NEW YORK CITY DEPARTMENT OF BUILDINGS

Notice of Public Hearing and Opportunity to Comment on Proposed Rules

What are we proposing? The Department of Buildings (DOB) is proposing to add new sections 711-01, 7015-02 and 7015-03 to Chapter 7000 of Title 1 of the Rules of the City of New York regarding refrigeration systems.

When and where is the hearing? DOB will hold a public hearing on the proposed rule online. The public hearing will take place at 11 a.m. on January 5, 2026.

Join through Internet – Desktop app:

To join the hearing via your browser either click on the following URL link or copy and paste it into your browser's address bar. Then follow the prompts to either continue using the browser or download/open the Teams desktop app.

https://events.gcc.teams.microsoft.com/event/9bb755a7-48d2-4a34-b0e2-419f95529c11@32f56fc7-5f81-4e22-a95b-15da66513bef

Enter your name when prompted and click the "Join now" button. If you don't have computer audio or prefer to phone in for audio, select "Phone audio" under "Other join options" then click the "Join now" button. You will first be placed in a waiting status in the virtual lobby, then be admitted when the hearing begins. If you are using phone audio then follow the dial-in instructions when prompted.

If you have low bandwidth or inconsistent Internet connection, we suggest you use the Phone audio option for the hearing. This will reduce the possibility of dropped audio and stutters.

• Join through Internet - Smartphone app:

To join using the Microsoft Teams app on your smartphone, click on the following URL link from your phone to automatically open the Teams app. Note that the Microsoft Teams app must already be installed on your smartphone. It is available for free both in the Apple Store and Google Play.

https://events.gcc.teams.microsoft.com/event/9bb755a7-48d2-4a34-b0e2-419f95529c11@32f56fc7-5f81-4e22-a95b-15da66513bef

When prompted select "Join meeting". Type your name and then select "Join meeting" again. You will first be placed in a waiting status in the virtual lobby, then be admitted when the hearing begins.

PLEASE NOTE: The above links are used to register for the hearing. Once registered, you will receive a confirmation email that will include a link to join the hearing. If you should run into technical difficulties when using the above links to register or you do not receive the registration confirmation email with your link to join the hearing, please use one of the following alternative methods to join the hearing. You should receive the confirmation email within a short time of registering. Please check your junk email folder too if you do not see the email in your inbox. Best practice is to register for the hearing prior to the actual hearing date.

Alternatively, open the Teams app and select "Join a meeting". Signing in with an account is not required. Type your name, the following Meeting ID and Passcode, then select "Join meeting".

Meeting ID: 245 185 179 803 2

Passcode: Wf6oV3ge (Code is case sensitive)

Join via phone only:

To join the meeting only by phone, use the following information to connect:

Phone: 646-893-7101

Phone Conference ID: 188 492 955#

You will first be placed in a waiting status in the virtual lobby, then be admitted when the hearing begins.

How do I comment on the proposed rules? Anyone can comment on the proposed rules by:

- **Website.** You can submit comments to the DOB through the NYC rules website at http://rules.cityofnewyork.us.
- **Email.** You can email comments to dobrules@buildings.nyc.gov.
- Mail. You can mail comments to the New York City Department of Buildings, Office of the General Counsel, 280 Broadway, 7th floor, New York, NY 10007.
- **Speaking at the hearing.** Anyone who wants to comment on the proposed rule at the public hearing must sign up to speak. You can sign up by emailing dobrules@buildings.nyc.gov by December 29, 2025 and including your name and affiliation. While you will be given the opportunity during the hearing to indicate that you would like to provide comments, we prefer that you sign up in advance. You can speak for up to three minutes. Please note that the hearing is for accepting oral testimony only and is not held in a "Question and Answer" format.

Is there a deadline to submit comments? Yes, you must submit comments by January 5, 2026.

What if I need assistance to participate in the hearing? You must tell the Office of the General Counsel if you need a reasonable accommodation of a disability at the hearing. You can tell us by email at dobrules@buildings.nyc.gov. Advance notice is requested to allow sufficient time to arrange the accommodation. You must tell us by December 22, 2025.

This location has the following accessibility option(s) available: Simultaneous transcription for people who are hearing impaired, and audio only access for those who are visually impaired.

Can I review the comments made on the proposed rules? You can review the comments made online on the proposed rules by going to the website at http://rules.cityofnewyork.us/. Copies of all comments submitted online, copies of all written comments and a summary of oral comments concerning the proposed rule will be available to the public at the Office of the General Counsel and may be requested by email at dobrules@buildings.nyc.gov.

