### NEW YORK CITY BOARD OF STANDARDS AND APPEALS NEW YORK CITY FIRE DEPARTMENT

Notice of Adoption of Final Rule

Amending

Chapters 1 and 3 through 26 of the Rules of the NYC Board and Standards and Appeals (Title 2 of the Rules of the City of New York)

and

Chapters 14 and 48 of the Rules of the NYC Fire Department (Title 3 of the Rules of the City of New York)

NOTICE IS HEREBY GIVEN PURSUANT TO THE AUTHORITY VESTED IN THE New York City Board of Standards and Appeals pursuant to Sections 666 and 1043 of the New York City Charter and Section 1-14 of Chapter 1 of Title 2 of the Rules of the City of New York, and in the Fire Commissioner of the City of New York pursuant to Sections 488 and 489 of the New York City Charter and Sections FC102.6.3 and FC901.6 of the New York City Fire Code (Title 29 of Administrative Code of the City of New York), and in accordance with the requirements of Sections 1043 of the New York City Charter, that the New York City Board of Standards and Appeals and the New York City Fire Department have adopted this final rule.

A public hearing was held on March 14, 2019. The rule shall take effect on May 5, 2019.

The Notice of Adoption, final rule and the Statement of Basis and Purpose of Final Rule, will be available on the Fire Department's website (<u>www.nyc.gov/fdny</u>) and NYCRULES (<u>www.nyc.gov/NYCRULES</u>).

# STATEMENT OF BASIS AND PURPOSE OF FINAL RULE

#### Repeal of Outdated BSA Rules and Reorganization of Building Design Rules

Prior to 1968, BSA was responsible for adopting standards regulating fire safety in buildings and construction sites. Among other things, BSA adopted rules relating to fire alarm systems and other fire protection systems, and construction site requirements.

With the enactment of the 1968 Building Code, and later, the 2008 Building Code and 2008 Fire Code, the New York City Department of Buildings (DOB) and FDNY took over this role. The new codes and rules promulgated thereunder by DOB and FDNY superseded the provisions of the BSA rules with respect to the design and construction of new buildings and the operation and maintenance of existing buildings. However, sometimes building owners and developers are confused as to whether the BSA requirements, which were never repealed or amended, remain in effect or are applicable to particular projects or installations.

The purpose of this rulemaking is to eliminate outdated BSA rules that have been superseded by the New York City Fire Code and to transfer to FDNY rules any remaining provisions of BSA rules relating to matters now regulated by the Fire Code that need to be retained.

The BSA rules that relate to the design of buildings and building systems (which are now regulated by the Building Code or other Construction Codes) are not being repealed but, like old building codes, will be kept in place for purposes of preserving pre-existing design requirements. The only exception are the BSA rules relating to construction site requirements, which are being repealed as they have no continuing applicability and have been wholly superseded by Building Code and Fire Code requirements.

The BSA rules being retained have been reorganized into two chapters in a manner designed to clarify their applicability. New introductory sections have been included that set forth the scope of each chapter, place the BSA rules in the proper context, and alert the reader to the requirements of the New York City Construction Codes. A cross-reference table indicating the disposition of each BSA rule provision and any new BSA or Fire Department section number is included as Chapter 5 of the BSA rules.

Specifically, BSA repeals the following BSA rule provisions, which are addressed by existing Building Code, Fire Code and/or FDNY rule provisions:

Section of BSA Rules	Type of Requirement	<b>BC/FC Section</b>	Disposition/Comments
<ul> <li>\$3-02 Alteration, Repair,</li> <li>Excavation for and</li> <li>Demolition of Building.</li> <li>(except sections</li> <li>indicated below)</li> </ul>	Design/Construction	BC Chapter 33	Repeal. Superseded by Building Code construction requirements
<ul><li>§3-02 (e) General</li><li>requirements</li><li>(7) Salamanders and</li><li>other heating devices</li></ul>	Operation	FC 307.6; 313.6; 1403.1.6; 3 RCNY 307-01; 1403-01; 3809-01(j)(2)	Repeal. Superseded by Fire Code and FDNY rule requirements
<ul> <li>§3-02 (e) General requirements</li> <li>(17) Storage of material and equipment</li> <li>(18) Storage and disposal of debris</li> <li>(19) Corrosive substances</li> </ul>	Operation/Maintenance	BC3303.4.7 BC3303.5 FC 304; 1405; FC Chapter 31	Repeal. Superseded by Building Code and Fire Code requirements
<ul><li>§3-02 (i) Demolition</li><li>operations</li><li>(18) Storage of</li></ul>	Operation	BC3306.9.11 FC 307.1; 1404.3	Repeal. Superseded by Building Code and Fire Code

Section of BSA Rules	Type of Requirement	<b>BC/FC Section</b>	Disposition/Comments
material (19) Burning at site			requirements
<ul><li>§3-02 (i) Demolition</li><li>operations</li><li>(20) Fire Protection</li><li>and Fire Extinguishers</li></ul>	Operation/Maintenance	BC 3303.7 BC3303.8; FC 906; 912.3; 1413.2 1414.1	Repeal. Superseded by Building Code and Fire Code requirements
<ul> <li>§3-02 (j) Equipment</li> <li>(25) Explosives</li> <li>(i) Storage, Sales, Transportation, Use or Possession of</li> <li>Explosives, Generally</li> <li>(A) Permit</li> <li>(B) Guncotton and Soluble Cotton</li> <li>(C) Nitro-glycerine</li> <li>(D) Transportation</li> <li>or Delivery</li> <li>(E) Supervision</li> <li>(F) Unapproved</li> <li>Kinds, Types or Brands</li> <li>(j) Equipment</li> <li>(25) Explosives</li> <li>(ii) Blasting</li> <li>Operations</li> </ul>	Operation/Maintenance	FC 105.6; 1407.1; 2707.6; 3301.5; 3307. 3 RCNY 2707-02	Repeal. Superseded by Fire Code and FDNY rule requirements
§5-01 Coin-Operated Dry Cleaning Establishments.	Design/Construction/ Operation/Maintenance	FC 105.6; FC Chapter 12	Repeal. NYC Department of Environmental Protection (DEP) rule 15 RCNY 12-04 prohibits use of self- service dry cleaning machines using perchlorethylene after May 15, 1997
§6-01 Elevator Readiness and Operator Availability to Assist in Fire Department Access During Hours When the Building is Normally Closed.	Operation	FC 506.2; 506.3; 607	Repeal. Superseded by Fire Code requirements
§8-01 Installation of Interior Fire Alarm Signal Systems.	Operation/Maintenance	BC901.5. FC 105.1; 105.2.2;	Repeal. Superseded by Building Code

Section of BSA Rules	Type of Requirement	BC/FC Section	Disposition/Comments
<ul><li>(n) Acceptance test.</li><li>(p) Maintenance.</li></ul>		901.1.1; 901.6; 901.7; 907.3.3; 907.17; 907.18; NFPA 72-2010 (as modified by FC Appendix B).	and Fire Code requirements
<ul> <li>§ 10-02 Fire</li> <li>Extinguishing</li> <li>Appliances – Sprinkler</li> <li>Systems.</li> <li>(uu) Maintenance</li> <li>inspection.</li> </ul>	Maintenance	FC 901.5; 901.6.1 903.5; 903.6; 1414; 3 RCNY §901-02; 903-01; 912-01; NFPA 25-2011	Repeal. Superseded by Fire Code and FDNY rule requirements
<ul> <li>§ 10-03 Fire</li> <li>Extinguishing</li> <li>Appliances – Standpipe</li> <li>and Fireline.</li> <li>(c) Monthly inspections.</li> <li>(e) Elevator in readiness.</li> </ul>	Operation/Maintenance	FC 607; 901.6; 3 RCNY §912-01; NFPA 25-2011	Repeal. Superseded by Fire Code and Fire Department rule requirements
§ 12-02 Tests of Fire- Resistive, Flameproofed Materials Used in Places of Public Assembly and Special Occupancy Structures.	Operation/Maintenance	FC 805; 3 RCNY §805-01; NFPA 701-2010.	Repeal. Superseded by Fire Code and Fire Department rule requirements
<ul> <li>§16-01 Installation and Use of Oil</li> <li>Burning Equipment and the Storage of Oils</li> <li>Used in Connection</li> <li>Therewith.</li> <li>(j)(4) Fee for permit and test of storage</li> </ul>	Operation/ Maintenance	FC113 FC603.1.8 FC Appendix A 3 PCNY \$11301	Repeal. Superseded by Fire Code and Fire Department rule requirements
tanks (o)(2) Instruction cards and certificates of fitness		3 RCNY §11301	requirements
§25-01 Arc and Gas Welding and Oxygen Cutting of Steel.	Design/Construction	NYC Admin Code 28-407; BC1704;	Repeal. Superseded by Building Code

Section of BSA Rules	Type of Requirement	BC/FC Section	Disposition/Comments
		2201; 2205-2207; 2209-2210	requirements and Construction Code General Administrative Provisions
§25-02 Electroslag Welding.	Design/Construction	NYC Admin Code 28-407; BC1704; 2201; 2205-2207; 2209-2210	Repeal. Superseded by Building Code requirements and Construction Code General Administrative Provisions
§26-01 Liquefiers Used to Convert Solid Carbon Dioxide to a Liquid and/or a Gas.	Design/Construction/ Operation/Maintenance	N/A	Repeal. No longer in use.

