By: Hancock S.B. No. 1656

A BILL TO BE ENTITLED

1	AN ACT
2	relating to the conversion of plastics and other recoverable
3	materials through pyrolysis or gasification.
4	BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:
5	SECTION 1. Section 361.003, Health and Safety Code, is
6	amended by amending Subdivisions (25), (34), (35), and (36) and
7	adding Subdivisions (10-a), (10-b), (24-a), (25-a), (25-b), and
8	(26-a) to read as follows:
9	(10-a) "Gasification" means a process through which
10	recoverable feedstocks are heated and converted into a fuel-gas
11	mixture in an oxygen-deficient atmosphere and the mixture is
12	converted into a valuable raw, intermediate, or final product
13	including a plastic, monomer, chemical, wax, lubricant, chemical
14	feedstock, crude oil, diesel, gasoline, diesel and gasoline
15	blendstock, home heating oil, ethanol, or another fuel. The term
16	does not include incineration.
17	(10-b) "Gasification facility" means a facility that
18	receives, separates, stores, and converts post-use polymers and
19	recoverable feedstocks using gasification. The commission may not
20	consider a gasification facility to be a solid waste management
21	facility or an incinerator.
22	(24-a) "Post-use polymers" means plastic polymers

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that derive from any household, industrial, community, commercial,

or other sources of operations or activities that might otherwise

- 1 become waste if not converted into a valuable raw, intermediate, or
- 2 final product. Post-use polymers include used polymers that
- 3 contain incidental contaminants or impurities such as paper labels
- 4 or metal rings but do not include used polymers mixed with solid
- 5 waste, medical waste, hazardous waste, tires, or construction or
- 6 demolition debris.
- 7 (25) "Processing" means the extraction of materials
- 8 from or the transfer, volume reduction, conversion to energy, or
- 9 other separation and preparation of solid waste for reuse or
- 10 disposal. The term includes the treatment or neutralization of
- 11 hazardous waste designed to change the physical, chemical, or
- 12 biological character or composition of a hazardous waste so as to
- 13 neutralize the waste, recover energy or material from the waste,
- 14 render the waste nonhazardous or less hazardous, make it safer to
- 15 transport, store, or dispose of, or render it amenable for recovery
- 16 or storage, or reduce its volume. The term does not include:
- 17 (A) gasification or pyrolysis; or
- 18 (B) activities concerning those materials
- 19 exempted by the administrator of the United States Environmental
- 20 Protection Agency under the federal Solid Waste Disposal Act, as
- 21 amended by the Resource Conservation and Recovery Act of 1976, as
- 22 amended (42 U.S.C. Section 6901 et seq.), unless the commission
- 23 determines that regulation of the activity under this chapter is
- 24 necessary to protect human health or the environment.
- 25 (25-a) "Pyrolysis" means a manufacturing process
- 26 through which post-use polymers are heated in an oxygen-deficient
- 27 atmosphere until melted and thermally decomposed, and are then

- 1 cooled, condensed, and converted into a valuable raw, intermediate,
- 2 or final product including a plastic, monomer, chemical, wax,
- 3 lubricant, chemical feedstock, crude oil, diesel, gasoline, diesel
- 4 and gasoline blendstock, home heating oil, ethanol, or another
- 5 fuel. The term does not include incineration.
- 6 (25-b) "Pyrolysis facility" means a manufacturing
- 7 <u>facility that receives, separates, stores, and converts post-use</u>
- 8 polymers using pyrolysis. The commission may not consider a
- 9 pyrolysis facility to be a solid waste management facility or an
- 10 <u>incinerator</u>.
- 11 (26-a) "Recoverable feedstock" means one or more of
- 12 the following materials, derived from recoverable waste, other than
- 13 coal refuse, that has been processed so that it may be used as
- 14 feedstock in a gasification facility:
- 15 (A) post-use polymers; and
- 16 (B) material, including municipal solid waste
- 17 containing post-use polymers and other post-industrial waste
- 18 containing post-use polymers, that has been processed into a fuel
- 19 or feedstock for which the United States Environmental Protection
- 20 Agency has made a non-waste determination under 40 C.F.R. Section
- 21 <u>241.3(c).</u>
- 22 (34) This subdivision expires on delegation of the
- 23 Resource Conservation and Recovery Act authority to the Railroad
- 24 Commission of Texas. Subject to the limitations of 42 U.S.C.
- 25 Section 6903(27) and 40 C.F.R. Section 261.4(a), "solid waste"
- 26 means garbage, rubbish, refuse, sludge from a waste treatment
- 27 plant, water supply treatment plant, or air pollution control