What authorizes DOB to make this rule? Sections 643 and 1043(a) of the City Charter and section 1103.1 of the New York City Mechanical Code authorize DOB to make this proposed rule. The rule was not included in the regulatory agenda for this Fiscal Year because it was not contemplated when DOB published the agenda.

Where can I find DOB's rules? DOB's rules are in Title 1 of the Rules of the City of New York.

What rules govern the rulemaking process? DOB must meet the requirements of Section 1043 of the City Charter when creating or changing rules. This notice is made according to the requirements of Section 1043(b) of the City Charter.

STATEMENT OF BASIS AND PURPOSE OF RULE

Local Law 77 of 2023 (LL77), which became effective on June 10, 2023, amended provisions of the New York City Mechanical Code relating to refrigeration, among other changes. The changes related to refrigeration were specifically about provisions to regulate the use of A2L refrigerants, where some of those refrigerants comply with phase 1 of the NYS HFC Law Part 494.1.4 (2), also known as the New York Climate Leadership and Community Protection Act.

A2L refrigerants are a class of mildly flammable, low-toxicity refrigerants that serve as lower global warming potential (GWP) alternatives to traditional hydrofluorocarbons (HFCs) like R-410A. They are primarily used in air conditioning systems, where they cycle between liquid and gas states to absorb indoor heat and release it outdoors, improving energy efficiency in residential and commercial HVAC setups. In commercial refrigeration, A2L refrigerants help maintain cold temperatures for food storage, display cases, and other systems, while reducing environmental impact.

The LL77 modifications codify applicable requirements for the use of such refrigerants by:

- Modifying 1102.2 Refrigerant to include A2Ls.
- Modifying Table 1103.1 to add footnote c to require that all refrigerating systems utilizing refrigerants classified into safety group "A2L" follow the rules of the department.
- Modifying 1104.3.1 Air-conditioning for human comfort deleted group A2, allowing such refrigerant to be used in high probability air conditioning system for human comforts, with some exceptions. High-probability systems are those in which the basic design or location of components is such that leaked refrigerant from a failed connection, seal, or component has a high probability of entering an occupied space.

- Modifying Section 1106.4 Flammable refrigerants, which requires Group A2L refrigerants used in systems inside machinery rooms comply with ASHREAE 15-2022, in lieu of requiring such machinery room conform to Class 1, Division 2, hazardous location classification requirements of the New York City Electrical Code.
- Adopting ASHRAE 15 -2022 and ASHRAE 31- 2022 in Chapter 15

The Department is proposing to add three new sections to chapter 7000 of Title 1 of the Rules of the City of New York to reflect these changes. Specifically, the proposed rule adds the following:

- 7011-01 incorporates specific design, installation, construction, alteration and repair requirements for refrigeration systems that use refrigerants classified into safety group "A2L" by the 2022 edition of American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") 34 - Designation and Safety Classification of Refrigerants. This section also includes requirements for a refrigerant detector that triggers an FDNY alarm when refrigerant concentration in the air exceeds safety levels.
- 7015-02 adopts and amends the 2022 edition of ASHRAE 15 Safety Standard for Refrigeration Systems as it pertains to the installation of refrigerating systems utilizing refrigerants classified into safety group "A2L" in residential applications.
- 7015-03 adopts the 2022 edition of ASHRAE 15.2 Safety Standard for Refrigeration Systems in Residential Applications and modifies it with regard to the installation of refrigerating systems that use refrigerants classified into safety group "A2L" in residential applications.

The Department of Buildings' authority for these rules is found in sections 643 and 1043 of the New York City Charter and section 1103.1 of the New York City Mechanical Code.

New material is underlined.
[Deleted material is in brackets.]
Asterisks (***) indicate unamended text.

"Shall" and "must" denote mandatory requirements and may be used interchangeably in the rules of this department, unless otherwise specified or unless the context clearly indicates otherwise.

Section 1. Chapter 7000 of Title 1 of the Rules of the City of New York is amended by adding a new Section 7011-01 to read as follows:

§7011-01 A2L Refrigerating Systems.

(a) Scope. Pursuant to footnote c of Table 1103.1 of the New York City Mechanical Code (MC), all refrigerating systems utilizing refrigerants classified into safety

group "A2L" by the 2022 edition of American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") 34 must comply with the requirements of this section.

