

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

SENATE BILL NO. 1413
AMENDMENT IN THE NATURE OF A SUBSTITUTE
(Proposed by the House Committee on Education
on _____)
(Patron Prior to Substitute—Senator Surovell)

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

Be it enacted by the General Assembly of Virginia:

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

Article 4.

Indoor Air Quality; Inspection and Evaluation.

§ 22.1-141.3. Scope of article.

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

§ 22.1-141.4. Definitions.

As used in this article, unless the context requires a different meaning:

"Certified testing, adjusting, and balancing technician" means (i) 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, the Testing, Adjusting and Balancing Bureau; (ii) a person who has completed United Association's Mechanical Equipment Services Apprenticeship Training Program; or (iii) 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.

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

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

§ 22.1-141.5. Inspection and evaluation program.

31 A. Each local school division shall provide for a uniform inspection and evaluation program of the indoor
32 air quality in each public school building in the local school division, including a review, inspection, or
33 evaluation of the following:

34 1. The heating, ventilation, and air conditioning systems;

35 2. Radon levels in the air;

36 3. Potential for exposure to microbiological airborne particles, including fungi, mold, and bacteria;

37 4. Air contaminants, including vapors from paint, cleaning chemicals, solvents, particulates, and outdoor
38 air pollutants;

39 5. The degree of pest infestation, including insects and rodents;

40 6. The degree of pesticide usage;

41 7. The presence of and the plans for removal of any extremely hazardous substances that are contained on
42 the list prepared pursuant to 42 U.S.C. § 11002(a)(2);

43 8. Ventilation systems;

44 9. Plumbing, including water distribution systems, drainage systems, and fixtures;

45 10. Moisture incursion;

46 11. The overall cleanliness of the facilities;

47 12. Building structural elements, including roofing, basements, and slabs; and

48 13. The use of space, particularly areas that were designed to be unoccupied.

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

53 **§ 22.1-141.6. Industry-recognized uniform inspection and evaluation.**

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

60 *systems inspection and evaluation shall include:*

61 *1. Testing for maximum filter efficiency;*

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

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

64 *4. Measurement of air distribution through all system inlets and outlets;*

65 *5. Verification of unit operation and that required maintenance has been performed in accordance with*

66 *the most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating*

67 *and Air-Conditioning Engineers;*

68 *6. Verification of control sequences;*

69 *7. Verification of carbon dioxide sensors and acceptable carbon dioxide concentrations indoors; and*

70 *8. Collection of field data for the installation of mechanical ventilation if none exists.*

71 *B. The portion of the uniform inspection and evaluation required pursuant to subsection A that relates to*

72 *the ventilation system shall identify the extent to which each school's current ventilation system components,*

73 *including any existing central or noncentral mechanical ventilation system, are operating in such a manner*

74 *as to provide appropriate ventilation to the school building in accordance with the most recent indoor*

75 *ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning*

76 *Engineers.*

77 *C. Each local school division shall prepare a written report of the results of the uniform inspection and*

78 *evaluation required pursuant to subsection A that includes any corrective actions necessary to be performed*

79 *on the mechanical ventilation system or the heating, ventilation, and air conditioning infrastructure,*

80 *including installation of filters meeting the most optimal level of filtration available for a given heating,*

81 *ventilation, and air conditioning system, installation of carbon dioxide sensors, and additional maintenance,*

82 *repairs, upgrades, or replacement. Each local school division shall make such report available for public*

83 *inspection at a regularly scheduled local school board meeting and on the local school board's public*

84 *website.*

85 *D. No local school division is required to provide for a uniform inspection and evaluation pursuant to*

86 *subsection A for any school building that will cease to be used as a school within one year of such a planned*

87 *inspection and evaluation.*