

# SENATE . . . . . No. 2179

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## The Commonwealth of Massachusetts

PRESENTED BY:

***Barry R. Finegold***

*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 relative to eliminating gas leaks.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>Barry R. Finegold</i>	<i>Second Essex and Middlesex</i>	
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>	<i>2/26/2021</i>
<i>Christina A. Minicucci</i>	<i>14th Essex</i>	<i>3/31/2021</i>

# SENATE . . . . . No. 2179

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By Mr. Finegold, a petition (accompanied by bill, Senate, No. 2179) of Barry R. Finegold, Jack Patrick Lewis and Christina A. Minicucci for legislation to eliminate gas leaks.  
Telecommunications, Utilities and Energy.

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## The Commonwealth of Massachusetts

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In the One Hundred and Ninety-Second General Court  
(2021-2022)  
\_\_\_\_\_

An Act relative to eliminating gas leaks.

*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. Chapter 30A of the General Laws is hereby amended by inserting, after  
2   Section 10A, the following new section:-

3           Section 10B. Notwithstanding the provisions of section 10, in any adjudicatory  
4   proceeding conducted by the department of public utilities regarding any petition, request for  
5   approval or investigation of a gas company or an electric company, as defined in section 1 of  
6   chapter 164, the following shall be allowed to participate fully as a party in such proceeding: (a)  
7   any municipality that is within the service area of such company; (b) any member of the general  
8   court whose district includes ratepayers within the service area of such company; and (c) any  
9   group of not fewer than 10 persons who are ratepayers within the service area of such company.

10          SECTION 2. Section 1 of Chapter 164 of the General Laws is hereby amended by  
11   inserting the following definition:-

“Critical root zone of a tree”, the area measured from the trunk of a tree at a radius of 1 foot per inch of the diameter of the trunk of such tree at 4.5 feet above grade.

SECTION 3. Section 1 of Chapter 164 of the General Laws is hereby amended by inserting, after the first use of the phrase “sell electricity” the following language:-

and to make, distribute or sell renewable thermal energy through a distribution system, provided, however, that such thermal energy will reduce emissions of greenhouse gases in accordance with chapter 21N; and further provided, however, that gas company shall not mean an alternative energy provider; and further

SECTION 4. Section 1E of Chapter 164 is hereby amended by inserting, after the first use of the word “standards,” the following:- for

SECTION 5. Section 1E of Chapter 164 is hereby amended by inserting, after the first use of the word “public,” the following:- health and public

SECTION 6. Section 70 of Chapter 164 is hereby amended by striking the word “selectmen” and inserting thereof:- “select board”

SECTION 7. Section 70 of Chapter 164 is hereby amended by inserting, after the last sentence, the following:-

For the purposes of this section, damage to property shall include any tree on public or private property damaged or killed by gas migrating into the critical root zone of such tree or by construction in the critical root zone of such tree during the course of repairing or replacing gas infrastructure. A municipality or person whose property is alleged to have been damaged by a gas company may submit a claim for such damages against a gas company with the department

which shall follow the procedures of chapter 30A for the resolution of any such claim, provided, however, that such claim for damage to a tree as a result of a gas leak or construction by a gas company must be substantiated by a certified arborist; provided further that the detection of methane in the critical root zone of a tree that has dead or dying branches shall be a rebuttable presumption that such methane is the cause of the decline or death of such tree. Nothing in this section shall prevent a municipality from further regulating the opening of streets or the use of public ways by a gas company, or from conditioning the consent of such municipality to dig up and open the ground.

SECTION 8. Section 75 of Chapter 164 is hereby amended by deleting the words, “the aldermen or selectmen,” and inserting thereof the following:-

(a) The city council, aldermen or select board of a municipality

SECTION 9. Section 75 of Chapter 164 is hereby amended by inserting, after the word “towns,” the following:-

and may regulate, restrict and control all acts and doings of a corporation subject to this chapter which may in any manner affect the health, safety, convenience or property of the inhabitants of their towns, and may require such corporation to confer with municipal officials to address coordination of services provided and construction undertaken by such corporation, including but not limited to grants of location and type of infrastructure installed or replaced.

