nitrate are located within the sympathetic detonation distance of explosives or blasting agents, one-half the mass of the ammonium nitrate should be included in the mass of the donor.

2 When the ammonium nitrate or blasting agent is not barricaded, the distances shown in Table A-VI-F-6 shall be multiplied by six. These distances allow for the possibility of high velocity metal fragments from mixers, hoppers, truck bodies, sheet metal structures, metal containers and the like which may enclose the "donor." Where storage is in bullet-resistant magazines recommended for explosives or where the storage is protected by a bullet-resistant wall, distances and barricade thicknesses in excess of those prescribed in Table A-VI-F-5, Footnote 7, are not required. For construction of bullet-resistant magazines, see Article 77.

3 The distances in Table A-VI-F-6 apply to ammonium nitrate that passes the insensitivity test prescribed in the definition of ammonium nitrate fertilizer promulgated by the Fertilizer Institute (Definitions and Test Procedure for Ammonium Nitrate Fertilizer, Fertilizer Institute 1964); and ammonium nitrate failing to pass said test shall be stored at separation distances determined by competent persons and approved by the authority having jurisdiction.

4 These distances apply to blasting agents which pass the insensitivity test prescribed in regulations of the United States Department of Transportation and the United States Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms.

5 Earth, or sand dikes, or enclosures filled with the prescribed minimum thickness of earth or sand are acceptable artificial barricades. Natural barricades, such as hills or timber of sufficient density that the surrounding exposure which require protection cannot be seen from the "donor" when the trees are bare of leaves, are also acceptable.

6 For determining the distances to be maintained from inhabited buildings, passenger railways and public highways, see Table A-VI-F-5 (High Explosives and Blasting Agents) or Table A-VI-F-7 (Low Explosives).

<table>
<thead>
<tr>
<th>DONOR WEIGHT</th>
<th>MINIMUM SEPARATION DISTANCE OF ACCEPTOR WHEN BARRICADED² (feet)</th>
<th>MINIMUM THICKNESS OF ARTIFICIAL BARRICADES³ (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pounds Over</td>
<td>Pounds Not Over</td>
<td>X 304.8 Per mm</td>
</tr>
<tr>
<td>X 0.484 Per kg</td>
<td>Ammonium Nitrate³</td>
<td>Blasting Agent⁴</td>
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<td>90,000</td>
<td>100,000</td>
<td>32</td>
</tr>
<tr>
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<td>64</td>
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</tbody>
</table>
# TABLE A-VI-F-7
## TABLE OF DISTANCES FOR STORAGE OF LOW EXPLOSIVES

<table>
<thead>
<tr>
<th>LOW EXPLOSIVES (pounds)</th>
<th>FROM INHABITED BUILDING DISTANCE (feet)</th>
<th>FROM PUBLIC RAILROAD AND HIGHWAY DISTANCE (feet)</th>
<th>FROM ABOVEGROUND MAGAZINE (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over X 0.484 per kg</td>
<td>X 304.3 per cm</td>
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<td></td>
</tr>
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<td>75</td>
<td>75</td>
</tr>
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<td>270</td>
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**TABLE A-VI-F-8 - DISTANCES FOR THE OPEN BURNING OF EXPLOSIVES**

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<th>QUANTITY OF EXPLOSIVES (Not Over)</th>
<th>MINIMUM DISTANCE IN FEET</th>
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<tr>
<td></td>
<td>X 304.8 Per mm</td>
</tr>
<tr>
<td>Inhabited Buildings⁹</td>
<td>Public Highways with Traffic Volume of less than 3,000 Vehicles per Day</td>
</tr>
<tr>
<td></td>
<td>Pounds</td>
</tr>
<tr>
<td>X 0.484 Per kg</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>20</td>
<td>110</td>
</tr>
<tr>
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<td>835</td>
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<tr>
<td>10000</td>
<td>865</td>
</tr>
</tbody>
</table>

1 This table is intended only for application of open burning of commercial explosive materials. The distances stated in this table should be measured from the center of the unit, except for separations from other open-burning units, which are measured from the edge of the unit.

2 "Explosive materials" means any explosive, slurry, emulsion, detonating cord, blasting agents and detonators.

3 "Explosives" means any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. A list of explosives determined to be within the coverage of 18 U.S.C. Chapter 40, Importation, Manufacture, Distribution and Storage of Explosive Material, is issued at least annually by the director of the Bureau of Alcohol, Tobacco, and Firearms of the Department of the Treasury. For quantity and distance purposes, detonating cord of 50 grains per foot (10.7 g/m) should be calculated as equivalent to 8 pounds (3.6 kg) of high explosives per 1,000 feet (304.8 m). Heavier or lighter core loads should be rated proportionally.

