

2023 Regular Session

SENATE BILL NO. 100

BY SENATOR LAMBERT

Prefiled pursuant to Article III, Section 2(A)(4)(b)(i) of the Constitution of Louisiana.

ENVIRONMENTAL QUALITY. Provides for advanced recycling facilities. (gov sig)

1 AN ACT

2 To amend and reenact R.S. 30:2153(1) through (7) and (15) and R.S. 30:2412(28) and (29),
3 and to enact R.S. 30:2153(16) through (18), relative to solid waste; to provide for
4 advanced recycling processes, facilities, and products; to provide for definitions; to
5 provide for exceptions; and to provide for related matters.

6 Be it enacted by the Legislature of Louisiana:

7 Section 1. R.S. 30:2153(1) through (7) and (15) and R.S. 30:2412(28) and (29) are
8 hereby amended and reenacted and R.S. 30:2153(16) through (18) are hereby enacted to read
9 as follows:

10 §2153. Definitions

11 As used in this Chapter, the following terms shall have the meaning ascribed
12 to them in this Section, unless the context clearly indicates otherwise:

13 (1) "Advanced recycling" means a manufacturing process for the conversion
14 of post-use polymers and recovered feedstocks into basic ~~hydrocarbon~~ raw materials,
15 feedstocks, chemicals, and other products ~~like waxes and lubricants~~ through
16 processes that include pyrolysis, gasification, depolymerization, catalytic cracking,
17 reforming, hydrogenation, solvolysis, **chemolysis**, and other similar technologies.

1 The recycled products produced at advanced recycling facilities include but are not
2 limited to monomers, oligomers, plastics, plastic and chemical feedstocks, basic and
3 unfinished chemicals, ~~crude oil, naphtha,~~ waxes, lubricants, coatings, and ~~other basic~~
4 ~~hydrocarbons~~ **adhesives**. ~~Energy recovery or the conversion of post-use polymers~~
5 ~~into fuel shall not be considered recycling as defined in R.S. 30:2412.~~ **Advanced**
6 **recycling does not include incineration of plastics or waste-to-energy processes.**
7 **Products sold as fuel are not recycled products. Advanced recycling shall be**
8 **considered "recycling" as defined in R.S. 30:2412.** Advanced recycling shall not
9 be considered solid waste disposal **management, solid waste** processing, **solid**
10 **waste recovery,** incineration, ~~combustion~~ **treatment,** or storage **waste-to-energy.**

11 (2) "Advanced recycling facility" means a **manufacturing** facility that
12 receives, stores, and converts post-use polymers and recovered feedstocks it receives
13 using advanced recycling. An advanced recycling facility is **a manufacturing**
14 **facility** subject to applicable department **manufacturing** regulations **for air, water,**
15 **waste, and land use.** Advanced recycling facilities shall not be considered solid
16 waste disposal **facilities, final disposal facilities, solid waste management**
17 **facilities, solid waste** processing **facilities, solid waste recovery facilities,**
18 ~~incineration~~ **incinerators,** ~~combustion,~~ or storage **waste-to-energy** facilities.

19 (3) "Depolymerization" means a manufacturing process through which
20 **post-use** polymers ~~or plastic materials~~ are broken down into smaller molecules
21 ~~without damaging the monomers themselves and then converted into a~~ **such as**
22 **monomers and oligomers or** raw, intermediate, or final product, ~~including~~
23 ~~monomers, oligomers~~ **products,** plastics, plastic and chemical feedstocks, basic and
24 unfinished chemicals, ~~crude oil, naphtha, liquid transportation fuels,~~ waxes,
25 lubricants, **and** coatings, ~~and other basic hydrocarbons.~~

26 (4) "Gasification" means a manufacturing process through which **post-use**
27 **polymers or** recovered feedstocks are heated and ~~converted into a fuel and gas~~
28 ~~mixture in an oxygen-deficient~~ **oxygen-controlled** atmosphere and the mixture is
29 converted into **syngas, which is a mixture of carbon monoxide and hydrogen,**

1 followed by conversion into valuable raw, intermediate, and final products,
2 including but not limited to plastic monomers, chemicals, waxes, lubricants,
3 chemical feedstocks, ~~crude oil, diesel, gasoline, and diesel and gasoline blendstocks,~~
4 ~~home heating oil and other fuels, including ethanol and transportation fuel,~~ that are
5 returned to economic utility in the form of raw materials; or products; ~~or fuels.~~

6 (5) "Post-use polymer" means a plastic to which all of the following apply:

7 (a) The plastic is derived from any industrial, commercial, agricultural, or
8 domestic activities, and includes pre-consumer recovered materials or
9 post-consumer materials.

10 (b) The plastic is not mixed with solid waste or hazardous waste onsite or
11 during processing at the advanced recycling facility.

12 (c) The plastics' use or intended use is as a feedstock for the manufacturing
13 of ~~crude oil, fuels,~~ feedstocks, ~~blendstocks,~~ raw materials, or other intermediate
14 products or final products using advanced recycling.

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

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

20 (6) "Pyrolysis" means a manufacturing process through which post-use
21 polymers or recovered feedstocks are heated in the absence of oxygen until melted
22 and thermally decomposed, non-catalytically or catalytically, and are then cooled,
23 condensed, and converted into valuable raw materials and; intermediate; and final
24 products, including but not limited to plastic monomers, chemicals, naphtha, waxes,
25 ~~lubricants,~~ and plastic and chemical feedstocks, ~~crude oil, diesel, gasoline, and~~
26 ~~diesel and gasoline blendstocks, home heating oil and other fuels, including ethanol~~
27 ~~and transportation fuel,~~ that are returned to economic utility in the form of raw
28 materials; or products; ~~or fuels.~~

29 (7)(a) "Recovered feedstock" means one or more of the following materials

1 that have been processed so that it may be used as feedstock in an advanced
2 recycling facility:

3 (i) Post-use polymers.