(b) A municipality may file with the department a complaint alleging a breach by an electric or gas company of its franchise or a breach of any regulation issued by the department, or a breach of any provision of this chapter. The department shall investigate any such complaint, including holding a public hearing at which the municipality shall participate as a

party according to the procedures of chapter 30A. The department shall issue a written decision describing the resolution of such complaint, which decision shall be made public.

SECTION 10. Section 116B of Chapter 164 is hereby amended by striking the first sentence and inserting thereof the following:-

(a) Whenever the commonwealth or a city or town undertakes the repair of streets, roads or sidewalks the appropriate gas company shall provide for the maintenance and improvement of each gas critical valve, shutoff valve, gate valve, and valve box cover located in the streets, roads or sidewalks to be repaired, so that the gate boxes are more easily and immediately accessible; provided, further, that the gas company shall comply with the requirements of section 144.

SECTION 11. Section 116B of Chapter 164 is hereby amended by inserting after the end of the last sentence the following:-

(b) Within twelve months following the effective date of this provision, a gas company shall locate by global positioning system and by street address each gas critical valve, shutoff valve, gate valve, and valve box cover and shall (i) record its location, (ii) ensure its accessibility and visibility, (iii) repair, replace or upgrade it as necessary to be in working order and in compliance with applicable federal and state laws and regulations, and (iv) thereafter no less than once every 5 years ensure that such valves are in compliance with applicable federal and state laws and regulations. A gas company shall provide such locations and repair status to police and fire departments of the municipality. A gas company may apply for funds under chapter 90 to assist in paying the costs of locating, repairing or replacing each such gas critical valve, shutoff valve, gate valve, and valve box cover.

SECTION 12. Section 144 of Chapter 164 is hereby amended by deleting the word “natural” the first two times it is used.

SECTION 13. Section 144(b)(2) of Chapter 164 is hereby amended by inserting, after first use of the word “property,” the following:- , as determined by a gas company, a municipal fire department, or the department of transportation. A Grade 1 leak shall include any gas reading that is (i) in equipment owned by a gas company inside a building, (ii) within 15 feet of an outside wall or foundation, or (iii) a gas-in-air reading of 1 percent or higher inside a manhole or confined space.

SECTION 14. Section 144(b)(2) of Chapter 164 is hereby amended by striking the last sentence and inserting thereof the following:- A gas company shall notify within an hour or less of detection the fire department and chief law enforcement officer in each city or town where a Grade 1 leak is identified.

SECTION 15. Section 144(b)(3) of Chapter 164 is hereby amended by striking all words after “hazard” and inserting thereof the following:- to be completed as immediately as possible. The gas company shall immediately schedule a completion of repairs, such repair to be completed within 6 months of detection, and the condition of such leak shall be kept under surveillance at a frequency of not less than once every two weeks until the hazard or source of the leak is eliminated. A Grade 2 leak shall include: (i) any leak migrating into the critical root zone of a tree; (ii) any leak within 40 feet of a foundation or wall that is not classified as a Grade 1 leak; (iii) any leak deemed of sufficient magnitude by the fire chief of a municipality to be hazardous or to be a public nuisance; and (iv) any leak within 150 feet of a school zone, as defined in subsection (d). A gas company shall notify within an hour or less of detection the fire

department and chief law enforcement officer in each city or town where a Grade 2 leak is identified.

(A) A municipality or person whose property is alleged to have been damaged by a gas company may submit a claim against such gas company for such damages with the department, which shall follow the procedures of chapter 30A for the resolution of any such claim. Filing such claim with the department shall not affect any other remedy at law or in equity.

