



General Assembly

Substitute Bill No. 6426

January Session, 2003

AN ACT CONCERNING INDOOR AIR QUALITY IN SCHOOLS.

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

1 Section 1. (NEW) (*Effective July 1, 2003*) As used in this section,
2 sections 10-220, 10-282, 10-283 and 10-291 of the general statutes, as
3 amended by this act, and sections 3 and 4 of this act:

4 (1) "Indoor environmental quality" means the quality of facets of the
5 environment that affect the health of the occupants of school facilities
6 including, but not limited to, air quality, the presence of radon and
7 water quality;

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

10 (3) "HVAC system" means the equipment, distribution network and
11 terminals that provide, either collectively or individually, the process
12 of heating, ventilation or air conditioning to a building; and

13 (4) "Bioaerosols" means microbiological airborne particles including,
14 but not limited to, fungi, mold and bacteria.

15 Sec. 2. Section 10-291 of the general statutes is repealed and the
16 following is substituted in lieu thereof (*Effective July 1, 2003*):

17 (a) No school building project for which state assistance is sought

18 shall be undertaken except according to a plan and on a site approved
19 by the [state] Department of Education, the town or regional board of
20 education and by the building committee of such town or district. No
21 such school building project shall be undertaken at an expense
22 exceeding the sum which the town or regional district may
23 appropriate for the project. In the case of a school building project
24 financed in whole or in part by an energy conservation lease purchase
25 agreement, the expense of the project shall not exceed the sum which
26 the town or regional school district approved for the project. In the
27 case of a school building project which is a construction, renovation or
28 replacement of a building to be used for public school purposes, the
29 town or regional board of education and the building committee of
30 such town or district shall include in its application a Phase I
31 environmental site assessment in accordance with the American
32 Society for Testing and Materials Standard E1527, Standard Practice
33 for Environmental Site Assessments: Phase I Environmental Site
34 Assessment Process, or similar subsequent standards. A copy of final
35 plans and specifications for each phase of site development and
36 construction of all school building projects and for each phase thereof
37 including site development shall be filed with the Commissioner of
38 Education subject to the provisions of section 10-292 before the start of
39 such phase of development or construction shall be begun. A town or
40 regional school district may commence a phase of development or
41 construction before completion of final plans and specifications for the
42 whole project provided a copy of the latest preliminary plan and cost
43 estimate for such project which has been approved by the town or
44 regional board of education and by the building committee shall be
45 submitted with the final plans and specifications for such phase. Any
46 board of education which, prior to the approval of a grant commitment
47 by the General Assembly, commences any portion of a school
48 construction project or causes any such project to be let out for bid,
49 shall not be eligible for a school construction grant until a grant
50 commitment is so approved.

51 (b) The Department of Education may not approve a school

52 building project plan or site, as applicable, if:

53 (1) In the case of a school building project that is a construction,
54 renovation or replacement of a building, the Phase I environmental site
55 assessment indicates that the site cannot, within reasonable
56 expenditures, meet the criteria for residential properties in regulations
57 adopted pursuant to section 22a-133k.

58 (2) The site is an area of moderate or high radon potential, as
59 indicated in the Department of Environmental Protection's Radon
60 Potential Map, or similar subsequent publications, except where the
61 school building project plan incorporates construction techniques to
62 mitigate radon levels in the air of the facility.

63 (3) The plans incorporate new roof construction or total replacement
64 of an existing roof and do not provide for the following: (A) A
65 minimum roof pitch of one-half inch per foot, (B) a minimum twenty-
66 year unlimited manufacturer's guarantee for water tightness covering
67 material and workmanship on the entire roofing system, (C) the
68 inclusion of vapor retarders, insulation, bitumen, felts, membranes,
69 flashings, metals, decks and any other feature required by the roof
70 design, and (D) that all manufacturer's materials to be used in the
71 roofing system are specified to meet the latest standards for individual
72 components of the roofing systems of the American Society for Testing
73 and Materials.

74 (4) In the case of a construction, renovation or replacement of a
75 school building, the plans do not incorporate the Sheet Metal and Air
76 Conditioning Contractors National Association's publication entitled
77 "Indoor Air Quality Guidelines for Occupied Buildings Under
78 Construction" or similar subsequent publications.

