LEGISLATIVE COMMITTEE MINUTES

SB367

Bill as Introduced

2022 SESSION

22-2965
08/11

SENATE BILL ***367***

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

SPONSORS: Sen. Avard, Dist 12; Sen. Watters, Dist 4; Sen. Hennessey, Dist 1; Sen. Bradley, Dist 3; Sen. Soucy, Dist 18; Sen. French, Dist 7; Sen. Cavanaugh, Dist 16; Rep. Pearl, Merr. 26; Rep. Potucek, Rock. 6

COMMITTEE: Energy and Natural Resources

ANALYSIS

This bill regulates advanced recycling and manufacturing facilities.

Explanation: Matter added to current law appears in ***bold italics.***
Matter removed from current law appears [~~in brackets and struckthrough.~~]
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

22-2965
08/11

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Two

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 New Paragraphs; Definitions. Amend RSA 149-M:4 by inserting after paragraph I the following new paragraphs:

I-a. "Advanced recycling" means a manufacturing process for the conversion of post-use polymers and recovered feedstocks into basic hydrocarbon raw materials, feedstock chemicals, and other products like waxes and lubricants through processes that include pyrolysis, gasification, depolymerization, catalytic cracking, reforming, hydrogenation, solvolysis, and other similar technologies. The recycled products produced at advanced recycling facilities include, but are not limited to monomers, oligomers, plastics, plastics and chemical feedstock basic and unfinished chemicals, waxes, lubricants, coatings, and other basic hydrocarbons. For the purposes of this chapter, "advanced recycling" shall not be considered solid waste management, solid waste processing, waste processing, treatment, incineration, or combustion.

I-b. "Advanced recycling facility" means a facility that receives, stores, and converts post use polymers and recovered feedstock it receives using advanced recycling. An advanced recycling facility shall be considered a manufacturing facility. For the purposes of this chapter, "advanced recycling facilities" shall not be considered facilities, solid waste facilities, solid waste management facilities, waste management facilities, processing/treatment facilities, solid waste collection, storage, and transfer facilities, processing facilities, treatment facilities, or incinerators.

2 Definition of Certified Waste-Derived Product. Amend RSA 149-M:4, II-a to read as follows:

II-a. "Certified waste-derived product" means a constituent of solid waste which is no longer regulated as a solid waste when certified by the department to be recyclable for its original use or alternate uses and which poses no greater risk to the environment, public health, and safety than exists by producing, distributing, using, or disposing comparable products which are not waste-derived. ***Products derived from advanced recycling shall not be considered waste-derived products or require certification as waste-derived products.***

3 New Paragraph; Depolymerization; Definitions. Amend RSA 149-M:4 by inserting after paragraph V the following new paragraph:

V-a. "Depolymerization" means a manufacturing process where post-use polymers are broken into smaller molecules such as monomers and oligomers or raw, intermediate, or final products, plastics and chemical feedstock basic and unfinished chemicals, waxes, lubricants, coatings, and other basic hydrocarbons.

4 New Paragraph; Gasification; Definitions. Amend RSA 149-M:4 by inserting after paragraph IX-a the following new paragraph:

IX-b. "Gasification" means a manufacturing process through which recovered feedstocks are heated and converted into a fuel and gas mixture in an oxygen-deficient atmosphere and the mixture is converted into valuable raw materials and intermediate and final products, including but not limited to, plastic monomers, chemicals, waxes, lubricants, plastic and chemical feedstock and other basic hydrocarbons that are returned to economic utility in the form of raw materials and products.

5 New Paragraph; Post-Use Polymer; Definitions. Amend RSA 149-M:4 by inserting after paragraph XV the following new paragraph:

XV-a. "Post-use polymer" means a plastic to which all of the following apply:

(a) The plastic is derived from any industrial, commercial, agricultural, or domestic activities.

(b) It is not mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility.

(c) The plastic's use or intended use is as a feedstock for the manufacturing of plastic and chemical feedstock other basic hydrocarbons, raw materials, or other intermediate products or final products using advanced recycling.

(d) The plastic has been sorted from solid waste and other regulated waste but may contain residual amounts of solid waste such as organic material and incidental contaminants or impurities such as paper labels and metal rings.

(e) The plastic is processed at a advanced recycling facility or held at such facility prior to processing.

6 New Paragraphs; Pyrolysis; Recovered Feedstock; Definitions. Amend RSA 149-M:4 by inserting after paragraph XVIII the following new paragraphs:

XVIII-a. "Pyrolysis" means a manufacturing process through which post-use polymers are heated in the absence of oxygen until melted and thermally decomposed and are then cooled, condensed, and converted into valuable raw materials and intermediate and final products, including but not limited to plastic monomers, chemicals, waxes, lubricants, plastic and chemical feedstock and other basic hydrocarbons, that are returned to economic utility in the form of raw materials or products.

XVIII-b. "Recovered feedstock" means one or more of the following materials that has been processed so it may be used as feedstock in an advanced recycling facility:

(a) Post-use polymers.

(b) Materials for which the United States Environmental Protection Agency has made a non waste determination pursuant to 40 C.F.R. 241.3(c), or has otherwise determined are feedstocks and not solid waste.

(c) Recovered feedstock does not include unprocessed municipal solid waste.

(d) Recovered feedstock is not mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility.

7 Definitions; Refuse. Amend RSA 149-M:4, XXI to read as follows:

XXI. "Refuse" means and includes any waste product, solid or having the character of a solid rather than a liquid in that it will not flow readily without additional liquid, and which is composed wholly or partly of such materials as garbage, swill, sweepings, cleanings, trash, rubbish, litter, industrial or domestic solid wastes; organic wastes or residue of animals sold as meat; fruit, vegetable or animal matter from kitchens, dining rooms, markets, food establishments or any places dealing in or handling meat, fowl, fruits, grain or vegetables; offal, animal excreta, or the carcasses of animals; construction and demolition debris; or accumulated waste material, cans, containers, tires, junk, or other such substances which may become a nuisance. ***"Refuse" shall not include post-use polymers and recovered feedstocks converted at an advanced recycling facility or held at such facility prior to conversion.***

8 Solid Waste; Definition. Amend RSA 149-M:XXII to read as follows:

XXII. "Solid waste" means any matter consisting of putrescible material, refuse, residue from an air pollution control facility, and other discarded or abandoned material. It includes solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. For purposes of this chapter, it does not include hazardous waste as defined in RSA 147-A:2; solid or dissolved materials in irrigation return flows; cut or uprooted tree stumps buried on-site with local approval if required, provided that such burial locations are not located within 75 feet of any drinking water supply; municipal and industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended; source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 , as amended; [or] septage or sludge as defined in RSA 485-A:2, IX-a and XI-a***; or post-use polymers and recovered feedstocks converted at an advanced recycling facility or held at such facility prior to conversion.***

9 New Paragraph; Solvolysis; Definition. Amend RSA 149-M:4 by inserting after paragraph XXII the following new paragraph:

XXII-a. "Solvolysis" means a manufacturing process through which post-use polymers are purified with the aid of solvents, while heated at low temperatures and/or pressurized to make useful products, allowing additives and contaminants to be removed. The products of solvolysis include monomers, intermediates, and valuable chemicals and raw materials. The process includes but is not limited to hydrolysis, amylolysis ammonoloysis, methanolysis and gycolysis.

10 New Subdivision; Regulation of Advanced Recycling. Amend RSA 149-M by inserting after section 61 the following new subdivision:

Regulation of Advanced Recycling

149-M:62 Regulation of Advanced Recycling.

I. The department shall regulate advanced recycling facilities as manufacturing facilities. Advanced recycling facilities and the products and by-products of advanced recycling conversion shall comply with applicable environmental rules and regulations that apply to manufacturing facilities, as applicable to their operations, products, and by-products. The department may make inspections of advanced recycling facilities to ensure compliance.

II. Products of advanced recycling shall not be considered "waste-derived products" or "refuse-derived fuel" and shall not be subject to the provisions of this chapter and rules created under its authority relating to waste-derived products and refuse-derived fuel, including but limited to the certification provisions of Env-Sw 1500.

III. Advanced recycling facilities shall give consideration to utilizing post-use polymers and recovered feedstocks generated within the state.

11 Effective Date. This act shall take effect 60 days after its passage.

SB 367 - AS AMENDED BY THE SENATE

02/24/2022 0789s

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22-2965
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SENATE BILL ***367***

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

SPONSORS: Sen. Avard, Dist 12; Sen. Watters, Dist 4; Sen. Hennessey, Dist 1; Sen. Bradley, Dist 3; Sen. Soucy, Dist 18; Sen. French, Dist 7; Sen. Cavanaugh, Dist 16; Rep. Pearl, Merr. 26; Rep. Potucek, Rock. 6

COMMITTEE: Energy and Natural Resources

ANALYSIS

This bill regulates advanced recycling and manufacturing facilities.

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STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Two

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 New Paragraphs; Definitions. Amend RSA 149-M:4 by inserting after paragraph I the following new paragraphs:

I-a. "Advanced recycling" means a manufacturing process for the conversion of post-use polymers and recovered feedstocks into basic hydrocarbon raw materials, feedstock chemicals, and other products like waxes and lubricants through processes that include pyrolysis, gasification, depolymerization, catalytic cracking, reforming, hydrogenation, solvolysis, and other similar technologies. The recycled products produced at advanced recycling facilities include, but are not limited to monomers, oligomers, plastics, plastics and chemical feedstock basic and unfinished chemicals, waxes, lubricants, coatings, and other basic hydrocarbons. For the purposes of this chapter, "advanced recycling" shall not be considered solid waste management, solid waste processing, waste processing, treatment, incineration, or combustion.

I-b. "Advanced recycling facility" means a facility that receives, stores, and converts post use polymers and recovered feedstock it receives using advanced recycling. An advanced recycling facility shall be considered a manufacturing facility. For the purposes of this chapter, "advanced recycling facilities" shall not be considered facilities, solid waste facilities, solid waste management facilities, waste management facilities, processing/treatment facilities, solid waste collection, storage, and transfer facilities, processing facilities, treatment facilities, or incinerators.

