AN ACT IMPROVING INDOOR AIR QUALITY IN PUBLIC SCHOOL CLASSROOMS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) (Effective from passage) (a) As used in this section and sections 2 to 6, inclusive, of this act:

(1) "Commissioner" means the Labor Commissioner or the commissioner's designee;

(2) "Commission" means the Occupational Safety and Health Review Commission established under section 31-376 of the general statutes;

(3) "Person" means one or more individuals, partnerships, associations, corporations, limited liability companies, business trusts, legal representatives or any organized group of persons;

(4) "Employee" means any person engaged in service to an employer in a business of his employer;

(5) "Local or regional board of education" means local and regional boards of education as used in title 10 of the general statutes and
includes regional educational service centers and state charter schools;

(6) "School facilities" means any permanent building or portable
building or structure or commercial space owned, rented, operated or
leased by boards of education and charters, including donated space,
used as a classroom or day care, or any other space for education
services including, but not limited to, classrooms, cafeterias, staff
lounges, staff offices, auditoriums, gymnasiums or libraries;

(7) "Heating, ventilation and air conditioning system" means the
equipment, distribution network and terminals that provide, either
collectively or individually, heating, ventilation or air conditioning to a
building;

(8) "School activity hours" means any time of day in which students
or school personnel occupy school facilities throughout the year;

(9) "ASHRAE Standard 62" means the most recent American National
Standards Institute/American Society of Heating, Refrigerating and
Air-conditioning Engineers Standard 62.1 entitled "ventilation for
acceptable indoor air quality";

(10) "Indoor air quality" means the overall potential health factors
within a school facility, including air quality, mold levels and other
potentially harmful toxins;

(11) "Routine indoor air monitoring program" means testing
procedures, testing protocols and testing frequency to ensure that
indoor air quality and the maintenance and operation of heating,
ventilation and air conditioning systems are in accordance with
ASHRAE Standard 62;

(12) "Public school temperature range" means a temperature from
sixty-eight degrees Fahrenheit to seventy-six degrees Fahrenheit;

(13) "Public school relative humidity range" means relative humidity
levels within twenty to sixty per cent;
(14) "Properly licensed heating, ventilation and air conditioning contractor" means a contractor who is licensed in accordance with chapter 393 of the general statutes;

(15) "Properly certified testing, adjusting and balancing technician" means a technician certified to perform testing, adjusting and balancing of heating, ventilation and air conditioning systems by the Associated Air Balance Council, the National Environmental Balancing Bureau or the Testing, Adjusting and Balancing Bureau, or individuals training under the supervision of a Testing, Adjusting and Balancing Bureau certified technician or a person certified to perform ventilation assessments of heating, ventilation and air conditioning systems through a certification body accredited by the American National Standards Institute; and

(16) "Skilled and trained construction workforce" means a workforce, managed in conformance with the Davis-Beacon of 1931 40 USC 3145, et seq., as amended from time to time, in which at least sixty per cent of the workers are graduates of or registered in and attending an apprenticeship program registered with the Labor Department's office of apprenticeship training.

Sec. 2. (NEW) (Effective July 1, 2022) (a) On or before August 15, 2022, the Labor Department shall establish: (1) A mandatory public school temperature range; and (2) a mandatory public school relative humidity range. The temperature and relative humidity readings for public school facilities shall be taken in a location or locations that are illustrative of the highest and lowest temperature and relative humidity in the school facility during school activity hours.

(b) (1) On or before June 30, 2023, the Labor Commissioner, in consultation with the Commissioner of Education and the Secretary of the Office of Policy and Management, or their designees, shall establish a routine school indoor air quality assessment and ventilation monitoring program that is consistent with the minimum requirements of the ASHRAE Standard 62 and the provisions of this section for use
by local and regional boards of education. The Labor Commissioner shall post the requirements of such program on the Labor Department's Internet web site.

(2) The routine indoor air quality assessment and ventilation monitoring program shall require any ventilation assessment be performed by a certified Testing, Adjusting and Balancing technician or mechanical engineer. The ventilation assessment shall verify whether the existing mechanical ventilation system is operating in accordance with design parameters, meets the requirements of the Labor Department and follows the recommendations of the American Society of Heating, Refrigerating and Air-Conditioning Engineers for ventilation needs during the 2020 coronavirus disease pandemic. The ventilation assessment for heating, ventilation and air conditioning systems shall include: (A) Testing for maximum filter efficiency; (B) physical measurements of outside air rate; (C) verification of operation of ventilation components; (D) measurement of all air distribution inlets and outlets; (E) verification of unit operation and that required maintenance has been performed in accordance with ASHRAE Standard 62.1 – 2019 Section 8 and Table 8-1; (F) verification of control sequences; (G) verification of carbon dioxide sensors; and (H) collection of field data for the installation of mechanical ventilation if none exist.