BSA additionally repeals the following BSA rule provisions, which FDNY has incorporated in whole or in part into FDNY rules:

Section of	Type of Requirement	BC/FC	<b>Disposition/Comments</b>
BSA Rules		Section	
<ul> <li>§3-02 (e) General requirements.</li> <li>(4)(i) Fire extinguishers and fire protection.</li> </ul>	Operation	FC 304.3; 508.5; 906; 912.2; 1404.2; 1412-1415. 3 RCNY §1401-01	Repeal. Transfer to FDNY rule 3 RCNY 1401-01 as new subdivision (c)(18) requirement of 5-foot clearance from hydrants at construction sites
§5-02 Non-Coin- Operated Dry Cleaning Establishments. (a) through (h)	Design/Construction/ Operation/Maintenance	FC 105.6; FC Chapter 12; FC 2703.1; FC Chapter 34; NFPA 32 (2007); NFPA 101 (2006)	Repeal. Transfer to new FDNY rule 3 RCNY 4801-01 provisions applicable to pre-existing facilities. Pursuant NYC Department of Environmental Protection rule 15 RCNY §12-04, all dry cleaning facilities installed in residential buildings before December 21, 2005 must eliminate perchlorethylene use by December 21, 2020.
§8-01 Installation of Interior Fire Alarm Signal Systems.	Operation/Maintenance	907.20.2; NFPA 72- 2010	Repeal. Transfer to new FDNY rule 3 RCNY 4801-01

(o) Daily and monthly test.		(as modified by FC Appendix B).	provisions applicable to pre-existing facilities and clarify that, consistent with current Fire Code procedures, daily testing is only required for systems without <u>a control panel</u> <u>capable of receiving and</u> <u>displaying supervisory</u> or trouble signals.
§ 15-01 Clearance Between Storage Vessels and Adjacent Structures.	Design/Construction/ Operation/Maintenance		Repeal. Transfer to new FDNY rule3 RCNY 4801-01 provisions applicable to pre-existing facilities.
§18-01 Use of Equipment for Spraying and Drying of Paints, Varnishes, Lacquers and Other Flammable Surface Coatings and Storage of Such Materials.	Design/Construction/ Operation/Maintenance	FC1503	Repeal. Transfer to new FDNY rule 3 RCNY 4801-01 provisions applicable to pre-existing facilities.

These BSA rule provisions are being incorporated into Fire Department rules unchanged, with two exceptions. The fire alarm system testing provisions of §8-01(o) have been revised in new Fire Department rule §4801-01(e) to apply current Fire Code inspection and testing procedures to such fire alarm systems if they are equipped with a control panel capable of receiving and displaying supervisory or trouble signals indicating that particular components of the fire alarm system are not functioning, require servicing or are otherwise not in good working order. The spray paint booth regulations of §18-01(d) have been revised in new Fire Department rule §4801-01(g) to omit reference to asbestos as a fireproofing material.

#### FDNY Enforcement of BSA Resolutions

BSA also adopts a new rule, 2 RCNY §1-15, that specifically authorizes FDNY to enforce BSA resolutions within the scope of FDNY's enforcement authority.

In accordance with BSA rule 2 RCNY §1-12.1, final determinations of the BSA are in the form of a written resolution. Resolutions recite the rule, regulation, order, requirement, decision or determination upon which an application has been made; proceedings before the Board, including plans and other submissions; findings and conclusions of the Board; the decision on an application; and, if an application is approved, the terms and conditions for approval. The resolutions are published by the agency in bulletins of its proceedings, posted on BSA's website, and subject to judicial review pursuant to §25-207 of the New York City Administrative Code and Article 78 of the New York Civil Practice Law and Rules.

Most BSA resolutions are sought by building owners and developers and are self-enforcing in the sense that, once BSA approval is obtained, it is in the interest of the owners and developers to reference and incorporate the approval into the plans they file with DOB.

However, from time to time, FDNY will apply to BSA to amend a Certificate of Occupancy to require installation of fire protection systems based on a change in use and occupancy of a premises. BSA may also condition the granting of an approval to a private party upon compliance with certain fire safety measures. These BSA approvals are not self-enforcing. FDNY is generally the agency inspecting and enforcing such fire-safety-related requirements arising from BSA approvals.

BSA has no mechanism in place to issue violations for failing to comply with the terms and conditions of its approvals, as set forth in its resolutions. BSA can enforce such terms and conditions by rescinding the approval, but generally this would have the effect of rendering an existing building or use illegal. Such a remedy is not always the most appropriate or expeditious enforcement method for obtaining compliance with the terms and conditions of a BSA approval.

FDNY has broad enforcement authority and comprehensive inspection programs. It is authorized by the New York City Charter to enforce BSA rules and by the NYC Administrative Code to enforce fire-safety-related requirements of the Construction Codes.

BSA and FDNY have concluded that it is in both agencies' interest – and in the interest of public safety – to adopt a rule that specifically authorizes FDNY to enforce BSA resolutions within the scope of FDNY's enforcement jurisdiction.

Text that has been deleted is indicated by [brackets]. Text that has been added is <u>underlined</u>.

*Italicized* terms in the FDNY rules are defined in Chapter 2 of the New York City Fire Code (Chapter 2 of Title 29 of the New York City Administrative Code) or Chapter 2 of FDNY's rules (Title 3 of the Rules of the City of New York).

Certain text has been highlighted as a note to the publisher. Blue highlighting of text indicates that the underlining should be retained in the publication of the final rule. Green highlighting of text indicates that brackets and bracketed text should be retained in the publication of the final rule.

Section 1. Chapter 1 of Title 2 of the Rules of the City of New York is amended by adding a new section, §1-15, to read as follows:

**§1-15 Fire Department Enforcement of Board Resolutions**. The resolutions of the Board, which set forth the final determinations of the Board and the terms and conditions for approval of an application, may be enforced by the New York City Fire Department, consistent with the scope of the Fire Department's enforcement authority under Chapter 19 of the New York City Charter, Titles 15 and 29 and Section 28-103.1 of the New York City Administrative Code, and any other applicable laws, rules and regulations. This provision shall not be deemed to impair

the authority of any other agency to enforce the resolutions of the Board, including the New York City Department of Buildings.

Section 2. The following sections of Title 2 of the Rules of the City of New York are REPEALED:

§3-02, entitled "Alteration, Repair, Excavation for and Demolition of Buildings."

§5-01, entitled "Coin-Operated Dry Cleaning Establishments."

- §5-02, entitled "Non-Coin-Operated Dry Cleaning Establishments."
- §6-01, entitled "Elevator Readiness and Operator Availability to Assist in Fire Department Access During Hours When the Building is Normally Closed."
- Subdivisions (n) (entitled "Acceptance Test"), (o) (entitled "Daily and monthly test") and (p) (entitled "Maintenance") of §8-01, entitled "Installation of Interior Fire Alarm Signal Systems."
- Subdivision (uu) (entitled "Maintenance inspection") of §10-02, entitled "Fire Extinguishing Appliances Sprinkler Systems."
- Subdivisions (c) (entitled, "Monthly Inspections") and (e) (entitled "Elevator in readiness") of §10-03, entitled "Fire Extinguishing Appliances Standpipe and Fireline."
- §12-02, entitled "Tests of Fire-Resistive, Flameproofed Materials Used in Places of Public Assembly and Special Occupancy Structures."
- §15-01, entitled "Clearance Between Storage Vessels and Adjacent Structures."
- Paragraph 4 (entitled "Fee for permit and test of storage tanks and piping") of subdivisions (j) and paragraph (2) of subdivision (o) (entitled "Instruction cards and certificates of fitness") of §16-01, entitled "Installation and Use of Oil Burning Equipment and the Storage of Oils Used in Connection Therewith."
- §18-01, entitled "Use of Equipment for Spraying and Drying of Paints, Varnishes, Lacquers and Other Flammable Surface Coatings and Storage of Such Materials."
- §25-01, entitled "Arc and Gas Welding and Oxygen Cutting of Steel."
- §25-02, entitled "Electroslag Welding."
- \$26-01, entitled "Liquefiers Used to Convert Solid Carbon Dioxide to a Liquid and/or a Gas."

