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**The New York City Council**

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**Briefing Paper of the Infrastructure Division**

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**Committee on Environmental Protection**

Hon. Costa Constantinides, Chair

**February 16, 2021**

**Int. No. 1576:** By the Public Advocate (Mr. Williams) and Council Member Constantinides (by request of the Queens Borough President

**Title:** A Local Law to amend the administrative code of the city of New York, in relation to increasing penalties for failure to comply with backflow prevention requirements

**Administrative Code:** Amends subdivisions a - d of section 24-343

**Int. No. 2170:** By Council Members Constantinides and Kallos

**Title:** A Local Law to amend the administrative code of the city of New York, in relation to the sustainable energy loan program

**Administrative Code:** Amends section 11-3001

1. **Introduction**

On February 16, 2021, the Committee on Environmental Protection, chaired by Council Member Costa Constantinides, will hold a hearing on Int. No. 1576, in relation to increasing penalties for failure to comply with backflow prevention requirements, and Int. No. 2170, in relation to the sustainable energy loan program. The Committee expects to hear testimony from the New York City Department of Environmental Protection (DEP), the New York City Mayor’s Office of Sustainability (MOS), public health and environmental advocates, and interested members of the public.

1. **Background**

*Backflow Prevention Devices*

New York City’s (City) drinking water infrastructure is comprised of 19 reservoirs and three controlled lakes across a 2,000 mile watershed.[[1]](#footnote-1) Originating as far as 125 miles north of the City, these resources located across the Hudson Valley and Catskill Mountains,[[2]](#footnote-2) convey approximately 1 billion gallons of water a day to City residents, and over 1 million gallons a day to many residents of Westchester, Putnam, Orange, and Ulster Counties.[[3]](#footnote-3) The system is gravity fed, and conveyed to residents via a network of 7,000 miles of mains, tunnels and aqueducts, some of which date back to the 1870s.[[4]](#footnote-4)

As the City’s water supply is largely gravity fed, events known as backflows can occur when conditions enable water to cease flowing toward the end user’s fixtures and outlets and instead the water flows from the intended outlets toward the supply line.[[5]](#footnote-5) Backflows may occur via backsiphonage, when water trying to drain to a low point in the system creates negative pressure which draws contaminated water back into the supply line, or backflows may occur via backpressure, when high pressure systems such as boilers, water heaters, or elevated water tanks exceed the pressure in the potable water system to which they are connected, and excess pressure forces water back into the potable water system.[[6]](#footnote-6)

Since backflow incidents have the potential to contaminate the potable water system, DEP requires that certain properties install backflow prevention devices, which stop water from flowing back into the city’s supply lines.[[7]](#footnote-7) These properties include residential properties with underground irrigation systems, swimming pools, or water boilers that use rust inhibitors; businesses such as laundromats and dry cleaners, or commercial car washes; and facilities including medical facilities, those providing veterinary services, slaughterhouses, food processing facilities, or other facilities that may produce potentially hazardous chemical or biological waste.[[8]](#footnote-8) Properties subject to backflow prevention requirements are expected to hire professional engineers or registered architects to prepare backflow prevention plans, which must be approved by DEP, and any backflow prevention devices must be installed by a licensed master plumber.[[9]](#footnote-9) The devices must undergo an initial testing carried out by a New York State Department of Health certified backflow tester, and undergo annual testing by a certified tester.[[10]](#footnote-10) Failure to comply may result in fines or the disconnection of a property’s water service.[[11]](#footnote-11)

*Energy Retrofits*

The energy used to heat, power, and cool New York City’s building stock accounts for nearly 73% of citywide greenhouse gas emissions.[[12]](#footnote-12) According to the City’s Roadmap to 80 x 50, approximately 90% of the buildings that currently exist in the City will still exist in 2050.[[13]](#footnote-13) As such, meeting citywide emissions reduction goals will not only require new buildings to meet ultra-low efficiency standards, but also will necessitate deep energy retrofits in nearly all of the city’s existing building stock.[[14]](#footnote-14)

In April 2019, the City Council passed Local Law 96 of 2019, which established a sustainable energy loan program for the purposes of providing certain building owners with funding for the installation of renewable energy systems or energy efficiency improvements.[[15]](#footnote-15) This Property Assessed Clean Energy (PACE) program is intended to provide property owners with a new mechanism to finance the up-front cost of making energy or other eligible improvements on a property.[[16]](#footnote-16) The property owners then pay the costs back over time through assessments on their property tax bill.[[17]](#footnote-17) Once an owner opts into the PACE financing program, the property remains subject to the agreement even if sold, transferred, or foreclosed upon

1. **Legislation**

**Int No. 1576** would increase monetary penalties on building owners or operators who fail to comply with reporting and installation requirements for water backflow prevention devices. Civil penalties for failure to install a backflow device would be $1,000 to 10,000, with criminal fines at $2,000 to 10,000. Failure to file the annual report would result in civil penalties from $700 to 10,000, with criminal fines from $1,400 to 10,000. This local law would take effect 120 days after it becomes law, provided that the commissioner of environmental protection may take all actions necessary for its implementation, including the promulgation of rules, before such effective date.