2 Definition of Certified Waste-Derived Product. Amend RSA 149-M:4, II-a to read as follows:

II-a. "Certified waste-derived product" means a constituent of solid waste which is no longer regulated as a solid waste when certified by the department to be recyclable for its original use or alternate uses and which poses no greater risk to the environment, public health, and safety than exists by producing, distributing, using, or disposing comparable products which are not waste-derived. ***Products derived from advanced recycling shall not be considered waste-derived products or require certification as waste-derived products.***

3 New Paragraph; Depolymerization; Definitions. Amend RSA 149-M:4 by inserting after paragraph V the following new paragraph:

V-a. "Depolymerization" means a manufacturing process where post-use polymers are broken into smaller molecules such as monomers and oligomers or raw, intermediate, or final products, plastics and chemical feedstock basic and unfinished chemicals, waxes, lubricants, coatings, and other basic hydrocarbons.

4 New Paragraph; Gasification; Definitions. Amend RSA 149-M:4 by inserting after paragraph IX-a the following new paragraph:

IX-b. "Gasification" means a manufacturing process through which recovered feedstocks are heated and converted into a fuel and gas mixture in an oxygen-deficient atmosphere and the mixture is converted into valuable raw materials and intermediate and final products, including but not limited to, plastic monomers, chemicals, waxes, lubricants, plastic and chemical feedstock and other basic hydrocarbons that are returned to economic utility in the form of raw materials and products.

5 New Paragraph; Post-Use Polymer; Definitions. Amend RSA 149-M:4 by inserting after paragraph XV the following new paragraph:

XV-a. "Post-use polymer" means a plastic to which all of the following apply:

(a) The plastic is derived from any industrial, commercial, agricultural, or domestic activities.

(b) It is not mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility.

(c) The plastic's use or intended use is as a feedstock for the manufacturing of plastic and chemical feedstock other basic hydrocarbons, raw materials, or other intermediate products or final products using advanced recycling.

(d) The plastic has been sorted from solid waste and other regulated waste but may contain residual amounts of solid waste such as organic material and incidental contaminants or impurities such as paper labels and metal rings.

(e) The plastic is processed at a advanced recycling facility or held at such facility prior to processing.

6 New Paragraphs; Pyrolysis; Recovered Feedstock; Definitions. Amend RSA 149-M:4 by inserting after paragraph XVIII the following new paragraphs:

XVIII-a. "Pyrolysis" means a manufacturing process through which post-use polymers are heated in the absence of oxygen until melted and thermally decomposed and are then cooled, condensed, and converted into valuable raw materials and intermediate and final products, including but not limited to plastic monomers, chemicals, waxes, lubricants, plastic and chemical feedstock and other basic hydrocarbons, that are returned to economic utility in the form of raw materials or products.

XVIII-b. "Recovered feedstock" means one or more of the following materials that has been processed so it may be used as feedstock in an advanced recycling facility:

(a) Post-use polymers.

(b) Materials for which the United States Environmental Protection Agency has made a non waste determination pursuant to 40 C.F.R. 241.3(c), or has otherwise determined are feedstocks and not solid waste.

(c) Recovered feedstock does not include unprocessed municipal solid waste.

(d) Recovered feedstock is not mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility.

7 Solid Waste; Definition. Amend RSA 149-M:XXII to read as follows:

XXII. "Solid waste" means any matter consisting of putrescible material, refuse, residue from an air pollution control facility, and other discarded or abandoned material. It includes solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. For purposes of this chapter, it does not include hazardous waste as defined in RSA 147-A:2; solid or dissolved materials in irrigation return flows; cut or uprooted tree stumps buried on-site with local approval if required, provided that such burial locations are not located within 75 feet of any drinking water supply; municipal and industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended; source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 , as amended; [or] septage or sludge as defined in RSA 485-A:2, IX-a and XI-a*; or post-use polymers and recovered feedstocks converted at an advanced recycling facility or held at such facility prior to conversion.*

8 New Paragraph; Solvolysis; Definition. Amend RSA 149-M:4 by inserting after paragraph XXII the following new paragraph:

XXII-a. "Solvolysis" means a manufacturing process through which post-use polymers are purified with the aid of solvents, while heated at low temperatures and/or pressurized to make useful products, allowing additives and contaminants to be removed. The products of solvolysis include monomers, intermediates, and valuable chemicals and raw materials. The process includes but is not limited to hydrolysis, amylolysis ammonoloysis, methanolysis and gycolysis.

9 New Subdivision; Regulation of Advanced Recycling. Amend RSA 149-M by inserting after section 61 the following new subdivision:

Regulation of Advanced Recycling

149-M:62 Regulation of Advanced Recycling.

I. The department shall regulate advanced recycling facilities as manufacturing facilities. An advanced recycling facility and the products and by-products of advanced recycling shall be subject to applicable statutes and departmental rules relative to air, water, waste and land use. The department may enter and inspect any advanced recycling facility to determine whether storage of materials prior to advanced recycling is a nuisance or poses a threat to the environment. The department may utilize its enforcement authorities under RSA 149-M:15 to require abatement of the nuisance or threat if found.

II. Products of advanced recycling shall not be considered "waste-derived products" or "refuse-derived fuel" and shall not be subject to the provisions of this chapter and rules created

under its authority relating to waste-derived products and refuse-derived fuel, including but limited to the certification provisions of Env-Sw 1500.

III. Advanced recycling facilities shall give consideration to utilizing post-use polymers and recovered feedstocks generated within the state.

10 Effective Date. This act shall take effect 60 days after its passage.

SB 367 - AS AMENDED BY THE HOUSE

02/24/2022 0789s
4May2022... 1764h
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2022 SESSION

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SENATE BILL ***367***

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SPONSORS: Sen. Avard, Dist 12; Sen. Watters, Dist 4; Sen. Hennessey, Dist 1; Sen. Bradley, Dist 3; Sen. Soucy, Dist 18; Sen. French, Dist 7; Sen. Cavanaugh, Dist 16; Rep. Pearl, Merr. 26; Rep. Potucek, Rock. 6

COMMITTEE: Energy and Natural Resources

ANALYSIS

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STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Two

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 Legislative Findings and Purpose. The general court finds that:

I. New Hampshire is committed to a clean environment and protection of its natural resources. The United States Environmental Protection Agency has recognized that reusing and recycling post-use materials conserves natural resources, reduces waste, prevents pollution, reduces greenhouse gasses contributing to climate change and serves as an important economic driver, helping to create jobs and tax revenue.

II. The purpose of this act is to facilitate recycling of greater amounts and more types of plastics by ensuring that advanced plastic recycling technologies in New Hampshire protect the public health and safety by being appropriately regulated as manufacturers under New Hampshire's applicable statutes and departmental rules relative to air, water, waste, and land use. Furthermore, such facilities will comply with all applicable federal statutes, including but not limited to the Clean Air Act, the Clean Water Act, and Environmental Protection Agency rules governing hazardous waste.

2 New Paragraphs; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph I the following new paragraphs:

I-a. "Advanced recycling" means a manufacturing process for the conversion of post-use polymers and recovered feedstocks into basic raw materials, feedstock chemicals, and other products like waxes and lubricants through processes that include pyrolysis, gasification, depolymerization, catalytic cracking, reforming, hydrogenation, solvolysis, and other similar technologies. The recycled products produced at advanced recycling facilities include monomers, oligomers, plastics, plastics and chemical feedstocks, basic and unfinished chemicals, waxes, lubricants, and coatings. For the purposes of this chapter, the primary products of advanced recycling shall not include hydrocarbons which are marketed, sold, or used as fuel for energy. Incidental products may be used for fuel only within the facility. For the purposes of this chapter, "advanced recycling" shall not be considered solid waste management, solid waste processing, waste processing, treatment, incineration, or combustion.

I-b. "Advanced recycling facility" means a facility that receives, stores, and converts post-use polymers and recovered feedstock it receives using advanced recycling. An advanced recycling

facility shall be considered a manufacturing facility. For the purpose of this chapter, "advanced recycling facility" shall not include a facility, solid waste facility, solid waste management facility, waste management facility, processing/treatment facility, solid waste collection, storage, and transfer facility, processing facility, treatment facility, or an incinerator.

3 Solid Waste Management; Definition of Certified Waste-Derived Product. Amend RSA 149-M:4, II-a to read as follows:

II-a. "Certified waste-derived product" means a constituent of solid waste which is no longer regulated as a solid waste when certified by the department to be recyclable for its original use or alternate uses and which poses no greater risk to the environment, public health, and safety than exists by producing, distributing, using, or disposing comparable products which are not waste-derived. ***Products derived from advanced recycling shall not be considered waste-derived products or require certification as waste-derived products.***

4 New Paragraph; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph V the following new paragraph:

V-a. "Depolymerization" means a manufacturing process where post-use polymers are broken into smaller molecules such as monomers, oligomers, plastic or chemical feedstocks, or other basic raw materials.

5 New Paragraph; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph IX-a the following new paragraph:

IX-b. "Gasification" means a manufacturing process through which recovered feedstocks are heated and converted into synthesis gas in an oxygen-deficient atmosphere and the mixture is converted into valuable raw materials.

6 New Paragraph; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph XV the following new paragraph:

XV-a. "Post-use polymer" means a plastic to which all of the following apply:

(a) The plastic is derived from industrial, commercial, agricultural, or domestic activities.

(b) The plastic is not mixed with solid waste or hazardous waste.

(c) The plastic's use or intended use is as a feedstock for mechanical or chemical recycling.

(d) The plastic has been sorted from solid waste and other regulated waste but may contain residual amounts of solid waste such as organic material and incidental contaminants or impurities such as paper labels and metal rings.

7 New Paragraphs; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph XVIII the following new paragraphs:

XVIII-a. "Pyrolysis" means a manufacturing process through which post-use polymers are heated in the absence of oxygen, sometimes in the presence of catalysts, until thermally decomposed

and are then cooled and condensed. The resulting chemicals, when separated from wastes, can provide raw materials for the production of plastics, lubricants, waxes, and other industrially useful chemicals.

XVIII-b. "Recovered feedstock" means one or more of the following materials that has been processed so it may be used as feedstock in an advanced recycling facility:

(a) Post-use polymers.

(b) Materials for which the United States Environmental Protection Agency has made a non waste determination pursuant to 40 C.F.R. 241.3(c), or has otherwise determined are feedstocks and not solid waste.

(c) Recovered feedstock does not include unprocessed municipal solid waste.

(d) Recovered feedstock is not mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility.

8 Solid Waste Management; Definitions. Amend RSA 149-M:4, XXII to read as follows:

XXII. "Solid waste" means any matter consisting of putrescible material, refuse, residue from an air pollution control facility, and other discarded or abandoned material. It includes solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. For purposes of this chapter, it does not include hazardous waste as defined in RSA 147-A:2; solid or dissolved materials in irrigation return flows; cut or uprooted tree stumps buried on-site with local approval if required, provided that such burial locations are not located within 75 feet of any drinking water supply; municipal and industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended; source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 , as amended; [or] septage or sludge as defined in RSA 485-A:2, IX-a and XI-a*; or post-use polymers and recovered feedstocks converted at an advanced recycling facility or held at such facility prior to conversion*.

