A Member of the International Code Family®

INTERNATIONAL



FIRE CODE®



INTERNATIONAL FIRE CODE®



2006 International Fire Code®

First Printing: January 2006

ISBN-13: 978-1-58001-255-3 (soft) ISBN-10: 1-58001-255-8 (soft) ISBN-13: 978-1-58001-254-6 (loose-leaf) ISBN-10: 1-58001-254-X (loose-leaf) ISBN-13: 978-1-58001-304-8 (e-document) ISBN-10: 1-58001-304-X (e-document)

 $\label{eq:copyright} \mbox{COPYRIGHT} \circledcirc 2006$ by INTERNATIONAL CODE COUNCIL, INC.

ALL RIGHTS RESERVED. This 2006 *International Fire Code*® is a copyrighted work owned by the International Code Council, Inc. Without advance written permission from the copyright owner, no part of this book may be reproduced, distributed, or transmitted in any form or by any means, including, without limitation, electronic, optical or mechanical means (by way of example and not limitation, photocopying, or recording by or in an information storage retrieval system). For information on permission to copy material exceeding fair use, please contact: Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795. Phone 1-888-ICC-SAFE (422-7233).

Trademarks: "International Code Council," the "International Code Council" logo and the "International Fire Code" are trademarks of the International Code Council, Inc.

PREFACE

Introduction

Internationally, code officials recognize the need for a modern, up-to-date fire code addressing conditions hazardous to life and property from fire, explosion, handling or use of hazardous materials and the use and occupancy of buildings and premises. The *International Fire Code*®, in this 2006 edition, is designed to meet these needs through model code regulations that safeguard the public health and safety in all communities, large and small.

This comprehensive fire code establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new system designs. This 2006 edition is fully compatible with all the *International Codes*® (I-Codes®) published by the International Code Council (ICC)®, including the *International Building Code*®, ICC *Electrical Code*®, *International Energy Conservation Code*®, *International Existing Building Code*®, *International Fuel Gas Code*®, *International Mechanical Code*®, ICC *Performance Code*®, *International Plumbing Code*®, *International Private Sewage Disposal Code*®, *International Property Maintenance Code*®, *International Residential Code*®, *International Wildland-Urban Interface Code*TM and *International Zoning Code*®.

The *International Fire Code* provisions provide many benefits, among which is the model code development process that offers an international forum for fire safety professionals to discuss performance and prescriptive code requirements. This forum provides an excellent arena to debate proposed revisions. This model code also encourages international consistency in the application of provisions.

Development

The first edition of the *International Fire Code* (2000) was the culmination of an effort initiated in 1997 by a development committee appointed by ICC and consisting of representatives of the three statutory members of the International Code Council: Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO) and Southern Building Code Congress International (SBCCI). The intent was to draft a comprehensive set of fire safety regulations consistent with and inclusive of the scope of the existing model codes. Technical content of the latest model codes promulgated by BOCA, ICBO and SBCCI was utilized as the basis for the development, followed by public hearings in 1998 and 1999 to consider proposed changes. This 2006 edition presents the code as originally issued, with changes reflected in the 2003 edition and further changes approved through the ICC Code Development Process through 2005. A new edition such as this is promulgated every three years.

This code is founded on principles intended to establish provisions consistent with the scope of a fire code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

Adoption

The *International Fire Code* is available for adoption and use by jurisdictions internationally. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings establishing the jurisdiction's laws. At the time of adoption, jurisdictions should insert the appropriate information in provisions requiring specific local information, such as the name of the adopting jurisdiction. These locations are shown in bracketed words in small capital letters in the code and in the sample ordinance. The sample adoption ordinance on page v addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

Maintenance

The *International Fire Code* is kept up-to-date through the review of proposed changes submitted by code enforcing officials, industry representatives, design professionals and other interested parties. Proposed changes are carefully considered through an open code development process in which all interested and affected parties may participate.

The contents of this work are subject to change both through the Code Development Cycles and the governmental body that enacts the code into law. For more information regarding the code development process, contact the Code and Standard Development Department of the International Code Council.

While the development procedure of the *International Fire Code* assures the highest degree of care, ICC, its members and those participating in the development of this code do not accept any liability resulting from compliance or noncompliance with the provisions because ICC and its founding members do not have the power or authority to police or enforce compliance with the contents of this code. Only the governmental body that enacts the code into law has such authority.