**Int. No. 2170** seeks to amend the PACE program in order to permit energy efficiency improvements to be incorporated into real property as a component of a new or existing building. The legislation would amend the existing definitions of “energy audit” and “energy efficiency improvement,” as well as add a new definition of “real property” in section 11-3001 of the Administrative Code of the City of New York.[[18]](#footnote-18) The local law would take effect immediately.

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| Int. No. 1576    By the Public Advocate (Mr. Williams) and Council Member Constantinides (by request of the Queens Borough President)    A Local Law to amend the administrative code of the city of New York, in relation to increasing penalties for failure to comply with backflow prevention requirements    Be it enacted by the Council as follows:    Section 1. Section 24-343.1 of the administrative code of the city of New York,  subdivisions a, b and c as added by local law number 76 for the year 2009, and subdivision d as added by local law number 58 for the year 2019, is amended to read as follows:  § 24-343.1 Backflow prevention [device reporting].  a. Definitions. For purposes of this section, the following terms shall have the following meanings:  [(1) "Backflow" shall mean] Backflow. The term “backflow” means a flow condition, induced by a differential in pressure, that causes the flow of water or other liquids and/or gases into the distribution of pipes of a city water main, private water main, or to an internal water main from any source other than its intended source.  [(2) "Backsiphonage" shall mean] Backsiphonage. The term “backsiphonage” means the backflow of contaminated or polluted water, or water of questionable quality from a plumbing fixture or other source, into a city water main, private water main, or to an internal water main due to a temporary negative or sub-atmospheric pressure within the public water supply system.  [(3) "Backflow prevention device" shall mean] Backflow prevention device. The term “backflow prevention device” means an approved air gap, reduced pressure zone device or double check valve assembly used to contain potential contamination within a facility.  [(4) "Cross connection" shall mean] Cross connection. The term “cross connection” means a physical connection or arrangement between two separate piping systems where one system contains potable water and the other contains steam, gas, a chemical, or water of questionable safety, and there may be a flow from one system to the other.  [(5) "Hazardous facility" shall mean] Hazardous facility. The term “hazardous facility” means a facility in which substances may be present that may endanger the health of other water users if introduced into the public water system, including but not limited to, laboratories, sewage treatment plants, chemical plants, hospitals and mortuaries.  b. Backflow prevention devices required. 1. When the department or the owner or operator of a building or structure has determined that there is a cross connection and no backflow prevention device, or a defective or unapproved device, such that there is a possibility of backflow or backsiphonage from such building or structure into a city water main, private water main, or to an internal water main, the owner or operator of such building or structure shall be under a duty to correct such potential or actual backflow or backsiphonage and provide the proper documentation to certify to the department that a backflow prevention device has been installed and where appropriate, that a backflow prevention device has been replaced.  2. Where removal of a cross-connection or installation or replacement of a backflow prevention device has been performed as part of a project for which a licensed professional engineer or registered architect has submitted plans that have been approved by the department, such licensed professional engineer or registered architect shall inspect and submit to the department a certification that the cross-connection has been removed or a backflow prevention device installed or replaced in conformity with plans approved by the department or the department of buildings.  [c.] 3. The department shall send out a mailing to or shall otherwise notify owners or operators of facilities identified by the department as potentially requiring backflow prevention devices informing them of the potential need for such a device and of the process for installation of backflow prevention devices under the auspices of the cross connection control program. The materials contained in such mailing shall be [translated into such languages provided for in section 8-1002 of this code] made available in English and in each of the designated citywide languages as defined in section 23-1101.  4. Any owner or operator of a building or structure who fails to install a backflow prevention device as required by this section shall be subject to such fines, penalties and other enforcement measures as may be imposed pursuant to section 24-346.  c. Testing of backflow prevention devices. 1. Each backflow prevention device installed pursuant to this section shall be tested annually and the owner or operator of such building or structure shall provide an annual test report to the department in accordance with department rules.  2. Any owner or operator of a building or structure who fails to provide an annual test report in accordance with department rules shall be subject to such fines, penalties and other enforcement measures as may be imposed pursuant to section 24-346.  d. Reporting on backflow prevention. On or before February 15, 2020, and on or before every February 15 thereafter, the department shall submit a report to the mayor and the speaker of the council setting forth the following information:  1. The number of all facilities that the department estimates requires the installation of one or more backflow prevention devices;  2. The number of such facilities that the department has determined to be hazardous facilities;  3. The number of all facilities in which backflow prevention devices were installed in the preceding calendar year;  4. The number of hazardous facilities in which backflow prevention devices were installed in the preceding calendar year;  5. The number of annual backflow prevention device test reports filed with the department in the preceding calendar year;  6. The number of violations issued in the preceding calendar year for failure to install a backflow prevention device; and   7. The number of violations issued in the preceding calendar year for failure to file an annual backflow prevention device test report with the department.  § 2. Subdivisions b and c of Section 24-346 of the administrative code of the city of New  York, as amended by local law number 55 for the year 2013, are amended to read as follows:  b. Any person who violates or fails to comply with any of the provisions of this chapter and chapter four of this title or any order, rule or regulation issued by the board or commissioner or with the conditions of any permit issued by the commissioner within the city of New York shall be liable for a civil penalty of not less than [fifty nor more than one thousand dollars] $50 or more than $1,000 for each violation, except that the civil penalty for violating section 24-303.1 shall be not less than [two thousand five hundred dollars nor more than twenty-five thousand dollars and] $2,000 nor more than $25,000, the civil penalty for the removal of a manhole cover in violation of section 24-304 shall be not less than [two thousand five hundred dollars nor more than ten thousand dollars] $2,000 nor more than $10,000, the civil penalty for the failure to install a backflow prevention device in violation of subdivision b of section 24-343.1 shall be not less than $1,000 nor more than $10,000, and the civil penalty for the failure to provide an annual test report in violation of subdivision c of section 24-343.1 shall be not less than $700 nor more than $10,000. In the case of a continuing violation each day's continuance shall be a separate and distinct offense. The environmental control board shall have the power to impose such civil penalties. A proceeding to impose such penalties shall be commenced by the service of a notice of violation returnable to such board. Such board, after a hearing as provided by the rules and regulations of the board, shall have the power to enforce its final decisions and orders imposing such civil penalties as if they were money judgments pursuant to subdivision d of section one thousand forty-nine-a of the New York city charter. A civil penalty imposed by the board may also be collected in an action brought in the name of the city in any court of competent jurisdiction. The board, in its discretion, may, within the limits set forth in this subdivision, establish a schedule of civil penalties indicating the minimum and maximum penalty for each separate offense.  c. In addition to the civil penalties set forth in subdivision b of this section and except as otherwise specifically provided, any person who knowingly violates or fails to comply with any provision of this chapter and chapter four of this title or any order, rule or regulation issued by the commissioner or board or with the conditions of any permit issued by the commissioner shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not less than [two hundred fifty nor more than one thousand dollars] $250 nor more than $1,000, or by imprisonment not exceeding [thirty] 30 days, or both for each violation, except that the punishment for the removal of a manhole cover in violation of section 24-304 shall be a fine of not less than [five hundred dollars nor more than ten thousand dollars] $500 nor more than $10,000, or imprisonment not exceeding [thirty] 30 days, or both for each violation [.], the punishment for the failure to install a backflow prevention device in violation of subdivision b of section 24-343.1 shall be a fine of not less than $2,000 nor more than $10,000, or imprisonment not exceeding 30 days, or both for each violation, and the punishment for the failure to provide an annual test report in violation of subdivision c of section 24-343.1 shall be a fine of not less than $1,400 nor more than $10,000, or imprisonment not exceeding 30 days, or both for each violation. In the case of a continuing violation each day's continuance shall be a separate and distinct offense.  § 3. This local law takes effect 120 days after it becomes law, provided that the commissioner of environmental protection may take all actions necessary for its implementation, including the promulgation of rules, before such effective date.  SG  LS #10137  5/15/2019 |