9 New Paragraph; Solid Waste Management; Definition. Amend RSA 149-M:4 by inserting after paragraph XXII the following new paragraph:

XXII-a. "Solvolysis" means a manufacturing process through which post-use polymers are purified with the aid of solvents, while heated at low temperatures and/or pressurized to make useful products, allowing additives and contaminants to be removed. The products of solvolysis include monomers, intermediates, and valuable chemicals and raw materials. The process includes but is not limited to hydrolysis, amylolysis, ammonolysis, methanolysis, and glycolysis.

10 New Subdivision; Solid Waste Management; Regulation of Advanced Recycling. Amend RSA 149-M by inserting after section 61 the following new subdivision:

Regulation of Advanced Recycling

149-M:62 Regulation of Advanced Recycling.

I. The department shall regulate advanced recycling facilities as manufacturing facilities. An advanced recycling facility and the products and by-products of advanced recycling shall be subject to applicable statutes and departmental rules relative to air, water, waste, and land use. The department may enter and inspect any advanced recycling facility to determine whether storage of materials prior to advanced recycling is a nuisance or poses a threat to the environment. The department may utilize its enforcement authorities under RSA 149-M:15 to require abatement of the nuisance or threat if found. The department may enter and inspect any advanced recycling facility to ensure compliance with all applicable statutes and departmental rules relative to air, water, waste, and land use and take any enforcement actions necessary.

II. Products of advanced recycling shall not be considered "waste-derived products" or "refuse-derived fuel" and shall not be subject to the provisions of this chapter and rules created under its authority relating to waste-derived products and refuse-derived fuel, including but limited to the certification provisions of department of environmental services rule Env-Sw 1500.

III. Advanced recycling facilities shall give priority to utilizing post-use polymers and recovered feedstocks generated within the state.

149-M:63 Reporting for Waste Reduction Goals. For the purpose of reporting recycling rates, all advanced recycling facilities shall report the source of post-use polymers including the state or country of origin, the mass of post-use polymer processed, the mass of recycled product, the mass of residual material, and the mass of processed material used for fuel to the department. Recycled product shall not include any residual material, product used for fuel, or non-post-use-polymer feedstock converted to product.

11 Effective Date. This act shall take effect 60 days after its passage.

CHAPTER 224
SB 367 - FINAL VERSION

02/24/2022 0789s
4May2022... 1764h
4May2022... 1899h

2022 SESSION

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SENATE BILL ***367***

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COMMITTEE: Energy and Natural Resources

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STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Two

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

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224:1 Legislative Findings and Purpose. The general court finds that:

I. New Hampshire is committed to a clean environment and protection of its natural resources. The United States Environmental Protection Agency has recognized that reusing and recycling post-use materials conserves natural resources, reduces waste, prevents pollution, reduces greenhouse gasses contributing to climate change and serves as an important economic driver, helping to create jobs and tax revenue.

II. The purpose of this act is to facilitate recycling of greater amounts and more types of plastics by ensuring that advanced plastic recycling technologies in New Hampshire protect the public health and safety by being appropriately regulated as manufacturers under New Hampshire's applicable statutes and departmental rules relative to air, water, waste, and land use. Furthermore, such facilities will comply with all applicable federal statutes, including but not limited to the Clean Air Act, the Clean Water Act, and Environmental Protection Agency rules governing hazardous waste.

224:2 New Paragraphs; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph I the following new paragraphs:

I-a. "Advanced recycling" means a manufacturing process for the conversion of post-use polymers and recovered feedstocks into basic raw materials, feedstock chemicals, and other products like waxes and lubricants through processes that include pyrolysis, gasification, depolymerization, catalytic cracking, reforming, hydrogenation, solvolysis, and other similar technologies. The recycled products produced at advanced recycling facilities include monomers, oligomers, plastics, plastics and chemical feedstocks, basic and unfinished chemicals, waxes, lubricants, and coatings. For the purposes of this chapter, the primary products of advanced recycling shall not include hydrocarbons which are marketed, sold, or used as fuel for energy. Incidental products may be used for fuel only within the facility. For the purposes of this chapter, "advanced recycling" shall not be considered solid waste management, solid waste processing, waste processing, treatment, incineration, or combustion.

I-b. "Advanced recycling facility" means a facility that receives, stores, and converts post-use polymers and recovered feedstock it receives using advanced recycling. An advanced recycling facility shall be considered a manufacturing facility. For the purpose of this chapter, "advanced recycling facility" shall not include a facility, solid waste facility, solid waste management facility, waste management facility, processing/treatment facility, solid waste collection, storage, and transfer facility, processing facility, treatment facility, or an incinerator.

224:3 Solid Waste Management; Definition of Certified Waste-Derived Product. Amend RSA 149-M:4, II-a to read as follows:

II-a. "Certified waste-derived product" means a constituent of solid waste which is no longer regulated as a solid waste when certified by the department to be recyclable for its original use or alternate uses and which poses no greater risk to the environment, public health, and safety than exists by producing, distributing, using, or disposing comparable products which are not waste-derived. ***Products derived from advanced recycling shall not be considered waste-derived products or require certification as waste-derived products.***

224:4 New Paragraph; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph V the following new paragraph:

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224:5 New Paragraph; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph IX-a the following new paragraph:

IX-b. "Gasification" means a manufacturing process through which recovered feedstocks are heated and converted into synthesis gas in an oxygen-deficient atmosphere and the mixture is converted into valuable raw materials.

224:6 New Paragraph; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph XV the following new paragraph:

XV-a. "Post-use polymer" means a plastic to which all of the following apply:

(a) The plastic is derived from industrial, commercial, agricultural, or domestic activities.

(b) The plastic is not mixed with solid waste or hazardous waste.

(c) The plastic's use or intended use is as a feedstock for mechanical or chemical recycling.

(d) The plastic has been sorted from solid waste and other regulated waste but may contain residual amounts of solid waste such as organic material and incidental contaminants or impurities such as paper labels and metal rings.

224:7 New Paragraphs; Solid Waste Management; Definitions. Amend RSA 149-M:4 by inserting after paragraph XVIII the following new paragraphs:

XVIII-a. "Pyrolysis" means a manufacturing process through which post-use polymers are heated in the absence of oxygen, sometimes in the presence of catalysts, until thermally decomposed and are then cooled and condensed. The resulting chemicals, when separated from wastes, can provide raw materials for the production of plastics, lubricants, waxes, and other industrially useful chemicals.

XVIII-b. "Recovered feedstock" means one or more of the following materials that has been processed so it may be used as feedstock in an advanced recycling facility:

(a) Post-use polymers.

(b) Materials for which the United States Environmental Protection Agency has made a non waste determination pursuant to 40 C.F.R. 241.3(c), or has otherwise determined are feedstocks and not solid waste.

(c) Recovered feedstock does not include unprocessed municipal solid waste.

(d) Recovered feedstock is not mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility.

224:8 Solid Waste Management; Definitions. Amend RSA 149-M:4, XXII to read as follows:

XXII. "Solid waste" means any matter consisting of putrescible material, refuse, residue from an air pollution control facility, and other discarded or abandoned material. It includes solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. For purposes of this chapter, it does not include hazardous waste as defined in RSA 147-A:2; solid or dissolved materials in irrigation return flows; cut or uprooted tree stumps buried on-site with local approval if required, provided that such burial locations are not located within 75 feet of any drinking water supply; municipal and industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended; source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended; [~~or~~] septage or sludge as defined in RSA 485-A:2, IX-a and XI-a*; or post-use polymers and recovered feedstocks converted at an advanced recycling facility or held at such facility prior to conversion.*

224:9 New Paragraph; Solid Waste Management; Definition. Amend RSA 149-M:4 by inserting after paragraph XXII the following new paragraph:

XXII-a. "Solvolysis" means a manufacturing process through which post-use polymers are purified with the aid of solvents, while heated at low temperatures and/or pressurized to make useful products, allowing additives and contaminants to be removed. The products of solvolysis include monomers, intermediates, and valuable chemicals and raw materials. The process includes but is not limited to hydrolysis, amylolysis, ammonolysis, methanolysis, and glycolysis.

224:10 New Subdivision; Solid Waste Management; Regulation of Advanced Recycling. Amend RSA 149-M by inserting after section 61 the following new subdivision:

Regulation of Advanced Recycling

149-M:62 Regulation of Advanced Recycling.

I. The department shall regulate advanced recycling facilities as manufacturing facilities. An advanced recycling facility and the products and by-products of advanced recycling shall be subject to applicable statutes and departmental rules relative to air, water, waste, and land use. The department may enter and inspect any advanced recycling facility to determine whether storage of materials prior to advanced recycling is a nuisance or poses a threat to the environment. The department may utilize its enforcement authorities under RSA 149-M:15 to require abatement of the nuisance or threat if found. The department may enter and inspect any advanced recycling facility to ensure compliance with all applicable statutes and departmental rules relative to air, water, waste, and land use and take any enforcement actions necessary.

II. Products of advanced recycling shall not be considered "waste-derived products" or "refuse-derived fuel" and shall not be subject to the provisions of this chapter and rules created under its authority relating to waste-derived products and refuse-derived fuel, including but limited to the certification provisions of department of environmental services rule Env-Sw 1500.

III. Advanced recycling facilities shall give priority to utilizing post-use polymers and recovered feedstocks generated within the state.

149-M:63 Reporting for Waste Reduction Goals. For the purpose of reporting recycling rates, all advanced recycling facilities shall report the source of post-use polymers including the state or country of origin, the mass of post-use polymer processed, the mass of recycled product, the mass of residual material, and the mass of processed material used for fuel to the department. Recycled product shall not include any residual material, product used for fuel, or non-post-use-polymer feedstock converted to product.

224:11 Effective Date. This act shall take effect 60 days after its passage.

Approved: June 17, 2022
Effective Date: August 16, 2022

Amendments

Sen. Avard, Dist 12
January 20, 2022
2022-0195s
08/11

Amendment to SB 367

Amend the bill by deleting section 7 and renumbering the original sections 8-11 to read as 7-10, respectively.

