

HOUSE No. 2094

The Commonwealth of Massachusetts

In the Year Two Thousand Nine

An Act relative to air quality in schools and public buildings..

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1.

2 The General Laws are hereby amended by inserting after chapter 111K the following
3 chapter:-

4 Chapter 111L - Indoor Air Quality

5 Section 2. Definitions.

6 As used in this Act, the following words shall, unless a different meaning clearly
7 appears from the context, have the following meanings:

8 Act means this statute.

9 Air contaminants includes but is not limited to: (a) volatile organic and inorganic
10 compounds including, but not limited to, vapors from paint, cleaning products, chemicals,
11 pesticides and solvents; (b) carbon monoxide; (c) particulates; (d) outdoor air pollutants; (e)

12 biological contaminants; and (f) other airborne substances, which may affect the health of
13 building occupants.

14 Building occupant means any person who works or transacts business in or otherwise
15 occupies a public building including but not limited to a person who is an employee of the
16 building owner.

17 Building systems include but are not limited to the HVAC system, systems providing
18 sanitary services, plumbing, and potable water, the energy management system and all other
19 systems in a public building which may impact the quality of the indoor environment.

20 Commissioner means the Commissioner of the Division of Occupational Safety of the
21 Department of Labor and Workforce Development or his/her designee.

22 Control means the power to direct, regulate or manage the thing controlled, whether
23 directly or indirectly.

24 Designated person means a person who has been given the responsibility by the
25 building owner to take necessary measures to assure compliance with sections 4 ff of this Act.

26 Director means the Director of the Division of Indoor Environments, or his/her
27 designee.

28 Division of Occupational Safety means the Division of Occupational Safety of the
29 Department of Labor and Workforce Development.

30 HVAC system means the collective components of the entire heating, ventilation and
31 air conditioning systems including mechanical and non-mechanical systems.

32 Public Building means any building, or any portion of any building, owned, leased or
33 operated by the Commonwealth, its agencies, authorities or political subdivisions, or any
34 building or any portion of any building which houses a program or activity for which 85% of the
35 funding is provided by the Commonwealth, its agencies, authorities or political subdivisions;
36 provided, how- ever, that "public building" shall not include correctional facilities (as defined in
37 M.G.L. c.125, s. 1), jails, prisons, reformatories, custodial facilities in the department of youth
38 services, and dormitories and residential facilities subject to 105 CMR 410.

39 Person means an individual, partnership, corporation, association, and the
40 Commonwealth, including its agencies, authorities, subdivisions and legal representatives or
41 agents.

42 Renovation means building modification involving activities that include but are not
43 limited to: installation, removal or replacement of roofs, walls, ceilings, floors, carpeting, and
44 components such as moldings, cabinets, doors, and windows; painting, decorating, demolition,
45 surface refinishing, removal or cleaning of ventilation ducts, additions to, replacement of or
46 modifications to entrances and exits, and stairways and elevators and any other substantial
47 modification of any of a public building's systems.

48 Representatives of building occupants means (a) employee organizations; (b) other
49 representatives or agents designated in writing as such by individuals employed in or occupying
50 a public building; (c) parents organizations and other representatives of students in schools; and
51 (d) legal guardians of building occupants who have not reached the age of majority.
52 "Representatives of building occupants" does not include representatives of the general public
53 who use a public building on an intermittent basis.

54 Section 3. Division of Indoor Environments.

55 (a) There shall be within the Department of Public Health a Division of Indoor
56 Environments within the Center for Environmental Health. The Commissioner of the Department
57 of Public Health shall appoint the Director of the Division of Indoor Environments.

58 (b) The Division of Indoor Environments shall administer and enforce the provisions
59 of this Act.

60 (c) When the building occupant is an employee of the building owner, the Division of
61 Occupational Safety also shall have the power to administer and enforce the provisions of this
62 Act.

63 (d) The Department of Public Health, in consultation with the Division of
64 Occupational Safety, shall promulgate such regulations as are required by this Act as well as
65 such regulations it deems will aid the efficient and effective implementation of this Act and the
66 standards and procedures for which this Act provides. The Director, in consultation with the
67 Commissioner, shall propose to the Commissioner of Public Health such regulations as the
68 Director may, from time to time, determine are necessary for this purpose. As an aid in
69 considering said regulations, the Commissioner of Public Health shall have access to the research
70 and resources and seek the advice of the various divisions and pro- grams in the Department of
71 Public Health and the Division of Occupational Safety concerned with similar issues.