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| Int. No. 2170    By Council Members Constantinides and Kallos    A Local Law to amend the administrative code of the city of New York, in relation to the sustainable energy loan program    Be it enacted by the Council as follows:    Section 1.  The definitions of “energy audit” and “energy efficiency improvement” in section 11-3001 of the administrative code of the city of New York, as added by local law number 96 for the year 2019, are amended to read as follows:  Energy audit. The term "energy audit" means a formal evaluation of the energy consumption of a permanent building or structural improvement to real property, conducted by a contractor certified by the authority, or certified by a certifying entity approved by the authority for purposes of article 5-L of the general municipal law, or certified by the administering agency, for the purpose of identifying appropriate energy efficiency improvements that could be made to or incorporated into the construction of the property.  Energy efficiency improvement. The term "energy efficiency improvement" means any improvement to real property, whether as a component of the new construction of a building or as the renovation or retrofitting of [a] an existing building to reduce energy consumption, such as window and door replacement, lighting, caulking, weatherstripping, air sealing, insulation, and heating and cooling system upgrades, and similar improvements, determined to be cost-effective pursuant to criteria established by the authority. However, "energy efficiency improvement" shall not include lighting measures or household appliances that are not permanently fixed to real property.  § 2. Section 11-3001 of the administrative code of the city of New York, as added by local law number 96 for the year 2019,  is amended by adding a new definition of “real property” in alphabetical order to read as follows:  Real property. The term “real property” means any property, an interest in which is or is eligible to be recorded with the city register or the office of the Richmond county clerk by the possessor of such interest.  § 3. This local law takes effect immediately.            SS  LS #16397  11/20/2020 |

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10. Id. [↑](#footnote-ref-10)
11. Id. [↑](#footnote-ref-11)
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15. New York City Council. A Local Law to amend the administrative code of the city of New York in relation to establishing a sustainable energy loan program. <https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3761079&GUID=6D07BB04-3355-4C2F-AC39-07C636842490> (last accessed 2/11/21) [↑](#footnote-ref-15)
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