79 Sec. 3. (NEW) (*Effective July 1, 2003*) (a) For purposes of this section
80 "Standard 62" means the American Society of Heating, Ventilating and
81 Air Conditioning Engineers Standard 62 entitled "Ventilation for
82 Acceptable Indoor Air Quality", as incorporated by the State Building
83 Code adopted under section 29-252 of the general statutes.

84 (b) Each local or regional board of education that, on or after the
85 date of the adoption of Standard 62, installed or renovated its HVAC
86 system through a school building project grant pursuant to chapter 173
87 of the general statutes shall ensure that its HVAC system is (1)
88 maintained and operated in accordance with Standard 62, and (2)
89 operated continuously during school activity hours except (A) during
90 scheduled maintenance and emergency repairs, and (B) during periods
91 for which school officials can demonstrate to the local or regional
92 board of education's satisfaction that the quantity of outdoor air
93 supplied by an air supply system that is not mechanically driven meets
94 the Standard 62 requirements for air changes per hour.

95 (c) Each local or regional board of education that, prior to the date of
96 the adoption of Standard 62, installed or renovated its HVAC system
97 through a school building project grant pursuant to chapter 173 of the
98 general statutes shall ensure that its HVAC system is maintained and
99 operated in accordance with the prevailing maintenance and standards
100 at the time of the installation or renovation of the HVAC system.

101 Sec. 4. (NEW) (*Effective July 1, 2003*) Notwithstanding the provisions
102 of section 10-286 of the general statutes, the Commissioner of
103 Education shall not include the area necessary to support an HVAC
104 system in the calculation of the number of gross square feet per pupil
105 pursuant to said section 10-286.

106 Sec. 5. Section 10-283 of the general statutes is amended by adding
107 subsection (f) as follows (*Effective July 1, 2003*):

108 (NEW) (f) No application for a school building project authorized
109 under subdivision (7) of section 10-282 for the purpose of remediation
110 of any documented indoor environmental quality deficiency shall be
111 accepted unless the application is accompanied by a report on a
112 review, inspection or evaluation of the following: (1) Radon levels in
113 the water and the air; (2) potential for exposure to bioaerosols; (3)
114 chemical compounds of concern to indoor air quality including, but
115 not limited to, volatile organic compounds; (4) the degree of pest

116 infestation, including, but not limited to, insects and rodents; (5) the
117 degree of pesticide usage; (6) the presence of, and the plans for
118 removal of, any hazardous substances that are contained on the list
119 prepared pursuant to Section 302 of the federal Emergency Planning
120 and Community Right-to-Know Act, 42 USC 9601 et seq.; (7)
121 ventilation systems; (8) plumbing, including water distribution
122 systems, drainage systems and fixtures; and (9) the use of space,
123 particularly areas designed to be unoccupied.

124 Sec. 6. Section 10-287 of the general statutes is amended by adding
125 subsection (e) as follows (*Effective July 1, 2003*):

126 (NEW) (e) For any project to correct indoor air quality deficiencies
127 pursuant to subdivision (7) of section 10-282, the commissioner may
128 withhold grant application approval if the applicant does not provide
129 acceptable evidence that the building maintenance staff responsible for
130 such facility are receiving training in the appropriate areas of plant
131 operations with specific training relative to indoor air quality or if the
132 applicant fails to submit as part of its application an acceptable
133 ongoing prevention program as required by section 10-220, as
134 amended by this act.

135 Sec. 7. Section 10-282 of the general statutes is amended by adding
136 subdivision (19) as follows (*Effective July 1, 2003*):

137 (NEW) (19) "Indoor air quality improvement" means the
138 remediation of any documented indoor environmental quality
139 deficiency (A) not specifically covered under a health, safety or
140 building code based on a determination by a state agency having
141 jurisdiction over such matters, and (B) that cannot be remedied by
142 ordinary maintenance based on an evaluation by The University of
143 Connecticut Health Center Division of Occupational and
144 Environmental Medicine or other consultants.