Section 3. The chapter headings of Chapters 3 through 26 of Title 2 of the Rules of the City of New York are amended to read as follows:

- The chapter heading of Chapter 3, entitled "Construction," is amended to read "Factory Regulations Pursuant to New York State Labor Law."
- The chapter heading of Chapter 4, entitled "Doors," is amended to read "Regulations Applicable to Existing Installations."
- The chapter heading of Chapter 5, entitled "Dry Cleaning Establishments," is amended to read "Rule Repeal and Recodification."

The chapter headings of Chapters 6 through 26 are REPEALED.

Section 4. The section numbers of the sections set forth in Chapters 3 through 26 of Title 2 of the Rules of the City of New York are amended as follows:

- §3-01, entitled "Fire Resistive Construction," is renumbered §3-02.
- §4-01, entitled "Automatic Door Operators," is renumbered §4-02.
- §4-02, entitled "Marking of Transparent Glass Doors and Fixed Adjacent Glass Sidelights," is renumbered §4-03.
- §5-03, entitled "Dry Load Capacity of Dry Cleaning Units," is renumbered §4-04.
- §5-04, entitled "Dry Cleaning Establishments Pursuant to the Zoning Resolution," is renumbered §4-05.
- §7-01, entitled "Standard Factory Exits," is renumbered §3-03.
- §7-02, entitled "Substandard Factory Exits," is renumbered §3-04.
- §8-01, entitled "Installation of Interior Fire Alarm Signal Systems," is renumbered §4-06 (except for subdivisions (n), (o) and (p), which are repealed, as set forth in §2 above).
- §9-01, entitled "Conduct of Fire Drills," is renumbered §3-05.
- §10-01, entitled "Automatic Fire Extinguishing Systems," is renumbered §4-08.
- §10-02, entitled "Fire Extinguishing Appliances Sprinkler Systems," is renumbered §4-09 (except for subdivision (uu), which is repealed, as set forth in §2 above).
- §10-03, entitled "Fire Extinguishing Appliances Standpipe and Fireline," is renumbered §4-10 (except for subdivisions (c) and (e), which are repealed, as set forth in §2 above).

- §11-01, entitled "Factory Built Fireplaces Obtaining Outdoor Combustion Air," is renumbered §4-11.
- §12-01, entitled "Application and Protection of Sprayed-on Fireproofing," is renumbered §4-12.
- §13-01, entitled "Fireproof Windows," is renumbered §3-06.
- §14-01, entitled "Construction and Installation of Gas Shut-Off Valves," is renumbered §4-13.
- §16-01, entitled "Installation and Use of Oil Burning Equipment and the Storage of Oils Used in Connection Therewith," is renumbered §4-14 (except for paragraphs (j)(4) and (o)(2), which are repealed, as set forth in §2 above).
- §17-01, entitled "Inspection of Approved Opening Protective Assemblies," is renumbered §4-15.
- §19-01, entitled "Design, Construction and Installation of Plastic Pipe and Fittings," is renumbered §4-16.
- §21-01, entitled "Use of Methyl Chloride in Class B and C Refrigerating Systems," is renumbered §4-17.
- §22-01, entitled "Minimum Sound Levels of Audible Alarms of Smoke Detectors," is renumbered §4-07.
- §23-01, entitled "Smoking in Protected Portions of Factories and in Special Classes of Occupancies," is renumbered §3-07.
- §24-01, entitled "Exterior Veneering Materials," is renumbered §4-18.

Section 5. The table of contents of Chapters 3, 4 and 5 of Title 2 of the Rules of the City of New York are amended to read as follows:

Chapter 3 [Construction] Factory Regulations Pursuant to New York State Labor Law

- §3-01 Scope
- <u>§3-02</u> Fire Resistive Construction
- [§3-02 Alteration, Repair, Excavation for and Demolition of Buildings.]
- <u>§3-03</u> Standard Factory Exits
- <u>§3-04</u> Substandard Factory Exits
- §3-05 Conduct of Fire Drills
- <u>§3-06 Fireproof Windows</u>
- <u>§3-07</u> Smoking in Protected Portions of Factories and in Special Classes of Occupancies

### Chapter 4 [Doors] <u>Regulations Applicable to Existing Installations</u>

- §4-01 Scope
- <u>§4-02</u> Automatic Door Operators
- [§4-02] <u>§4-03</u> Marking of Transparent Glass Doors and Fixed Adjacent Glass Sidelights
- <u>§4-04 Dry Load Capacity of Dry Cleaning Units</u>
- §4-05 Dry Cleaning Establishments Pursuant to the Zoning Resolution
- <u>§4-06 Installation of Interior Fire Alarm Signal Systems</u>
- <u>§4-07 Minimum Sound Levels of Audible Alarms of Smoke Detectors</u>
- <u>§4-08 Automatic Fire Extinguishing Systems</u>
- §4-09 Fire Extinguishing Appliances Sprinkler Systems
- <u>§4-10 Fire Extinguishing Appliances Standpipe and Fireline</u>
- <u>§4-11 Factory Built Fireplaces Obtaining Outdoor Combustion Air</u>
- <u>§4-12</u> Application and Protection of Sprayed-on Fireproofing
- <u>§4-13</u> Construction and Installation of Gas Shut-Off Valves
- <u>§4-14</u> Installation and Use of Oil Burning Equipment and the Storage of Oils Used in Connection Therewith
- <u>§4-15 Inspection of Approved Opening Protective Assemblies</u>
- <u>§4-16 Design, Construction and Installation of Plastic Pipe and Fittings</u>
- <u>§4-17</u> Use of Methyl Chloride in Class B and C Refrigerating Systems
- <u>§4-18 Exterior Veneering Materials</u>

Chapter 5 [Dry Cleaning Establishments] Rule Repeal and Recodification

# <u>§5-01</u> Cross-Reference Table of Rules Repealed, Renumbered and Transferred Effective May 5, 2019

Section 5. Chapter 3 of Title 2 of the Rules of the City of New York is amended by adding a new §3-01, to read as follows:

**§3-01. Scope.** The rules set forth in this chapter were adopted to implement provisions of the New York State Labor Law with respect to the design, construction, operation and maintenance of factories. In general, these rules were applicable to factories constructed prior to December 6, 1968. Consult the New York State Labor Law, and the applicable provisions of the New York City Building or Construction Codes in effect on or after December 6, 1968, to determine whether these rules apply to buildings constructed or altered on or after December 6, 1968.

Section 6. Chapter 4 of Title 2 of the Rules of the City of New York is amended by adding a new §4-01, to read as follows:

**§4-01. Scope.** The rules set forth in this chapter govern the design, installation, operation and maintenance of devices, equipment and systems in certain occupancies. In general,

these rules were applicable to buildings constructed prior to December 6, 1968. Consult the applicable provisions of the New York City Building or Construction Codes in effect on or after December 6, 1968, to determine whether these rules apply to buildings constructed or altered on or after December 6, 1968.

Section 7. Chapter 5 of Title 2 of the Rules of the City of New York is amended by adding a new §5-01, to read as follows:

**§5-01.** <u>Rules Repealed, Renumbered and Transferred Effective May 5, 2019</u>. The reorganization and recodification of Chapters 3 through 26 of the rules of the Board of Standards and Appeals effective May 5, 2019 is shown in Table 5-01.</u>

Prior BSA Section (2 RCNY)	Action	BSA Section (2 RCNY) Effective May 5, 2019	FDNY Section (3 RCNY) Effective May 5, 2019
<u>N/A</u>	New Section	<u>§3-01</u>	<u>N/A</u>
<u>§3-01</u>	<u>Renumber</u>	<u>§3-02</u>	<u>N/A</u>
<u>§3-02 (except</u> (e)(4)(i))	Repeal	<u>N/A</u>	<u>N/A</u>
<u>§3-02 (e)(4)(i)</u>	<u>Repeal/</u> FDNY Rule	<u>N/A</u>	<u>§1401-01(c)(18)</u>
<u>N/A</u>	New Section	<u>§4-01</u>	<u>N/A</u>
<u>§4-01</u>	<u>Renumber</u>	<u>§4-02</u>	<u>N/A</u>
<u>§4-02</u>	Renumber	<u>§4-03</u>	<u>N/A</u>
<u>§5-01</u>	<u>Repeal</u>	<u>N/A</u>	<u>N/A</u>
<u>N/A</u>	New Section	<u>§5-01</u>	<u>N/A</u>
<u>§5-02(a) through (h)</u>	<u>Repeal/</u> FDNY Rule	<u>N/A</u>	<u>§4801-01(d)</u>
<u>§5-03</u>	Renumber	<u>§4-04</u>	<u>N/A</u>
<u>§5-04</u>	Renumber	<u>§4-05</u>	<u>N/A</u>
<u>§6-01</u>	<u>Repeal</u>	<u>N/A</u>	<u>N/A</u>
<u>§7-01</u>	Renumber	<u>§3-03</u>	<u>N/A</u>
<u>§7-02</u>	Renumber	<u>§3-04</u>	<u>N/A</u>
<u>§8-01</u>	<u>Renumber</u>	<u>§4-06</u>	<u>N/A</u>
$\frac{\$8-01(n)}{\$8-01(p)}$	Repeal	<u>N/A</u>	<u>N/A</u>
<u>\$8-01(o)</u>	<u>Repeal/</u> FDNY Rule	<u>N/A</u>	<u>§4801-01(e)</u>
<u>§9-01</u>	Renumber	<u>§3-05</u>	<u>N/A</u>
<u>§10-01</u>	Renumber	<u>§4-08</u>	<u>N/A</u>
<u>§10-02</u>	Renumber	<u>§4-09</u>	<u>N/A</u>