(b) References. See MC Sections 102.4, 1101.6, 1101.8, 1101.11, 1102.2, 1104.2, 1105.3, 1105.7, 1105.8, 1105.9, 1105.11 and 1108.1

(c) General.

- Applicability. Group A2L refrigerating systems must conform to the specific provisions of the 2022 edition of ASHRAE 15 as adopted and modified by Section 7015-02. ASHRAE 15 provisions apply pursuant to Section MC 102.8. Except otherwise stated, ASHRAE 15 does not apply to residential refrigeration systems complying with ASHRAE 15.2 as modified by 7015-03.
- (2) Changing refrigerant. Refer to ASHRAE 15 Section 5.3.
- Signs, nameplates, and operation and emergency shut-down instructions. Signs and identification for Group A2L refrigerant must comply with ASHRAE 15 Section 10.1. Emergency shutdown procedures, including instructions, must comply with ASHRAE 15 Section 10.6. Nameplates must comply with ASHRAE 15 Section 9.17. In addition to the information required to be provided on the nameplates, in accordance with ASHRAE 15 Section 9.17, the nameplate for each refrigerating system that contains a refrigerant circuit must include the following information:
 - (i) Horsepower of each compressor, and the equivalent of such horsepower in kilowatts.
 - (ii) Total quantity of refrigerant, inclusive of the quantity of refrigerant in all connected piping and equipment.

(d) System requirements.

- (1) Refrigerants. Refrigerants having a Safety Group Classification of A2L not identified in MC Table 1103.1, but listed in ASHRAE 34 Table 4-1 and 4-2, are not required to be approved by the department before use.
- Refrigerant Detection System Requirements.

 Refrigeration systems having refrigerants in Safety Group Classification

 A2L must have an integral refrigerant detection system as required in

 Section 7.6.2.3 of ASHRAE 15 for refrigeration systems for human comfort applications or Section 7.7.3.3 of ASHRAE 15 for refrigeration systems

- other than human comfort applications. Such refrigerant detection systems must comply with Section 7.6.2.4 of ASHRAE 15.
- (3) <u>Mitigation Action Requirements</u>. <u>Mitigation actions must be provided in accordance with section 7.6.2.5 of ASHRAE 15.</u>
- Release Mitigation Controls. Release mitigation controls may be used to reduce the releasable charge in accordance with 7.3.4 and 7.6 of

 ASHRAE 15 such that the Mitigation Releasable Refrigerant Charge

 (Mrel) as calculated in 7.3.4.3 is less than or equal to the Effective

 Dispersal Volume Charge (EDVC) calculated in 7.6.
- (e) Refrigeration system classification. Refrigerants in safety group "A2L" must be classified in ASHRAE 34, Table 4-1 and 4-2.
- (f) System application requirements.
 - (1) Refrigerant restrictions. The use of the term "natural ventilation" in Section 7 of ASHRAE 15 is not construed to require outside air.
 - Allowable refrigerant charges for human comfort. Allowable refrigerant charge volumes for high-probability direct systems utilizing A2L refrigerants must be calculated in accordance with ASHRAE 15, Section 7.6. For a space having only recirculating air conditioning unit(s), with no adjoining spaces and with no outside air introduced by ductwork, ASHRAE 15 section 7.6.1.2 must be used to calculate the maximum refrigerant charge of such unit's independent circuit in conjunction with the definition of "Air Circulation" in section 7015-02 of these rules.
 - (3) Allowable refrigerant charges for other than human comfort. Allowable refrigerant charge volumes for high-probability direct systems utilizing A2L refrigerants must be calculated in accordance with ASHRAE 15 Section 7.7.

(g) Machinery room.

- Machinery room. Where refrigerants in safety group A2L are used in machinery rooms, such machinery rooms must be designed to comply with the applicable requirements of Section 8.9 and 8.11 of ASHRAE 15.
- <u>Emergency pressure control system.</u> Permanently installed refrigeration systems containing more than 6.6 pounds (3 kg) of A2L refrigerant are not required to be provided with an emergency pressure control system.
- (3) Refrigerant detector. When refrigerants in safety group A2L are used, the machinery room must be provided with a refrigerant detection system in accordance with Section 8.11 of ASHRAE 15 and the following:

- (i) An emergency alarm "FDNY Alarm" must generate an output signal in no more than 30 seconds when exposed to a refrigerant concentration exceeding 25% of the lower flammability limit (LFL) or when it reaches the upper detection limit of the refrigerant detector, whichever is lower, start level 2 ventilation in accordance with ASHRAE 15, and automatically de-energize the following equipment in the machinery room:
 - (A) Refrigerant compressors,
 - (B) Refrigerant pumps,
 - (C) Normally closed automatic refrigerant valves,
 - (D) Other unclassified electrical sources of ignition with apparent power rating greater than 1 kVA, where the apparent power is the product of the circuit voltage and current rating.
- (ii) A trouble Alarm "FDNY Fault" must generate an output signal when the detection of refrigerant concentration reaches a concentration equal to the occupational exposure limit (OEL) value for such refrigerant as published in ASHRAE 34 and start level 1 ventilation in accordance with ASHRAE 15.
- (iii) A supervisory alarm "FDNY Supervisory" must generate an output signal when the detector identifies a malfunctioning component within the system that needs immediate attention.
- (iv) The set points for "trouble alarm" and "emergency alarm" must be in accordance with Table 8-1 of ASHRAE 15.
- (v) All alarms must annunciate at both a refrigerant detection panel inside the machinery room and at an annunciator panel located outside the machinery room. The annunciator panel located outside the machinery room must display the same information in the panel located inside the machinery room and be installed within 10 feet of the machinery room entrance door, on the premises.
- (vi) When refrigerant detectors are installed in buildings without fire alarm systems, such refrigerant detection system must be monitored at a continuously attended location, on the premises, by a person holding a Certificate of Fitness issued by the New York

City Fire Department ("FDNY") or by an FDNY approved central supervising station with refrigerant detection alarm, supervisory, and trouble signals being transmitted as separate and distinct signals to such FDNY approved central station.

- (vii) When refrigerant detectors are installed in buildings with fire alarm systems, such refrigerant detector system may be used in multi-hazard applications.
- (viii) When refrigerant detectors are installed in buildings with a building-wide fire alarm system, the refrigerant detector control panel must be monitored by such building-wide fire alarm system and the following signals must be transmitted to the building-wide fire alarm control panel (fire command center or station):
 - (A) Emergency Alarm "FDNY Alarm"
 - (B) Supervisory signal "FDNY Supervisory"
 - (C) Trouble Alarm "FDNY Fault"

Each alarm input to the control unit, whether emergency, supervisory or trouble alarm, must be transmitted to the building-wide fire alarm control panel (fire command center or station) at a discrete point, if the building-wide fire alarm system is capable, and the location of an operated initiating device must be visibly indicated by floor, fire zone, or other approved subdivision.

- Where a building is provided with emergency power, refrigerant detection systems must be connected to such emergency power.

 Where a building is not otherwise provided with emergency power, the power source for emergency power to a refrigerant detection system must be served by an uninterruptable power source (UPS).
- (h) Refrigerant piping safety for all group A2L refrigerating systems. Where refrigerant piping penetrates floors, ceilings, or roofs pursuant to Section 1107.2.3 of the NYC Mechanical Code, it must comply with the requirements of paragraphs (1) through (5) of this subdivision.

- (1) Refrigerant piping systems, including but not limited to stop valve, and piping identification must comply with the requirements of ASHRAE 15 section 9.12.
- (2) Refrigerant quantity limits must comply with the requirements of ASHRAE 15 section 7.6 or 7.7.
- (3) Room volume calculations must comply with section 7.2.3.1 of ASHRAE 15 and must be performed for all occupiable and habitable spaces through which refrigerant piping passes, regardless of whether such space is served by the system.

Exception: If such piping is enclosed in a gas tight and 2-hour fire rated enclosure, the enclosure must be made gas tight and comply with the requirements of ASHRAE 15 section 9.13 and 9.14.

(4) Connected Spaces.

- (i) Where spaces are connected via natural ventilation the size of the opening must be calculated in accordance with ASHRAE 15 section 7.2.3.2
- (ii) Where spaces are connected via ducted air distribution system the size of the opening must be calculated in accordance with ASHRAE 15 section 7.2.3.3
- (iii) Where spaces are connected via mechanical ventilation the size of the opening must be calculated in accordance with ASHRAE 15 section 7.2.3.4
- (5) **Location**. Refrigerant piping for Group A2L refrigerants must comply with the location requirements of Section 9.12.2 of ASHRAE 15.

Exception: Refrigerant piping for Group A2L refrigerants may be installed in public corridors if such refrigerant piping and fittings are completely contained within another continuous pipe and are inside an enclosure which has a 2-hour fire rating. Such enclosure must also be leak tight in compliance with the requirements of ASHRAE 15 section 9.13.