Amend RSA 149-M:62, I as inserted by section 9 of the bill by replacing it with the following:

I. The department shall regulate advanced recycling facilities as manufacturing facilities. Advanced recycling facilities and the products and by-products of advanced recycling conversion shall comply with applicable environmental rules and regulations that apply to manufacturing facilities, as applicable to their operations, products, and by-products. The department may make inspections of advanced recycling facilities to ensure compliance that post use polymers are used as raw materials for advanced recycling and are not refuse or solid waste. Failure to comply may result in classification as processing and treatment under the universal facility standards in Env-Sw 1000.

Sen. Avard, Dist 12
February 18, 2022
2022-0753s
08/05

Amendment to SB 367

Amend the bill by deleting section 7 and renumbering the original sections 8-11 to read as 7-10, respectively.

Amend RSA 149-M:62, I as inserted by section 9 of the bill by replacing it with the following:

I. The department shall regulate advanced recycling facilities as manufacturing facilities. An advanced recycling facility and the products and by-products of advanced recycling shall be subject to applicable statutes and departmental rules relative to air, water, waste and land use. The department may enter and inspect any advanced recycling facility to determine whether storage of materials prior to advanced recycling is a nuisance or poses a threat to the environment. The department may utilize its enforcement authorities under RSA 149-M:15 to require abatement of the nuisance or threat if found.

Energy and Natural Resources
February 22, 2022
2022-0789s
08/05

Amendment to SB 367

Amend the bill by deleting section 7 and renumbering the original sections 8-11 to read as 7-10, respectively.

Amend RSA 149-M:62, I as inserted by section 9 of the bill by replacing it with the following:

I. The department shall regulate advanced recycling facilities as manufacturing facilities. An advanced recycling facility and the products and by-products of advanced recycling shall be subject to applicable statutes and departmental rules relative to air, water, waste and land use. The department may enter and inspect any advanced recycling facility to determine whether storage of materials prior to advanced recycling is a nuisance or poses a threat to the environment. The department may utilize its enforcement authorities under RSA 149-M:15 to require abatement of the nuisance or threat if found.

Committee Minutes

SENATE CALENDAR NOTICE
Energy and Natural Resources

Sen Kevin Avard, Chair
Sen Bob Giuda, Vice Chair
Sen James Gray, Member
Sen David Watters, Member
Sen Rebecca Perkins Kwoka, Member

Date: February 2, 2022

HEARINGS

Tuesday	02/08/2022	
(Day)	(Date)	
Energy and Natural Resources	State House 103	9:00 a.m.
(Name of Committee)	(Place)	(Time)

9:00 a.m.	**SB 268-FN**	relative to the approval of power purchase agreements for offshore wind energy resources from the Gulf of Maine.
9:15 a.m.	**SB 440-FN**	relative to approval of offshore wind energy contracts.
9:30 a.m.	**SB 367**	relative to the regulatory status of advanced recycling and manufacturing facilities.
9:45 a.m.	**SB 429-FN**	relative to the site evaluation committee.

EXECUTIVE SESSION MAY FOLLOW

Sponsors:

SB 268-FN

Sen. Watters	Sen. Avard	Sen. Kahn	Sen. Rosenwald
Sen. Whitley	Sen. Soucy	Sen. Perkins Kwoka	Sen. Sherman
Sen. Cavanaugh	Sen. D'Allesandro	Sen. Prentiss	Rep. Somssich
Rep. Wall	Rep. Cushing		

SB 440-FN

Sen. Watters	Sen. Sherman	Sen. D'Allesandro	Sen. Avard
Sen. Rosenwald	Sen. Whitley	Sen. Soucy	Sen. Cavanaugh
Sen. Prentiss	Rep. Cali-Pitts	Rep. McGhee	Rep. Wall

SB 367

Sen. Avard	Sen. Watters	Sen. Hennessey	Sen. Bradley
Sen. Soucy	Sen. French	Sen. Cavanaugh	Rep. Pearl
Rep. Potucek			

SB 429-FN

Sen. Giuda	Sen. Watters	Sen. Ward	Rep. Harrington
Rep. Vose	Rep. Leishman		

Daley Frenette 271-3042

Kevin A. Avard
Chairman

Senate Energy and Natural Resources Committee

Daley Frenette 271-3042

SB 367, relative to the regulatory status of advanced recycling and manufacturing facilities.

Hearing Date: February 8, 2022

Members of the Committee Present: Senators Avard, Giuda, Gray, Watters and Perkins Kwoka

Members of the Committee Absent : None

Bill Analysis: This bill regulates advanced recycling and manufacturing facilities.

Sponsors:

Sen. Avard	Sen. Watters	Sen. Hennessey
Sen. Bradley	Sen. Soucy	Sen. French
Sen. Cavanaugh	Rep. Pearl	Rep. Potucek

Who supports the bill: Kirsten Koch, BIA, Craig Cookson, American Chemistry Council, Representative John Potucek, Rockingham-District 6, Mike Wimsatt, NHDES, Senator Bradley, Senate District 3, Senator French, Senate District 7, Susan Chase, Bruce Berk, Janet Moore, Judith Saum.

Who opposes the bill: Patricia Martin, Lynn Merlone, Jane Hershey, Anne Thomas.

Who is neutral on the bill: None.

Summary of testimony presented:

Senator Avard, Senate District 12

- The goal of this bill is to incentivize private investment to come to New Hampshire and develop another method of keeping plastic out of landfills and advanced recycling facilities. There is an ongoing issue with New Hampshire landfills. Allowing plastics that cannot be recycled into landfills is not an option.
- The bill also aims to establish a clear regulatory path for these types of recycling facilities to be treated as manufacturing facilities and not as solid waste facilities. 15 other states have passed similar regulations to meet with the intent to attract private investments to their states that would bring good jobs in stem fields and construction as well as other ways to recycle other hard handled

plastics. There are no other such facilities in the northeast, so we want this type of manufacturing in New Hampshire.

- Amendment 0195s that was written in conjunction with DES and the American Chemistry Council. It deletes the definition of refuse as requested by DES. It amends the language on page 4 regarding the authority of the department. Senator Avard is unsure if the amendment has completely satisfied the department, however he believes the amendment is sufficient.
- Senator Avard stated that his goal is to pass the enabling language to help New Hampshire and it can help our solid waste needs by diverting plastics from our landfills. It will also help recycling and help our economy by bringing good jobs in manufacturing and STEM fields

Kirsten Koch, BIA

- BIA serves as a statewide chamber of commerce, and they represent over 400 members. BIA supports SB 367. The bill furthers environmental sustainability and brings economic benefits to New Hampshire.
- The bill improves New Hampshire's solid waste management goals by preventing traditionally hard-to-recycle plastics from going into New Hampshire landfills. Instead, the bill gives advanced recycling facilities the opportunity to manufacture these products into a variety of reusable materials.
- The bill encourages advanced recycling facilities to come to New Hampshire for business ultimately creating more jobs for the local economy.
- The bill provides regulatory certainty for advanced recycling facilities. The main function of these facilities is to manufacture new materials, not dispose of waste. They need to be appropriated regularly.
- BIA believes that New Hampshire should welcome sustainable business and regulate advanced recycling facilities as manufactures.
- Senator Watters asked if there would be a way for the industry to make a commitment to source materials from New Hampshire. BIA would not be opposed to this.
- Senator Watters asked if the industry would be willing to help craft a purpose statement that specifically defines addressing the solid waste crises in New Hampshire.
- Senator Gray stated that many of New Hampshire's landfills already take in refuse from other states. He asked if it would be more appropriate to address this issue on a regional basis. Ms. Koch believes that this bill would contribute to reducing waste in all of New England. This type of regulation has been implemented in 15 other states but is not thoroughly present throughout New England. Overall, it will reduce waste that goes into landfills in New England as a whole.
- Senator Giuda asked if New Hampshire can mandate that other states segregate these types of plastics before they come to New Hampshire as a

condition of using New Hampshire landfills. Ms. Koch believes that question would be better answered by DES.

- Senator Watters asked for clarification regarding if these plastics can only be used to manufacture new products and not also be used as a type of fuel. Ms. Koch did not know the specifics of the use of the products; however, they can be turned into materials that can be used for other manufacturing needs.

Mike Wimsatt, DES

- DES is in support of SB 367. There are a few issues with the bill that they would like addressed.
- Lines 9-12 of the amendment reads "The department may make inspections of advanced recycling facilities to ensure compliance that post use polymers are used as raw materials for advanced recycling and are not refuse or solid waste. Failure to comply may result in classification as processing and treatment under the universal facility standards in Env-Sw 1000". This language was in response to concerns raised by DES but is unlikely to happen. If a facility is doing well, there will be no reason to regulate them as a solid waste facility.
- Because the language of the bill involves sweeping exemptions for what can be considered solid waste, DES may struggle to find the authority to go in and inspect certain cases. DES recommends that the language be changed to more clearly define the authority of DES to go in and inspect cases that may not be considered solid waste.
- Mr. Wimsatt would like to ensure that DES is able to be responsive to citizens in the future in the unlikely event of a challenging scenario where their authority is called into question due to the bill's language.
- Senator Watters asked if the authority DES has currently to regulate facilities as manufacturing facilities would ensure that the department can address siting and environmental concerns. Mr. Wimsatt said that Env-Sw 1000 are a set of broad rules that apply to a facility. Mr. Wimsatt also clarified that advanced recycling facilities have additional standards under the solid waste rules that apply to it. If SB 367 passes, those additional standards are eliminated. Senator Watters asked if DES would be willing to help change the language of the bill so that the purpose is to try to source materials for the facilities in-state instead of out-of-state. Mr. Wimsatt believes that this would be appropriate and desirable. He believes that advanced recycling facilities would be good for the state and that the facilities would be able to compete in the market. He would like to make sure that there is no language in the bill that would disincentivize people from opening these facilities in NH.
- Senator Giuda asked if the plastics that the facilities would use are segregatable for the purposes of being turned into something useful. Mr. Wimsatt confirmed that they are segregatable and explained that there are two ways this happens. Firstly, people may use a towns transfer station. The second way is the

recyclables are collected and sent to a materials recovery facility in Massachusetts where the recyclables are sorted and baled.