# <u>TABLE 5-01</u> <u>CROSS-REFERENCE TABLE OF</u> <u>RULES REPEALED, RENUMBERED AND TRANSFERRED</u>

<u>§10-02(uu)</u>	Repeal	<u>N/A</u>	N/A
<u>§10-03</u>	Renumber	<u>§4-10</u>	N/A
<u>§ 10-03 (c)</u> § 10-03 (e)	Repeal	<u>N/A</u>	<u>N/A</u>
<u>§11-01</u>	Renumber	<u>§4-11</u>	<u>N/A</u>
<u>§12-01</u>	Renumber	<u>§4-12</u>	<u>N/A</u>
<u>§12-02</u>	Repeal	<u>N/A</u>	<u>N/A</u>
<u>§13-01</u>	Renumber	<u>§3-06</u>	<u>N/A</u>
<u>§14-01</u>	Renumber	<u>§4-13</u>	<u>N/A</u>
<u>§15-01</u>	<u>Repeal/</u> FDNY Rule	<u>N/A</u>	<u>§4801-01(f)</u>
<u>§16-01</u>	Renumber	<u>§4-14</u>	<u>N/A</u>
<u>§16-01(j)(4)</u> §16-01(0)(2)	<u>Repeal</u>	<u>N/A</u>	<u>N/A</u>
<u>§17-01</u>	Renumber	<u>§4-15</u>	<u>N/A</u>
<u>§18-01</u>	<u>Repeal/</u> FDNY Rule	<u>N/A</u>	<u>§4801-01(g)</u>
<u>§19-01</u>	Renumber	<u>§4-16</u>	<u>N/A</u>
<u>§21-01</u>	Renumber	<u>§4-17</u>	<u>N/A</u>
<u>§22-01</u>	Renumber	<u>§4-07</u>	<u>N/A</u>
<u>§23-01</u>	Renumber	<u>§3-07</u>	<u>N/A</u>
<u>§24-01</u>	Renumber	<u>§4-18</u>	<u>N/A</u>
<u>§25-01</u>	Repeal	<u>N/A</u>	<u>N/A</u>
<u>§25-02</u>	<u>Repeal</u>	<u>N/A</u>	<u>N/A</u>
<u>§26-01</u>	<u>Repeal</u>	<u>N/A</u>	<u>N/A</u>

Section 8. Section 1401-01 of Chapter 14 of Title 3 of the Rules of the City of New York is amended by adding a new paragraph (18) to subdivision (c), to read as follows:

#### 1401-01 Enforcement of Fire Safety at Construction Sites

\* \* \*

(c) General Requirements

\* \* \*

(18) except as otherwise required by *Administrative Code* §15-205 or other applicable law, rule or regulation, or as otherwise *approved*, providing and maintaining a clear space of five (5) feet from any *construction site* fence, equipment or other *construction site* material, operation or *facility* to any street (public) hydrant, to allow unobstructed *Department* access to the hydrant, making of hose connections, and operation of the hydrant operating nut. Section 9. Chapter 48 of Title 3 of the Rules of the City of New York is amended by adding a new section, \$4801-01, to read as follows:

# 4801-01 [Reserved] Former Board of Standards and Appeals Rules

- (a) Scope. This section consolidates former Board of Standards and Appeals rules in effect on June 30, 2008, that are applicable to the design and installation of devices, equipment and systems in *pre-existing facilities*.
- (b) Definitions. Reserved.
- (c) General Provisions. The design, installation, operation and maintenance of devices, equipment and systems allowed or approved by the New York City Board of Standards and Appeals pursuant to provisions of former Board of Standards and Appeals rules 2 RCNY 5-02, 8-01, 15-01 and 18-01, as set forth below, but not allowed by the Fire Code, and/or by the *Building Code* in effect on December 6, 1968 or thereafter, may be continued in *pre-existing facilities* in compliance with such former rules and other applicable laws, rules and regulations in effect at such time of such allowance or approval and any subsequent alteration thereof, until such time as such *facilities* may be required to comply with the *Construction Codes, Zoning Resolution*, Fire Code, the *rules*, or other applicable law, rule or regulation, with respect to the design, installation, operation or maintenance of such devices, equipment and systems.
- (d) Dry Cleaning Establishments (Former Board of Standards and Appeals Rule 2 RCNY <u>§5-02</u>)

# § 5-02 Non-Coin-Operated Dry Cleaning Establishments

(a) Definitions.

**Combustible solvent.** The term "combustible solvent" shall mean a liquid solvent that will either burn or will support combustion.

**Dealing directly with the ultimate consumer.** For the purpose of these rules and to carry into effect the provisions of § 32-15 A of the Zoning Resolution of the City of New York, the term "dealing directly with the ultimate consumer" shall refer only to those retail non-coin-operated dry cleaning establishments which perform services or articles conveyed directly by a retail customer to such establishment or collected directly from and delivered to the retail customer by an employee of such establishment or by any vehicle in the ownership, operation or control of such establishment.

**Dry cleaning.** For the purpose of these rules "dry cleaning" shall be deemed to be the insertion, into a dry cleaning machine or unit, of textiles,

fabrics, garments or other articles for the purpose of cleaning them by the use of solvents (other than water) with a flash point of not less than 138.2 degrees Fahrenheit when tested in a Tagliabue open cut tester, and the removal of same from such machine by an employee or owner-operator of a dry cleaning establishment, with a rail, counter, or other divider separating the dry cleaning units from the customer space.

**Dry cleaning establishment.** For the purpose of these rules a "dry cleaning establishment" shall be deemed to be a non-coin-operated retail establishment used for dry cleaning, (as defined in § 5-02(a) "dry cleaning" of these rules) dealing directly with ultimate consumers, limited to 2,000 square feet of floor area per establishment and wherein the total aggregate dry load capacity of the dry cleaning machines shall not exceed 60 lbs. This definition and § 5-02(c)(1)(i) shall not apply to any premises where Use Group 16 is permitted.

Dry cleaning establishment using a combustible solvent and dry cleaning establishments using a non-combustible solvent. The terms "dry cleaning establishment using a combustible solvent" and "dry cleaning establishments using a non-combustible solvent" as used in these rules shall refer to the solvent used as the detergent in the dry cleaning units.

**Dry cleaning unit.** A "dry cleaning unit" is the machinery or equipment in which textiles, fabrics, garments or other articles are carried through a complete cleaning cycle. A "dry cleaning unit" may consist of one or more detached component machines.

**Existing.** The term "existing" shall mean those dry cleaning establishments established prior to December 15, 1961.

**Flammable liquid solvents.** The term "flammable liquid solvents" shall mean such as will omit a flammable vapor at a temperature below 100 degrees Fahrenheit when tested in a Tagliabue open cup tester.

**Hereafter established.** The term "hereafter established" shall mean those dry cleaning establishments established after December 14, 1961.

**Non-combustible solvent.** The term "non-combustible solvent" shall mean a liquid solvent that will not burn and will not support combustion.

**Spotting or sponging.** The term "spotting or sponging" shall mean the local application of a "flammable liquid solvent" to remove spots of dirt, grease, paint or stains from wearing apparel, textiles, fabrics or articles of any other sort. All other terms used shall be as defined in the Zoning

Resolution, Administrative Code, Multiple Dwelling Law, or Labor Law, when not inconsistent with the specific terms defined herein.