4 "Blasting agents" means any material or mixture, consisting of fuel and oxidizer, intended for blasting, not otherwise defined as an explosive, provided the finished product, as mixed for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when unconfined.

5 "Detonator" means any device containing any initiating or primary explosive that is used for initiating detonation. A detonator may not contain more than 10 grams of total explosives by weight, excluding ignition or delay charges. The term includes, but is not limited to, electric blasting caps of instantaneous and delay blasting caps which use detonating cord, shock tube or any other replacement for electric wires. All types of detonators in strengths through No. 8 cap should be rated at 1 1/2 pounds (0.68 kg) of explosives per 1,000 caps. For strengths higher than No. 8 cap, consult the manufacturer.
6 "Natural barricade" means natural features of the ground, such as hills, or timber of sufficient density that the surrounding exposures that require protection cannot be seen from the magazine when the trees are bare of leaves.
7 "Artificial barricade" means an artificial mound or revetted wall of earth of a minimum thickness of 3 feet (914.4 mm).
8 "Barricaded" means the effective screening of a building containing explosive materials from the magazine or other building, OB/OD site, railway or highway by a natural or an artificial barrier. A straight line from the top of any sidewall of the building containing explosive materials to the eave line of any magazine or other building or to a point 12 feet (3657.6 mm) above the center of a railway or highway shall pass through such a barrier.
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### TABLE A-VI-F-9 - DISTANCES FOR THE OPEN DETONATION OF EXPLOSIVES

<table>
<thead>
<tr>
<th>QUANTITY OF EXPLOSIVES(^{3,4,5}) (Not Over)</th>
<th>MINIMUM DISTANCE IN FEET X 304.8 Per mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inhabited Buildings(^9)</td>
</tr>
<tr>
<td>Pounds</td>
<td>No Missile Hazard</td>
</tr>
<tr>
<td>X 0.484 Per kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>730</td>
</tr>
<tr>
<td>2</td>
<td>920</td>
</tr>
<tr>
<td>5</td>
<td>1,250</td>
</tr>
<tr>
<td>10</td>
<td>1,600</td>
</tr>
<tr>
<td>20</td>
<td>1,990</td>
</tr>
<tr>
<td>50</td>
<td>2,700</td>
</tr>
<tr>
<td>75</td>
<td>3,080</td>
</tr>
<tr>
<td>100</td>
<td>3,400</td>
</tr>
<tr>
<td>150</td>
<td>3,900</td>
</tr>
<tr>
<td>200</td>
<td>4,275</td>
</tr>
<tr>
<td>300</td>
<td>4,900</td>
</tr>
<tr>
<td>400</td>
<td>5,400</td>
</tr>
<tr>
<td>500</td>
<td>5,800</td>
</tr>
</tbody>
</table>

1 This table is intended only for application of open burning of commercial explosive materials. The distances stated in this table should be measured from the center of the unit, except for separations from other open-burning units, which are measured from the edge of the unit.
2 “Explosive materials” means any explosive, slurry, emulsion, detonating cord, blasting agents and detonators.
3 “Explosives” means any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. A list of explosives determined to be within the coverage of 18 U.S.C. Chapter 40, Importation, Manufacture, Distribution and Storage of Explosive Material, is issued at least annually by the director of the Bureau of Alcohol, Tobacco, and Firearms of the Department of the Treasury. For quantity and distance purposes, detonating cord of 50 grains per foot (10.7 g/m) should be calculated as equivalent to 8 pounds (3.6 kg) of high explosives per 1,000 feet (304.8 m). Heavier or lighter core loads should be rated proportionally.
4 “Blasting agents” means any material or mixture, consisting of fuel and oxidizer, intended for blasting, not otherwise defined as an explosive, provided the finished product, as mixed for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when unconfined.
5 “Detonator” means any device containing any initiating or primary explosive that is used for initiating detonation. A detonator may not contain more than 10 grams of total explosives by weight, excluding ignition or delay charges. The term includes, but is not limited to, electric blasting caps of instantaneous and delay blasting caps which use detonating cord, shock tube or any other replacement for electric wires. All types of detonators in strengths through No. 8 cap should be rated at 1 1/2 pounds (0.68 kg) of explosives per 1,000 caps. For strengths higher than No. 8 cap, consult the manufacturer.
6 “Natural barricade” means natural features of the ground, such as hills, or timber of sufficient density that the surrounding exposures that require protection cannot be seen from the magazine when the trees are bare of leaves.
7 “Artificial barricade” means an artificial mound or revetted wall of earth of a minimum thickness of 3 feet (914.4 mm).
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(675 IAC 22-2.3-34J) Eff: May 17, 2003
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