- Senator Giuda stated that New Hampshire a great deal of material sent to New Hampshire landfills comes from out of state. Senator Giuda asked if we can require other states to segregate the plastics out of the waste streams that eventually come to New Hampshire landfills. Mr. Wimsatt stated that no one is required by law to separate recyclables. However, other states have passed laws that require the separation of recyclables so it could also be done in New Hampshire.
- Senator Giuda acknowledged lines 9-12 of the amendment and asked if facilities would be given warnings prior to being reclassified as a process and treatment facility if they fail to comply. Mr. Wimsatt believes that the language is troublesome. The language that DES recommended was "the department is authorized to enter and inspect any advanced recycling facility to determine whether the storage of post-use polymers or recovered feedstocks poses a substantial threat to human health or the environment. The department may utilize its enforcement authorities under 149 M15 to address any such identified threats". This will give DES the authority to use its existing authority under the solid waste statute to address problems and does not thrust the facility back into the solid waste realm. Senator Avard asked if DES uses this same standard with other manufacturing organization. Mr. Wimsatt clarified that this would be unique, and he suggested this because if this was not a facility that was taking recycled plastics, it would be taking raw polymers from the chemical manufacturing industry. There would be no food or beverage residues and therefore no reasons for DES to call it solid waste.
- Senator Avard asked how this would apply to other facilities that generate this waste. Mr. Wimsatt clarified that every facility generates solid waste. The difference is that this bill is addressing a facility that is receiving what is currently considered solid waste. The bills' specific purpose is to exempt the facilities by not considering the material as solid waste.
- Senator Avard asked if some of the waste that the facilities would handle is waste that they would want to recycle. Mr. Wimsatt said this is unlikely because the materials have already been baled and are ready for the market. There is no place to put it.
- Senator Avard asked if the cost of sending the plastics out of state is an incentive for local municipalities to simply put it in a landfill instead. Mr. Wimsatt clarified that commodities prices are strong again and it is unlikely that that will happen. There is no doubt that some recyclables are making it to landfills anyway.
- Senator Avard stated that there are no other facilities like this in the region. He asked what Massachusetts does with all the plastics they receive. Mr. Wimsatt clarified that the recyclables to manufacturing facilities to be turned into products.

- Senator Avard stated that the language of the bill has been adopted by 15 other states. He asked if any of these companies have gone bankrupt. Mr. Wimsatt stated that he does not know. He does not believe that the facilities are at risk of failing.
- Senator Avard stated that this bill would open the door to developing these manufacturing businesses in NH. Mr. Wimsatt clarified that DES is supportive of the bill.
- Senator Gray believes that the distance from the treatment facilities is not cost effective. Mr. Wimsatt clarified that being closer to the supply is generally more helpful but believes that the facilities would be able to operate anywhere in the state.
- Senator Watters asked why DES's language was not used. Senator Avard clarified that it was his choice. He would like to begin the process. Senator Giuda disagreed with Senator Avard on the issue of the language. He believes that the current language does not give DES enough flexibility and it may disincentivize companies from locating in New Hampshire. Senator Avard believes that it is appropriate because of the difference of treatment between facilities that generate the solid waste and those that receive it.
- Senator Watters asked if it would make more sense based on New Hampshire's past experiences to allow DES to inspect and preemptively address issues. DES wants to be able to address very specific issues. Under current law, the materials are considered solid waste. If the bill passes with this language, they will not have the authority anymore because the material will no longer be considered solid waste.
- Senator Gray suggested blending the language of the bill with the language DES prefers.

Craig Cookson, American Chemistry Council

- ACC supports the bill. ACC strongly encourages the committee to ensure New Hampshire's interest by ensuring that greater amounts of post-use packaging materials, especially plastics, are recycled and converted into feedstocks for new plastics and other useful products.
- Advanced recycling helps to decrease plastic waste and support continued progress towards zero waste and sustainability goals for our communities.
- Residents of New Hampshire will have the opportunity to recycle greater amounts and types of plastics packaging. Advanced recycling takes hard-to-recycle plastics and refers to several different technologies that convert used plastics into their original building blocks.
- New Hampshire and the rest of the United States do a fairly good job of mechanically recycling soda bottles, water bottles, detergent bottles, etc.., however it is challenging to mechanically recycle complexly engineered packaging such as pouches and tubes. These plastics greatly reduce food waste

and keep food fresh. This is important because food is a huge contributor to greenhouse gas emissions.

- Thanks to advanced recycling, these plastics can be recycled and converted into a versatile mix of products.
- This is a feedstock of raw material. One misconception is that they only produce fuel, but they can be used in a variety of recognizable products.
- Wendy's fast-food restaurant has recently begun using plastics cups made up of 20 percent recycled plastics thanks to advanced recycling. Herbal Essence, the beauty product company has also begun producing shampoo and conditioner bottles made of 50 percent certified recycled plastic.
- As manufacturers, the facilities are subject to a litany of federal, state, and local environmental regulations.
- It would be beneficial for New Hampshire to develop this industry and 15 other states have adopted similar legislation.
- Senator Watters asked Mr. Cookson if he would be opposed if they changed the language to give DES more flexibility. Mr. Cookson would prefer tighter language that is more prescriptive as opposed to granting the department almost carte blanche authority.
- Senator Watters thinks that it would be best for ACC to work with DES to create better language. ACC will be happy to help with any language suggestions.
- Senator Giuda asked if Mr. Cookson would be comfortable with Senator Gray's suggestion on blending the language. Mr. Cookson would like to look at the language first.

DF
Date Hearing Report completed: February 11, 2022

Speakers

Senate Energy & Natural Resources Committee
SIGN-IN SHEET

Date: 2/08/2022 **Time:** 9:30 a.m.

SB 367 AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

Name/Representing *(please print neatly)*

Name/Representing	Support	Oppose	Speaking?	Yes	No
Kirsten Koch BIA	☒	☐	Speaking?	☒	☐
Craig Cookson, Amer. Chemistry Council	☒	☐	Speaking?	☒	☐
Rep. John Potucek Rock 6	☒	☐	Speaking?	☐	☒
Mike Wimsatt NHDES	☒	☐	Speaking?	☒	☐
	☐	☐	Speaking?	☐	☐
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	☐	☐	Speaking?	☐	☐

Senate Remote Testify

Energy and Natural Resources Committee Testify List for Bill SB367 on 2022-02

Support: 6 Oppose: 4

Name	Title	Representing	Position
Bradley, Senator Jeb	An Elected Official	SD3	Support
French, Senator Harold	An Elected Official	Senate District 7	Support
Chase, Susan	A Member of the Public	Myself	Support
Martin, Patricia	A Member of the Public	Myself	Oppose
Berk, Bruce	A Member of the Public	Myself	Support
Moore, Janet	A Member of the Public	Myself	Support
Merlone, Lynn	A Member of the Public	Myself	Oppose
Hershey, Jane	A Member of the Public	Myself	Oppose
Thomas, Anne	A Member of the Public	Myself	Oppose
Saum, Judith	A Member of the Public	Myself	Support

Testimony

PRINTINGUNITED ALLIANCE
10015 Main Street, Fairfax, VA 22031
703-385-1335 • 703-273-0456 (fax)
sgia.org • printing.org

February 3, 2022

Hon. Kevin Avard
Chairman, Senate Energy and Natural Resources Committee
New Hampshire Senate
State House, Room 115
107 North Main Street
Concord, NH 03301

Dear Chairman Avard and members of Senate Energy and Natural Resources Committee,

The PRINTING United Alliance is writing to offer support for SB 367. PRINTING United Alliance, the most comprehensive member-based printing and graphic arts association in the United States, represents the interests of those facilities printing for the packaging and retail industry, to name a few. As such, our members print on a wide variety of plastic substrates that contribute to the economy of New Hampshire. Further, our industry remains committed to seeking out pathways to reduce the amount of waste going to landfills through the use of recycling infrastructure. This legislation is critical to the continued need to expand the state's current recycling infrastructure. This bill helps to provide regulatory certainty for advanced recycling processes and create a more circular economy for plastics in New Hampshire.

This legislation clearly establishes a regulatory pathway for advanced recycling facilities. We agree with language included in the legislation indicating that the products of this activity will not be considered either "waste-derived" or "refuse-derived" products. The end product from this recycling activity does result in a commercially viable and useful product. Passage of this critical legislation will help provide companies that provide these printed products a clean, and effective end of life strategy that reduces the amount sent to solid waste landfills. We strongly encourage you to sign this important bill into law that supports technology allowing companies to participate in the circular economy for plastics.

Advanced recycling technologies can process plastics that do not have strong end markets, thus enabling a more circular economy for plastics. And, while this technology may be new to New Hampshire, across the country, private companies are already manufacturing post-use plastics at a commercial scale into a versatile mix of valuable new products.

Thank you for your support of this important legislative initiative. Inclusion of advanced recycling to the state's recycling infrastructure is a critical next step towards crafting a lasting solution.

If you have questions or would like additional information, please feel free to contact me at mkinter@printing.org, or 703-359-1313. Thank you for your consideration.

Sincerely,

Marcia Y Kinter

Vice President – Government & Regulatory Affairs

BUSINESS & INDUSTRY ASSOCIATION
New Hampshire's Statewide
Chamber of Commerce

Kirsten Koch

BIA Testimony on SB 367

NH Senate Energy and Natural Resources Committee

February 8, 2022

Mr. Chairman and Members of the Senate Energy and Natural Resources Committee. My name is Kirsten Koch, and I am the Director of Public Policy for the Business and Industry Association (BIA), New Hampshire's statewide chamber of commerce and leading business advocate. BIA represents more than 400 members in a variety of industries. Member firms employ 89,000 people throughout the state, which represents one in seven jobs, and contribute $4.5 billion annually to the state's economy.

I am here today to express BIA's support for Senate Bill 367, relative to the regulatory state of advanced recycling and manufacturing facilities. This bill furthers environmental sustainability and brings economic benefits to New Hampshire.

This bill furthers the state's solid waste management goals by preventing many traditionally hard-to-recycle plastics from going into New Hampshire landfills. Instead, advanced recycling facilities can manufacture these plastics into a variety of reusable materials. It is time to welcome this technology into New Hampshire to divert solid waste from landfills and begin developing a more robust recycling market for New England.

Additionally, this bill encourages advanced recycling facilities to come to New Hampshire for business, ultimately bringing more jobs to the local economy. This bill provides regulatory certainty for advanced recycling facilities. The main function of these facilities is to manufacture new materials, not to dispose of waste. New Hampshire should welcome sustainable business and regulate advanced recycling facilities as manufacturers.

BIA respectfully requests this committee to pass Senate Bill 367 because this bill would further sustainability efforts and increase economic opportunities for New Hampshire.

Thank you for your consideration of BIA's support for this legislation. I will gladly try to answer any questions from the committee.

