

HOUSE No. 446

The Commonwealth of Massachusetts

PRESENTED BY:

Paul W. Mark

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 to promote healthy communities and the environment.

PETITION OF:

NAME:

Paul W. Mark

DISTRICT/ADDRESS:

2nd Berkshire

HOUSE No. 446

By Mr. Mark of Peru, a petition (accompanied by bill, House, No. 446) of Paul W. Mark relative to reduction of the volume of non-recycled plastics and other materials that are disposed of in landfills. Environment, Natural Resources and Agriculture.

The Commonwealth of Massachusetts

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

An Act to promote healthy communities and the environment.

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

1 WHEREAS, each year a significant volume of plastic wastes are generated in the
2 Commonwealth which are not recycled through traditional recycling efforts and must therefore
3 be disposed of;

4 WHEREAS, it is in the interests of the people of the Commonwealth to reduce the
5 volume of non-recycled plastics and other materials that are disposed of in landfills;

6 WHEREAS, the Massachusetts Department of Environmental Protection (the
7 Department) recognizes in its Massachusetts 2010-2020 Solid Waste Master Plan: Pathway to
8 Zero Waste (the 2010-2020 Solid Waste Master Plan) that diverting materials from disposal
9 presents important environmental opportunities, economic development opportunities, and
10 disposal cost reduction opportunities for the Commonwealth;

11 WHEREAS, the Department stated in its 2010-20120 Solid Waste Master Plan that the
12 State can do more to divert material from disposal and direct material toward an active and
13 productive second life in the Commonwealth's economy; and

14 WHEREAS, the Department in its 2010-2020 Solid Waste Master Plan recognizes that a
15 number of innovative technologies such as pyrolysis and gasification have advanced in recent
16 years and it is in the Commonwealth's interest to encourage the development of innovative
17 technologies for converting non-recycled plastics into fuels or useful products.

18 NOW, THEREFORE, the time has arrived for the Massachusetts General Court to
19 promote the beneficial conversion of non-recycled plastics via pyrolysis and gasification
20 processes into alternative fuels and other valuable final and intermediate products through the
21 following bill.

22 SECTION 1. Chapter 16 of the General Laws, as appearing in the 2012 Official
23 Edition, are hereby amended by inserting section 21A after section 21:

24 Section 21A: Innovative Technologies.

25 (a) In developing and implementing comprehensive statewide solid waste master plans,
26 the Department of Environmental Protection shall promote the development and use of pyrolysis
27 and gasification processes to divert non-recycled plastics away from landfills and toward
28 conversion into alternative fuels and other valuable final and intermediate products by reducing
29 unnecessary and inappropriate barriers to the siting and operation of facilities utilizing such
30 technologies.

31 (b) Definitions. In this section:

32 [(1) Engineered Fuel. The term “engineered fuel” means a solid fuel that is
33 manufactured from non-recycled constituents of municipal solid waste or other secondary
34 materials.]

35 (2) Gasification. The term “gasification” means a process through which post-use
36 plastics are heated and converted to synthesis gas in an oxygen-deficient atmosphere, which can
37 be converted into fuels such as ethanol or other chemical feedstocks.

38 (3) Post-use plastics. The term “post-use plastics” means plastics that derive from
39 domestic, commercial, municipal, or other sources of activities, plastics that are recycled in
40 commercial markets, and/or other plastics that might otherwise become a waste, where such
41 plastics are processed through pyrolysis or gasification to manufacture crude oil, fuels, and/or
42 other valuable final or intermediate products. Post-use plastics may contain incidental
43 contaminants (e.g., paper labels on plastic bottles, metal rings on plastic bottle caps, etc.).

44 (4) Pyrolysis. The term “pyrolysis” means a process through which post-use plastics are
45 heated in the absence of oxygen until melted and thermally decomposed, and are then cooled,
46 condensed, and converted into crude oil and/or refined into fuels, feedstocks (such as diesel and
47 naphtha), blendstocks, chemicals, waxes, lubricants and/or other raw materials.

48 (c) Study. With respect to post-use plastics that are often deposited in landfills, the
49 Department of Environmental Protection shall conduct a study to determine the manner in which
50 the Commonwealth and the Department of Environmental Protection can promote and make
51 progress toward a cost-effective system (including with respect to environmental issues) through
52 which pyrolysis, gasification, and other innovative technologies such as engineered fuels are
53 used to convert post-use plastics [, alone or in combination with other municipal solid waste or

54 secondary materials,] into materials that can be used to generate electric energy or fuels or as
55 chemical feedstocks.

56 (d) Completion of Study. Not later than 2 years after the date of enactment of this Act,
57 the Department of Environmental Protection shall complete the study described in subsection (c)
58 and submit to the appropriate committees of the General Court reports providing findings and
59 recommendations developed through the study.

60 SECTION 2. Section 2 of chapter 21H of the General Laws, as appearing in the 2012
61 Official Edition, is hereby amended by striking the definition of “solid waste” and inserting the
62 following definition:

63 “Solid waste” or “waste”, garbage, refuse, trash, rubbish, sludge, residue or by-products
64 of processing or treatment of discarded material, and any other solid, semi-solid or liquid
65 discarded material resulting from domestic, commercial, mining, industrial, agricultural,
66 municipal, or other sources of activities, but shall not include solid or dissolved material in
67 domestic sewage or post-use plastics that would otherwise become a solid waste provided the
68 post-use plastics are processed through pyrolysis or gasification to manufacture fuels and/or
69 other valuable final or intermediate products.

70 SECTION 3: Said section 2 of chapter 21H, as so appearing, is hereby amended by
71 inserting the following definitions:

72 “Gasification”, a process through which post-use plastics and non-recycled materials is
73 heated and converted to synthesis gas in an oxygen-deficient atmosphere, which can be
74 converted into fuels such as ethanol or other chemical feedstocks.

75 “Gasification facility,” a facility that collects, separates, stores and/or converts post-use
76 plastics and other materials into fuels and/or other valuable final or intermediate products using a
77 gasification process.

78 “Post-use plastics”, plastics that derive from domestic, commercial, municipal, or other
79 sources of activities, plastics that are recycled in commercial markets, and/or other plastics that
80 might otherwise become a waste, where such plastics are processed through pyrolysis or
81 gasification to manufacture crude oil, fuels, and/or other valuable final or intermediate products.
82 Post-use plastics may contain incidental contaminants (e.g., paper labels on plastic bottles, metal
83 rings on plastic bottle caps, etc.).

84 “Pyrolysis”, a process through which post-use plastics are heated in the absence of
85 oxygen until melted and thermally decomposed, and are then cooled, condensed and converted
86 into crude oil and/or refined into fuels, feedstocks (such as diesel and naphtha), blendstocks,
87 chemicals, waxes, lubricants and/or other raw materials.

88 “Pyrolysis facility”, a facility that collects, separates, stores and/or converts post-use
89 plastics into fuels and/or other valuable final or intermediate products using a pyrolysis process.
90 Pyrolysis facilities shall not be considered “municipal waste combustors” or “municipal waste
91 combustion units”.