(B) Any suspected damage to a tree due to a gas leak or construction by a gas company shall be reported to the gas company for mandatory inspection by a certified arborist. If a certified arborist determines that a tree is damaged or has been killed by a natural gas leak or construction by a gas company, the gas company shall provide the entity which owns the tree with the funds of equal or greater value to replace the compromised tree. The department shall promulgate rules and regulations to implement this section within 12 months of its effective date.

SECTION 16. Section 144(b)(4) of Chapter 164 is hereby amended by striking the word “12” the first time it appears and inserting thereof: -“6”

SECTION 17. Section 144(b)(4) of Chapter 164 is hereby amended by inserting after the last sentence the following:- A gas company shall notify within an hour or less of detection the fire department and chief law enforcement officer in each city or town where a Grade 3 leak is identified.

SECTION 18. Chapter 164 is hereby amended by striking all words in Section 144(c) and inserting thereof the following:-

(c) (1) For the purposes of this subsection and subsection (c)(1) of section 145, a Grade 3 leak identified as having a significant environmental impact shall be defined by the department using the leak extent method and threshold, defined as an area in which a gas company has detected positive subsurface gas readings surrounded by an area of negative subsurface gas readings. At least every three years a gas company shall reassess the leak extent method and threshold to ensure that the method and threshold are identifying more than 5% of the existing Grade 3 leaks having a significant environmental impact and that the approach is the best available technology for identification of leaks having a significant environmental impact, defined as the 7% of leaks with the highest emissions in the service territory.

(2) Upon the undertaking of a significant project on a public way exposing confirmed gas infrastructure, and with sufficient notice, a municipality or the commonwealth shall submit written notification of the project to a gas company. In response to such notice from the municipality or upon seeking a permit from a municipality to open a public way for the purpose of repairing or replacing leak-prone infrastructure, the gas company shall survey the project area for the presence of Grade 1 leaks, Grade 2 leaks and Grade 3 leaks identified as having a significant environmental impact and shall set repair and replacement schedules for all known or newly detected Grade 1 leaks, Grade 2 leaks and Grade 3 leaks identified as having a significant environmental impact. The gas company shall provide to such municipality for each such leak, the location, history, and leak grade classification as defined in this section, and for each such pipeline, the age, type, condition, operating pressure, size and material. Upon completion of any repair or replacement of leak-prone infrastructure, the gas company shall provide to such municipality a report from a gas inspector that (i) all pipes are installed at the proper depth and all new joints are sealed; (ii) all gas critical valves, shutoff valves, gate valves, and valve box



141 covers are uncovered, accessible, operational, tested and capable of accepting a gate key; (iii) the  
142 repaired or replaced infrastructure is free from defects that could cause new leaks; and (iv) the  
143 repair or replacement has otherwise been properly completed according to state and federal  
144 regulations.

145 SECTION 19. Chapter 164 is hereby amended by striking all words in Section 144(d)  
146 and inserting thereof the following:-

147 (d) A gas company shall survey pipelines in every school zone at least once every 12  
148 months or during the next scheduled survey, whichever is sooner. Grade 3 gas leaks detected in a  
149 school zone shall be repaired by the gas company no later than 6 months from the date the leak  
150 was detected. Grade 1 leaks and Grade 2 leaks shall be repaired as required in subsection (b) of  
151 this section. For the purposes of this section, "school zone" shall mean on or within 150 feet of  
152 the real property comprising a public or private accredited preschool, accredited Head Start  
153 facility, elementary, vocational or secondary school.

154 SECTION 20. Chapter 164 is hereby amended by striking all words in Section 144(e) and  
155 inserting thereof the following:-

156 (e) (1) For the purposes of this subsection, the following words shall have the following  
157 meaning:-

158 "global positioning system," a positioning system using satellites that continuously  
159 transmit coded information. The information transmitted from the satellites is interpreted by  
160 receivers to precisely identify locations on earth by measuring distance from the satellites.

