

NOTICE OF ADOPTION OF FINAL RULE

Department of Environmental Protection

NOTICE IS HEREBY GIVEN PURSUANT TO THE AUTHORITY VESTED IN THE COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION by Section 1403 (c) of the New York Charter and Sections 24-105, and 24-109(b) of the New York City Administrative Code, that the Department of Environmental Protection has amended its rules concerning the amendments to the engineering criteria for fossil fuel burning boilers & water heaters. These amendments were proposed and published in the City Record on March 30, 2016. A public hearing was held on May 2, 2016.

Statement of Basis and Purpose of Rule

Local Law Number 38 for the year 2015 amends Title 24 of the Administrative Code of the City of New York by increasing the threshold for boiler registrations from 2.8 million btu (mbtu) per hour to 4.2 mbtu per hour. In order to ensure that boilers that range from 2.8 mbtu per hour to 4.2 mbtu per hour are still subject to certain standards, including a combustion efficiency test, modified standards have been established in a new Section 2-05 (“Application for Registrations”). This newly created section sets forth the criteria that a registration that ranges from 2.8 mbtu per hour to 4.2 mbtu per hour must meet.

This rule also requires that these registrations are subject to the field verification process requirements set forth in Section 2-06.

Consistent with the above, DEP has amended Chapter 2 of Title 15 of the Rules of the City of New York, to apply certain standards for boilers that range from 2.8 mbtu per hour to 4.2 mbtu per hour, which were previously defined as certificates of operation and are now defined as registrations. Subjecting these boilers to the performance requirements set forth in this section will help to regulate and control emission sources.

The Rule is authorized by Section 1043 of the Charter of the City of New York and sections 24-105, and 24-109(b) of the Administrative Code.

The text of the Rule follows.

Section 1. Title 15 of the Rules of the City of New York is amended by amending Chapter 2, to read as follows:

Chapter 2. Engineering Criteria for Fossil Fuel Burning Boilers & Water Heaters

Section 2. Section 2-01 of Title 15 of the Rules of the City of New York is amended to read as follows:

§2-01 Introduction and Applicability.

All owners of fossil fuel burning boilers and water heaters that require a registration and have heat input equal to or greater than 2.8 million BTU/hour but less than 4.2 million BTU/hour or require a certificate of operation under the New York City Air Pollution Control Code, as codified in Chapter 1 of Title 15 of the New York City Administrative Code, are subject to these rules.

In order for a registration or work permit to be issued an application must be filed[,] and accompanied by plans and any additional information that may be requested by the department. The application will enable the department to evaluate the design of equipment installation for compliance with the specification requirements described in section §2-11 of this chapter. Upon issuance of a registration or work permit, the equipment shall be installed and adjusted to meet the performance requirements specified in section §2-08 of this chapter.

Section 3. Paragraph 60 of Section 2-02 of Title 15 of the Rules of the Code of City New York is amended by adding a new definition and paragraphs 61 through 67 are renumbered as follows:

§2-02 Definitions.

(60) Registration. “Registration” means a document issued by the department for the installation and / or operation of a boiler or water heater that has a heat input equal to or greater than 2.8 million BTU/hour but less than 4.2 million BTU/hour.

[(60)] 61 Smoke reading. “Smoke reading” means the measurement of smoke density as measured in accordance with ASTM International D2156-09.

[(61)]62 Stack loss. “Stack loss” means the sensible heat carried away by the dry flue gas and the sensible and latent heat carried away by the water vapor in the flue gas.

[(62)]63 Transition section. “Transition section” means a section of duct, breeching or stack used to connect these elements with structures of different cross-sectional dimensions. The required length for such transition section must conform with:

$$L = 4(D_1 - D_2)$$

Where,

D₁ = the diameter (or equivalent diameter) of the larger cross-sectional structures.

D₂ = the diameter (or equivalent diameter) of the smaller cross-sectional structures.