- (b) Approval
  - (1) (i) It shall be unlawful to use any premises for any hereafter established non-coin-operated retail dry cleaning establishment unless application and plans have been filed with, and approved by, the Department of Buildings or the [Department of Ports and Trade] Department of Small Business Services in accordance with law.
    - (ii) The Department of Buildings shall have exclusive jurisdiction over inspections and enforcement of all provisions of these rules, except where such jurisdiction is specifically given to any other Agency in these rules or by the New York City Charter.
  - (2) The provisions of these rules shall not apply to any dry cleaning establishment for which plans were approved prior to the effective date of these rules, provided that such establishment complied with the rules in force at the time of approval.
  - (3) No dry cleaning unit shall be installed unless such unit is approved by the Board of Standards and Appeals.
  - (4) The dry load capacity of all dry cleaning units shall be rated by the Board of Standards and Appeals on the basis of 2.8 pounds per cubic foot of the volume of the washing compartment.
  - (5) No dry cleaning solvent shall be used unless such solvent has been tested and rated by the Fire Commissioner.
  - (6) It shall be unlawful in any dry cleaning unit approved by the Board to use any solvent other than that for which the dry cleaning unit has been approved by the Board.
  - (7) No non-conforming existing dry cleaning establishment shall be enlarged or extended unless such extension or enlargement be made in a conforming manner.
- (c) Restrictions on locations and areas
  - (1) (i) No dry cleaning establishment shall have a gross floor area exceeding 2,000 square feet to be used for dry cleaning and incidental operations, including space used for pressing, finishing,

storage and for the service of customers. The square foot area limitation shall apply to the aggregate of all space so used on all floors and mezzanines of the premises involved above the cellar or basement thereof. Additional space may be used on a lower floor which is either a basement or cellar provided that on such floor there shall be no dry cleaning and no storage of recently cleaned articles. Such additional space may include ordinary storage, boilers, compressors, pumps and filtration equipment.

- (ii) In calculating the gross floor area of a non-coin-operated dry cleaning establishment pursuant to § 5-02(c)(1)(i) such gross floor area in a multiple use type of service establishment, shall not include the area used for lawful non-dry-cleaning operations.
- (2) No non-coin-operated retail dry cleaning establishment using a combustible solvent shall be permitted within any building which is:
  - (i) of wood frame (class 4) construction; or
  - (ii) which is classified as a public building pursuant to § 26-235 of the Administrative Code except when located in a portion of such building completely separated from the public use portion by unpierced fire-proof construction having a 3 hour fire rating provided § 5-02(c)(2)(iii) is complied with; or
  - (iii) where any part of such establishment is within 20 feet of the public use portion of a public building.
- (d) Egress. Egress from all establishments subject to these rules shall comply with the Administrative Code and all other laws, rules and regulations applicable thereto and in addition thereto, all such establishments shall be provided with an unobstructed aisle not less than 3 feet wide leading from the main work area to all required means of egress. All required exit doors shall swing in the direction of egress.
- (e) Fire prevention. All hereafter established dry cleaning establishments, subject to these rules, shall comply with the following:
  - (1) No boiler shall be permitted in the same area or space where dry cleaning units are located, nor in the cellar directly under or within 5 ft. (measured horizontally) from any dry cleaning unit, unless either
    - (i) the boiler or boilers shall be enclosed in a one hour fire resistive unpierced enclosure and entered only from the outer air; or

- (ii) the boiler or boilers shall be enclosed in a one hour fire resistive enclosure with a one-hour fireproof self-closing door opening into a ventilated vestibule similarly enclosed and entered by a one-hour fireproof self-closing door opening into the interior of the premises or establishment.
- (2) The ceiling of all such boiler rooms as required in § 5-02(e)(1) and the adjoining entrance vestibule referred to in § 5-02(e)(1)(ii) above, shall be fire-retarded with one-hour fire resistive material.
- (3) Non-fireproof partitions and ceilings within six feet of any dry cleaning unit using a combustible solvent shall be fire-retarded with one-hour fire resistive materials and doors and with two approved automatic wet pipe sprinkler heads located over each cleaning unit; these sprinkler heads may have their source of supply from the house water system.
- (4) All openings from any such dry cleaning establishment, using a combustible solvent, leading to a fire escape shall be equipped with a one-hour fireproof self-closing door or fireproof window assembly.
- (5) Except as provided in § 5-02(e)(1), there shall not be employed in any such dry cleaning establishment using a combustible solvent any device or apparatus employing flame or fire or which is likely to produce an exposed spark except electric apparatus placed at least five feet above the floor, or approved type of "explosion proof electric motors." In such establishments all lighting shall be fitted with keyless sockets and all switches and receptacles shall be placed at least four feet above the floor. Nothing contained in this paragraph (5) or § 5-02(e)(1) shall prohibit the installation of any gas, or oil-fired heating device of a type approved by the Board for use in garages or in combustible or explosive atmospheres.
- (6) In an establishment using a non-combustible solvent, no direct-fired clothes dryer shall be located within 25' of a dry cleaning unit unless an incombustible vapor tight partition (which may contain glass), equipped with self-closing doors, is provided between the dry cleaning unit and the flame producing device. This partition may provide either complete or partial separation, provided that any partial separation is so arranged that the line of air travel around the partition from the dry cleaners to the dryers is a minimum of 25'.
  - (i) The 25 feet separation between dry cleaning units and direct fired clothes dryers as required by § 5-02(e)(6) may be reduced to 15 feet where a solid incombustible vapor-tight partition is constructed extending from the top of direct-fired clothes dryers to the ceiling and all portions of the dryer enclosures are solid, except

for self-closing access doors, so that vapors from the dry cleaning units cannot reach the dryer flame, provided adequate fresh air for combustion and drying is supplied to the dryers from the outer air.

- (ii) Nothing contained in these rules shall prohibit the installation of suspended gas or oil-fired heaters approved by the Board, provided that such heaters are located at least 7' above the floor, and at least 5' (measured horizontally) from any dry cleaning unit using a noncombustible solvent.
- (7) It shall be unlawful to store any flammable liquids or solvents in quantities aggregating more than five gallons without a permit as provided in Subchapter 9 of Chapter 4 of Title 27 of the Administrative Code.
- (8) All flammable liquids and solvents used for spotting and sponging shall be contained in approved individual metal containers not exceeding two-quart capacity each.
- (9) All sludge or residue removed from a dry cleaning unit shall be placed in a metal container not exceeding 55 gallons of capacity with a tight fitting cover and shall be removed from the premises and disposed of in a lawful manner.
- (10) All solvent used in the dry cleaning unit shall be either
  - (i) received and stored in metal containers not exceeding 55 gallons each and pumped directly into a dry cleaning unit or units by means of a detachable leakproof pump and pipe system, or
  - (ii) received and stored in a tank or tanks constructed in accordance with the Oil Burner rules (§ 16-01) of the Board of Standards and Appeals, and pumped directly into a dry cleaning unit or units by means of a closed leakproof pipe and pump system.
- (11) All non-coin-operated retail dry cleaning establishments shall be provided with at least two portable dry chemical fire extinguishers of not less than five pounds capacity each. The Fire Department shall have jurisdiction over the location of these fire extinguishers and shall make periodic inspection to insure that the fire extinguishers are in proper working order, and that proper housekeeping conditions are maintained on the premises and that the dry cleaning solvent used shall be of the type for which the dry cleaning unit was approved by the Board.
- (f) Ventilation

- (1) All hereafter established dry cleaning establishments subject to these rules shall be equipped with adequate ventilation to provide at least four complete changes of air volume an hour of such establishments during the operation of any dry cleaning units, and such ventilation as is otherwise required by law. The ventilating system shall be so arranged that air surrounding the dry cleaning equipment shall not be drawn through or past any unprotected flame producing device. Sufficient make-up air shall be introduced into all parts of the establishment to equal the air exhaust by dry cleaning units, dryers, and exhaust ventilating system.
- (2) The direct equipment exhausts or vents of all dry cleaning establishments subject to these rules shall terminate to the outer air in the following manner:
  - (i) At least 7 feet above the roof, street, yard, or court grade on which it opens in which said establishment is located, and
  - (ii) The exhaust shall be under negative pressure within the envelope of the building by means of a power operated fan, and
  - (iii) The terminal of the exhaust shall be at least five feet from any window or ventilating opening if the window or ventilating opening lies on the same plane as the exhaust terminal and when the windows, or ventilating openings lie on a plane which faces in the direction of the exhaust terminal such terminal shall be at least 10 feet from such opening, and
  - (iv) All direct equipment exhausts or vents shall be provided with approved mesh lint arrestors which shall be kept clean unless approved lint traps are provided on the units.
- (g) Operating precautions
  - (1) A printed notice embodying these rules shall be posted in a conspicuous place in all dry cleaning establishments.
  - (2) All equipment shall be installed in such manner as to minimize noise, vibration, smoke, and odors, and other forms of nuisances to the occupants of the premises in which such cleaning establishment may be located or to the occupants of any adjacent premises.
- (h) Penalties. Any violation of these rules shall be subject to the penalties prescribed in the Zoning Resolution therefor, in addition to other penalties prescribed by law.

