

**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2023**

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**SENATE BILL 725**

Short Title: Definitions for Advanced Recycling. (Public)

Sponsors: Senators Sawrey, Craven, and Overcash (Primary Sponsors).

Referred to: Rules and Operations of the Senate

April 10, 2023

A BILL TO BE ENTITLED

AN ACT TO EXEMPT ADVANCED RECYCLING FACILITIES FROM SOLID WASTE PERMITTING REQUIREMENTS.

The General Assembly of North Carolina enacts:

**SECTION 1.(a)** G.S. 130A-290 reads as rewritten:

**"§ 130A-290. Definitions.**

"(a) Unless a different meaning is required by the context, the following definitions shall apply throughout this Article:

...

(24) "Recovered material" means a material that has known recycling potential, can be feasibly recycled, and has been diverted or removed from the solid waste stream for sale, use, or reuse. In order to qualify as a recovered material, a material must meet the requirements of G.S. 130A-309.05(c). Recovered material includes post-use polymers and recovered feedstocks that are processed at an advanced recycling facility or held at such facility prior to processing.

...

(35) "Solid waste" means any hazardous or nonhazardous garbage, refuse or sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, domestic sewage and sludges generated by the treatment thereof in sanitary sewage collection, treatment and disposal systems, and other material that is either discarded or is being accumulated, stored or treated prior to being discarded, or has served its original intended use and is generally discarded, including solid, liquid, semisolid or contained gaseous material resulting from industrial, institutional, commercial and agricultural operations, and from community activities. Notwithstanding sub-sub-subdivision b.3. of this subdivision, the term includes coal combustion residuals. The term does not include:

...

f. Recovered ~~material~~ material, including post-use polymers and recovered feedstocks converted at an advanced recycling facility or held at such facility prior to conversion through an advanced recycling process.

...

(38) "Solid waste management" means purposeful, systematic control of the generation, storage, collection, transport, separation, treatment, processing,



- 1 recycling, recovery and disposal of solid waste. Solid waste management does  
2 not include advanced recycling.
- 3 (39) "Solid waste management facility" means land, personnel and equipment used  
4 in the management of solid waste. Solid waste management facility does not  
5 include an advanced recycling facility.
- 6 ...
- 7 (46) "Advanced recycling" means a manufacturing process for the conversion of  
8 post-use polymers and other recovered feedstocks into basic raw materials,  
9 feedstocks, chemicals, and other recycled products through processes that  
10 include pyrolysis, gasification, depolymerization, catalytic cracking,  
11 reforming, solvolysis, chemolysis, and other similar technologies. Advanced  
12 recycling does not include incineration of plastics or waste-to-energy  
13 processes.
- 14 (47) "Advanced recycling facility" means a manufacturing facility that receives,  
15 stores, and converts post-use polymers and other recovered feedstocks it  
16 receives using advanced recycling.
- 17 (48) "Depolymerization" means a manufacturing process in which post-use  
18 polymers are broken into smaller molecules such as monomers, oligomers,  
19 plastic or chemical feedstocks, waxes, lubricants, coatings, or other raw,  
20 intermediate, or final products.
- 21 (49) "Gasification" means a manufacturing process through which post-use  
22 polymers or other recovered feedstocks are heated in an oxygen-controlled  
23 atmosphere and converted into synthesis gas, followed by conversion into  
24 valuable raw, intermediate, or final products, including plastic monomers,  
25 chemicals, waxes, lubricants, coatings, and plastic and chemical feedstocks.
- 26 (50) "Post-use polymer" means a plastic to which all of the following apply:  
27 a. It is derived from any industrial, commercial, agricultural, or domestic  
28 activities and may include pre-consumer or postconsumer recovered  
29 materials.  
30 b. It has been sorted from solid waste and other regulated waste but may  
31 contain residual amounts of waste such as organic material and  
32 incidental contaminants or impurities such as paper labels and metal  
33 rings.  
34 c. It is not mixed with solid waste or hazardous waste on-site or during  
35 processing at the advanced recycling facility.  
36 d. Its use or intended use is as a feedstock for the manufacturing of  
37 feedstocks, raw materials, or other intermediate or final products using  
38 advanced recycling.  
39 e. It is processed at an advanced recycling facility or held at such facility  
40 prior to processing.
- 41 (51) "Pyrolysis" means a manufacturing process through which post-use polymers  
42 or other recovered feedstocks are heated in the absence of oxygen until melted  
43 and thermally decomposed and are then cooled, condensed, and converted into  
44 valuable raw, intermediate, or final products, including plastic monomers,  
45 chemicals, waxes, lubricants, and plastic and chemical feedstocks.
- 46 (52) "Recovered feedstock" means a post-use polymer or materials for which the  
47 United States Environmental Protection Agency has made a non-waste  
48 determination pursuant to 40 C.F.R. § 241(c) or has otherwise determined are  
49 feedstocks and not solid waste, that has been processed so that it may be used  
50 as feedstock in an advanced recycling facility. Recovered feedstock does not  
51 include unprocessed municipal solid waste or waste that has been mixed with

1                    solid waste or hazardous waste on-site or during processing at an advanced  
2                    recycling facility.  
3                    (53) "Solvolysis" means a manufacturing process through which post-use  
4                    polymers are purified with the aid of solvents, allowing additives and  
5                    contaminants to be removed in order to produce monomers, intermediates,  
6                    valuable chemicals, plastic and chemical feedstocks, and other raw materials.  
7                    Solvolysis includes hydrolysis, aminolysis, ammonolysis, methanolysis, and  
8                    glycolysis.

9                    ...."

10                    **SECTION 1.(b)** The Revisor of Statutes is authorized to renumber the subdivisions  
11 of G.S. 130A-290, as amended by subsection (a) of this section, to ensure that the subdivisions  
12 are listed in alphabetical order and in a manner that reduces the current use of alphanumeric  
13 designations, to make conforming changes, and to reserve sufficient space to accommodate  
14 future additions to the statutory section.

15                    **SECTION 2.** This act is effective when it becomes law.