(3) The indoor air quality and ventilation assessment shall result in a written report reviewed by a mechanical engineer and shall include appropriate corrective actions needed for the mechanical ventilation system or the heating, ventilation and air conditioning infrastructure, including installation of appropriate filters, installation of carbon dioxide sensors and additional maintenance, repairs, upgrades or replacement.

(c) On or before July 1, 2024, and every three years thereafter, each local and regional board of education shall conduct an indoor air quality and ventilation assessment in a manner consistent with the Labor Department's routine school indoor air quality assessment and ventilation monitoring program established in this section. The written
(d) The Labor Department shall require all local and regional boards of education to make the appropriate corrective actions identified in the ventilation assessment report. The corrective actions shall include testing, adjusting and balancing the public school mechanical ventilation system and, if necessary or cost effective, repair, upgrade or replacement of the existing heating, ventilation and air conditioning system or the installation of a stand-alone mechanical ventilation system. The corrective actions identified in the ventilation assessment may include general maintenance, reading and adjustment of ventilation rates, filter replacement to meet a minimum efficiency reporting value of at least thirteen, if equipment allows, while assuring the pressure drop is less than the fan's capability, carbon dioxide monitor installation or whole system installation or replacement. Portable filtration and air cleaners shall be used only if the existing heating, ventilation and air conditioning infrastructure cannot meet minimum filtration and ventilation requirements or, as recommended by a mechanical engineer, as supplemental enhancement to the permanent heating, ventilation and air conditioning infrastructure when the desired indoor air quality cannot be maintained with the mechanical ventilation system or there are concerns with outdoor air contaminants such as those created by wildfires and pollution.

(e) Any remediation, additions or alterations to a heating, ventilation and air conditioning system shall be performed by a properly licensed heating, ventilation and air conditioning contractor employing a skilled and trained construction workforce consisting of journey persons and registered apprentices, pursuant to title 31 of the general statutes, in accordance with chapter 393 of the general statutes.

(f) All testing and certifications of a heating, ventilation and air conditioning system shall be performed by a properly certified testing, adjusting and balancing technician.
(g) The Labor Commissioner, in consultation with the Commissioner of Education and the Secretary of the Office of Policy and Management, or their designees, shall approve the routine indoor air monitoring program at least every three years to ensure the efficacy of the program and shall review the program in the event of a public health emergency or other potentially impacting indoor air quality in schools across the state.

(h) Local and regional boards of education shall be responsible for the ongoing maintenance of heating, ventilation and air conditioning systems in a manner enabling such systems to continually maintain indoor air quality and temperature and humidity ranges in school facilities during school activity hours in accordance with standards adopted by the Labor Department pursuant to this section. Each local and regional boards of education shall participate in the United States Environmental Protection Agency’s Air Quality Flag Program for Schools.

(i) Each local and regional boards of education shall close a school for the day if the mandated public school temperature range cannot be maintained by the school for two or more consecutive school activity hours. Any school closure required pursuant to this subsection shall not result in diminishment of pay for any board of education employee or any employee contracted to work for such board of education, who was scheduled to work on such day or days.

(j) On or before June 30, 2026, and each year thereafter, each local and regional board of education shall have in place a heating, ventilation and air conditioning system capable of being in full compliance with the indoor air quality, temperature and humidity monitoring program standards established pursuant to subsection (b) of this section and shall operate and maintain such system in accordance with such standards.

Sec. 3. Subsection (b) of section 10-283 of the 2022 supplement to the general statutes is repealed and the following is substituted in lieu thereof (Effective from passage):
(b) (1) Notwithstanding the application date requirements of this section, at any time within the limit of available grant authorization and within the limit of appropriated funds, the Commissioner of Administrative Services, in consultation with the Commissioner of Education, may approve applications for grants and make payments for such grants, for any of the following reasons: (A) To assist school building projects to remedy damage from fire and catastrophe, (B) to correct safety, health and other code violations, (C) to replace roofs, including the replacement or installation of skylights as part of the roof replacement project, (D) to remedy a certified school indoor air quality emergency, (E) to install insulation for exterior walls and attics, (F) to purchase and install a limited use and limited access elevator, windows, photovoltaic panels, wind generation systems, building management systems, a public school administrative or service facility or portable classroom buildings, provided portable classroom building projects shall not create a new facility or cause an existing facility to be modified so that the portable buildings comprise a substantial percentage of the total facility area, as determined by the commissioner, [or] (G) for school security projects, including, but not limited to, making improvements to existing school security infrastructure or installing new school security infrastructure, or (H) for the installation, remediation or replacement of heating, ventilation and air conditioning systems necessary to continually maintain indoor air quality and temperature and humidity ranges in school facilities during school activity hours in accordance with standards adopted by the Labor Department pursuant to section 2 of this act.