\* \* \*

(e) Daily and Monthly Testing of Interior Fire Alarm Systems (Former Board of Standards and Appeals Rule 2 RCNY §8-01). The following testing requirements of former BSA rule 2 RCNY §8-01, as amended by this section, shall apply to interior fire alarm systems in pre-existing facilities, as set forth in R4801-01(c). All fire alarm systems designed and installed pursuant to former BSA rule 2 RCNY §8-01 shall be operated and maintained in compliance with applicable Fire Code requirements, except as otherwise provided in this section.

# § 8-01 Installation of Interior Fire Alarm Signal Systems.

\* \* \*

- (o) Daily and monthly test
  - (1) Every fire alarm system shall be tested [each morning immediately after the hours of starting work] on a daily basis, except for fire alarm systems with a control panel capable of receiving and displaying supervisory or trouble signals indicating that particular components of the fire alarm system are not functioning, require servicing or are otherwise not in good working order. Fire alarm systems designed, installed, operated and maintained with such a control panel shall be tested in compliance with the requirements of FC907.20.2.
  - (2) No [such] fire alarm system shall be used for any other purpose, except that the daily dismissal signals may be given if authorized by the Fire Commissioner. The use of the system for fire drill purposes may be considered a test of those parts of the system actually used.
  - [(2)] (3) Each sending station shall be tested at least once a month.
  - [(3)] (4) All apparatus requiring rewinding shall be rewound after each operation and kept in normal condition.
  - [(4)] (5) A complete record of monthly tests, fire drills and other operations of fire alarm systems shall be kept subject to inspection by the Fire <u>Commissioner.</u>
- (f) Cryogenic Gases ((Former Board of Standards and Appeals Rule 2 RCNY §15-01)

# § 15-01 Clearance Between Storage Vessels and Adjacent Structures

Every installation of liquid oxygen, nitrogen or argon storage vessels shall be made only outdoors as permitted by law. The minimum clearance between storage vessel and adjacent structures may be 1 foot if the walls are a minimum of 2 hours fire resistive construction and with no openings within 10 feet of the storage vessel unless such openings lead to rooms used exclusively for the storage of oxygen, nitrogen or argon and/or the charging of cylinders or suitable containers with oxygen, nitrogen or argon in which case the distance from storage vessel to wall opening may be reduced to 10 feet. No smoking, open flames or storage of combustible material shall be permitted in the area. All piping from the storage vessel and within the building shall be as required by the Fire Department. Each installation shall be serviced and periodically inspected by specially trained personnel holding Certificates of Fitness issued by the Fire Department. All electrical work shall be in accordance with the Electrical Code of the City of New York. Each installation shall bear a label as required in the original resolution.

(g) Spray Operations (Former Board of Standards and Appeals Rule 2 RCNY §18-01)

### <u>§ 18-01 Use of Equipment for Spraying and Drying of Paints, Varnishes, Lacquers</u> and Other Flammable Surface Coatings and Storage of Such Materials

(a) [Application] Restrictions.

\* \* \*

- (3) Restrictions. No spraying, dipping or immersing of any article or thing within the City of New York with any flammable paints, varnishes, lacquers or any other flammable substances, mixtures or compounds commonly used for painting, varnishing, staining or similar purposes shall be permitted in any premises or portion thereof as follows:
  - (i) Which is occupied as a class A or B multiple dwelling or a dwelling for one or two-families, except where a location is provided which is separated by fireproof construction from the residential occupancy and ventilated as provided in § 18-01(c).
  - (ii) Which is occupied as a place of public assembly except trade schools where the buildings are of Class I or Class II construction and spraying, dipping or immersing are demonstrated for instriction purposes only.
  - (iii) <u>Which is artificially lighted by any means other than electricity.</u>
  - (iv) Which is heated by other than the use of steam or hot water circulating systems and the boiler is located outside the space where spraying, dipping or immersing is carried on.
- (b) Definitions.

**Cabinet booth.** The term "Cabinet Booth" when used in these rules shall mean a compartment with a back, top and two sides of incombustible materials over a substantial metal frame and equipped with air exhaust facilities, located within a

room or any portion of any premises where spraying with any flammable paints, varnishes, lacquers or any other flammable substances, mixtures or compounds commonly used for painting, varnishing, staining or similar purposes is carried on.

**Canopy booth or hood.** The term "Canopy Booth or Hood" when used in these rules shall mean an installation consisting of a metal canopy or hood, without any side or end panels enclosing the object sprayed and an air exhaust system under which spraying with any flammable paints, varnishes, lacquers or any other flammable substances, mixtures or compounds commonly used for painting, varnishing, staining or similar purposes is carried on.

\* \* \*

**Dipping room.** The term "Dipping Room" when used in these rules shall mean a fully-enclosed ventilated room approved for such use in which any article or thing is dipped, or immersed in any flammable paints, varnishes, lacquers or any other flammable substances, mixtures, or compounds commonly used for painting, varnishing, staining or similar purposes is carried on.

**Fireproof or fire-resisting partitions.** The term "Fireproof or Fire-Resisting Partitions" used in these rules shall mean the standards set in the Labor Law and the rules of the Board of Standards and Appeals for factory buildings (§ 7-01). All openings in this type of partition shall only be equipped with self-closing fireproof assemblies.

\* \* \*

**Spray or spraying space, dipping space or immersing space.** The term "spray or spraying space" "dipping space or immersing space" when used in these rules shall mean that portion of the premises used for the actual work of spraying, dipping or immersing any article or thing with any flammable paints, varnishes, lacquers or any other flammable substances, mixtures or compounds, commonly used for painting, varnishing, staining or similar purposes in any booth or room.

**Spray room.** The term "spray room" when used in these rules shall mean a fully enclosed ventilated room approved for such use in which any article or thing is sprayed by any flammable paints, varnishes, lacquers or any other flammable substance, mixtures or compounds commonly used for painting, varnishing, staining or similar purposes is carried on.

**Storage room.** The term "storage room" when used in these rules shall mean a fully-enclosed ventilated room used for the storage and mixing of any flammable paints, varnishes, lacquers or any flammable substances, mixtures or compounds commonly used for painting, varnishing, staining or similar purposes.

**Tunnel booth.** The term "tunnel booth" when used in these rules shall mean a compartment consisting of two sides and top, equipped with an air exhaust system in which spraying with any flammable paints, varnishes, lacquers or any other flammable substances, mixtures or compounds commonly used for painting, varnishing, staining or similar purposes is carried on.

- (c) Ventilation
  - (1) Spraying or dipping spaces shall be ventilated when in operation so that the movement of air shall be at least one hundred (100') linear feet per minute in the breathing zone of the operator and be of sufficient capacity to prevent the accumulation of mist or vapors. For requirements of ventilation of storage rooms see § 18-0l(d)(4)(i).
  - (2) Air shall be admitted to the spraying, dipping or immersing spaces in an amount equal to the capacity of the fan or fans and in such a manner as to avoid short-circuiting the path of air in the working zone of such spaces. Exhaust fans shall be kept running constantly while spraying, mixing or dipping. Exhaust fan control shall be interconnected with spray gun so as to operate simultaneously. Exhaust fans shall, in addition, be arranged to operate independently of spray gun. Ventilation Equipment shall be kept in operation for a sufficient length of time thereafter to exhaust all vapors, fumes or residues of spraying materials from the spray booth, dip space or drying room. Air admitted to the spraying, dipping, immersing, drying spaces or storage rooms shall be fresh air taken from the outside of the building.
  - (3) Equipment. Motors shall be located outside of spraying, dipping or immersing spaces except as provided in § 18-01(d).
- (d) Specification for spray booths, spray rooms, dip and immersing rooms, drying equipment and material storage rooms
  - (1) Spray booths shall be constructed of metal or incombustible materials satisfactory to the administrative official having jurisdiction. Ventilation and lighting for spray booths, spray rooms, dipping rooms, drying rooms and storage rooms shall comply with requirements of these rules.
    - (i) Spray, dip and immersing rooms shall be enclosed on all sides with partitions constructed of incombustible materials with floors in such rooms of concrete. Where such rooms are located over wooden floors, such wooden floors shall be surfaced with 1" of grout adequately reinforced or a mixture of Portland cement and sand similarly reinforced. Ceilings over such rooms shall be protected by 5/8" unsanded gypsum plaster or 7/8" of cement or sanded gypsum plaster on approved 3.0 lb metal lath or other

equivalent fire resisting ceiling protection. Ventilation, lighting and heating for these rooms shall comply with the requirements of these rules. Where additional fire fighting equipment is necessary such equipment shall be furnished in accordance with the direction of the Fire Commissioner. Floor drains leading to the house draining system or the public sewer shall not be permitted. Dip tanks shall be provided with hinged metal covers held open by a fusible link, such covers to be equipped with an opening to permit automatic flooding of the tank with fire extinguishing media of a type and so located as the Fire Commissioner shall direct. Where the work process, such as conveyorized operation, makes the use of a cover impractical, the dip tank and drain boards shall be protected by an adequate extinguishing system designed for manual and automatic operation satisfactory to the Fire Commissioner and such conveyor shall be interlocked with the extinguishing system so that in the event the extinguishing system is activated, the conveyor action shall be stopped.