BRIGHTMARK

1725 Montgomery Street, Floor 3
San Francisco, CA 94111
415-810-0448
Brightmark.com

February 8, 2022

The Honorable Kevin Avard
Chairman, Senate Energy and Natural Resources Committee
New Hampshire Senate
State House, Room 115
107 North Main Street
Concord, NH 03301

Dear Chairman Avard and Members of the Senate Energy and Natural Resources Committee:

I write to urge your support of SB 367, a bill that promotes sensible regulation of advanced recycling facilities as manufacturing facilities in New Hampshire. This legislation would encourage advanced recycling projects, further the state's environmental goals, and create economic opportunities. Legislative support of advanced recycling is very important to businesses such as Brightmark, the company I founded and lead, as it provides regulatory certainty for advanced recycling projects and contributes to a more circular economy.

By way of background, advanced recycling refers to several different technologies that convert post-use plastics into their original chemical building blocks for the production of new plastics, waxes and other valuable products. These technologies help decrease plastic waste and support continued progress toward zero waste and sustainability goals for communities and states. Furthermore, advanced recycling technologies will expand the range of materials we can recycle, help preserve the value of resources in our economy, and bridge the gap between the supply and demand for high-quality recycled plastics used in food-grade and pharmaceutical applications.

I launched Brightmark in 2016 with the mission of combatting some of the greatest environmental challenges facing the United States and providing solutions for waste. Since then, our company of 125 full time employees has built one of the most advanced plastics recycling facilities in the U.S. located in Ashley, Indiana. This facility will divert 100,000 tons of plastic waste each year from landfills and incinerators and recycle it into the original chemical precursors for the production of new plastics, waxes and other valuable products. The facility accepts all streams of plastic waste, plastic types 1-7, including straws, plastic wrap, food packaging, children's toys, and medical waste.

Projects such as these not only provide communities and surrounding areas with a solution to address their plastic waste problem, they also spur economic development by providing shovel-ready infrastructure projects. A total of 136 full time manufacturing jobs will be created in Ashley. We are hopeful to see additional facilities take root in other parts of the country as we move to address our plastic waste problem in a far more circular way. The Northeast, in particular, could greatly benefit from a solution like Brightmark's as its population density creates a need for greater recycling infrastructure. Deployment of advanced recycling facilities could help New Hampshire and more broadly, New England, achieve a more circular economy and close the loop on plastics.

BRIGHTMARK

1725 Montgomery Street, Floor 3
San Francisco, CA 94111
415-810-0448
Brightmark.com

Advanced recycling facilities have a smaller environmental footprint than common manufacturing operations, including food processing, auto manufacturing, hospitals, and universities. A 2021 report from Good Company, a sustainability consulting firm, studied the emissions of advanced recycling and found them to be very low. Just like other manufacturing facilities, advanced recycling facilities are regulated under the U.S. Clean Air Act and would also have to comply with any regulations at the state and local level. A recent life cycle analysis of Brightmark's plastics renewal technology conducted in conjunction with the Georgia Institute of Technology and Environmental Clarity, Inc. found that our process produces 39%-139% fewer greenhouse gas emissions than equivalent products made from virgin material, provides 82% energy use savings, and 46% water use savings. Simply put, the life cycle analysis shows that products created by plastics renewal require 17% the amount of fossil fuels as the same family of hydrocarbon plastics made from virgin petroleum.

With the help of clear legislative support, Brightmark plans to grow its footprint throughout the country. Our hope is to expand over the next two years and develop a number of new facilities that will recycle more than 1.2 million tons of plastic waste per year. Each project represents more than $500m investment with at least 100 locally jobs created. We are hopeful that New Hampshire will join with the fifteen other states that have adopted policies that modernize laws and recognize advanced recycling technologies as manufacturing processes.

We look forward to working with your committees and the legislature as you develop advanced recycling polices. Please let me know if you have questions or if I can provide further guidance.

Thank you.
Sincerely,

Bob Powell,
Founder & CEO

FPA Flexible Packaging Association
Connecting. Advancing. Leading.

185 Admiral Cochrane Drive
Suite 105
Annapolis, MD 21401

Tel (410) 694-0800
Fax (410) 694-0900

www.flexpack.org

Testimony in SUPPORT
of
Senate Bill 367
in
New Hampshire Senate Energy and Natural Resources Committee
on
February 8, 2022

Dear Chairman Avard and Members of the Committee,

The Flexible Packaging Association (FPA) is pleased to **support SB 367**, which would provide regulatory certainty for advanced recycling processes and create a more circular economy for plastics in New Hampshire.

I am Sam Schlaich, Counsel, Government Affairs for FPA, which represents flexible packaging manufacturers and suppliers to the industry. In the U.S. Flexible packaging represents $34.8 billion in annual sales in the U.S. and is the second largest, and fastest growing segment of the packaging industry. The industry employs approximately 80,000 workers in the United States. Flexible packaging is produced from paper, plastic, film, aluminum foil, or any combination of these materials, and includes bags, pouches, labels, liners, wraps, rollstock, and other flexible products.

These are products that you and I use every day – including hermetically sealed food and beverage products such as cereal, bread, frozen meals, infant formula, and juice; as well as sterile health and beauty items and pharmaceuticals, such as aspirin, shampoo, feminine hygiene products, and disinfecting wipes. Even packaging for pet food uses flexible packaging to deliver fresh and healthy meals to a variety of animals. Flexible packaging is also used for medical device packaging to ensure that the products packaged, diagnostic tests, IV solutions and sets, syringes, catheters, intubation tubes, isolation gowns, and other personal protective equipment maintain their sterility and efficacy at the time of use. Trash and medical waste receptacles use can liners to manage business, institutional, medical, and household waste. Carry-out and take-

out food containers and e-commerce delivery, which are increasingly important during this national emergency, are also heavily supported by the flexible packaging industry.

Thus, FPA and its members are particularly interested in solving the plastic pollution issue and increasing recycling of solid waste from packaging. We believe that SB 367 will help do just that. Flexible packaging is in a unique situation as it is one of the most environmentally sustainable packaging types, from a water and energy consumption, product to package ratio, transportation efficiency, and food waste and greenhouse gas emission reduction standpoint, but circularity options are limited. There is no single solution that can be applied to all communities when it comes to the best way to collect, sort, and process flexible packaging waste. Viability is influenced by existing equipment and infrastructure; material collection methods and rates; volume and mix; and demand for the recovered material. Single material flexible packaging, which is approximately half of the flexible packaging waste generated, can be mechanically recycled through store drop-off programs, however end-markets are scarce. The other half can be used to generate new feedstock, whether through pyrolysis, gasification, or fuel blending, but again, if there are no end market for the product, these efforts will be stranded.

Developing end-of-life solutions for flexible packaging is a work in progress and FPA is partnering with other manufacturers, recyclers, retailers, waste management companies, brand owners, and other organizations to continue making strides toward total packaging recovery. Some examples include, The Recycling Partnership and the Materials Recovery for the Future or MRFF project; the Hefty® EnergyBag® Program; and the University of Florida's Advanced Recycling Program. All of these programs seek to increase infrastructure for the collection, sortation and ultimate processing of the valuable materials that make up flexible packaging, including plastic.

Advanced recycling technologies can process plastics that do not have strong end markets, thus enabling a more circular economy for plastics. In addition to benefiting the environment, advanced recycling provides important economic benefits. As the American Chemistry Council reports, more than $7.5 billion in advanced recycling projects have been announced or are already operating in the United States, with the potential to divert 11.7 billion pounds of waste from landfills. And, while this technology may be new to New Hampshire, across the country,

private companies are already manufacturing post-use plastics at a commercial scale into a versatile mix of valuable new products.

FPA believes that a suite of options is needed to address the lack of infrastructure for non-readily recyclable packaging materials, and promotion and support of advanced recycling development is an important lever. Thus, FPA supports the goals of SB 367 and urges support.

In advance, thank you for your consideration. If we can provide further information or answer any questions, please do not hesitate to contact me at 410-694-0800 or SSchlaich@FlexPack.org.

Respectfully,

Sam Schlaich

Sam H. Schlaich, J.D.
Government Affairs Counsel, FPA

PLASTIC® ENERGY

Support for NH SB 367- Regulation of Advanced Recycling and Manufacturing Facilities
February 7, 2022

Hon. Kevin Avard &
Chairman, Senate Energy and Natural Resources Committee
New Hampshire Senate
State House, Room 115
107 North Main Street
Concord, NH 03301

Dear Chairman Avard and Members of the Senate Energy and Natural Resources Committee,

Plastic Energy Limited is a technology provider at the forefront of the circular economy for plastics and the advanced recycling industry. Over the past 10 years, using patented technology, Plastic Energy is converting end of life mixed plastic into a recycled feedstock entirely used to produce virgin-quality recycled plastic. Plastic Energy has over 5 years of operational experience in Spain with our two commercial plants in Almeria and Seville.

As the company looks to grow in the USA and develop recycling facilities, it is important that the right legislation is in place to enable this development and ultimately enable more plastic recycling. It is important for New Hampshire to support legislation like SB 367 so that advanced recycling facilities which process and recycle plastic material today are classified as a manufacturing facility in the state of New Hampshire. This is a crucial regulatory aspect that facilitates the permitting and implementation of advanced recycling which is a circular and sustainable alternative to incineration and landfilling of plastic waste.

The development of advanced recycling is crucially important to ensure that plastic waste would not be disposed of, but rather the waste could be locally managed and recycled and a final product for the material value chain could be manufactured while at the same time supporting local job creation.

Plastic Energy believes it is important for New Hampshire to support SB 367 to encourage innovation and technologies like advanced recycling to grow. Advanced recycling technologies have several benefits when used in addition to reduce, reuse, and mechanical recycling approaches to plastic waste management. Some of the key benefits are listed below.

Advanced Recycling can increase recycling rates and landfill diversion

Advanced recycling is a complementary technology to mechanical recycling with the ability to accept hard to recycle plastic materials. For example, Plastic Energy's plants in Spain process end of life plastic that is all flexible and film packaging, including multilayer packaging, that would instead be incinerated or landfilled. Multiple polymer types can be mixed together and the residual plastic waste from material recovery facilities, that is today sent to landfill, can also be used by advanced recyclers. By reusing this end-of-life plastic in an advanced recycling plant, additional plastic waste volume is recovered and recycled on top of what is achieved today. Hence, advanced recycling can increase recycling rates and divert more end-of-life plastics from landfills and incineration.

Advanced Recycling provides a stable secondary market to support existing waste management infrastructure and increase recycling

Many material recover facilities do not put much effort into sorting residual mixed plastic waste from their recycling facilities because the cost is high and there is not a stable secondary market to support this investment. With long term supply contracts between the existing waste handlers and advanced recyclers a strong and long-term secondary material market is established. This would allow for communities to consider expanding the collection of films and spur investment in equipment for more sorting.