Letter Designations in Front of Section Numbers

In each code development cycle, proposed changes to the code are considered at the Code Development Hearings by the ICC Fire Code Development Committee, whose action constitutes a recommendation to the voting membership for final action on the proposed change. Proposed changes to a code section that has a number beginning with a letter in brackets are considered by a different code development committee. For example, proposed changes to code sections that have [B] in front of them (e.g. [B] 607.2) are considered by the ICC Building Code Development Committee at the code development hearings.

The content of sections in this code that begin with a letter designation are maintained by another code development committee in accordance with the following:

[B] = International Building Code Development Committee;

[EB] = International Existing Building Code Development Committee;

[FG] = International Fuel Gas Code Development Committee;

[M] = International Mechanical Code Development Committee; and

[P] = International Plumbing Code Development Committee.

Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2003 edition. Deletion indicators in the form of an arrow () are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.

ORDINANCE

The *International Codes* are designed and promulgated to be adopted by reference by ordinance. Jurisdictions wishing to adopt the 2006 *International Fire Code* as an enforceable regulation governing regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises should ensure that certain factual information is included in the adopting ordinance at the time adoption is being considered by the appropriate governmental body. The following sample adoption ordinance addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

SAMPLE ORDINANCE FOR ADOPTION OF THE INTERNATIONAL FIRE CODE ORDINANCE NO.

An ordinance of the **[JURISDICTION]** adopting the 2006 edition of the *International Fire Code*, regulating and governing the safe-guarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the **[JURISDICTION]**; providing for the issuance of permits and collection of fees therefor; repealing Ordinance No. ______ of the **[JURISDICTION]** and all other ordinances and parts of the ordinances in conflict therewith.

The [GOVERNING BODY] of the [JURISDICTION] does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the [TITLE OF JURISDICTION'S KEEPER OF RECORDS] of [NAME OF JURISDICTION], being marked and designated as the *International Fire Code*, 2006 edition, including Appendix Chapters [FILL IN THE APPENDIX CHAPTERS BEING ADOPTED] (see *International Fire Code* Section 101.2.1, 2006 edition), as published by the International Code Council, be and is hereby adopted as the Fire Code of the [JURISDICTION], in the State of [STATE NAME] regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the [JURISDICTION] are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. That the following sections are hereby revised:

Section 101.1 Insert: [NAME OF JURISDICTION]

Section 109.3. Insert: [OFFENSE, DOLLAR AMOUNT, NUMBER OF DAYS]

Section 111.4. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS]

Section 3. That the geographic limits referred to in certain sections of the 2006 *International Fire Code* are hereby established as follows:

Section 3204.3.1.1 (geographic limits in which the storage of flammable cryogenic fluids in stationary containers is prohibited): [JURISDICTION TO SPECIFY]

Section 3404.2.9.5.1 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited): [JURISDICTION TO SPECIFY]

Section 3406.2.4.4 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks is prohibited): [JURISDICTION TO SPECIFY]

Section 3804.2 (geographic limits in which the storage of liquefied petroleum gas is restricted for the protection of heavily populated or congested areas): [JURISDICTION TO SPECIFY]

Section 4. That Ordinance No. _____ of [JURISDICTION] entitled [FILL IN HERE THE COMPLETE TITLE OF THE ORDINANCE OR ORDINANCES IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY SPECIFIC REFERENCE] and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 5. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The **[GOVERNING BODY]** hereby declares that it

would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 6. That nothing in this ordinance or in the Fire Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 4 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 7. That the **[JURISDICTION'S KEEPER OF RECORDS]** is hereby ordered and directed to cause this ordinance to be published. (An additional provision may be required to direct the number of times the ordinance is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

Section 8. That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect **[TIME PERIOD]** from and after the date of its final passage and adoption.