- (ii) Panels of polished wired glass or plate-glass at least one-quarter (1/4) of an inch thick, not exceeding seven hundred and twenty (720) square inches in area and not more than forty-eight (48") inches in any linear dimension may be used in the sides of a spray booth or room.
- (iii) The inner sides of walls, ceilings and the floors of all spraying or dipping spaces shall have a smooth surface.
- (iv) <u>All openings in spray, dip or immersing rooms shall be protected</u> by fireproof opening protective assemblies. Windows opening on a street may be used to provide ventilation but no window on a lot line or less than 20 ft. from any opening in a wall of an adjacent building shall be permitted except when the subject room is more than 20 ft., in the horizontal plane, above an adjoining building.
- (v) <u>Ferrous metals used in the construction of spraying, dipping or</u> <u>immersing spaces shall be thoroughly painted on the inside or be</u> <u>galvanized.</u>
- (vi) All spraying, dipping or immersing spaces shall be so constructed that at least three (3) feet of clear working space shall always be maintained for each operator spraying, dipping or immersing the material being processed.
- (2) Storage rooms. Storage rooms shall be constructed of fireproof or fire resisting material and shall have a window opening to the outer air but such window shall not be on a lot line, enclosed court, nor opposite within

twenty feet of windows of adjacent buildings nor part of the same premises, such window openings to be fireproofed and lower half provided with open louvers or ventilated by metal duct or fan at least 8 inches in diameter. The floors of all storage rooms shall be of incombustible non-ferrous materials. The sill of the door shall be at least 6 inches above the finished floor. All doors to be tin-clad, approved, fireproof and self-closing. The lighting equipment shall comply with §18-01(d)(5)(ii)(B) and shall have an electric switch located outside the room. Immediately adjacent to such room shall be provided such portable fire extinguishing equipment for use within the storage room as the Fire Commissioner shall direct.

#### (3) Drying equipment

Gas fired drying ovens. Gas fired drying ovens shall be of a type as (i) approved by the Board. Such ovens shall be constructed of metal and incombustible materials so designed as to preclude the direct application of flame to the materials in process. Ventilation shall be provided for each oven of sufficient capacity to maintain an oven vapor concentration at all times during the drying process of less than 1/4 the low explosive limit of the solvent used. All oven openings shall be maintained at a negative pressure relative to room pressure for inward flow. The controls for the safety exhaust and recirculating fans shall be properly interlocked with the gas supply line so that when the gas is flowing the fans are in operation. A time delay relay shall be installed to provide a minimum of four oven volume changes with fresh air and in the case of an indirect fired type of oven simultaneous purging of the combustion chamber before the ignition system can be energized and gas flow started. Each oven shall be equipped with gas burning equipment approved for such use and with electrical controls so arranged as to shut off the gas valve when ignition fails or the gas supply pressure drops to 2 inches of water. The use of a continuous gas pilot light is prohibited unless an automatic gas shut off valve is provided which will shut the gas off at the pilot light when the flame is extinguished or the supply of gas cut off. Electrical pilot ignition shall be of the continuous type or equal in performance, designed for use in high temperatures, with controls so inter-locked as to shut off the gas supply when current is interrupted. An auxiliary manually operated gas shut off valve shall be located not nearer than 25 feet from the oven so as to control the gas supply in the event of an emergency. Such ovens shall be adequately insulated on all sides and top to limit the maximum surface temperature to 140°F and to 160°F on the base, unless the floor is protected by a 3 inch mat of reinforced concrete placed over and bonded into the existing concrete floor and projecting not less than 6 inches outside the projected area of the equipment or unless an unenclosed clear air space not less than 4 inches above the concrete floor is maintained between the floor and the underside of the oven. The burner section of gas fired drying ovens shall not be located nearer than 25 feet from spraying or dipping spaces except when separated by fire proof construction, in which case the distance between burner section and spray or dip space shall be not less than 25 feet measured in the shortest line of travel.

- (ii) Electric infra-red ray drying ovens. Electric Infra-Red Ray Drying Ovens shall be of a type as approved by the Board. Such ovens shall be constructed of electric equipment installed in accordance with the National Electric Code and the requirements of the Bureau of Electrical Control. Ovens when erected shall be placed on concrete floors without any additional protection, provided that at least 12 inches of clear space above the floor is provided to permit adequate ventilation.
  - (A) In drying processed material involving the evaporation of considerable amounts of flammable solvents by infra-red lamps, such installations shall not be confined in small rooms unless such rooms are thoroughly ventilated by a power driven ventilation system of sufficient capacity to maintain a vapor concentration at all times during the drying process of less than 1/4 the low explosive limit of the solvent used; the controls of the ventilation system to be so inter-locked with the Infra-Red Ray System that the latter cannot function unless the ventilating system is in operation. When equipped with duct ventilating system, the Infra-Red Ray Oven shall be adequately secured so as to prevent moving.
  - (B) Where the evaporation of a considerable amount of flammable vapors are involved, ventilated hoods located as near to the floor as practicable or enclosures shall be provided at the initial stage of the process with adequate exhaust system to discharge the primary evaporation from the solvents to the outer air, so that when the processed material progresses through the lamp drying tunnels only a comparatively small amount of solvent is left for evaporation. A space between such ventilating section and the drying section shall be maintained.

- (C) Lamps and other electrical equipment shall be kept free from flammable deposits and adequate cleaning shall be maintained.
- (D) Lamp and resistance heater type drying units shall be separated from spraying and dipping processes complying with these rules by a distance of at least 15 feet or shall be installed in a separate fireproof room.
- (E) Controls shall be arranged so that the lamps in the tunnels will be shut off automatically if and when the conveyor stops.
- (F) Where there are no conveyors and the material being processed is left stationary in the dryer there shall be an excessive temperature switch to shut off the lamps or resistance heaters to avoid overheating the material being processed if it is not removed from the dryer in time.
- (G) Material to be processed on the conveyors shall be rigidly supported so as not to be liable to displacement and cause lamp breakage and short circuits. Where there are no conveyors, materials should be fixed on dollies running on tracks or other equivalent method to accomplish the same result.
- (iii) The temperature of the air contacting the processed material or of the material itself shall not be higher than that to which such material can be safely subjected.
- (iv) Such fire fighting equipment suitable for electrical and solvent vapor fires shall be provided as the Fire Commissioner may direct.
- (4) Specifications for ducts, pipes and fans
  - (i) All ducts used for ventilating spray, dip or immersing spaces shall be constructed of approved incombustible materials or metal of not less than the following gauges of metal: Ducts twenty-four (24") inches or less in diameter No. 22 gauge. Ducts over twenty-four (24") inches and not over thirty-six (36") inches in diameter No. 20 gauge. Ducts exceeding thirty-six (36") inches in diameter No. 18 gauge.
  - (ii) Ducts shall be strongly constructed and be installed in a workmanlike manner. They shall be rigidly supported.