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- 1 facility, and other discarded material, including solid, liquid,
- 2 semisolid, or contained gaseous material resulting from
- 3 industrial, municipal, commercial, mining, and agricultural
- 4 operations and from community and institutional activities. The
- 5 term:
- 6 (A) does not include:
- 7 (i) solid or dissolved material in domestic
- 8 sewage, or solid or dissolved material in irrigation return flows,
- 9 or industrial discharges subject to regulation by permit issued
- 10 under Chapter 26, Water Code;
- 11 (ii) soil, dirt, rock, sand, and other
- 12 natural or man-made inert solid materials used to fill land if the
- 13 object of the fill is to make the land suitable for the construction
- 14 of surface improvements; [or]
- 15 (iii) waste materials that result from
- 16 activities associated with the exploration, development, or
- 17 production of oil or gas or geothermal resources and other
- 18 substance or material regulated by the Railroad Commission of Texas
- 19 under Section 91.101, Natural Resources Code, unless the waste,
- 20 substance, or material results from activities associated with
- 21 gasoline plants, natural gas or natural gas liquids processing
- 22 plants, pressure maintenance plants, or repressurizing plants and
- 23 is hazardous waste as defined by the administrator of the United
- 24 States Environmental Protection Agency under the federal Solid
- 25 Waste Disposal Act, as amended by the Resource Conservation and
- 26 Recovery Act, as amended (42 U.S.C. Section 6901 et seq.); or
- 27 (iv) post-use polymers or recoverable

1 feedstocks processed through pyrolysis or gasification; and

- 2 (B) does include hazardous substances, for the
- 3 purposes of Sections 361.271 through $361.277[\frac{}{7}]$ and
- 4 361.343 through 361.345.
- 5 (35) This subdivision is effective on delegation of
- 6 the Resource Conservation and Recovery Act authority to the
- 7 Railroad Commission of Texas. Subject to the limitations of 42
- 8 U.S.C. Section 6903(27) and 40 C.F.R. Section 261.4(a), "solid
- 9 waste" means garbage, rubbish, refuse, sludge from a waste
- 10 treatment plant, water supply treatment plant, or air pollution
- 11 control facility, and other discarded material, including solid,
- 12 liquid, semisolid, or contained gaseous material resulting from
- 13 industrial, municipal, commercial, mining, and agricultural
- 14 operations and from community and institutional activities. The
- 15 term:
- 16 (A) does not include:
- 17 (i) solid or dissolved material in domestic
- 18 sewage, or solid or dissolved material in irrigation return flows,
- 19 or industrial discharges subject to regulation by permit issued
- 20 under Chapter 26, Water Code;
- 21 (ii) soil, dirt, rock, sand, and other
- 22 natural or man-made inert solid materials used to fill land if the
- 23 object of the fill is to make the land suitable for the construction
- 24 of surface improvements; [or]
- 25 (iii) waste materials that result from
- 26 activities associated with the exploration, development, or
- 27 production of oil or gas or geothermal resources and other

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- 1 substance or material regulated by the Railroad Commission of Texas
- 2 under Section 91.101, Natural Resources Code; or
- 3 <u>(iv) post-use polymers or recoverable</u>
- 4 <u>feedstocks processed through pyrolysis or gasification;</u> and
- 5 (B) does include hazardous substances, for the
- 6 purposes of Sections 361.271 through 361.277[-361.280] and
- 7 361.343 through 361.345.
- 8 (36) "Solid waste facility" means all contiguous land,
- 9 including structures, appurtenances, and other improvements on the
- 10 land, used for processing, storing, or disposing of solid waste.
- 11 The term includes a publicly or privately owned solid waste
- 12 facility consisting of several processing, storage, or disposal
- 13 operational units such as one or more landfills, surface
- 14 impoundments, or a combination of units. The term does not include
- 15 <u>a pyrolysis or gasification facility.</u>
- SECTION 2. Subchapter B, Chapter 361, Health and Safety
- 17 Code, is amended by adding Section 361.041 to read as follows:
- 18 Sec. 361.041. TREATMENT OF POST-USE POLYMERS AND
- 19 RECOVERABLE FEEDSTOCKS AS SOLID WASTE. The commission may not
- 20 consider post-use polymers or recoverable feedstock to be solid
- 21 waste if they are converted using pyrolysis or gasification into a
- 22 valuable raw, intermediate, or final product including a plastic,
- 23 monomer, chemical, wax, lubricant, chemical feedstock, crude oil,
- 24 diesel, gasoline, diesel and gasoline blendstock, home heating oil,
- 25 <u>ethanol</u>, or another fuel.
- SECTION 3. Section 361.119, Health and Safety Code, is
- 27 amended by adding Subsection (c-1) to read as follows:

- 1 (c-1) A facility that reuses or converts recyclable
- 2 <u>materials through pyrolysis or gasification</u>, and the operations
- 3 conducted and materials <u>handled</u> at the facility, are not subject to
- 4 regulation under rules adopted under this section if the owner or
- 5 operator of the facility demonstrates that:
- 6 (1) the primary function of the facility is to convert
- 7 materials that have a resale value greater than the cost of
- 8 converting the materials for subsequent beneficial use; and
- 9 (2) all the solid waste generated from converting the
- 10 materials is disposed of in a solid waste facility authorized under
- 11 this chapter, with the exception of small amounts of solid waste
- 12 that may be inadvertently and unintentionally disposed of in
- 13 <u>another manner.</u>
- 14 SECTION 4. Sections 361.421(5), (6), and (8), Health and
- 15 Safety Code, are amended to read as follows:
- 16 "Recyclable material" means material that has been
- 17 recovered or diverted from the solid waste stream for purposes of
- 18 reuse, recycling, or reclamation, a substantial portion of which is
- 19 consistently used in the manufacture of products which may
- 20 otherwise be produced using raw or virgin materials. The term
- 21 includes post-use polymers and recoverable feedstocks that are
- 22 converted through pyrolysis or gasification into valuable raw,
- 23 <u>intermediate</u>, and <u>final products</u>. Recyclable material is not solid
- 24 waste unless the material is deemed to be hazardous solid waste by
- 25 the Administrator of the United States Environmental Protection
- 26 Agency, whereupon it shall be regulated accordingly unless it is
- 27 otherwise exempted in whole or in part from regulation under the