[(63)]64 Venting Calculations: “Venting calculations” means calculations that determine the acceptance of the combustion air supply and boiler flue gas venting. These calculations include:

- (1) Flue venting: draft for atmospheric or non-power vented boilers, equivalent length for direct vent or sealed combustion appliances,
- (2) Combustion air: louvers, dedicated inlet or infiltration.

([64]65) UL. "UL" means the Underwriters' Laboratory.

([65]66) Water Heater. "Water heater" means equipment which is used to heat and store water.

([66]67) Work Permit. "Work permit" means a permit issued for the installation of a device or apparatus.

Section 4. A new Section 2-05 of Title 15 is added to read as follows:

§2-05 Application for Registration

(a) Filing of application. (1) The application must be signed by the owner. The application must include all essential details pertaining to the equipment as set forth on the application form, and the manner in which new equipment will be installed. All documents must be certified by a professional engineer or registered architect.

(2) Only one type and size of equipment may be included on any one application. For example, applications for a boiler and a furnace, which constitute similar equipment of different sizes, or applications for identical boilers with different (although equivalent) burners must be filed separately.

(3) When filed, the application must include any supplementary data and calculation sheet(s), plans and any additional forms required by the department by rule.

(b) Contents of application. The application must include the following:

(1) The authorization of the equipment owner and his or her name, address and signature. The application must be signed by the proprietor where the business is a sole proprietorship. If the business is a partnership, the application must be signed by a partner. In the case of a corporation, the application must be signed by an officer of the corporation. In all instances, the signatory must indicate his or her title after his or her signature.

(2) A licensed professional engineer or architect must certify the following:

i. Venting calculations for stack / draft adequacy, which shall meet the same criteria as set forth in § 2-04 (b)(6).

ii. Certificate of Compliance. All oil-fired boilers and associated burners, boiler/burner assemblies, and control equipment installed under this chapter must comply with the following equipment acceptance requirements so that such equipment meets the minimum design and performance standards of the department.

Equipment Acceptance Requirements

(a) List of accepted equipment. If the application for the registration is to install equipment that appears on the list of accepted equipment, no additional certification is required.

(b) UL/CSA/ETL listed equipment. If the application for the registration is to install equipment that is listed by UL, CSA Group, or ETL, a certification of

compliance from a professional engineer must be submitted on a form prescribed by the department and available on the department's website.

(c) Unlisted and custom equipment. If the application for the registration is to install custom equipment, or equipment that is not on the department's list of accepted equipment and is not UL, CSA Group, or ETL-listed, a certification of compliance from a professional engineer must be submitted on a form prescribed by the department and available on the department's website.

(c) Boiler Room Plan.

The plans, as specified below, must be filed with each application and must include the premise address of the installation. The plans must not be smaller than 8 1/2 by 11 inches nor larger than 11 by 17 inches and details must be shown legibly in black ink on a white background.

(1) The boiler room layout must include the following:

(i) boiler location.

(ii) burner location.

(iii) breeching layout schematic, including the length, elbows, cross sectional dimensions; and location of "test holes."

(iv) location and cross-sectional dimensions of the stack. Only the cross-sectional dimension of the outlet is required for existing stacks.

(v) location of fixed ventilation. Ducts and other such pertinent details must be shown along with their dimensions. Length, elbows, cross-sectional dimensions and inlet and outlet locations must be included for any new ventilation ducts.

(vi) location of smoke alarms, draft controls, fans, cleanouts, when applicable. These locations may be shown schematically.

(vii) locations of all combustion equipment located in the same room or on the same stack and not covered by the subject application, including the manufacturer, model number, and fuel delivery rate when not shown on the application. The fixed ventilation supplied for all combustion equipment must be clearly shown on the plans, even if all such equipment is not covered by the subject application.

(2) A licensed oil-burner installer must certify all oil burning installations and dual-fuel installations. A licensed oil-burner installer or a licensed plumber must certify all gas-fired installations.