- (iii) Ventilating ducts shall run as directly as practicable to the outer air and be protected with a hood against the weather. The exhaust terminal or hood shall also be protected with a screen of copper or bronze with a mesh not larger than one-quarter (1/4") inch.
- (iv) Where a duct passes through a non-fireproof floor or roof, the duct shall be protected at such point by an outer pipe or sleeve with an air space of at least one (1") inch between the sleeve and pipe protected from the woodwork by at least a 1" blanket of [asbestos,] compressed [rockwood] rock wool or glasswool, or equivalent fireresistive material extending through the entire depth of the ceiling construction and adequately secured to the outer pipe. The outer pipe shall be not less than two (2") inches from any woodwork and such woodwork shall be covered with at least 26 gauge metal or other incombustible material.
- (v) Ventilating ducts shall not terminate within ten (10) feet measured horizontally of any chimney outlet, unprotected air intakes or within twenty (20) feet of any exit or any opening in an adjoining building.
- (vi) If induced draft is used to create an air movement, the air shall be supplied from a point outside the spray or dip or immersing space. Fans and motor must be located outside the spray, or dip space, except approved explosion-proof motor and non-ferrous blade fans which, however, are not to be located where residues of spraying material may collect on such equipment.
- (vii) The exhaust system from any spray, dip or immersing space shall not be connected to any other ventilating system or be discharged into a chimney or flue used for the purpose of conveying gases of combustion.
- (viii) Exhaust fan blades shall be constructed of non-ferrous metal. All exhaust and ventilating fans to be permanently connected to their source of power, using metallic conduit. Rheostats in fan bases not permitted. Fan blades not coming in direct contact with spraying fumes need not comply with this requirement.
- (ix) Adequate access doors or panels have tight fitting by means of screw bolts, clamps or springs shall be provided, to permit inspection and cleaning.
- (5) Electrical equipment and lighting fixtures

- No motors, switches, rheostats, lamps, fluorescent light or other (i) electrical equipment shall be located in spray, dipping or immersing rooms or within ten (10') feet of the open end of any spray compartment, spray booth, immersing or dipping space unless such electrical equipment be of a type approved for use in explosive atmosphere and where a conduit leads from a hazardous location to a non-hazardous location, the conduit shall be sealed off by an approved sealing compound. Except that alternating current induction motors of the totally enclosed type, having no brushes make and break contacts, collectors or other arcing or sparking parts may be located within ten (10') feet of a spray booth, spray compartment or dipping space when approved by the administrative official having jurisdiction. No open flame shall be used within 25 ft. of spray, dip or coating space or paint storage room or cabinet except when separated by fireproof construction, except as provided in § 18-01(d)(3)(i) "gas fired drying ovens" and § 18-01(d)(3)(ii)(D) electric infra-red dry ovens. Nothing herein contained, nor in § 18-01(g)(5) shall prohibit the use of electrostatic paint spraying equipment of a type approved by the Board under such conditions as the Board shall prescribe in its approval.
- (ii) Lighting fixtures
  - (A) Artificial lighting shall be only by means of electricity.
  - (B) When lighting fixtures are located within 10' of a spray booth, spraying space, dipping space or within a storage room they shall be of the rigid stem type, enclosing all wiring and be equipped with keyless sockets having vapor proof globes. Where exposed to breakage, globes shall be adequately protected by substantial metal guards or equivalent means. Fluorescent tube type lighting fixtures when used in spray booths or in spray and dip spaces or in storage rooms or rooms containing inflammable vapors, shall be of a type approved for use in explosive atmospheres. The auxiliaries of mercury vapor lamps shall be offset at least ten (10') feet from spray booth, spray or dip spaces unless enclosed in explosion-proof protection.
  - (C) All electrical equipment shall be installed and grounded as provided by the Administrative Code covering electrical equipment and permanently connected to their source of current supply, using metallic conduit.

- (D) No pin plug receptacles shall be used except when the use of receptacles and attachment plugs become necessary they shall be so connected to form a part of a unit device with explosion-proof interlocking switch precluding the removal of the plug when the switch is in the "on" position or by an approved explosion-proof enclosure which can seal the arc when the current is interrupted. Such receptacles and plugs shall be of the polarized type providing a connection for the grounding wire of the portable cords.
- (E) All electric wiring shall be enclosed in rigid standard weight metallic conduits with explosion proof joints and fittings. Joints in metallic conduit having threaded couplings shall not have less than five (5) fully engaged threads. Where flexible connections are required a flexible fitting approved for explosive atmospheres shall be used.
- (F) The use of portable cords or trailer lights are prohibited, except when flexible cord approved for hard usage containing one (1) extra insulated conductor properly connected to form a grounding connection for metal lamp guards, motor frames and all other exposed metal portions of such portable lamps and devices may be used. When portable lamps are used they shall be enclosed in a manner approved for explosive atmospheres and with substantial guards of metal to prevent breakage. Sockets shall be of the keyless moulded composition type with no exposed metal parts.

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- (f) Material storage and mixing
  - (1) Main supplies of spray coating and dipping materials and thinners shall be kept in an outside storage building, storage rooms or in vented metal cabinets in accordance with the following amounts:
    - (i) Spraying materials not in excess of 100 gallons may be stored in single walled metal cabinets ventilated to the outer air. Such cabinet to be metal covered on all sides, including the doors and arranged for ventilation at top and bottom.
    - (ii) Spraying materials not in excess of 200 gallons may be stored in double-walled metal cabinets ventilated to the outer air or wood cabinets metal covered on all sides, including the door, and arranged for ventilation at top and bottom, to the outer air.

- (iii) Spraying materials in excess of 200 gallons shall be stored in a separate exterior storage building of fire-proof or fire-resisting material with ventilated plain glass skylight or in a storage room constructed fire-proof in a fireproof building or fire-resisting in a non-fireproof building. The maximum amount of spraying materials to be stored in a storage room of a non-fireproof building shall be determined by the administrative official having jurisdiction.
- (iv) Mixing or thinning of coating materials shall be conducted in a storage building or storage room, except that containers of total capacity not exceeding ten gallons may be opened and their contents mixed in the spray room or room in which booths are located while the air exhaust system is operating.
- (v) Working supplies sufficient for not more than one day's use but not exceeding twenty gallons to each booth, nor a total of hundred gallons, may be kept in the spray room or room in which spray booths are located; covers of containers must be kept thereon when such containers are not actually in use. This amount is in addition to the amount allowed in § 18-01(f)(1)(vii).
- (vi) Gravity feed material containers for supplying spray guns shall not exceed ten gallons in capacity and shall be supported by wire cables or metal brackets having a factor of safety of four when filled with the heaviest spraying materials used.
- (vii) Pressure feed tanks and other equipment for use in connection with direct spraying under air pressure shall be restricted to tanks of not more than sixty gallons, individual capacity, designed, constructed and approved for this specific purpose by the Board of Standards and Appeals. Each tank shall be provided with a safety valve set at a pressure not exceeding eighty pounds. All gravity feed containers and other spraying equipment shall be approved as above.
- (viii) The installation of all electrical wiring, switches, lighting and all other electrical equipment, and the provisions of these rules against carrying matches or smoking and prohibiting flame or sparkproducing devices, shall also apply to storage or mixing rooms.
- (2) Storage of materials where nitro cellulose products are manufactured. Storage of spraying, dipping and immersing materials shall be as provided in § 18-01(f)(1)(i) through (iii), but in a building in which nitro cellulose products are manufactured, stored or kept the amount shall be not over

twenty-five (25) gallons as per § 27-4200, subdivision (h) of the Administrative Code.

- (3) Sprinklers. Sprinkler heads shall be provided in all spray, dip or immersing spaces and storage rooms and shall be installed in accordance with the Sprinkler rules of the Board of Standards and Appeals § 10-02, except in non-sprinklered buildings where sprinkler connection may be made to the house water supply, provided the size of the house water supply line is adequate for the number of sprinkler heads.
- (4) Maintenance of sprinkler heads. Sprinkler heads in spraying, dipping and immersing spaces shall be cleaned at least once a week under the supervision of the person holding the certificate of fitness and a coating of light grease or vaseline shall be applied after each cleaning to prevent the formation of a hard deposit and render the sprinkler useless in case of fire. The use of paper bags or other materials about sprinkler heads is prohibited.

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(h) Existing spray booths and installations. These sections shall be retroactive in the following respects;

<u>§ 18-01(a)(3)(iv)</u>	Heating of Rooms
<u>§ 18-01(c)(1)</u>	Air Exhaust System
<u>§ 18-01(c)(2)</u>	Air Supply and Mixing
<u>§ 18-01(d)</u>	Specifications for Spray Booths, Spray Rooms, Dip and Immersing Rooms, New Drying Equipment, and Material Storage Rooms
<u>§ 18-01(d)(1)(iii)</u>	Surfacing of Booths
<u>§ 18-01(d)(1)(v)</u>	Surfacing of Metal in Booths
<u>§ 18-01(d)(3)(ii)</u>	Maintenance of Ducts
<u>§ 18-01(d)(4)(vi)</u>	Method of Induced Draft
<u>§ 18-01(d)(5)(i)</u>	Electrical Equipment
<u>§ 18-01(d)(5)(ii)</u>	Electrical Lighting
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<u>§ 18-01(e)(12)</u>	Motor vehicles in booths or rooms
<u>§ 18-01(e)(13)</u>	Spraying Elevator Cabs
<u>§ 18-01(f)</u>	Material, Storage and Mixing

<u>§ 18-01(g)</u>	General Requirements
<u>§ 18-01(h)</u>	Section 18-01(f)(1), (2), (3) and (4) may not be applied in fireproof buildings equipped with an approved existing automatic sprinkler system where the general conditions of cleanliness are properly maintained at all times

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