

## 1 VIRGINIA ACTS OF ASSEMBLY — CHAPTER

2 *An Act to amend the Code of Virginia by adding in Chapter 9 of Title 22.1 an article numbered 4, consisting*  
 3 *of sections numbered 22.1-141.3 through 22.1-141.6, relating to public school buildings; indoor air*  
 4 *quality; inspection and evaluation.*

5 [S 1413]

6 Approved

7 **Be it enacted by the General Assembly of Virginia:**

8 **1. That the Code of Virginia is amended by adding in Chapter 9 of Title 22.1 an article numbered 4,**  
 9 **consisting of sections numbered 22.1-141.3 through 22.1-141.6, as follows:**

10 *Article 4.*11 *Indoor Air Quality; Inspection and Evaluation.*12 **§ 22.1-141.3. Scope of article.**

13 *The provisions of this article apply to matters relating to indoor air quality in public school buildings*  
 14 *occupied by school board employees and students during regular work and school hours.*

15 **§ 22.1-141.4. Definitions.**16 *As used in this article, unless the context requires a different meaning:*

17 *"Certified testing, adjusting, and balancing technician" means (i) a technician, tradesperson, or*  
 18 *apprentice certified to perform testing, adjusting, and balancing of heating, ventilation, and air conditioning*  
 19 *systems by the Associated Air Balance Council, the National Environmental Balancing Bureau, the Testing,*  
 20 *Adjusting and Balancing Bureau or (ii) a person certified to perform ventilation assessments of heating,*  
 21 *ventilation, and air conditioning systems through a certification body accredited by the American National*  
 22 *Standards Institute.*

23 *"Heating, ventilation, and air conditioning system" means the equipment, distribution network, controls,*  
 24 *and terminals that provide, either collectively or individually, heating, ventilation, or air conditioning to a*  
 25 *building.*

26 *"Indoor air quality" means air quality within buildings and structures, especially as it relates to the health*  
 27 *and comfort of building occupants.*

28 **§ 22.1-141.5. Inspection and evaluation program.**

29 *A. At least once every two years, each local school division shall provide for a uniform inspection and*  
 30 *evaluation program of the indoor air quality in each public school building in the local school division,*  
 31 *including a review, inspection, or evaluation of the following:*

- 32 1. *The heating, ventilation, and air conditioning systems;*
- 33 2. *Radon levels in the air;*
- 34 3. *Potential for exposure to microbiological airborne particles, including fungi, mold, and bacteria;*
- 35 4. *Air contaminants, including vapors from paint, cleaning chemicals, solvents, particulates, and outdoor*  
 36 *air pollutants;*
- 37 5. *The degree of pest infestation, including insects and rodents;*
- 38 6. *The degree of pesticide usage;*
- 39 7. *The presence of and the plans for removal of any extremely hazardous substances that are contained on*  
 40 *the list prepared pursuant to 42 U.S.C. § 11002(a)(2);*
- 41 8. *Ventilation systems;*
- 42 9. *Air handling unit condensation systems;*
- 43 10. *Moisture incursion;*
- 44 11. *The overall cleanliness of the facilities;*
- 45 12. *Building structural elements, including roofing, basements, and slabs; and*
- 46 13. *The use of space, particularly areas that were designed to be unoccupied.*

47 *B. Each local school division shall make available for public inspection at a regularly scheduled local*  
 48 *school board meeting and on the local school board's public website or each individual school's public*  
 49 *website the results of any review, inspection, or evaluation conducted pursuant to its uniform program*  
 50 *established in accordance with subsection A.*

51 **§ 22.1-141.6. Industry-recognized uniform inspection and evaluation.**

52 *A. At least once every four years, each local school division shall provide for an industry-recognized*  
 53 *uniform inspection and evaluation of the heating, ventilation, and air conditioning system in each public*  
 54 *school building in the local school division. Such inspection and evaluation shall be performed by a certified*  
 55 *testing, adjusting, and balancing technician, an industrial hygienist certified by the American Board of*  
 56 *Industrial Hygiene, a technician with a Master HVAC License from the Virginia Department of Professional*

57 *and Occupational Regulation, or a mechanical engineer. Such heating, ventilation, and air conditioning*  
58 *systems inspection and evaluation shall include:*

59 *1. Testing for maximum filter efficiency;*

60 *2. Physical measurements of outside air delivery rate;*

61 *3. Verification of the appropriate condition and operation of ventilation components;*

62 *4. Measurement of air distribution system outside air, return air, and supply air and static pressure*  
63 *readings across all air handling unit components, including filters, coils, and fans;*

64 *5. Verification of unit operation and that required maintenance has been performed in accordance with*  
65 *the most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating*  
66 *and Air-Conditioning Engineers;*

67 *6. Verification of carbon dioxide sensors and acceptable carbon dioxide concentrations indoors; and*

68 *7. Collection of field data for the installation of mechanical ventilation if none exists.*

69 *B. The portion of the uniform inspection and evaluation required pursuant to subsection A that relates to*  
70 *the ventilation system shall identify the extent to which each school's current ventilation system components,*  
71 *including any existing central or noncentral mechanical ventilation system, are operating in such a manner*  
72 *as to provide appropriate ventilation to the school building in accordance with the most recent indoor*  
73 *ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning*  
74 *Engineers.*

75 *C. Each local school division shall prepare a written report of the results of the uniform inspection and*  
76 *evaluation required pursuant to subsection A that includes any corrective actions necessary to be performed*  
77 *on the mechanical ventilation system or the heating, ventilation, and air conditioning infrastructure,*  
78 *including installation of filters meeting the most optimal level of filtration available for a given heating,*  
79 *ventilation, and air conditioning system, installation of carbon dioxide sensors, and additional maintenance,*  
80 *repairs, upgrades, or replacement. Each local school division shall make such report available for public*  
81 *inspection at a regularly scheduled local school board meeting and on the local school board's public*  
82 *website.*

83 *D. No local school division is required to provide for a uniform inspection and evaluation pursuant to*  
84 *subsection A for any school building that will cease to be used as a school within one year of such a planned*  
85 *inspection and evaluation.*