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- 1 federal Solid Waste Disposal Act, as amended by the Resource
- 2 Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et
- 3 seq.), by Environmental Protection Agency regulation. However,
- 4 recyclable material may become solid waste at such time, if any, as
- 5 it is abandoned or disposed of rather than recycled, whereupon it
- 6 will be solid waste with respect only to the party actually
- 7 abandoning or disposing of the material.
- 8 (6) "Recycled material" means materials, goods, or
- 9 products that consist of recyclable material or materials derived
- 10 from postconsumer waste, industrial waste, or hazardous waste which
- 11 may be used in place of a raw or virgin material in manufacturing a
- 12 new product. The term includes post-use polymers and recoverable
- 13 <u>feedstocks used in pyrolysis or gasification.</u>
- 14 (8) "Recycling" means a process by which materials
- 15 that have served their intended use or are scrapped, discarded,
- 16 used, surplus, or obsolete are collected, separated, or processed
- 17 and returned to use in the form of raw materials in the production
- 18 of new products. Recycling includes:
- 19 (A) the composting process if the compost
- 20 material is put to beneficial reuse as defined by the commission;
- 21 [and]
- (B) the application to land, as organic
- 23 fertilizer, of processed sludge or biosolids from municipal
- 24 wastewater treatment plants and other organic matter resulting from
- 25 poultry, dairy, livestock, or other agricultural operations; and
- (C) the conversion of post-use polymers and
- 27 recoverable feedstocks through pyrolysis or gasification.

- 1 SECTION 5. (a) In this section:
- 2 (1) "Advisory committee" means the pollution
- 3 prevention advisory committee established under Section 361.0215,
- 4 Health and Safety Code.
- 5 (2) "Commission" means the Texas Commission on
- 6 Environmental Quality.
- 7 (3) "Engineered fuel" means a solid fuel that is
- 8 manufactured from recoverable constituents of municipal solid
- 9 waste or other secondary materials.
- 10 (4) "Feedstock" means raw material that is used in a
- 11 machine or industrial process.
- 12 (5) "Sustainable materials management" means a
- 13 systematic approach to using and reusing materials more
- 14 productively over their entire life cycle, taking into account
- 15 life-cycle cost benefit analysis considerations.
- 16 (b) To further develop and implement the state solid waste
- 17 management strategies and plans, the commission and the comptroller
- 18 of public accounts, in coordination with the advisory committee,
- 19 shall conduct a study to promote sustainable materials management
- 20 and the development and use of pyrolysis and gasification processes
- 21 to divert recoverable polymers and other materials away from
- 22 landfills and toward conversion into valuable raw, intermediate,
- 23 and final products, including plastic, monomers, chemicals, waxes,
- 24 lubricants, chemical feedstocks, crude oil, diesel, gasoline,
- 25 diesel and gasoline blendstocks, home heating oil, ethanol, and
- 26 other fuels, by reducing unnecessary and inappropriate barriers to
- 27 the siting, permitting, and operation of facilities using the

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- 1 technologies.
- 2 (c) The study must examine post-use polymers and
- 3 recoverable feedstocks that are often deposited in landfills to:
- 4 (1) evaluate recycling and recovery based on the
- 5 energy and water savings and greenhouse gas reductions achieved by
- 6 improving material recovery from the solid waste stream, including
- 7 by measuring certain environmental benefits of waste prevention;
- 8 and
- 9 (2) determine the manner in which state and local
- 10 government officials can promote sustainable materials management,
- 11 environmental issues, and a cost-effective system through the use
- 12 of pyrolysis, gasification, and other innovative technologies such
- 13 as engineered fuels, to convert post-use polymers, alone or in
- 14 combination with other recoverable feedstocks, into materials that
- 15 can be used as plastics, monomers, or chemicals and chemical
- 16 feedstocks, or to generate energy or produce fuels.
- 17 (d) Not later than two years after the effective date of
- 18 this Act, the commission and the comptroller of public accounts
- 19 shall complete the study under this section and report findings and
- 20 recommendations to the legislature and the governor.
- 21 (e) This section expires September 1, 2021.
- 22 SECTION 6. This Act takes effect immediately if it receives
- 23 a vote of two-thirds of all the members elected to each house, as
- 24 provided by Section 39, Article III, Texas Constitution. If this
- 25 Act does not receive the vote necessary for immediate effect, this
- 26 Act takes effect September 1, 2019.