(2) As part of the annual service quality standards report required by section 1I, each gas company shall report to the department the following data as of the time of the report: (i) the location by street address and by the global positioning system of each Grade 1, Grade 2 and Grade 3 leak; (ii) the date each Grade 1, Grade 2 and Grade 3 leak was classified or reclassified; and (iii) the dates of repairs performed on each Grade 1, Grade 2 and Grade 3 leak; and (iv) the location of each such leak according to the global positioning system. A gas company shall specify any reclassification of previously identified leaks in its annual report.

(3) The annual service quality standards report shall include (i) definitions of terms and acronyms; (ii) methodologies and instrumentation used to detect a gas leak and to determine its grade; (iii) the location by street segment of all leak-prone infrastructure to be replaced; (iv) the percent of leak-prone infrastructure remaining under plans mandated by subsection (b) of section 145; (v) safety violations in the territory of a gas company, including but not limited to, over pressurization incidents, third-party hits, and natural force pipe failures, reported both as absolute numbers as well as by incidents per linear mile of pipe; (vi) the cost of replacing all leak prone infrastructure as compared to repairing all known gas leaks in the gas company's service territory; (vi) the cost to ratepayers of lost and unaccounted for gas; and (vii) progress by the department and the gas companies regulated under this chapter towards achieving the targets and benchmarks mandated by chapter 21N.

(4) The annual service quality standards report shall be posted electronically and publicly by March 1 by the department in spreadsheet format.

(5) The department shall post a map of all leaks by grade classification, including those identified as having a significant environmental impact, updated quarterly, showing the location of such leaks throughout the commonwealth.

SECTION 21. Section 144(f) of Chapter 164 is hereby amended by inserting after the last sentence the following:-: As part of such oversight and monitoring, the department shall require an annual audit of leaks reported to the department by gas companies, such audit to be conducted by a qualified independent contractor chosen jointly by the department and the attorney general. Such audit shall include a statistically significant random selection of reported leaks and shall include for each leak (i) the leak classification; (ii) the leak extent measurement; and (iii) the success of any repairs of such leak. The department shall make such audit available to the public by July 1 of each year.

SECTION 22. Section 144 of Chapter 164 is hereby amended by inserting, after the last sentence of the Section 144(f), the following subsection:-

(g) The department shall promulgate regulations establishing uniform standards for winter surveillance and patrol of cast iron pipes subject to hazardous frost cap conditions. Such standards shall meet or exceed federally mandated standards for integrity management requirements for distribution pipelines and shall include criteria to determine the conditions of weather, the duration and oscillation of temperatures around and below 32 degrees Fahrenheit, the type and size of cast iron pipe segments that are prone to cracks and leaks as a result of extended frost cap conditions, and the frequency of surveillance and patrol necessary to ensure public safety from hazardous leaks caused by such cracks. Such winter surveillance and patrol standards shall be in effect from December 15 to March 15 unless weather conditions warrant an

203 earlier start or later end date. Such regulations shall be promulgated by the department within 6  
204 months of the effective date of this subsection.

205 SECTION 23. Chapter 164 is hereby amended by striking all words in Section 145(b)  
206 and inserting thereof the following:

207 (b) A gas company shall file with the department a plan to address aging or leaking gas  
208 infrastructure within the commonwealth in the interest of public health and public safety and  
209 reducing lost and unaccounted for natural gas through a reduction in gas system leaks by number  
210 and by volume.

211 SECTION 24. Section 145(b) of Chapter 164 is hereby amended by deleting the word  
212 “may” both times it appears” and inserting thereof:-“shall”

213 SECTION 25. Section 145(b) of Chapter 164 is hereby amended by deleting the word  
214 “natural” both times it appears”

215 SECTION 26. Section 145(b) of Chapter 164 is hereby amended by inserting, after the  
216 first use of the word “public,” the following:- health and public

217 SECTION 27. Section 145(c) of Chapter 164 is hereby amended by striking the first use  
218 of the words “any plan,” and inserting thereof the following:-

219 (1) For the purposes of this subsection, a Grade 3 leak identified as having a significant  
220 environmental impact shall be defined by the department as set forth in section 144(c)(1) of this  
221 chapter.