TABLE OF CONTENTS

CHA	PTER 1 ADMINISTRATION	403 Public Assemblages and Events	33
Section	on	404 Fire Safety and Evacuation Plans	35
101	General	405 Emergency Evacuation Drills	36
102	Applicability	406 Employee Training and Response Procedur	es37
103	Department of Fire Prevention 2	407 Hazard Communication	37
104	General Authority and Responsibilities 2	408 Use and Occupancy-related Requirements	38
105	Permits	. ,	
106	Inspections	CHAPTER 5 FIRE SERVICE FEATURES	41
107	Maintenance	Section	
108	Board of Appeals	501 General	41
109	Violations	502 Definitions	41
110	Unsafe Buildings	503 Fire Apparatus Access Roads	41
111	Stop Work Order	504 Access to Building Openings and Roofs	
СНА	PTER 2 DEFINITIONS	505 Premises Identification	
Section	on	506 Key Boxes	42
201	General	507 Hazards to Fire Fighters	43
202	General Definitions	508 Fire Protection Water Supplies	
CITA	PERD 4 CENTED AT DESCAPETONS	509 Fire Command Center	44
СНА	PTER 3 GENERAL PRECAUTIONS AGAINST FIRE	510 Fire Department Access to Equipment	44
Section	on		
301	General	CHAPTER 6 BUILDING SERVICES	
		AND SYSTEMS	45
301	General	AND SYSTEMS	
301 302	General 27 Definitions 27	AND SYSTEMS	
301 302 303	General27Definitions27Asphalt Kettles27	AND SYSTEMS	45
301 302 303 304	General27Definitions27Asphalt Kettles27Combustible Waste Material27	AND SYSTEMS Section 601 General	45
301 302 303 304 305	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28	AND SYSTEMS Section 601 General	45 45
301 302 303 304 305 306 307 308	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29	AND SYSTEMS Section 601 General	45 45 45
301 302 303 304 305 306 307 308 309	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28	AND SYSTEMS Section 601 General	45 45 45 47
301 302 303 304 305 306 307 308 309 310	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31	Section 601 General	45 45 45 47 49
301 302 303 304 305 306 307 308 309 310 311	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31	Section 601 General	45 45 47 49 50 52
301 302 303 304 305 306 307 308 309 310 311 312	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32	Section 601 General	45 45 47 49 50 52
301 302 303 304 305 306 307 308 309 310 311 312 313	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32Fueled Equipment32	Section 601 General	45 45 47 49 50 52
301 302 303 304 305 306 307 308 309 310 311 312 313 314	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32Fueled Equipment32Indoor Displays33	Section 601 General	45 45 47 49 50 52 52
301 302 303 304 305 306 307 308 309 310 311 312 313	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32Fueled Equipment32	Section 601 General	45 45 47 49 50 52 52
301 302 303 304 305 306 307 308 309 310 311 312 313 314 315	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32Fueled Equipment32Indoor Displays33	Section 601 General	45 45 47 49 50 52 54
301 302 303 304 305 306 307 308 309 310 311 312 313 314 315	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32Fueled Equipment32Indoor Displays33Miscellaneous Combustible Materials Storage33	Section 601 General	45454549505252
301 302 303 304 305 306 307 308 309 310 311 312 313 314 315	General27Definitions27Asphalt Kettles27Combustible Waste Material27Ignition Sources28Motion Picture Projection Rooms and Film28Open Burning and Recreational Fires28Open Flames29Powered Industrial Trucks and Equipment31Smoking31Vacant Premises31Vehicle Impact Protection32Fueled Equipment32Indoor Displays33Miscellaneous Combustible Materials Storage33PTER 4 EMERGENCY PLANNING AND PREPAREDNESS35	Section 601 General	4545474950525455
301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 CHA	General 27 Definitions 27 Asphalt Kettles 27 Combustible Waste Material 27 Ignition Sources 28 Motion Picture Projection Rooms and Film 28 Open Burning and Recreational Fires 28 Open Flames 29 Powered Industrial Trucks and Equipment 31 Smoking 31 Vacant Premises 31 Vehicle Impact Protection 32 Fueled Equipment 32 Indoor Displays 33 Miscellaneous Combustible Materials Storage 33 PTER 4 EMERGENCY PLANNING AND PREPAREDNESS 35	Section 601 General	454547495052545555