72 (e) The Division of Occupational Safety shall adopt all such regulations promulgated
73 by the Department of Public Health as relate to sections 7, 9, 10, 11, 12 hereof within 90 days of
74 their promulgation by the Department of Public Health.

75 (f) Nothing in this section shall limit the powers granted to and responsibilities
76 imposed upon the Division of Occupational Safety by Chapter 149 of the General Laws.

77 Section 4. Access to Buildings and Records by the Division.

78 (a) For the purpose of administering the provisions of this Act, the Director shall have
79 access and entry at reasonable times to the premises of any public building to investigate
80 compliance with this Act. When the building owner is the employer of some or all of the
81 building occupants, the Commissioner shall have access and entry at reasonable times to the
82 premises of a public building to investigate compliance with this Act. If a building owner or
83 anyone acting on its behalf or as its agent refuses or fails to comply with a request by either of
84 the Director or the Commissioner for access to a public building, the supreme judicial or superior
85 court shall have jurisdiction to order compliance.

86 (b) For the purpose of enforcing the provisions of this Act, a building owner shall,
87 upon the request of the Director, permit the Director, at reasonable times, to have access to and
88 to copy all records related to this Act or its enforcement. When the building owner is the
89 employer of some or all of the building occupants, the building owner shall, upon the request of
90 the Commissioner, permit the Commissioner, at reasonable times, to have access to and to copy
91 all records related to this Act or its enforcement. If a building owner or anyone on in its behalf or
92 as its agent refuses or fails to comply with such a request by either said Director or said
93 Commissioner, the superior court shall have jurisdiction to order compliance.

94 (c) Any person who obstructs the Director or the Commissioner in the performance of
95 the duties described subsections (a) or (b) of this section 4 shall be punished by a fine of not less

96 than one thousand and no more than five thousand dollars or by imprisonment for not more than
97 six months, or both, for each instance of the offense.

98 Section 5. Indoor Environmental Compliance Program.

99 Within one year of the effective date of this Act, each building owner shall establish
100 for each public building under its control a written indoor environmental compliance program
101 which shall contain the information and documents required by section 6, and which shall
102 contain procedures for implementing the actions and standards contained in sections 7, 8 and 9.
103 Each building owner shall identify in its indoor environmental compliance program a designated
104 person who shall be responsible for the day-to-day implementation of the indoor environment
105 compliance program and for all recordkeeping responsibilities connected therewith. A copy of
106 the indoor environmental compliance program shall be kept in said public building and be
107 available to the public for inspection and, in addition, available electronically, wherever
108 possible.

109 Section 6. Information to be included in Indoor Environmental Compliance Program.

110 Indoor environment compliance programs shall include, at a minimum, the following
111 information:

112 (a) A written narrative description of the facility's building systems;

113 (b) Single-line schematics or as-built construction documents which locate major
114 building system equipment and the areas that they serve;

115 (c) Information relating to the daily operation and management of the building
116 systems, which shall include, at a minimum, a description of all normal operating procedures,

117 special procedures such as seasonal start-ups and shutdowns, and a list of operating performance
118 criteria including, but not limited to minimum outside air ventilation rates, potable hot water
119 storage and delivery temperatures, range of relative humidity, and any space pressurization
120 requirements;

121 (d) A general description of the building and its function including but not limited to,
122 work activity, number of employees and visitors, hours of operation, weekend use, and known
123 air contaminants released in the building;

124 (e) As-built construction documents, HVAC system commissioning reports, HVAC
125 systems testing, adjusting and balancing reports, operations and maintenance manuals, water
126 treatment logs, and operator training materials;

127 (f) A written maintenance program for the building systems, which shall be
128 preventive in scope and reflect equipment manufacturers' recommendations and best practices as
129 determined by the building systems maintenance industry. At a minimum, the maintenance
130 program shall describe the equipment to be maintained, and establish maintenance procedures
131 and frequency of performance; and

132 (g) A checklist for the visual inspection of building systems that accords with the
133 regulations promulgated by the Department of Public Health.