222 (2) Any plan

SECTION 28. Section 145(c) of Chapter 164 is hereby amended by inserting after the first use of the phrase “under the plan;” the following:-

(vi) work plans including location by street segments of leak-prone infrastructure scheduled to be replaced as required by this section; and (vii)

SECTION 29. Section 145(c) of Chapter 164 is hereby amended by inserting after the first use of the phrase “evaluate the plan” the following:

Such improvement of existing infrastructure may include repair rather than replacement of a pipe having a Grade 3 leak identified as having a significant environmental impact as classified by section 144 (c), provided, however that such repair shall be cost effective and shall comply with applicable safety regulations related to pipeline infrastructure.

SECTION 30. Section 145(c) of Chapter 164 is hereby amended by inserting after the first use of the phrase “next 5 years,” the following:- a report of any remaining leak-prone infrastructure by street segment remaining in the service territory of the gas company

SECTION 31. Section 145(d) of Chapter 164 is hereby amended by inserting, after the first use of the word “public,” the following:- health and public

SECTION 32. Section 145 of Chapter 164 is hereby amended by adding the following subsection:

SECTION 33. Section 144 of Chapter 164 is hereby amended by inserting, after the last sentence of the Section 144(h), the following subsection:-

(i) Within 30 days of receipt of any plan submitted to the department by a gas company for replacement or improvement of any existing infrastructure pursuant to this section, the

department shall send such plan to the municipality whose service territory is covered by such plan. Within 30 days of approval of such plan, the department shall send such approval to the municipality whose service territory is covered by such plan.

SECTION 34. Chapter 164 is hereby amended by inserting after section 148 the following section:-

Section 149. Upon the undertaking of any planned project involving excavation for purposes of performing maintenance or construction involving gas mains or services by gas company employees, including any blasting work, in advance of any excavation, a gas company shall ensure that employees first locate, identify and mark any gas critical valve, shutoff valve, gate valve, and valve box covers and verify that all such valves are cleared, operational and accessible in clear sight at ground level; and following any such project, that such valves are left cleared, operational, and visible. A gas company shall further ensure that any gas critical valve, shutoff valve, and gate valve in the significant project area has a gate box installed upon it.

SECTION 35. Chapter 164 is hereby amended by inserting after section 148 the following section:-

Section 150. A gas company shall establish for each service territory a program to lend without charge a combustible gas indicator to municipal officials to enable such officials to determine the proximity of a gas leak in an area where such officials intend to plant trees or other vegetation and shall provide training without charge to such officials in the effective use of a combustible gas indicator to detect a gas leak A gas company shall determine with a combustible gas indicator the proximity of a gas leak to trees or other vegetation in any area where it has

265 received permission from the municipality for construction on pipelines and shall report such  
266 results to the municipality.

267 SECTION 36. Chapter 164 is hereby amended by inserting after section 148 the  
268 following section:-

269 Section 151. (a) Each gas company shall maintain a central control room within its  
270 service territory with trained staff sufficient to monitor its pipelines and respond to fluctuations  
271 in pressurization, reportable incident, and infrastructure failures.

272 (b) Notwithstanding any general or special law to the contrary, the department shall  
273 develop, promulgate, and maintain regulations to ensure that gas pressure is monitored by  
274 qualified personnel on each site where work is being performed that involves the pressurization  
275 or depressurization of transmission lines, as is necessary to protect public safety and to prevent  
276 damage to property. The department shall promulgate initial regulations pursuant to this section  
277 not later than 180 days following the passage of this Act.