



General Assembly

January Session, 2003

**Raised Bill No. 6426**

LCO No. 2862

Referred to Committee on Education

Introduced by:  
(ED)

**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 Section 10-291 of the general statutes is repealed and the  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 flat-roof construction that does not have  
64 adequate pitch towards drains in order to prevent pooling of water.

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

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

75 (b) Each local or regional board of education that, on or after the  
76 date of the adoption of Standard 62, installed or renovated its HVAC  
77 system through a school building project grant pursuant to chapter 173  
78 of the general statutes shall ensure that its HVAC system is (1)

79 maintained and operated in accordance with Standard 62, and (2)  
80 operated continuously during school activity hours except (A) during  
81 scheduled maintenance and emergency repairs, and (B) during periods  
82 for which school officials can demonstrate to the local or regional  
83 board of education's satisfaction that the quantity of outdoor air  
84 supplied by an air supply system that is not mechanically driven meets  
85 the Standard 62 requirements for air changes per hour.

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

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

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

99 (NEW) (f) No application for a school building project authorized  
100 under subdivision (7) of section 10-282, as amended by this act, for the  
101 purpose of remediation of any documented indoor environmental  
102 quality deficiency shall be accepted unless the application is  
103 accompanied by a report on a review, inspection or evaluation of the  
104 following: (1) Radon levels in the water and the air; (2) potential for  
105 exposure to bioaerosols; (3) chemical compounds of concern to indoor  
106 air quality including, but not limited to, volatile organic compounds;  
107 (4) the degree of pest infestation, including, but not limited to, insects  
108 and rodents; (5) the degree of pesticide usage; (6) the presence of, and  
109 the plans for removal of, any hazardous substances that are contained  
110 on the list prepared pursuant to Section 302 of the federal Emergency

111 Planning and Community Right-to-Know Act, 42 USC 9601 et seq.; (7)  
112 ventilation systems; (8) plumbing, including water distribution  
113 systems, drainage systems and fixtures; and (9) the use of space,  
114 particularly areas designed to be unoccupied.

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

117 (NEW) (e) For any project to correct indoor air quality deficiencies  
118 pursuant to subdivision (7) of section 10-282, as amended by this act,  
119 the commissioner may withhold grant approval if the applicant does  
120 not provide acceptable evidence that building maintenance staff  
121 responsible for such facility are receiving training in the appropriate  
122 areas of plant operations with specific training relative to indoor air  
123 quality.

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

126 (NEW) (19) "Indoor air quality improvement" means the  
127 remediation of any documented indoor environmental quality  
128 deficiency not specifically covered under a health, safety or building  
129 code based on a determination by a state agency having jurisdiction  
130 over such matters. The University of Connecticut Health Center  
131 Division of Occupational and Environmental Medicine or other  
132 consultants may provide consultation to evaluate whether the  
133 conditions do not provide for adequate indoor environmental quality  
134 and cannot be remedied through ordinary maintenance, provided the  
135 applicant submits documentation that the proposed remedies will be  
136 both corrective and preventative.

137 Sec. 8. Subsection (b) of section 10-283 of the general statutes is  
138 repealed and the following is substituted in lieu thereof (*Effective July*  
139 *1, 2003*):

140 (b) Notwithstanding the application date requirements of this

141 section, the Commissioner of Education may approve applications for  
142 grants to assist school building projects to remedy damage from fire  
143 and catastrophe, to correct safety, health and other code violations, to  
144 replace roofs, to effect indoor air quality improvement, or to purchase  
145 and install portable classroom buildings at any time within the limit of  
146 available grant authorization and make payments thereon within the  
147 limit of appropriated funds, provided portable classroom building  
148 projects shall not create a new facility or cause an existing facility to be  
149 modified so that the portable buildings comprise a substantial  
150 percentage of the total facility area, as determined by the  
151 commissioner.

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

154 (NEW) (9) In the case of projects for indoor air quality  
155 improvement, the eligible percentage, as determined in section 10-  
156 285a, of the eligible cost as determined by the Commissioner of  
157 Education.

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

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

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

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

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

227 (c) Annually, each local and regional board of education shall  
228 submit to the Commissioner of Education a strategic school profile  
229 report for each school under its jurisdiction and for the school district  
230 as a whole. The superintendent of each local and regional school  
231 district shall present the profile report at the next regularly scheduled  
232 public meeting of the board of education after each November first.  
233 The profile report shall provide information on measures of (1) student  
234 needs, (2) school resources, including technological resources and  
235 utilization of such resources and infrastructure, (3) student and school  
236 performance, (4) equitable allocation of resources among its schools,  
237 (5) reduction of racial, ethnic and economic isolation, and (6) special  
238 education. For purposes of this subsection, measures of special  
239 education include (A) special education identification rates by



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

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

274 building structural elements, including, but not limited to, roofing,  
275 basements or slabs; and (11) the use of space, particularly areas that  
276 were designed to be unoccupied.

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

**Statement of Purpose:**

To provide assistance and direction to school districts to improve the quality of air in school buildings.

*[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.]*