Advanced Recycling promotes the circular economy, keeping valuable plastic materials in the system

End of life plastic can be transformed via an advanced recycling plant into an oil that is used as a feedstock to create virgin-quality recycled products. Compared to mechanical recycling, advanced recycling enables the production of virgin-quality and food grade compliant recycled plastic packaging. Plastic Energy has focused specifically on plastics to plastics production. This means that all the oil manufactured from the advanced recycling plants in Spain is used to make prime application plastics. Products that are already being made with recycled feedstock from our advanced recycling plants and commercialized on the market include Magnum Ice Cream, Philadelphia Cream Cheese, Yoplait Yogurt, and many more.

Advanced recycling has a lower CO_2 footprint for recycling end of life plastic waste compared to incineration and a lower footprint for producing LDPE when compared to LDPE manufactured from virgin fossil sources.

Plastic Energy published a fully peer reviewed, ISO 14040/14044 compliant Life Cycle Assessment (LCA). The LCA study looked at both the end of life and product manufacture scenarios. When end of life plastic is used in advanced recycling vs. incineration, on a per kg of waste plastic basis, the CO_2 impact for the former option is lower by roughly 65%. In addition to the carbon footprint, advanced recycling is done in the absence of oxygen, so no combustion occurs. When 1 kg of LDPE is made from oil from Plastic Energy advanced recycling vs. oil from virgin fossil sources, the CO_2 impact for the former is lower by roughly 50%.

In conclusion, Plastic Energy supports this bill advocating for advanced recycling to be seen as a manufacturing process to enable the multiple benefits discussed above. Therefore, Plastic Energy kindly and respectfully urges New Hampshire to support SB 367.

Sincerely,

Adela Putinelu | Head of Policy
adela.putinelu@plasticenergy.com

PLASTIC ENERGY Recycling plastics that no one else can

Plastic Energy Limited
65 Carter Lane
London
EC4V 5DY
(+44) 7904 066 889
plasticenergy.com

February 8, 2022

Hon. Kevin Avard
Chairman, Senate Energy and Natural Resources Committee
New Hampshire Senate
State House, Room 115
107 North Main Street
Concord, NH 03301

Re: Support for SB 367- Regulation of Advanced Recycling and Manufacturing Facilities

Dear Chairman Avard and Members of the Senate Energy and Natural Resources Committee:

We respectfully encourage support for SB 367, a bill that promotes sensible regulation of advanced recycling facilities as manufacturing facilities in New Hampshire. This legislation would help provide regulatory certainty for advanced recycling processes, further the state's environmental goals, and create economic opportunities.

As background, advanced recycling refers to several different technologies that convert post-use plastics into their original chemical building blocks for the production of new plastics, waxes and other products. These technologies complement traditional recycling methods and are essential to helping consumer goods companies meet their goals for using more recycled plastics. Advanced recycling also is essential to helping keep plastic waste out of our environment and create more jobs in New Hampshire.

Fifteen states to date have adopted policies that modernize laws and recognize advanced recycling technologies as manufacturing processes. Diverting recoverable plastics in New Hampshire from landfills for conversion to feedstocks for new plastics could displace hundreds of thousands of tons of plastics created from virgin natural resources every year.

And, while this technology may be new to New Hampshire, across the country, private companies are already manufacturing post-use plastics at a commercial scale into a versatile mix of valuable new products.

Plastics contribute to sustainability via sanitary packaging that reduces food spoilage, help lightweight automobiles and enable more energy efficient buildings and homes. However, we need to do a better job of recycling and recovering plastics after use as only 8.5% of plastics are currently recycled each year according to the U.S. Environmental Protection Agency. Advanced recycling technologies can process plastics that do not have strong end markets, thus enabling a more circular economy for plastics.

Across the U.S, more than $7.5 billion in advanced recycling projects have been announced or are already operating in the United States, with the potential to divert 11.7 billion pounds of waste from landfills. Adopting legislation to sensibly regulate advanced recycling technologies would open New Hampshire to companies that are investing in and developing advanced recycling facilities.

Advanced recycling is an important part of the solution to a global and domestic challenge of sustainably managing our plastics after use. A circular economy for plastics will help New Hampshire reduce the amount of waste going to landfills, oceans, and incinerators; conserve natural resources; develop a more competitive recycling market; increase jobs, combat climate change; and help to address inequity and environmental justice concerns.

Thank you for your consideration.

Sincerely,
American Chemistry Council
Braven Environmental
Brightmark
Flexible Packaging Association
Plastic Energy
Plastics Industry Association
Printing United Alliance

American Forest & Paper Association

February 8, 2022

The Honorable Kevin Avard, Chair
Senate Committee on Energy and Natural Resources
New Hampshire General Court
Concord, NH 03301

RE: Letter of Information on Senate Bill 367 – An Act relatively to the regulatory status of advanced recycling and manufacturing facilities

On behalf of the American Forest & Paper Association (AF&PA)[i], we appreciate the opportunity to share our perspective on legislation under consideration by the Committee: Senate Bill 367, which establishes definitions for advanced recycling and manufacturing facilities.

AF&PA must respectfully oppose the bill as currently written because it does not exclude the conversion of post-use plastics and recovered feedstocks into fuel or fuel ingredients in the definition of "advanced recycling." The result is that the definition inappropriately combines chemical recycling and energy recovery under one definition. This distinction is important because recycling and energy production are separate processes in the U.S. EPA waste hierarchy; facilities that recycle and facilities that produce energy are often governed (e.g.- taxed and permitted) differently under state and federal law; and changing the definition of recycling for one material can have unintended impacts on other recyclable materials.

There are a few points in the bill where amendments could allow AF&PA to withdraw our opposition. Specifically:

Page 1, line 4: strike "basic hydrocarbon raw materials"

> The specific exclusion of fuels and fuel ingredients from the definition of advanced recycling in the bill is also necessary to address the possibility that products with multiple uses, like "basic hydrocarbons," that are used for fuel or fuel ingredients are included in the definition of "advanced recycling."

Page 1, line 7-8: strike "but are not limited to"

> While the bill does not specifically cite fuels or fuel ingredients as the products made through the thermochemical conversion technologies identified as advanced recycling processes, it does say the definition of advanced recycling includes "but are not limited to" the products cited in the bill's text. Without limiting language in the bill excluding fuels and fuel ingredients from the definition of advanced recycling, the "but are not limited to" language could allow an interpretation that fuels and fuel ingredients may be included in the definition.

Page 2, lines 34-36: strike item (b) in its entirety

> AF&PA also opposes the bill as currently written because it includes the conversion of "recovered feedstock" in the definition of "advanced recycling" and defines "recovered feedstock" as a non-hazardous secondary material that is used as a fuel. That definition is covered by the language, "Materials for which the United States Environmental Protection Agency has made a non waste determination pursuant to 40 C.F.R. 241.3(c)..." 40 C.F.R. 241.3 only deals with standards and procedures for identification of non-hazardous secondary materials that are solid waste when used as a fuel or ingredients in combustion units."

The conversion of post-use plastics and recovered feedstocks into new plastic products or inputs for new plastic products can legitimately be called "recycling" (chemical recycling). The conversion of post-use plastics and recovered feedstocks into fuels or fuel ingredients is not "recycling", it is energy recovery. The language in this bill must make that distinction clear.

Conclusion

We thank the Committee for your time and consideration on this important matter. We look forward to continuing our work with New Hampshire. Please feel free to contact Abigail Sztein, Director, Government Affairs at abigail_sztein@afandpa.org for further information.

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[1] AF&PA serves to advance U.S. paper and wood products manufacturers through fact-based public policy and marketplace advocacy. The forest products industry is circular by nature. AF&PA member companies make essential products from renewable and recycle resources, generate renewable bioenergy and are committed to continuous improvement through the industry's sustainability initiative — *Better Practices, Better Planet 2030: Sustainable Products for a Sustainable Future.* The forest products industry accounts for approximately four percent of the total U.S. manufacturing GDP, manufactures nearly $300 billion in products annually and employs approximately 950,000 people. The industry meets a payroll of approximately $60 billion annually and is among the top 10 manufacturing sector employers in 45 states.

In New Hampshire, the forest products industry employs over 4,000 individuals, with an annual payroll of nearly $204 million and manufacturing output exceeding $845 million annually.

American Chemistry Council

February 8, 2022

Hon. Kevin Avard
Chairman, Senate Energy and Natural Resources Committee
New Hampshire Senate
State House, Room 115
107 North Main Street
Concord, NH 03301

Re: Support for SB 367- Regulation of Advanced Recycling and Manufacturing Facilities

Dear Chairman Avard and Members of the Senate Energy and Natural Resources Committee:

The American Chemistry Council (ACC) is a national trade association representing chemicals and plastics manufacturers in the United States, including member companies in New Hampshire. The chemical industry directly employs over 2,049 people in New Hampshire and indirectly supports another 1,185 jobs and generates over $155 million payroll over 68 establishments, supporting the needs of New Hampshire and its residents.

Over 96% of all manufactured goods are impacted by the business of chemistry, making this industry an essential part of every facet of our nation's economy. Chemistry provides significant economic benefits in every state including New Hampshire. Thanks to chemistry, our lives are healthier, safer, more sustainable and productive than before.

ACC is an expert resource on innovative plastics recycling programs to improve plastics circularity nationwide. ACC strongly encourages the Committee to support New Hampshire's interest in ensuring that greater amounts of our post-use packaging materials, especially plastics, are recycled and converted into feedstocks for new plastics and other useful products.

We respectfully request the Committee supports classifying advanced recycling technologies as manufacturing facilities in New Hampshire, which will enable residents of New Hampshire to recycle greater amounts and types of plastics packaging. Advanced recycling helps us decrease plastic waste, support continued progress toward zero waste and sustainability goals for communities and states.

New Hampshire can accelerate the adoption and growth of advanced recycling in the state by ensuring these technologies are properly regulated as manufacturing and not waste disposal in the state. These technologies receive plastics that has been sorted and/or source separated and use these plastics as a raw material to manufacture higher value, marketable products that can go back into plastics manufacturing again. Throughout the U.S., policymakers are looking for proactive solutions to encourage greater amounts and types of plastics are recycled in their states. As a result, fifteen states to date have reformed their laws to acknowledge they are manufacturing facilities and States in the Northeast have introduced similar legislation.