134 Section 7. Complaints.

135 Each building owner shall establish procedures for receiving and responding to
136 reports and complaints from building occupants and building occupant representatives regarding
137 building conditions, the indoor environment and building maintenance. Where the Department of

138 Public Health has promulgated regulations or where the Division of Indoor Environments has
139 established standard procedures and forms for the above, each building owner shall use the
140 relevant procedures and forms. Building owners shall maintain a written record of all reports and
141 complaints they receive from building occupants and the remedial actions, if any, taken to
142 respond to the reports and complaints.

143 Section 8. Reporting Building-Related Illnesses.

144 Each building owner shall establish procedures for receiving reports from building
145 occupants regarding symptoms or illnesses that may be related to conditions in a public building.
146 Each building owner shall maintain a written record of such reports which shall include, at a
147 minimum, information on the nature of the symptom or illness reported, the number of building
148 occupants affected, the date of each report was received from a building occupant, and the
149 remedial action, if any, taken to correct the source of the problem, or any other response to the
150 report.

151 Section 9. Inspections.

152 Each building owner shall perform a visual inspection annually and a thorough
153 building condition survey every five years of each public building under its control for
154 compliance with the standards promulgated by the Division of Indoor Environments pursuant to
155 section 10 of this Act. The five-year building condition survey shall be conducted by an
156 independent licensed architect or engineer or other appropriately qualified professional. Within
157 six months of the effective date of this Act, the Department of Public Health shall promulgate
158 regulations containing the standard procedures to be followed in the performance of the visual

159 inspection and the five-year building condition survey. The annual visual inspection shall, at a
160 minimum, consider the following:

161 (a) The building site, including utilities, paving, playgrounds, and play fields.

162 (b) Roofing.

163 (c) Exterior elements of the building, including walls, doors, windows, fire escapes.

164 (d) Building structural elements.

165 (e) Building interiors, including finishes, doors, and hardware.

166 (f) Special construction, including stairs, elevators, escalators, and swimming pools.

167 (g) Environmental features, including appearance, cleanliness, acoustics, lighting
168 quality, thermal comfort, humidity, ventilation and space adequacy.

169 (h) Complaints and medical reports received by the building owner pursuant to this
170 Act since the last annual and five-year building condition survey.

171 The five-year building condition survey shall, at a minimum, consider the following:

172 (a) The building site, including utilities, paving, playgrounds, and play fields.

173 (b) Roofing.

174 (c) Exterior elements of the building, including walls, doors, windows, fire escapes.

175 (d) Building structural elements.

176 (e) Building interiors, including finishes, doors, and hardware.

177 (f) Electrical systems, including service and distribution, lighting, communications,
178 technology infrastructure and cabling.

179 (g) Plumbing, including water distribution systems, drainage and fixtures.

180 (h) Heating and cooling systems, including boilers, furnaces, terminal units, and
181 control systems.

182 (i) Ventilation systems.

183 (j) Air conditioning systems, including refrigeration, terminal units, and control
184 systems.

185 (k) Special construction, including stairs, elevators, escalators, and swimming pools.

186 (l) Fire protection and security systems, including alarm, detection, and fire
187 protection.

188 (m) Environmental features, including appearance, cleanliness, acoustics, lighting
189 quality, thermal comfort, humidity, ventilation and space adequacy.

190 (n) Complaints and medical reports received by the building owner pursuant to this
191 Act since the last annual visual inspection and five-year building condition survey, as
192 appropriate.

193 Each building owner shall publish the results of each annual and five-year building
194 condition survey on its public web site or, if such a site does not exist, as a written report that it
195 shall make available to the public. Each building owner shall e-mail each such report within
196 thirty days of its completion to the Director and where the building owner is also an employer of

197 some or all of the building occupants, also to the Commissioner. The Director shall cause each
198 such report to be published on the Department of Public Health's web site where it shall remain
199 for at least five years. The Commissioner shall cause each such report he receives to be
200 published on the Division of Occupation Safety's web site

201 269 where it shall remain for at least five years. Building owners shall keep records of
202 annual inspections and five year building condition surveys for at least ten years.

203 Section 10. Standards.

204 Within six months of the effective date of this Act, the Department of Public Health,
205 shall promulgate regulations establishing indoor environmental standards for each of the subjects
206 listed below. Within six months of the promulgation of said standards, each building owner shall
207 take the actions required by said standards in each public building under its control and
208 incorporate means for implementing each standard within the indoor environmental compliance
209 program for each said public building.

210 (a) The maintenance and operation of HVAC systems.

211 (b) Ventilation of point sources of contaminants.

212 (c) Humidity.