4 (ii) Materials for which the United States Environmental Protection Agency
5 or the department has made a non-waste determination pursuant to 40 CFR 241.3(c),
6 or has otherwise determined are feedstocks and not solid waste.

7 (b) The term "recovered feedstock" shall not include the following:

8 (i) Unprocessed municipal **solid** waste.

9 (ii) Commonly recycled paper that is segregated from solid waste.

10 (iii) Commonly recycled paper that is collected as part of a collection system
11 that commingles the paper with other solid waste at any point from the time of
12 collection through the materials recovery.

13 (iv) Material that is mixed with solid waste or hazardous waste onsite or
14 during processing at an advanced recycling facility.

15 * * *

16 (15) "Solvolysis" means a manufacturing process through which post-use
17 **plastics polymers** are reacted **purified** with the aid of solvents while heated at low
18 temperatures or **heated at low temperatures and** pressurized to make useful
19 products, while allowing additives and contaminants to be **separated removed**. The
20 products of solvolysis include ~~but are not limited to~~ monomers, intermediates, and
21 valuable **chemicals, plastic and chemical feedstocks, and** raw materials. The
22 process includes but is not limited to hydrolysis, aminolysis, ammonolysis,
23 methanolysis, ~~ethanolysis,~~ and glycolysis.

24 **(16) "Mass balance attribution" means a chain of custody accounting**
25 **methodology with rules defined by a third party certification system that**
26 **enables the attribution of the mass of advanced recycling feedstocks to one or**
27 **more advanced recycling products.**

28 **(17) "Recycled plastics" or "recycled plastic" means products that are**
29 **produced from the following:**

"advanced recycling".

Proposed law provides that "advanced recycling" is "recycling" as defined in R.S. 30:2412.

Present law provides that "advanced recycling" does not include certain solid waste processes.

Proposed law retains present law and adds solid waste management, recovery, and treatment as excluded processes.

Present law defines "advanced recycling facility" as a facility that receives, stores, and converts post-use polymers and recovered feedstocks it receives using advanced recycling.

Proposed law retains present law and provides that an "advanced recycling facility" is a manufacturing facility, subject to Dept. of Environmental Quality regulations for air, water, waste, and land use.

Present law provides that advanced recycling facilities are not solid waste disposal, processing, combustion, or storage facilities.

Proposed law retains present law but removes combustion and storage facilities and adds final disposal, solid waste management and recovery, and waste-to-energy facilities as exclusions.

Present law defines "depolymerization" as a manufacturing process through which polymers or plastic materials are broken down into smaller molecules without damaging the monomers themselves and then converted into certain products.

Proposed law retains present law but excludes crude oil, naphtha, liquid transportation fuels, and other basic hydrocarbons as products of the process.

Present law defines "gasification" as 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 raw, intermediate, and final products.

Proposed law retains present law and adds that post-use polymers may be used in the process. Proposed law changes "oxygen-deficient" to "oxygen-controlled" and specifies that the mixture is converted into syngas, a mixture of carbon dioxide and hydrogen.

Proposed law excludes fuels as products of gasification, specifically crude oil, diesel, gasoline, diesel and gasoline blendstocks, home heating oil, and other fuels, including ethanol and transportation fuel.

Present law defines "post-use polymer" and specifies that it may be sourced from any industrial, commercial, agricultural, or domestic activities.

Proposed law retains present law and adds pre-consumer recovered materials and post-consumer materials as sources. Proposed law excludes crude oil, fuels, and blendstocks as products made from post-use polymers.

Present law defines "pyrolysis" as 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 certain products.

Proposed law retains present law and specifies that the process may use recovered feedstocks. Proposed law adds naphtha and plastic and removes crude oil, diesel, gasoline, and diesel and gasoline blendstocks, home heating oil, and other fuels, including ethanol and transportation fuel as products of pyrolysis.

Present law defines "recovered feedstock" as materials that have been processed for use as feedstock in an advanced recycling facility and provides exclusions.

Proposed law retains present law and specifies that unprocessed municipal solid waste is excluded.

Present law defines "solvolysis" as a manufacturing process through which post-use plastics are reacted with the aid of solvents while heated at low temperatures or pressurized to make useful products while allowing additives and contaminants to be separated.

Proposed law retains present law and specifies that the process uses polymers that are purified and that the polymers may be pressurized to make products. Proposed law specifies that products may include chemicals and plastic and chemical feedstocks. Proposed law excludes ethanolytic as a solvolysis process.

Proposed law defines "mass balance attribution".

Proposed law defines "recycled plastics" or "recycled plastic".

Proposed law defines "third-party certification system".

Present law defines "solid waste" as any garbage, refuse, sludge, and other discarded material, including those in a solid, liquid, or semisolid state resulting from residential, community, or commercial activities and provides for certain exclusions.

Proposed law retains present law and adds post-use polymers and recovered feedstocks that are converted through advanced recycling or held at an advanced recycling facility prior to conversion.

Present law defines "solid waste management facility" as any solid waste disposal area, volume reduction plant, transfer station, or other facility the purpose of which is resource recovery or the disposal, recycling, processing, or storage of solid waste and which is owned or operated by or receives solid waste from a parish or municipality, and provides for certain exclusions.

Proposed law retains present law and adds advanced recycling facilities to the exclusions.

Effective upon signature of the governor or lapse of time for gubernatorial action.

(Amends R.S. 30:2153(1)-(7) and (15) and R.S. 30:2412(28) and (29); adds R.S. 30:2153(16)-(18))