(2) Not later than seven calendar days following the discovery of a reason described in subparagraphs (A) to (F), inclusive, of subdivision (1) of this subsection, the superintendent of schools of a town or regional school district shall notify the Commissioner of Administrative Services in writing of such reason in order to be eligible for a grant under this subsection. Such superintendent shall submit an application to the commissioner not later than six months following such notification in order to receive a grant under this subsection.
Sec. 4. (NEW) (Effective from passage) (a) Any local or regional board of education, regional educational service center or charter school commencing a project to remediate, replace or install a heating, ventilation and air conditioning system shall be considered to be in compliance with the provisions of subsection (j) of section 2 of this act.

(b) Any local or regional board of education or charter school eligible for reimbursement for school construction projects pursuant to chapter 173 of the general statutes, that submits a completed application to remediate, replace or install a heating, ventilation and air conditioning system to continually maintain indoor air quality and temperature and humidity ranges in school facilities during school activity hours, shall be considered to be in compliance with the provisions of subsection (j) of section 2 of this act.

Sec. 5. (NEW) (Effective July 1, 2022) (a) Each superintendent for a local or regional board of education, regional educational service center or charter school shall:

(1) Designate an individual within each local and regional board of education to be responsible for receiving, and reporting to the superintendent, complaints of mold, evidence of pest infestation, hazardous odors or chemicals and poor indoor air-quality;

(2) Make available on the district’s Internet web site the procedure for any party to file such complaint with the designated individual;

(3) Duly forward any such complaints, in writing, to each bargaining agent representative representing members who work or visit the affected building, including, but not limited to, teachers, paraeducators, nurses, custodians, administrative staff and bus workers; and

(4) Report complaints, in writing, to the corresponding board of education at either the next regularly scheduled meeting or within sixty calendar days, whichever is earlier.

(b) Any indoor air quality complaint filed under subsection (a) of this
section shall be investigated by local and regional boards of education, including documentation of any physical symptoms exhibited by students, staff or visitors, including, but not limited to, urgent care referrals, blood test, an OSHA 301 form or incident report forms, workers' compensation claims and the testing of any visible substance, including, but not limited to, mold, chemicals, pest droppings, infestations or other such substance, for the presence of a health hazard. Upon confirmation of the presence of a health hazard, the local or regional board of education shall notify the Labor Department's Division of Occupational Safety and Health of such hazard, and the local and regional board of education shall create and implement a plan for remedying such hazard.

(c) No employer that is a local or regional board of education, regional education service center or state charter school shall retaliate against, discipline or terminate any employee for filing a complaint or reporting conditions regarding indoor air quality under section 5 of this act.

(d) Any employee of local and regional boards of education, regional educational service centers and state charter schools who believe that such employee has experienced discrimination, retaliation, discipline or termination by their employer for filing a complaint or reporting conditions regarding indoor air quality under section 5 of this act may submit a complaint alleging such violation in accordance with section 31-379 of the general statutes.

Sec. 6. Subsection (a) of section 10-283b of the 2022 supplement to the general statutes is repealed and the following is substituted in lieu thereof (Effective from passage):

(a) On and after July 1, 2011, the Commissioner of Administrative Services shall include school building projects for the Technical Education and Career System on the list developed pursuant to section 10-283. The adoption of the list by the General Assembly and authorization by the State Bond Commission of the issuance of bonds
pursuant to section 10-287d shall fund the full cost of the projects. On or after July 1, 2011, the Commissioner of Administrative Services, in consultation with the Commissioner of Education, may approve applications for grants to assist school building projects for the Technical Education and Career System to remedy damage from fire and catastrophe, to correct safety, health and other code violations, to replace roofs, to remedy a certified school indoor air quality emergency, for the installation, remediation or replacement of heating, ventilation and air conditioning systems necessary to continually maintain indoor air quality and temperature and humidity ranges in school facilities during school activity hours in accordance with standards adopted by the Labor Department pursuant to section 2 of this act, or to purchase and install portable classroom buildings at any time within the limit of available grant authorization and to make payments on such a project within the limit of appropriated funds, provided portable classroom building projects do not create a new facility or cause an existing facility to be modified so that the portable buildings comprise a substantial percentage of the total facility area, as determined by the Commissioner of Administrative Services. Such projects shall be subject to the requirements of chapters 59 and 60.

This act shall take effect as follows and shall amend the following sections:

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**Statement of Purpose:**
To require local and regional boards of education to maintain healthy indoor air quality in their schools.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]