CHA	PTER 8	INTERIOR FINISH, DECORATIVE	1008	Doors, Gates and Turnstiles 109
		MATERIALS AND FURNISHINGS57	1009	Stairways
Section	n		1010	Ramps
801	General	57	1011	Exit Signs
802	Definiti	ons	1012	Handrails
803		Wall and Ceiling Finish and	1013	Guards
	Trim	in Existing Buildings 57	1014	Exit Access
804		Wall and Ceiling Trim in and Existing Buildings 59	1015	Exit and Exit Access Doorways
805		ered Furniture and Mattresses in	1016	Exit Access Travel Distance
005		and Exisiting Buildings	1017	Corridors
806		ive Vegetation in New and	1018	Exits
907		ing Buildings 61 ive Materials Other Than Decorative	1019	Number of Exits and Continuity125
807		ration in New and Existing Buildings 62	1020	Vertical Exit Enclosures
808	_	ings Other Than Upholstered	1021	Exit Passageways
	Furni	ture and Mattresses or Decorative	1022	Horizontal Exits
	Materials in New and Existing Buildings 63	1023	Exterior Exit Ramps and Stairways 129	
CHA	PTER 9	FIRE PROTECTION SYSTEMS65	1024	Exit Discharge
Section	n		1025	Assembly
901	General	65	1026	Emergency Escape and Rescue
902	Definiti	ons	1027	Means of Egress for Existing Buildings 136
903	Automa	tic Sprinkler Systems 69	1028	Maintenance of the Means of Egress 140
904		tive Automatic Fire-extinguishing		
00.5	•	ms	CHAPTER 11 AVIATION FACILITIES14	
905		pe Systems	Section	
906		e Fire Extinguishers	1101	General
907		arm and Detection Systems	1102	Definitions
908 909	_	ncy Alarm Systems	1103	General Precautions
909		Control Systems 90 and Heat Vents 96	1104	Aircraft Maintenance
910		on Control	1105	Portable Fire Extinguishers144
912	•	partment Connections	1106	Aircraft Fueling
913	_	mps	1107	Helistops and Heliports149
914		stection Based on Special Detailed		r
,,,	Requirements of Use and Occupancy100	CHA	PTER 12 DRY CLEANING151	
CIVI PERE AN ANTANG OF EGREGG		Section	on	
CHAPTER 10 MEANS OF EGRESS		1201	General	
		102	1202	Definitions
1001 1002		stration	1203	Classifications
1002			1204	General Requirements
1003		Means of Egress 104 nt Load 105	1205	Operating Requirements
1004	_	Width	1206	Spotting and Pretreating
1005	_	of Egress Illumination	1207	Dry Cleaning Systems
1007		ble Means of Egress	1208	Fire Protection
- 00,	11000001		- 200	

CHA	PTER 13 COMBUSTIBLE DUST-PRODUCING OPERATIONS155	CHA! Section	PTER 16 FRUIT AND CROP RIPENING 173
Section	on	1601	General
1301	General	1602	Definitions
1302	Definitions	1603	Ethylene Gas
1303	Precautions	1604	Sources of Ignition
1304	Explosion Protection	1605	Combustible Waste
CHAPTER 14 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION		1606	Ethylene Generators
		1607	Warning Signs
Section	on	CHA	PTER 17 FUMIGATION AND THERMAL
1401	General		INSECTICIDAL FOGGING 175
1402	Definitions	Section	on
1403	Temporary Heating Equipment	1701	General
1404	Precautions Against Fire	1702	Definitions
1405	Flammable and Combustible Liquids157	1703	Fire Safety Requirements
1406	Flammable Gases		
1407	Explosive Materials	CHA	PTER 18 SEMICONDUCTOR FABRICATION
1408	Owner's Responsibility for Fire Protection 158	G .:	FACILITIES 177
1409	Fire Reporting	Section	
1410	Access for Fire Fighting	1801	General
1411	Means of Egress	1802	Definitions
1412	Water Supply for Fire Protection	1803	General Safety Provisions
1413	Standpipes	1804	Storage
1414	Automatic Sprinkler System	1805	Use and Handling
1415	Portable Fire Extinguishers	CITA	DEED 10 LUMBED WARDS AND
1416	Motorized Equipment	CHA	PTER 19 LUMBER YARDS AND WOODWORKING FACILITIES187
1417	Safeguarding Roofing Operations 159	Section	
СНА	PTER 15 FLAMMABLE FINISHES 161	1901	General
Section		1902	Definitions
1501	General	1903	General Requirements
1502	Definitions	1904	Fire Protection
1503	Protection of Operations	1905	Plywood, Veneer and Composite Board
1504	Spray Finishing		Mills
1505	Dipping Operations	1906	Log Storage Areas
1506	Powder Coating		Storage of Wood Chips and Hogged Material Associated With Timber and Lumber
1507	Electrostatic Apparatus		Production Facilities
1508	Organic Peroxides and Dual-component	1908	Storage and Processing of Wood Chips, Hogged
	Coatings		Material, Fines, Compost and Raw Product Associated With Yard Waste and Recycling
1509	Indoor Manufacturing of Reinforced Plastics 170		Facilities
1510	Floor Surfacing and Finishing Operations 170	1909	Exterior Storage of Finished Lumber Products