Section 5. A new subdivision (e) has been added to Section 2-06 of Title 15, to read as follows:

§ 2-06 Field Verification.

(e) This section applies to registrations that are subject to the requirements of section 2-01 of this chapter.

Section 6. A new subdivision (c) has been added to Section 2-09 of Title 15, to read as follows:

§2-09 Annual Tune-ups and Record Keeping Requirements

(c) This section applies to registrations that are subject to the requirements of section 2-01 of this chapter.

Section 7. Paragraph 2 of subdivision (b) of Section 2-13 of Title 15 has been amended to read as follows:

§2-13 Determination of Acceptable Location of Chimney Outlet.

(b) For existing installations:

(2) The chimney outlet must not be located within the minimum radial distance specified in Table II.

Such requirement must apply to receptors which are at a height equal to or greater than the chimney outlet.

For receptors located below the chimney outlet, the chimney outlet must not be located within the minimum radial distance specified in Table II. In those instances where the above is applicable, the following statement must be provided as a plan note in place of the statement required in §2-04(c)(2[1])(iv) - (vi):

Section 8. Paragraphs 1, 2, 3, and 5 of subdivision (a), paragraphs 1, 2, 3, and 4 of subdivision (b), paragraphs 1, and 2 of subdivision (c), and subdivision (d) of Section 2-15 of Title 15, have been amended, paragraph 4 of subdivision (e) of Section 2-15 of Title 15 has been repealed, and paragraphs 5, 6, 7, 8, and 9 of subdivision (e) of Section 2-15 of Title 15 have been renumbered, to read as follows:

§2-15 Performance Standards for the Continued Use of #4 Oil and #6 Oil in Heat and Hot Water Boilers

(a) *General Provisions.* (1) The commissioner will not issue a work permit or a certificate of operation or a registration for a boiler and/or burner that uses #4 oil or #6 oil unless (i) the applicant demonstrates to the satisfaction of the commissioner that the particulate matter and NO_x emissions of the #4 oil and/or #6 oil meets the equivalency standards described in this section, or (ii) the applicant enters into a compliance agreement with the commissioner as provided in this section.

(2) An owner who holds a certificate of operation or a registration for a boiler and/or burner that uses #4 oil may file an amendment to convert the boiler and/or burner to use #2 oil and/or natural gas. An owner who holds a certificate of operation or a registration for a boiler and/or burner that uses #6 oil may file such an amendment to convert the boiler and/or burner to use #2 oil, #4 oil and/or natural gas. An amendment pursuant to this paragraph must not require the replacement of a boiler and/or burner.

(3) The commissioner will not approve any amendment for a previously issued work permit or certificate of operation or a registration to convert a boiler and/or burner from using #2 oil, #4 oil and/or natural gas to using #6 oil or from using #2 oil and/or natural gas to using #4 oil.

(5) Notwithstanding any other provision in this section, the commissioner will not issue a work permit or a certificate of operation or a registration for a boiler and/or burner that uses #2 oil, #4 oil, #6 oil and/or natural gas unless the particulate matter and NOx emissions of such boiler or burner meets any binding emissions standard established by either state or federal law or regulation.

(b) *Existing Boilers (Renewal)*. (1) The commissioner may issue a renewal of a certificate of operation or a registration for a boiler and/or burner that uses #2 oil, #4 oil and/or natural gas in accordance with §24-122(d) of the New York City Administrative Code.

(2) The commissioner will not issue a renewal of a certificate of operation or a registration for a boiler and/or burner that uses #6 oil, unless (i) the applicant demonstrates to the satisfaction of the commissioner that the particulate matter and NOx emissions of the #6 oil to be used in such boiler and/or burner will be equivalent to or less than emissions from #4 oil as provided in paragraph 4 of subdivision (a) of this section, or (ii) the applicant enters into a compliance agreement with the commissioner in accordance with subdivision (e) of this section.