Advanced recycling refers to several different technologies that **convert used plastics into their original building blocks**, to produce new plastics, waxes, and other valuable products.

Advanced recycling technologies can expand the scope of materials we can recycle, help preserve the value of resources in our economy, and bridge the gap between the supply and demand for high-quality recycled plastics used in food-grade and pharmaceutical applications.

Advanced recycling helps us to achieve a circular economy and close the loop on plastics. Having a transparent regulatory framework for advanced recycling facilities in New Hampshire will enable advanced recycling to grow in the state, bringing in jobs, creating economic development, and increasing the amount of plastics recycled instead of landfilled.

Advanced recycling facilities have a smaller environmental footprint than common manufacturing operations, including food processing, auto manufacturing, hospitals, and universities. A 2021 report from Good Company, a sustainability consulting firm, studied the emissions of advanced recycling and found them to be very low. Just like other manufacturing facilities, advanced recycling facilities are regulated under the U.S. Clean Air Act and would also have to comply with any regulations at the state and local level.

Many global brand companies have set sustainability goals to include more recycled plastic in their packaging. Advanced recycling complements mechanical recycling in helping companies meet their commitments. Recycled plastic generated through advanced recycling has even been approved for use in certain food- and pharma-contact packaging.

Advanced recycling technologies enable post-use plastics that currently do not have strong end markets (e.g. films, pouches, tubes, foam, lids) to be converted back to their basic chemical building blocks. These chemical building blocks can then be used to produce new food grade plastics, chemicals, and other valuable products of chemistry such as waxes and lubricants. Technologies such as pyrolysis, gasification and depolymerization heat plastics in an oxygen deprived environment, without combustion, and convert the plastics to liquid feedstocks that can be remanufactured into a versatile mix of new products for remanufacturing. We are seeing advanced recycling in action across the United States with many incredible examples of circularity. Some examples include:

- Wendy's is moving away from its lined paper cups to new plastic cups that will be made with 20% recycled plastics. The cups will be certified by the International Sustainability & Carbon Certification Plus (ISSC+) system and are the result of a partnership between LyondellBasell, Berry Plastics and Wendy's.
- Procter & Gamble's Herbal Essences brand will be the first P&G brand to use Eastman Renew's advanced recycling plastic in its packaging. Herbal Essences will introduce five shampoo and conditioner collections made from 50% ISCC+ certified recycled plastic.
- Chevron Phillips has completed its first commercial sales of its ISCC+ certified Marlex® Anew ™ Circular Polyethylene derived from advanced recycling of plastics. Chevron-Phillips has set a goal to produce one billion pounds of their circular polymers by 2030.
- Exxon Mobil and Agilyx have partnered to create Cyclyx International to prepare plastic feedstocks for advanced recycling. ExxonMobil will use these plastics as it recently announced plans to build its first large-scale advanced recycling facility in Baytown, Texas.

A recent report released in November 2021 by Closed Loop Partners, a New York based investment firm, found that advanced recycling technologies can process many types of plastics into a versatile mix of end products and can help double the plastics packaging recycling rate by 2030. The report notes the important role that policymakers, investors and the plastics value chain play in achieving success. This recent report comes on the heels on Closed Loop's April 2019 report that found there was a $120 billion economic opportunity in North America via advanced recycling.

Additionally, the ACC is a leader in calling for policy approaches that will help Americans recycle more types of plastics. Our "5 Actions for Sustainable Change" calls for a national 30% recycled plastic target for all plastics packaging. A July 2021 analysis by Independent Commodity Intelligence Services (ICIS) estimated that it will require 13 billion pounds of recycled plastic per year to reach a 30% recycled plastic target in the U.S. and that it will take both mechanical and advanced recycling to get there. Lastly, the U.S. Environmental Protection Agency recently recognized in its National Recycling Strategy to achieve its 50% national recycling rate by 2030, the important potential of advanced recycling technologies in achieving that goal.

Finally, it is important to state that a recent report showed that air emissions from these facilities are expected to have roughly similar or lower air emissions (CAPs) than many common facilities such as universities, hospitals, food and auto manufacturers found in the U.S. Additionally, that the technologies employ the latest emissions control technologies and are subject to strict limits under the U.S. Clean Air Act. Even so, these facilities are expected to have emissions well below federal permitting thresholds and are well-regulated by state and local air authorities.

In closing, the ACC would like to reiterate the importance of New Hampshire recognizing that advanced recycling is a manufacturing process that will enable us to recycle greater amounts and types of plastics. And, that the products of chemistry it produces are secondary raw materials (recycled products) that are being put back into commerce as new food, pharmaceutical and medical contact packaging. Recognition and creating the opportunity for advanced recycling to grow in New Hampshire will help enable the State meet its goals to recycle more post-use materials and send less of these materials to landfills or incinerators.

Sincerely,
Craig M. Cookson
Senior Director, Plastics Sustainability
American Chemistry Council

Voting Sheets

Senate Energy & Natural Resources Committee

EXECUTIVE SESSION RECORD

2021-2022 Session

Bill # SB 367

Hearing Date: 2/8

Executive Session Date: 2/22

Motion of: OTP **Vote:**

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair	✓				
Sen. Giuda, Vice Chair					
Sen. Gray			✓		
Sen. Watters		✓			
Sen. Perkins Kwoka					

Motion of: 0753S **Vote:**

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair	✓			✓	
Sen. Giuda, Vice Chair	✓			✓	
Sen. Gray	✓		✓	✓	
Sen. Watters	✓	✓		✓	
Sen. Perkins Kwoka					

Motion of: OTP A **Vote:**

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair	✓			✓	
Sen. Giuda, Vice Chair	✓		✓	✓	
Sen. Gray	✓			✓	
Sen. Watters	✓	✓		✓	
Sen. Perkins Kwoka					

Motion of: **Vote:**

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair					
Sen. Giuda, Vice Chair					
Sen. Gray					
Sen. Watters					
Sen. Perkins Kwoka					

Reported out by: Avard

Notes:

Committee Report

STATE OF NEW HAMPSHIRE

SENATE

REPORT OF THE COMMITTEE

Tuesday, February 22, 2022

THE COMMITTEE ON Energy and Natural Resources

to which was referred **SB 367**

AN ACT relative to the regulatory status of advanced recycling and manufacturing facilities.

Having considered the same, the committee recommends that the Bill

OUGHT TO PASS WITH AMENDMENT

BY A VOTE OF: 4-0

AMENDMENT # 0789s

Senator Kevin Avard
For the Committee

Daley Frenette 271-3042

ENERGY AND NATURAL RESOURCES

SB 367, relative to the regulatory status of advanced recycling and manufacturing facilities.
Ought to Pass with Amendment, Vote 4-0.
Senator Kevin Avard for the committee.

General Court of New Hampshire - Bill Status System

Docket of SB367

Docket Abbreviations

Bill Title: relative to the regulatory status of advanced recycling and manufacturing facilities.

Official Docket of **SB367.**:

Date	Body	Description
12/17/2021	S	To Be **Introduced** 01/05/2022 and Referred to Energy and Natural Resources; **SJ 1**
2/2/2022	S	**Hearing:** 02/08/2022, Room 103, SH, 09:30 am; **SC 6**
2/22/2022	S	Committee Report: Ought to Pass with Amendment **#2022-0789s**, 02/24/2022; **SC 8A**
2/24/2022	S	Committee Amendment **#2022-0789s**, AA, VV; 02/24/2022; **SJ 4**
2/24/2022	S	**Ought to Pass with Amendment** 2022-0789s, MA, VV; OT3rdg; 02/24/2022; **SJ 4**
3/23/2022	H	Introduced 03/17/2022 and referred to Environment and Agriculture
3/29/2022	H	Public Hearing: 04/05/2022 11:20 am LOB 301-303
4/7/2022	H	Subcommittee Work Session: 04/12/2022 02:00 pm LOB 301-303
4/13/2022	H	Subcommittee Work Session: 04/19/2022 01:00 pm LOB 301-303
4/20/2022	H	Subcommittee Work Session: 04/26/2022 10:00 am LOB 301-303
4/27/2022	H	Executive Session: 04/26/2022 10:00 am LOB 301-303
4/27/2022	H	Majority Committee Report: Ought to Pass with Amendment **#2022-1764h (Vote 9-7; RC)**
4/27/2022	H	Minority Committee Report: Refer for Interim Study
5/4/2022	H	Amendment # 1764h: AA VV 05/04/2022 **HJ 11**
5/4/2022	H	FLAM # 1899h (Rep. Bixby): AA VV 05/04/2022 **HJ 11**
5/4/2022	H	**Ought to Pass with Amendment** 1899h: MA DV 198-128 05/04/2022 **HJ 11**
5/12/2022	S	Sen. Avard Moved to Concur with the House Amendment, MA, VV; 05/12/2022; **SJ 12**
6/7/2022	H	Enrolled (in recess of) 05/26/2022 **HJ 14**
6/6/2022	S	Enrolled Adopted, VV, (In recess 05/26/2022); **SJ 13**
6/22/2022	S	Signed by the Governor on 06/17/2022; Chapter 0224; Effective 08/16/2022

NH House	NH Senate

Other Referrals

Senate Inventory Checklist for Archives

Bill Number: SB367 **Senate Committee:** Energy

Please include all documents in the order listed below and indicate the documents which have been included with an "X" beside

X Final docket found on Bill Status

Bill Hearing Documents: {Legislative Aides}

X Bill version as it came to the committee

X All Calendar Notices

X Hearing Sign-up sheet(s)

X Prepared testimony, presentations, & other submissions handed in at the public hearing

X Hearing Report

___ Revised/Amended Fiscal Notes provided by the Senate Clerk's Office

Committee Action Documents: {Legislative Aides}

All amendments considered in committee (including those not adopted):

X - amendment # 01955 X - amendment # 07535

X - amendment # 07875 ___ - amendment # _____

X Executive Session Sheet

X Committee Report

Floor Action Documents: {Clerk's Office}

All floor amendments considered by the body during session (only if they are offered to the senate):

___ - amendment # _____ ___ - amendment # _____

___ - amendment # _____ ___ - amendment # _____

Post Floor Action: (if applicable) {Clerk's Office}

___ Committee of Conference Report (if signed off by all members. Include any new language proposed by the committee of conference):

___ Enrolled Bill Amendment(s)

___ Governor's Veto Message

All available versions of the bill: {Clerk's Office}

X as amended by the senate X as amended by the house

X final version

Completed Committee Report File Delivered to the Senate Clerk's Office By:

Kelly 6/24/22

Committee Aide **Date**

Senate Clerk's Office AK