

HOUSE No. 2138

The Commonwealth of Massachusetts

PRESENTED BY:

Denise Provost

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act reducing human exposure to particulate matter pollution.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Denise Provost</i>	<i>27th Middlesex</i>	<i>1/20/2017</i>
<i>José F. Tosado</i>	<i>9th Hampden</i>	<i>1/20/2017</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>	<i>1/27/2017</i>
<i>Jonathan Hecht</i>	<i>29th Middlesex</i>	<i>1/27/2017</i>
<i>Patricia D. Jehlen</i>	<i>Second Middlesex</i>	<i>2/3/2017</i>
<i>Michelle M. DuBois</i>	<i>10th Plymouth</i>	<i>1/20/2017</i>
<i>Christine P. Barber</i>	<i>34th Middlesex</i>	<i>1/20/2017</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>1/20/2017</i>
<i>Paul R. Heroux</i>	<i>2nd Bristol</i>	<i>1/20/2017</i>

HOUSE No. 2138

By Ms. Provost of Somerville, a petition (accompanied by bill, House, No. 2138) of Denise Provost and others for legislation to reduce human exposure to particulate matter pollution. Environment, Natural Resources and Agriculture.

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE HOUSE, NO. 741 OF 2015-2016.]

The Commonwealth of Massachusetts

**In the One Hundred and Ninetieth General Court
(2017-2018)**

An Act reducing human exposure to particulate matter pollution.

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 18. Chapter 17 of the General Laws is hereby amended by inserting
2 after Section 20 the following sections:—

3 “particulate matter” shall mean the broad class of chemically and physically
4 diverse substances that exist as discrete particles in air, including coarse, fine, and ultrafine
5 particles

6 “fine particles” shall mean particles less than or equal to 2.5 micrometers in
7 diameter

8 “ultrafine particles” shall mean particles less than or equal to .1 micrometers in
9 diameter (.1 micrometers is equivalent to 100 nanometers)

10 “nanoparticles” shall have the same meaning as “ultrafine particles”

11 “black carbon” shall mean those fine particles less than or equal to 2.5 micrometers in
12 diameter (also known as soot)

13 “exposure” shall mean inhalable particulate matter that is emitted from pollution sources
14 and which may come into contact with human respiratory systems

15 “substantially reduced” shall mean particulate matter levels which meet a verifiable
16 reduction in indoor ultrafine particle levels by 80% relative to outdoor levels

17 “minimal exposure” shall mean indoor particulate matter levels 80% or more lower than
18 outdoor levels

19 “mitigations” are modifications to sites or structures which reduce levels of particulate
20 matter pollution, these shall include, but are not limited to: the implementation of filtration
21 systems, location of air inlets, sound-proofing, land use buffers, vegetative or structural barriers,
22 decking over highway, building set-backs (siting), trees, gardens, and/or parks.

23 SECTION 18A. This Act may be cited as the ‘Healthy Breathing Act’

24 SECTION 18B. Chapter 21A of the General Laws, as appearing in the 2004
25 Official Edition, is hereby amended by inserting after section 18A the following section:-

26 SECTION 18C. The department of environmental protection, in consultation
27 with the department of public health, shall promulgate regulations based on the best available
28 science for conducting health risk assessments for exposure to ultrafine, fine, and black carbon
29 particulate matter concentrations present in the indoor air of existing and proposed buildings.

30 (a) To ensure the accuracy and completeness of the assessment, these guidelines shall
31 set
32 forth standard procedures for conducting air dispersion modeling, managing air pollution,
33 monitoring particulate matters, and estimating exposure.

34 (b) The department of environmental protection shall by regulation or by
35 subregulation
36 guidance establish standards and operating procedures for air quality verification testing.

37 SECTION 18D. Section 10 of chapter 28A of the General Laws, as so appearing,
38 is hereby amended by adding the following paragraph:-

39 (g) The agency shall issue an original license for a school age child care
40 program, day care center, family day care home or large family day care home which is not a
41 part of a family day care system, family day care system, group care facility or temporary shelter
42 facility located within 500 feet of a high-activity roadway as defined in section 1A of chapter
43 40A of the General Laws or a train station or train yard serving diesel locomotives only after the
44 applicant has carried out the health risk assessment described in section 18B of chapter 21A of
45 the General Laws and the assessment results indicate either:

46 (i) that short-term and long-term exposure to air at the site will pose no significant
47 health risk, or

48 (ii) can and will be mitigated so as to pose no significant health risk.

49 SECTION 18E. Section 1A of chapter 40A of the General Laws, as so
50 appearing, is hereby amended by inserting before the definition of “permit granting authority”
51 the following definitions:-

52 “high-activity roadway” shall mean any roadway that, on an average day, has
53 traffic in excess of 50,000 vehicles.

54 “hospital” shall mean any institution in the Commonwealth of Massachusetts,
55 however named, whether conducted for charity or for profit, which is advertised, announced,
56 established or maintained for the purpose of caring for persons admitted thereto and staying
57 overnight for diagnosis or medical, surgical or restorative treatment which is rendered within
58 said institution; but shall not include clinics, day surgery centers, dialysis centers, or other such
59 health care facilities which do not admit patients overnight.