(3) An owner who holds a certificate of operation or a registration for a boiler and/or burner that uses #2 oil, #4 oil, #6 oil and/or natural gas, and who seeks to make an in-kind replacement for use with #2 oil, #4 oil and/or natural gas is not required to file a new application for a work permit and a subsequent certificate of operation or a registration. The owner must provide on a form to be designated by the commissioner the make, model and serial number of the replacement equipment. The previously issued certificate of operation or a registration may be renewed with the previously issued application number assigned by the department upon approval of the amendment by the department.

(4) An owner who holds a certificate of operation or a registration for a boiler and/or burner and who seeks to replace the boiler and/or burner with equipment that is not of the same make and model number must file a new application for a work permit and a subsequent certificate of operation or a registration as provided in sections 2-04 and 2-05 of this chapter. The previously issued certificate of operation or a registration for the previously installed equipment will be cancelled upon receiving the application. The department will not accept an amendment to the previously issued certificate of operation or a registration for such replacement of the equipment.

(c) *New Installations (Replacement)*. (1) All applications for a work permit or a registration for a boiler and/or burner must specify that the equipment uses #2 oil and/or natural gas, unless the applicant demonstrates to the satisfaction of the commissioner that the particulate matter and NOx emissions of the #4 oil and/or #6 oil to be used in such boiler and/or burner will be equivalent to or less than the emissions from #2 oil as provided in paragraph 4 of subdivision (a) of this section.

(2) In cases where a work permit has been issued before the effective date of this rule for a boiler and/or burner that uses #4 oil or #6 oil, but where a certificate of operation or a

registration has not yet been issued, the owner of the equipment must file an amendment specifying the use of #2 oil and/or natural gas, unless the owner demonstrates to the satisfaction of the commissioner that the particulate matter and NOx emissions of the #4 oil and/or #6 oil to be used in such boiler or burner will be equivalent to or less than the emissions from #2 oil as provided in paragraph 4 of subdivision (a) of this section.

(d) *Sunset Provision.* Notwithstanding any other provision in this section, after January 1, 2030, all applications for a certificate of operation or a registration for a boiler and/or burner must specify that the equipment uses #2 oil and/or natural gas, unless (i) the applicant demonstrates to the satisfaction of the commissioner that the particulate matter and NOx emissions of the #4 oil or #6 oil to be used in such boiler and/or burner will be equivalent to or less than emissions from #2 oil as provided in paragraph 4 of subdivision a of this section, or, (ii) the applicant is an owner of fifty or more buildings with boilers or burners that use #4 oil or #6 oil, and enters into a compliance agreement with the commissioner in accordance with subdivision (e) of this section.

(e) *Compliance Agreements.*

[(4) An application to enter into an agreement to comply with subdivision (b) of this section must be filed by January 1, 2013, or the expiration date of the certification of operation in effect at the time of the effective date of this section, whichever is sooner.]

[(5)4] An application to enter into an agreement to comply with subdivision (d) of this section must be filed by January 1, 2020.

[(6)5] An application filed according to this subdivision must be sent to:

Director of the Division of Air and Noise Programs, Enforcement and Policy
Bureau of Environmental Compliance
New York City Department of Environmental Protection
59-17 Junction Blvd.
Flushing, NY 11373

[(7)6] The commissioner will publish in the City Record a written opinion no later than seven days after entering into a compliance agreement, stating the facts and reasons leading to his or her decision, as well as a copy of the compliance agreement.

[(8)7] By December 31, 2014, and every year thereafter, the commissioner will publish a report summarizing the number of compliance agreements applied for and granted. The report will also summarize the environmental impacts of such compliance agreements and the overall program on tons of particulate matter and NOx in the air.

[(9)8] Notwithstanding this specific compliance provision, Section 24-110 of the New York City Administrative Code may apply.