213 (d) Heating.

214 (e) Air exchange.

215 (f) Ventilation of buildings without mechanical ventilation systems.

216 (g) Maintenance of non-ducted air plenums.

- 217 (h) Storage of hazardous materials.
- 218 (i) Asbestos.
- 219 (j) Fiberglass.
- 220 (k) Lead paint
- 221 (l) Outdoor air contaminants.
- 222 (m) Water intrusion.
- 223 (n) Microbial contamination.
- 224 (o) Cleaning.
- 225 (p) Building entrances and exits.
- 226 (q) Sound levels.
- 227 (r) Light levels.
- 228 (s) Sanitary facilities.
- 229 (t) Potable water.
- 230 (u) Protective equipment and training for maintenance workers and custodians.
- 231 (v) Procedures and forms for implementing section 7 of this Act.

232 Section 11. Hazardous Chemicals.

233 Each building owner shall evaluate any hazardous substances or chemicals currently
234 in use in a public building under its control and maintain an inventory of the same. Each building

235 owner shall assure that each such substance or chemical is the least toxic alternative feasible for
236 the purpose for which it is intended. Each building owner shall assure for each public building
237 under its control that cleaning and maintenance chemicals, pesticides, and other hazardous
238 substances are used and applied according to the relevant manufacturers' recommendations and
239 material safety data sheets, and shall post notices in clear sight in areas to be treated with
240 potentially hazardous substances at least 24 hours prior to application. Said notices shall include
241 information of the identity of substances intended to be applied and any precautions that should
242 be taken by occupants in those areas. The requirements of this section 11 are in addition to the
243 requirements established by G.L. c. 111F, c. 132B and other applicable statutes and regulations.

244 Section 12. Renovations.

245 Whenever a public building is renovated while continuing to be occupied, the
246 building owner shall take such measures as are needed to assure that the indoor environment
247 experienced by building occupants is not degraded during the renovation as a result of activities
248 or products used in work sites or from any other cause related to the renovation. Such measures
249 shall include, but not be limited to the following:

250 (a) Except in emergencies, the building owner shall provide notice to occupants and
251 the representatives of building occupants of the renovations, including a description of their
252 scope and timing. In the case of emergencies, such notice shall be provided as soon as reasonably
253 possible.

254 (b) Before renovation or similar activities are begun, the building owner, together
255 with representatives of building occupants, shall meet with the contractor or individual(s)
256 performing the work and shall develop and implement a work plan designed to prevent the entry

257 of air contaminants into occupied areas of the building during and after the performance of the
258 work.

259 (c) At a minimum, the work plan shall provide for:

260 (i) the continued effective functioning of the HVAC systems in the occupied portions
261 of the building during the renovation;

262 (ii) isolation of work areas from the occupied portions of the building and appropriate
263 negative pressure containment;

264 (iii) air contaminant suppression controls and/or auxiliary air filtration/cleaning
265 within the occupied portions of the building;

266 (iv) controls to prevent air contaminant entry into the HVAC air distribution system;

267 (v) measures to minimize the impact of noise or vibration from the renovation on the
268 occupied parts of the building;

269 (vi) measures to ensure that all building materials and furnishings are kept dry before
270 they are installed or used in the building;

271 (vii) augmented cleaning in occupied parts of the building during the renovation
272 project;

273 (viii) measures for maintaining adequate heat in the occupied portions of the building;

274 (ix) the identity and contact information of the person responsible for complying with
275 this section of the Act;

276 (x) regular public posted notices of scheduled renovation activities, and

277 (xi) emergency procedures, including a plan for evacuating occupants from the
278 building.

279 Section 13. Recordkeeping.

280 (a) Maintenance records. Each building owner shall maintain the inspection and
281 maintenance records required by this Act, which shall include the specific remedial or
282 maintenance actions taken, the name and affiliation of the individual performing the work, and
283 the date of the inspection or maintenance activity.

284 (b) Complaints and Reports of Illnesses. The building owner shall maintain a record
285 of building occupant complaints and reports of illnesses or symptoms that may be associated
286 with public building conditions in accordance with sections 7 and 8 of this Act, and of other
287 communications received from or sent to building occupants regarding building conditions or
288 symptoms or illnesses related to public building conditions. All complaints shall be promptly
289 transmitted to the designated person for resolution.