(i) Testing and inspection.

- (1) Testing of refrigerating system and its components must be performed in accordance with ASHRAE 15 section 9.13 and 9.14. Such test must be witnessed by a special inspector.
- (2) Special inspections must be conducted in accordance with 2022 NYC Building Code 1705.21.
- §2. Chapter 7015 of Title 1 of the Rules of the City of New York is amended by adding a new section 7015-02 to read as follows:

§7015-02 American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") 15 amendment relating to the installation of refrigerating systems utilizing refrigerants classified into safety group "A2L."

Pursuant to Section 28-103.19 of the New York City Administrative Code, the Department of Buildings adopts the 2022 edition of the American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") 15 Safety Standard for Refrigeration Systems as it pertains to the installation of refrigerating systems utilizing refrigerants classified into safety group "A2L" in residential applications and amends it to read as follows:

<u>Delete and replace the definitions in Section 3.1 of air circulation and safety shutoff valve,</u> as follows:

Air circulation: mechanically inducing airflow within spaces connected by air ducts.

Safety shutoff valve: an automatically controlled refrigerant valve for the purpose of limiting the amount of refrigerant released into a space when a refrigerant leak is detected. Valves must be designed to close in an event of an electric power failure.

Revise Section 7.2.3.4 to read as follows:

- 7.2.3.4 Connected Spaces via Mechanical Ventilation. Where two or more spaces are connected by a mechanical ventilation system complying with the requirements of section 7.6.4, the volume of all such connected spaces must be included in the effective dispersal volume used to calculate the EDVC.
- §3. Chapter 7015 of Title 1 of the Rules of the City of New York is amended by adding a new section 7015-03, to read as follows:

§7015-03 American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") 15.2 amendment relating to the installation of refrigerating

systems utilizing refrigerants classified into safety group "A2L" in residential applications.

Pursuant to Section 28-103.19 of the New York City Administrative Code, the Department of Buildings adopts the 2022 edition of the American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") 15.2 Standard for as it pertains to the installation of refrigerating systems utilizing refrigerants classified into safety group "A2L" in residential applications and amends it as follows:

Revise Section 2.1 to read as follows:

2.1 This standard applies to listed direct refrigeration systems in one- and two-family dwellings in group R3 buildings that are limited to serving only a single dwelling unit or sleeping unit:

Delete paragraphs b and c and replace with the following: DELETED.



NEW YORK CITY LAW DEPARTMENT DIVISION OF LEGAL COUNSEL 100 CHURCH STREET NEW YORK, NY 10007 212-356-4028

CERTIFICATION PURSUANT TO

CHARTER §1043(d)

RULE TITLE: Rules Relating to Safety Standards for Refrigeration

REFERENCE NUMBER: 2025 RG 077

RULEMAKING AGENCY: Department of Buildings

I certify that this office has reviewed the above-referenced proposed rule as required by section 1043(d) of the New York City Charter, and that the above-referenced proposed rule:

- (i) is drafted so as to accomplish the purpose of the authorizing provisions of law;
- (ii) is not in conflict with other applicable rules;
- (iii) to the extent practicable and appropriate, is narrowly drawn to achieve its stated purpose; and
- (iv) to the extent practicable and appropriate, contains a statement of basis and purpose that provides a clear explanation of the rule and the requirements imposed by the rule.

Date: November 24, 2025

/s/ STEVEN GOULDEN

Senior Counsel

NEW YORK CITY MAYOR'S OFFICE OF OPERATIONS 253 BROADWAY, 10th FLOOR NEW YORK, NY 10007 212-788-1400

CERTIFICATION / ANALYSIS PURSUANT TO CHARTER SECTION 1043(d)

RULE TITLE: Rules Relating to Safety Standards for Refrigeration

REFERENCE NUMBER: DOB-204

RULEMAKING AGENCY: Department of Buildings

I certify that this office has analyzed the proposed rule referenced above as required by Section 1043(d) of the New York City Charter, and that the proposed rule referenced above:

- (i) Is understandable and written in plain language for the discrete regulated community or communities;
- (ii) Minimizes compliance costs for the discrete regulated community or communities consistent with achieving the stated purpose of the rule; and
- (iii) Does not provide a cure period because it does not establish a violation, modification of a violation, or modification of the penalties associated with a violation.

/s/ Francisco X. Navarro
Mayor's Office of Operations

*November 25, 2025*Date