CHAI	PTER 20 MANUFACTURE OF ORGANIC	2302	Definitions	. 215
	COATINGS 191	2303	Commodity Classification	. 216
Sectio	on .	2304	Designation of High-piled Storage Areas	. 218
2001	General	2305	Housekeeping and Maintenance	. 218
2002	Definitions	2306	General Fire Protection and Life Safety	
2003	General Precautions		Features	. 218
2004	Electrical Equipment and Protection 191	2307	Solid-piled and Shelf Storage	. 222
2005	Process Structures	2308	Rack Storage	. 222
2006	Process Mills and Kettles	2309	Automated Storage	. 222
2007	Process Piping	2310	Specialty Storage	. 223
2008	Raw Materials in Process Areas			
2009	Raw Materials and Finished Products 193	CHA	PTER 24 TENTS, CANOPIES AND OTHER MEMBRANE STRUCTURES	. 225
СНАІ	PTER 21 INDUSTRIAL OVENS195	Section	on	
Sectio		2401	General	. 225
2101	General	2402	Definitions	. 225
2101	Definitions	2403	Temporary Tents, Canopies and Membrane	
			Structures	. 225
2103	Location	2404	Temporary and Permanent Tents, Canopies	227
2104	Fuel Piping		and Membrane Structures	. 221
2105	Interlocks	СНА	PTER 25 TIRE REBUILDING AND	
2106	Fire Protection	CIII	TIRE STORAGE	. 231
2107	Operation and Maintenance	Section	on	
CHAPTER 22 MOTOR FUEL-DISPENSING		2501	General	. 231
CIIII	FACILITIES AND REPAIR	2502	Definitions	. 231
	GARAGES197	2503	Tire Rebuilding	. 231
Sectio	n	2504	Precautions Against Fire	. 231
2201	General	2505	Outdoor Storage	. 231
2202	Definitions	2506	Fire Department Access	. 232
2203	Location of Dispensing Devices	2507	Fencing	. 232
2204	Dispensing Operations	2508	Fire Protection	. 232
2205	Operational Requirements	2509	Indoor Storage Arrangement	
2206	Flammable and Combustible Liquid Motor Fuel-dispensing Facilities		PTER 26 WELDING AND OTHER	
2207	Liquefied Petroleum Gas Motor Fuel-dispensing Facilities	Section	HOT WORK	. 233
2208	Compressed Natural Gas Motor	2601	General	233
	Fuel-dispensing Facilities	2602	Definitions	
2209	Hydrogen Motor Fuel-dispensing and	2603		
	Generation Facilities	2604	General Requirements	
2210	Marine Motor Fuel-dispensing Facilities 209		Fire Safety Requirements	
2211	Repair Garages211	2605	Gas Welding and Cutting	
CILAT	OTED 22 HICH DIJ ED COMDUCTIDI E	2606	Electric Arc Hot Work.	
СПАІ	PTER 23 HIGH-PILED COMBUSTIBLE STORAGE	2607	Calcium Carbide Systems	
Sectio		2608	Acetylene Generators	. 233
2301	General	2609	Piping Manifolds and Hose Systems for Fuel Gases and Oxygen	. 235