145 Sec. 8. Subsection (b) of section 10-283 of the general statutes is
146 repealed and the following is substituted in lieu thereof (*Effective July*
147 *1, 2003*):

148 (b) Notwithstanding the application date requirements of this
149 section, the Commissioner of Education may approve applications for
150 grants to assist school building projects to remedy damage from fire
151 and catastrophe, to correct safety, health and other code violations, to
152 replace roofs, to effect indoor air quality improvement, or to purchase
153 and install portable classroom buildings at any time within the limit of
154 available grant authorization and make payments thereon within the
155 limit of appropriated funds, provided portable classroom building
156 projects shall not create a new facility or cause an existing facility to be
157 modified so that the portable buildings comprise a substantial
158 percentage of the total facility area, as determined by the
159 commissioner.

160 Sec. 9. Subsection (a) of section 10-286 of the general statutes is
161 amended by adding subdivision (9) as follows (*Effective July 1, 2003*):

162 (NEW) (9) In the case of projects for indoor air quality
163 improvement, the eligible percentage, as determined in section 10-
164 285a, of the eligible cost as determined by the Commissioner of
165 Education.

166 Sec. 10. Section 10-220 of the general statutes is repealed and the
167 following is substituted in lieu thereof (*Effective July 1, 2003*):

168 (a) Each local or regional board of education shall maintain good
169 public elementary and secondary schools, implement the educational
170 interests of the state as defined in section 10-4a and provide such other
171 educational activities as in its judgment will best serve the interests of
172 the school district; provided any board of education may secure such
173 opportunities in another school district in accordance with provisions
174 of the general statutes and shall give all the children of the school
175 district as nearly equal advantages as may be practicable; shall provide
176 an appropriate learning environment for its students which includes
177 (1) adequate instructional books, supplies, materials, equipment,
178 staffing, facilities and technology, (2) equitable allocation of resources
179 among its schools, and (3) a safe school setting; shall have charge of the

180 schools of its respective school district; shall make a continuing study
181 of the need for school facilities and of a long-term school building
182 program and from time to time make recommendations based on such
183 study to the town; shall undertake maintenance of its facilities,
184 including, but not limited to, maintenance that is necessary to protect
185 indoor environmental quality; shall implement an ongoing prevention
186 program such as the Environmental Protection Agency's Indoor Air
187 Quality Tools for Schools program to protect the indoor environmental
188 quality of its facilities; shall report annually to the Commissioner of
189 Education on the condition of its facilities and the action taken to
190 implement its long-term school building program, which report the
191 commissioner shall use to prepare an annual report that said
192 commissioner shall submit in accordance with section 11-4a to the joint
193 standing committee of the General Assembly having cognizance of
194 matters relating to education; shall advise the Commissioner of
195 Education of the relationship between any individual school building
196 project pursuant to chapter 173 and such long-term school building
197 program; shall have the care, maintenance and operation of buildings,
198 lands, apparatus and other property used for school purposes and at
199 all times shall insure all such buildings and all capital equipment
200 contained therein against loss in an amount not less than eighty per
201 cent of replacement cost; shall determine the number, age and
202 qualifications of the pupils to be admitted into each school; shall
203 develop and implement a written plan for minority staff recruitment
204 for purposes of subdivision (3) of section 10-4a; shall employ and
205 dismiss the teachers of the schools of such district subject to the
206 provisions of sections 10-151 and 10-158a; shall designate the schools
207 which shall be attended by the various children within the school
208 district; shall make such provisions as will enable each child of school
209 age, residing in the district to attend some public day school for the
210 period required by law and provide for the transportation of children
211 wherever transportation is reasonable and desirable, and for such
212 purpose may make contracts covering periods of not more than five
213 years; may place in an alternative school program or other suitable
214 educational program a pupil enrolling in school who is nineteen years

215 of age or older and cannot acquire a sufficient number of credits for
216 graduation by age twenty-one; may arrange with the board of
217 education of an adjacent town for the instruction therein of such
218 children as can attend school in such adjacent town more conveniently;
219 shall cause each child five years of age and over and under eighteen
220 years of age who is not a high school graduate and is living in the
221 school district to attend school in accordance with the provisions of
222 section 10-184, and shall perform all acts required of it by the town or
223 necessary to carry into effect the powers and duties imposed by law.