60 “long-term care facility” shall mean any institution whether conducted for
61 charity or profit which is advertised, announced or maintained for the express or implied purpose
62 of providing three or more individuals admitted thereto with long-term resident, nursing,
63 convalescent or rehabilitative care; supervision and care incident to old age for ambulatory
64 persons; or retirement home care for elderly persons. Long-term care facility shall include
65 convalescent or nursing homes, rest homes, and charitable homes for the aged.

66 “particulate matter mitigation” shall mean verifiable strategies structural and
67 nonstructural that minimize exposure to particulate matter pollution.

68 “public open space” shall mean space intended for use by the general public or by
69 occupants or users of adjacent building for sports, play, recreation, relaxation, gardening, or

70 other outdoor activities; but shall not include passive green spaces, landscaped areas, planted
71 buffer zones, or other open spaces which are not designed for recreational activity.

72 “publicly funded” shall mean any entity or institution which receives federal, state or
73 municipal monies and/or subsidies.

74 “publicly subsidized” shall mean any project receiving any form of direct funding, loan,
75 loan guarantee, tax credit, TIF funding, publicly bonded funds, or property tax incentives(?),
76 issued or granted by any public or quasi-public entity.

77 “construction” shall mean new construction or substantial rehabilitation.

78 SECTION 18F. Section 1A of chapter 40A of the General Laws, as so
79 appearing, is hereby amended by inserting after the definition of “permit granting authority” the
80 following definition:-

81 “school” shall mean any public or private institution primarily engaged in the
82 education of persons aged 18 years and younger. This definition does not include institutions of
83 higher education.

84 SECTION 18G. Section 9 of chapter 40A of the General Laws, as so appearing,
85 is hereby amended by adding the following paragraph:-

86 No publically funded or publically subsidized residential development, hospital,
87 long-term care facility, school, or public open space shall be permitted to be constructed as of
88 right without a special permit issued upon the finding set forth in Section 9D of Chapter 40A
89 (OR if the plans for such facility include either a building structure, apart from parking structures

90 and accessory structures, or public open space) within 500 feet of a high-activity roadway or a
91 train yard or train station serving diesel locomotives.

92 SECTION 18H. No permit granting authority shall grant a building permit for
93 any proposed residential development, hospital, long-term care facility additions or school within
94 500 feet of a high-activity roadway or a diesel rail yard or station, unless

95 (a) the owner or applicant carries out a health risk assessment consistent with the
96 regulations adopted pursuant to section 18B of chapter 21A of the General Laws, and

97 (b) the assessment results indicate that short-term and long-term exposure to air
98 at the site poses no significant health risk, or

99 (c) such exposure can and will be mitigated so as to substantially reduce exposure
100 and minimize impacts to human health by

101 (d) a certified industrial hygienist, licensed environmental engineer or other
102 professional with the necessary skill and abilities to conduct indoor and outdoor air pollution
103 monitoring who is acceptable to the department of environmental protection, in consultation with
104 the department of public health.

105 SECTION 18I: Subsection a of section 6 of chapter 70B of the General Laws, as
106 so appearing, is hereby amended by inserting after subparagraph (6) the following paragraph:-

107 (7) If the school project includes structures, apart from parking structures and
108 accessory structures, within 500 feet of a high-activity roadway as defined in Section 1A of
109 Chapter 40A of the General Laws or a train station or train yard serving diesel locomotives, the
110 applicant has carried out the health risk assessment described in section 18B of chapter 21A of

111 the General Laws and the assessment results indicate that short-term and long-term exposure to
112 air at the site will pose no significant health risk, or that such exposure can and will be mitigated
113 so as to pose no significant risk to human health.

114 SECTION 18J: Section 51 of Chapter 111 of the General Laws, as so appearing,
115 is hereby amended by inserting after the second paragraph the following paragraph:-

116 No original license shall be issued to establish a hospital so as to place structures
117 or public open spaces inhabited by patients within 500 feet of a high-activity roadway or a train
118 station or train yard serving diesel locomotives unless the developer has carried out the health
119 risk assessment described in section 18B of chapter 21A of the General Laws and the assessment
120 results indicate that short-term and long-term exposure to air at the site will pose no significant
121 health risk, or that such exposure can and will be mitigated so as to pose no significant risk to
122 human health. In the case of a facility previously licensed as a hospital in which there is only a
123 change in ownership, no such health risk assessment shall be required, in the absence of
124 expansions or new construction.

125 SECTION 18K: Section 71 of Chapter 111 of the General Laws, as so
126 appearing, is hereby amended by inserting after the second paragraph the following paragraph:-

127 No original license shall be issued to establish a convalescent or nursing home,
128 rest home or charitable home for the aged so as to place residential structures within 500 feet of a
129 high-activity roadway as defined in section 1 of chapter 40A or a train station or train yard
130 serving diesel locomotives unless the developer has carried out the health risk assessment
131 described in section 18B of chapter 21A of the General Laws and the assessment results indicate
132 that short-term and long-term exposure to air at the site will pose no significant health risk, or

133 that such exposure can and will be mitigated so as to pose no significant risk to human health. In
134 the case of a facility previously licensed in which there is only a change in ownership, no such
135 health risk assessment shall be required, in the absence of expansion or new construction