СНА	PTER 27 HAZARDOUS MATERIALS— GENERAL PROVISIONS237	Section	PTER 32 CRYOGENIC FLUIDS279 on
Section	on	3201	General
2701	General	3202	Definitions
2702	Definitions	3203	General Requirements
2703	General Requirements	3204	Storage
2704	Storage	3205	Use and Handling
2705	Use, Dispensing and Handling		
СНА	PTER 28 AEROSOLS	CHA	PTER 33 EXPLOSIVES AND FIREWORKS 285
Section		Section	
2801	General	3301	General
2802	Definitions	3302	Definitions
2803	Classification of Aerosol Products	3303	Record Keeping and Reporting291
2804	Inside Storage of Aerosol Products	3304	Explosive Materials Storage and Handling 291
2805	Outside Storage	3305	Manufacture, Assembly and Testing of
2806	_		Explosives, Explosive Materials and
	Retail Display	2206	Fireworks
2807	Manufacturing Facilities	3306	Small Arms Ammunition
СНА	PTER 29 COMBUSTIBLE FIBERS269	3307	Blasting
Section		3308	Fireworks Display
2901	General	CHA	PTER 34 FLAMMABLE AND COMBUSTIBLE LIQUIDS305
2902	Definitions	Section	
2903	General Precautions	3401	General
2904	Loose Fiber Storage	3402	Definitions
2905	Baled Storage	3403	General Requirements
СПУ	PTER 30 COMPRESSED GASES271	3404	Storage
Section		3405	Dispensing, Use, Mixing and Handling329
	General	3406	Special Operations
3002	Definitions	CHA	PTER 35 FLAMMABLE GASES 345
3003	General Requirements	Section	on
3004	Storage of Compressed Gases	3501	General
3005	Use and Handling of Compressed Gases 275	3502	Definitions
3006	Medical Gas Systems	3503	General Requirements
3007	Compressed Gases Not Otherwise Regulated 276	3504	Storage
CHA	PTER 31 CORROSIVE MATERIALS277	3505	Use
Section	on	CHA	PTER 36 FLAMMABLE SOLIDS347
3101	General	Section	
3102	Definitions	3601	General
3103	General Requirements	3602	Definitions
3104	Storage	3603	General Requirements
3105	Use	3604	Storage

TABLE OF CONTENTS

3605	Use	CHAPTER 41 PYROPHORIC MATERIALS 373
3606	Magnesium	Section
		4101 General
CHA	PTER 37 HIGHLY TOXIC AND TOXIC	4102 Definitions
~ .	MATERIALS351	4103 General Requirements
Section		4104 Storage
3701	General	4105 Use
3702	Definitions	4106 Silane Gas
3703	Highly Toxic and Toxic Solids and Liquids 352	
3704	Highly Toxic and Toxic Compressed Gases 353	CHAPTER 42 PYROXYLIN (CELLULOSE NITRATE) PLASTICS377
3705	Ozone Gas Generators	4201 General
		4201 General
CHAPTER 38 LIQUEFIED PETROLEUM GASES		4202 Definitions
Section		4204 Storage and Handling
3801	General	4204 Storage and Handring
3802	Definitions	CHAPTER 43 UNSTABLE (REACTIVE)
3803	Installation of Equipment	MATERIALS 379
3804	Location of Containers	Section
3805	Prohibited Use of LP-gas	4301 General
3806	Dispensing and Overfilling	4302 Definitions
3807	Safety Precautions and Devices	4303 General Requirements
3808	Fire Protection	4304 Storage
		4305 Use
3809	Storage of Portable LP-gas Containers Awaiting Use or Resale	
3810	Containers Not in Service	CHAPTER 44 WATER-REACTIVE SOLIDS AND LIQUIDS
3811	Parking and Garaging	Section
		4401 General
CHAPTER 39 ORGANIC PEROXIDES365		4402 Definitions
Section	on	4403 General Requirements
3901	General	4404 Storage
3902	Definitions	4405 Use
3903	General Requirements	
3904	Storage	CHAPTER 45 REFERENCED STANDARDS 383
3905	Use	
		APPENDIX A BOARD OF APPEALS
CHAPTER 40 OXIDIZERS		Section
Section	on	A101 General
4001	General	APPENDIX B FIRE-FLOW REQUIREMENTS
4002	Definitions	FOR BUILDINGS
4003	General Requirements	Section
4004	Storage	B101 General
4005	Use	B102 Definitions

B103	Modifications	
B104	Fire-flow Calculation Area	
B105	Fire-flow Requirements for Buildings 393	
B106	Referenced Standards	
APPE	NDIX C FIRE HYDRANT LOCATIONS AND DISTRIBUTION395	
Sectio	n	
C101	General	
C102	Location	
C103	Number of Fire Hydrants	
C104	Consideration of Existing Fire Hydrants 395	
C105	Distribution of Fire Hydrants	
APPE	NDIX D FIRE APPARATUS ACCESS ROADS	
Sectio	n	
D101	General	
D102	Required Access	
D103	Minimum Specifications	
D104	Commercial and Industrial Developments 398	
D105	Aerial Fire Apparatus Access Roads 398	
D106	$Multiple-family\ Residential\ Developments\dots 398$	
D107	One- or Two-family Residential Developments	
APPE	NDIX E HAZARD CATEGORIES 401	
Sectio		
E101	General	
E102	Hazard Categories	
E103	Evaluation of Hazards	
A DDE	NDIX F HAZARD RANKING407	
Section		
F101	General	
	Referenced Standards	
1102	Referenced standards	
APPE	NDIX G CRYOGENIC FLUIDS—WEIGHT AND VOLUME EQUIVALENTS 409	
Sectio		
G101	General	
INDEX411		