224 (b) The board of education of each local or regional school district
225 shall, with the participation of parents, students, school administrators,
226 teachers, citizens, local elected officials and any other individuals or
227 groups such board shall deem appropriate, prepare a statement of
228 educational goals for such local or regional school district. The
229 statement of goals shall be consistent with state-wide goals pursuant to
230 subsection (c) of section 10-4. Each local or regional board of education
231 shall develop student objectives which relate directly to the statement
232 of educational goals prepared pursuant to this subsection and which
233 identify specific expectations for students in terms of skills, knowledge
234 and competence.

235 (c) Annually, each local and regional board of education shall
236 submit to the Commissioner of Education a strategic school profile
237 report for each school under its jurisdiction and for the school district
238 as a whole. The superintendent of each local and regional school
239 district shall present the profile report at the next regularly scheduled
240 public meeting of the board of education after each November first.
241 The profile report shall provide information on measures of (1) student
242 needs, (2) school resources, including technological resources and
243 utilization of such resources and infrastructure, (3) student and school
244 performance, (4) equitable allocation of resources among its schools,
245 (5) reduction of racial, ethnic and economic isolation, and (6) special
246 education. For purposes of this subsection, measures of special
247 education include (A) special education identification rates by
248 disability, (B) rates at which special education students are exempted

249 from mastery testing pursuant to section 10-14q, (C) expenditures for
250 special education, including such expenditures as a percentage of total
251 expenditures, (D) achievement data for special education students, (E)
252 rates at which students identified as requiring special education are no
253 longer identified as requiring special education, (F) the availability of
254 supplemental educational services for students lacking basic
255 educational skills, (G) the amount of special education student
256 instructional time with nondisabled peers, (H) the number of students
257 placed out-of-district, and (I) the actions taken by the school district to
258 improve special education programs, as indicated by analyses of the
259 local data provided in subparagraphs (A) to (H), inclusive, of this
260 subdivision.

261 (d) Prior to January 1, 2005, and biennially thereafter, qualified
262 personnel or qualified contractors of a local or regional board of
263 education shall conduct a uniform inspection and evaluation program
264 of the indoor environmental quality of its schools, such as the
265 Environmental Protection Agency's Indoor Air Quality Tools for
266 Schools Program, unless such building is constructed, renovated or
267 replaced on or after January 1, 2003, in which case such building need
268 only be inspected once every five years during the ten years following
269 such construction, renovation or replacement, and biennially
270 thereafter. The inspection and evaluation program shall include, but
271 not be limited to, a review, inspection or evaluation of the following:
272 (1) The HVAC systems; (2) radon levels in the water and the air; (3)
273 potential for exposure to bioaerosols; (4) chemical compounds of
274 concern to indoor air quality including, but not limited to, volatile
275 organic compounds; (5) the degree of pest infestation, including, but
276 not limited to, insect and rodents; (6) the degree of pesticide usage; (7)
277 the presence of and the plans for removal of any hazardous substances
278 that are contained on the list prepared pursuant to Section 302 of the
279 federal Emergency Planning and Community Right-to-Know Act, 42
280 USC 9601 et seq.; (8) ventilation systems; (9) plumbing, including
281 water distribution systems, drainage systems and fixtures; (10)
282 building structural elements, including, but not limited to, roofing,

283 basements or slabs; and (11) the use of space, particularly areas that
284 were designed to be unoccupied.

This act shall take effect as follows:	
Section 1	July 1, 2003
Sec. 2	July 1, 2003
Sec. 3	July 1, 2003
Sec. 4	July 1, 2003
Sec. 5	July 1, 2003
Sec. 6	July 1, 2003
Sec. 7	July 1, 2003
Sec. 8	July 1, 2003
Sec. 9	July 1, 2003
Sec. 10	July 1, 2003

ED *Joint Favorable Subst.*

ENV *Joint Favorable*

APP *Joint Favorable*

FIN *Joint Favorable*