290 (c) Indoor Environmental Compliance Program. Each building owner shall maintain
291 all other records generated as a result of the indoor environmental compliance program
292 applicable to a public building under its control or as a result of any action taken with regard to
293 this Act.

294 (d) Retention of records. Records required to be kept under section 6 shall be
295 maintained in perpetuity. The building owner shall retain all other records required to be

296 maintained under this section for a minimum of ten years, unless the record is required to be
297 maintained for a longer period of time by some other statute.

298 (e) Availability. The records subject to this section shall be available on request to
299 building occupants and their representatives for examination and copying within three business
300 days of a request made.

301 Section 14. Building Occupant's Right to Request an Inspection.

302 (a) Any building occupant or representative of a building occupant who believes that
303 a violation of this Act exists in any public building may request an inspection of such workplace
304 by the Director by giving written notice of the alleged violation to said Director setting forth the
305 grounds for the notice. When a building occupant is the employee of the building owner, the
306 building occupant also may request an inspection by the Division of Occupational Safety by
307 giving written notice of the alleged violation to the Commissioner setting forth the grounds for
308 the notice. For the purpose of this section "inspection" shall include an inspection of any public
309 building, or an inspection of the records required to be kept by this Act. The identity of any
310 person requesting such an inspection shall be kept confidential unless said person waives his
311 right to confidentiality in writing.

312 (b) If, upon receipt of notification of a request for inspection, the Director or the
313 Commissioner, depending on which received the request for inspection, determines that there are
314 reasonable grounds to believe that the alleged violation exists, he shall cause an inspection to be
315 made as soon as necessary to prevent immediate harm to building occupants or otherwise as soon
316 as practicable to determine if the alleged or any other violation exists. Inspections under this
317 section need not be limited to matters referred to in the complaint.

318 (c) Within thirty days of the completion of said inspection, the Director or the
319 Commissioner, depending on which received the request for inspection, shall issue a report
320 detailing its findings and recommendations, and provide copies to the building occupant or
321 representative of a building occupant who requested the inspection, and to the building owner.

322 Section 15. No Retaliation.

323 No person shall retaliate or discriminate in any manner against a building occupant or
324 a representative of a building occupant because the building occupant or the representative of a
325 building occupant has filed a complaint, initiated or caused to be initiated any proceeding under
326 or related to this Act, has testified or is about to testify in any proceeding related to or arising out
327 of this Act or has taken any action permitted by this Act or exercised on behalf of himself or
328 others any right afforded by this Act.

329 Section 16. Enforcement.

330 (a) The Director or the Commissioner, depending on who received the request for
331 inspection, shall review the report resulting from an inspection performed pursuant to section
332 14.

333 (b) If, on the basis of the report, the Director or Commissioner, depending on which
334 received the request for inspection, concludes that the building owner has violated any portion of
335 this Act, he shall issue an order requiring the building owner to remedy the violations. Such
336 order shall include a timeline for implementation for each remedy ordered. If the building owner
337 does not take the actions prescribed by the order within the time prescribed by the order, the
338 superior court for the county in which the public building subject to the report is located shall

339 have jurisdiction to compel compliance upon the request of said Director, Commissioner, or an
340 occupant of the affected building.

341 (c) The Director or Commissioner, depending on which received the request for
342 inspection, shall provide the building occupant or representative of a building occupant who
343 requested the inspection with a copy of the order to comply with this Act, or, if he has
344 determined that there has been no violation, with written notification of his determination that
345 there is no violation and the reasons therefor, within 48 hours of the issuance of the order or the
346 making of the determination that there has not been a violation of the Act.

347 (d) Any person aggrieved by an action or the lack thereof of the Director or the
348 Commissioner concerning sections 14 and 16 of this Act may appeal such action to the superior
349 court for the county in which the public building subject to the action or lack thereof is located.

350 (e) The Director may order the evacuation of a building at any time if he determines
351 with or without an inspection having been performed that an emergency exists that presents an
352 immediate danger to the health or safety of building occupants as a result of a violation of the
353 requirements of this Act. Where the building owner is the employer of some or all of the building
354 occupants, the Commissioner may order the evacuation of a building at any time if he
355 determines, with or without an inspection having been performed, that an emergency exists that
356 presents an immediate danger to the health or safety of building occupants, who are employees
357 of the building owner, as a result of a violation of the requirements of this Act. The superior
358 court for the county in which the public building subject to the evacuation order is located shall
359 have jurisdiction to compel compliance.