CHAPTER 1

ADMINISTRATION

SECTION 101 GENERAL

101.1 Title. These regulations shall be known as the *Fire Code* of [NAME OF JURISDICTION], hereinafter referred to as "this code."

101.2 Scope. This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:

- 1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
- 2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises;
- 3. Fire hazards in the structure or on the premises from occupancy or operation;
- Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.

101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

101.3 Intent. The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises and to provide safety to fire fighters and emergency responders during emergency operations.

101.4 Severability. If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

101.5 Validity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions hereof, which are determined to be legal; and it shall be presumed that this code would have been adopted without such illegal or invalid parts or provisions.

SECTION 102 APPLICABILITY

102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:

- 1. Structures, facilities and conditions arising after the adoption of this code.
- 2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
- 3. Existing structures, facilities and conditions when identified in specific sections of this code.

4. Existing structures, facilities and conditions which, in the opinion of the fire code official, constitute a distinct hazard to life or property.

102.2 Administrative, operational and maintenance provisions. The administrative, operational and maintenance provisions of this code shall apply to:

- Conditions and operations arising after the adoption of this code.
- 2. Existing conditions and operations.

102.3 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the *International Building Code*. Subject to the approval of the fire code official, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code and the *International Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

102.4 Application of building code. The design and construction of new structures shall comply with the *International Building Code*, and any alterations, additions, changes in use or changes in structures required by this code, which are within the scope of the *International Building Code*, shall be made in accordance therewith.

102.5 Historic buildings. The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings and structures shall be provided in accordance with an approved fire protection plan.

102.6 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 45 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.

102.7 Subjects not regulated by this code. Where no applicable standards or requirements are set forth in this code, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards, as approved, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the fire code official to determine compliance with

codes or standards for those activities or installations within the fire code official's jurisdiction or responsibility.

102.8 Matters not provided for. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code shall be determined by the fire code official.

102.9 Conflicting provisions. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

SECTION 103 DEPARTMENT OF FIRE PREVENTION

103.1 General. The department of fire prevention is established within the jurisdiction under the direction of the fire code official. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

103.2 Appointment. The fire code official shall be appointed by the chief appointing authority of the jurisdiction; and the fire code official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the fire code official shall have the authority to appoint a deputy fire code official, other related technical officers, inspectors and other employees.

103.4 Liability. The fire code official, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act required or permitted in the discharge of official duties.

103.4.1 Legal defense. Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The fire code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

SECTION 104 GENERAL AUTHORITY AND RESPONSIBILITIES

104.1 General. The fire code official is hereby authorized to enforce the provisions of this code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures,

rules and regulations shall be in compliance with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code.

104.2 Applications and permits. The fire code official is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

104.3 Right of entry. Whenever it is necessary to make an inspection to enforce the provisions of this code, or whenever the fire code official has reasonable cause to believe that there exists in a building or upon any premises any conditions or violations of this code which make the building or premises unsafe, dangerous or hazardous, the fire code official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the fire code official by this code. If such building or premises is occupied, the fire code official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the fire code official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, the fire code official has recourse to every remedy provided by law to secure entry.

104.3.1 Warrant. When the fire code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the fire code official for the purpose of inspection and examination pursuant to this code.

104.4 Identification. The fire code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

104.5 Notices and orders. The fire code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Sections 109.1 and 109.2.

104.6 Official records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than five years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

104.6.1 Approvals. A record of approvals shall be maintained by the fire code official and shall be available for public inspection during business hours in accordance with applicable laws.

104.6.2 Inspections. The fire code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

104.6.3 Fire records. The fire department shall keep a record of fires occurring within its jurisdiction and of facts concerning the same, including statistics as to the extent of