

WEST VIRGINIA LEGISLATURE

2022 REGULAR SESSION

Introduced

House Bill 4084

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EVANS AND YOUNG

[Introduced January 14, 2022; Referred to
the Committee on Small Business, Entrepreneurship
and Economic Development then Energy and
Manufacturing.]

1 A BILL to amend and reenact §22-15-2 of the Code of West Virginia, 1931, as amended, relating
2 to advanced recycling; adding definitions relating to advanced recycling and advanced
3 recycling facilities; adding depolymerization and gasification as definitions; defining
4 pyrolysis and expanding the definition of recovered feedstock; and facilitating the
5 conversion of plastics and other recovered materials through advanced recycling
6 processes.

Be it enacted by the Legislature of West Virginia:

ARTICLE 15. SOLID WASTE MANAGEMENT ACT.

§22-15-2. Definitions.

7 Unless the context clearly requires a different meaning, as used in this article the terms:

8 (1) “Advanced recycling” means a manufacturing process for the conversion of post-use
9 polymers and recovered feedstocks into basic hydrocarbon raw materials, feedstocks, chemicals,
10 and other products like waxes and lubricants through processes that include pyrolysis,
11 gasification, depolymerization, catalytic cracking, reforming, hydrogenation, solvolysis, and other
12 similar technologies. The recycled products produced at advanced recycling facilities include, but
13 are not limited to, monomers, oligomers, plastics, plastics and chemical feedstocks, basic and
14 unfinished chemicals, waxes, lubricants, coatings, and other basic hydrocarbons. Advanced
15 recycling shall not be considered “solid waste management,” “solid waste disposal,” “energy
16 recovery,” “materials recovery,” “resource recovery,” “waste processing,” “incineration,”
17 “incineration technology,” or “combustion.”

18 (2) “Advanced recycling facility” means a facility that receives, stores and converts post-
19 use polymers and recovered feedstocks it receives using advanced recycling. An advanced
20 recycling facility is a manufacturing facility subject to applicable department manufacturing
21 regulations for air, water, waste, and land use. Advanced recycling facilities shall not be
22 considered “solid waste facilities,” “solid waste management facilities,” “transfer facilities,” “waste

23 processing facilities,” “solid waste disposal facilities,” “energy recovery incinerator,” “energy
24 recovery facilities,” “materials recovery facilities,” “resource recovery facilities,” “waste processing
25 facilities,” “combustion facilities, or “incinerators.”

26 (4) ~~(3)~~ “Agronomic rate” means the whole sewage sludge application rate, by dry weight,
27 designed:

28 (A) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover
29 crop or vegetation on the land; and

30 (B) To minimize the amount of nitrogen in the sewage sludge that passes below the root
31 zone of the crop or vegetation grown on the land to the groundwater.

32 ~~(2)~~ (4) “Applicant” means the person applying for a commercial solid waste facility permit
33 or similar renewal permit and any person related to such person by virtue of common ownership,
34 common management or family relationships as the director may specify, including the following:
35 Spouses, parents and children and siblings.

36 ~~(3)~~ (5) “Approved solid waste facility” means a solid waste facility or practice which has a
37 valid permit under this article.

38 ~~(4)~~ (6) “Back hauling” means the practice of using the same container to transport solid
39 waste and to transport any substance or material used as food by humans, animals raised for
40 human consumption or reusable item which may be refilled with any substance or material used
41 as food by humans.

42 ~~(5)~~ (7) “Bulking agent” means any material mixed and composted with sewage sludge.

43 ~~(6)~~ (8) “Class A facility” means a commercial solid waste facility which handles an
44 aggregate of between ten thousand and thirty thousand tons of solid waste per month. Class A
45 facility includes two or more Class B solid waste landfills owned or operated by the same person
46 in the same county, if the aggregate tons of solid waste handled per month by such landfills
47 exceeds nine thousand nine hundred ninety-nine tons of solid waste per month.

48 ~~(7)~~ (9) “Commercial recycler” means any person, corporation or business entity whose

49 operation involves the mechanical separation of materials for the purpose of reselling or recycling
50 at least seventy percent by weight of the materials coming into the commercial recycling facility.

51 ~~(8)~~ (10) "Commercial solid waste facility" means any solid waste facility which accepts
52 solid waste generated by sources other than the owner or operator of the facility and does not
53 include an approved solid waste facility owned and operated by a person for the sole purpose of
54 the disposal, processing or composting of solid wastes created by that person or such person and
55 other persons on a cost-sharing or nonprofit basis and does not include land upon which reused
56 or recycled materials are legitimately applied for structural fill, road base, mine reclamation and
57 similar applications.

58 ~~(9)~~ (11) "Compost" means a humus-like material resulting from aerobic, microbial,
59 thermophilic decomposition of organic materials.

60 ~~(40)~~ (12) "Composting" means the aerobic, microbial, thermophilic decomposition of
61 natural constituents of solid waste to produce a stable, humus-like material.

62 ~~(44)~~ (13) "Commercial composting facility" means any solid waste facility processing solid
63 waste by composting, including sludge composting, organic waste or yard waste composting, but
64 does not include a composting facility owned and operated by a person for the sole purpose of
65 composting waste created by that person or such person and other persons on a cost-sharing or
66 nonprofit basis and shall not include land upon which finished or matured compost is applied for
67 use as a soil amendment or conditioner.

68 ~~(42)~~ (14) "Cured compost" or "finished compost" means compost which has a very low
69 microbial or decomposition rate which will not reheat or cause odors when put into storage and
70 that has been put through a separate aerated curing cycle stage of thirty to sixty days after an
71 initial composting cycle or compost which meets all regulatory requirements after the initial
72 composting cycle.

73 ~~(43)~~ (15) "Department" means the Department of Environmental Protection.

74 (16) "Depolymerization" means a manufacturing process where post-use polymers are

75 broken into smaller molecules such as monomers and oligomers or raw, intermediate, or final
76 products, plastics and chemical feedstocks, basic and unfinished chemicals, waxes, lubricants,
77 coatings, and other basic hydrocarbons.

78 ~~(14)~~ (17) “Energy recovery incinerator” means any solid waste facility at which solid wastes
79 are incinerated with the intention of using the resulting energy for the generation of steam,
80 electricity or any other use not specified herein.

81 (18) “Gasification” means a manufacturing process through which recovered feedstocks
82 are heated and converted into a fuel and gas mixture in an oxygen-deficient atmosphere and the
83 mixture is converted into valuable raw materials and intermediate and final products, including,
84 but not limited to, plastic monomers, chemicals, waxes, lubricants, plastic and chemical
85 feedstocks, and other basic hydrocarbons that are returned to economic utility in the form of raw
86 materials and products.

87 ~~(15)~~ (19) “Incineration technologies” means any technology that uses controlled flame
88 combustion to thermally break down solid waste, including refuse-derived fuel, to an ash residue
89 that contains little or no combustible materials, regardless of whether the purpose is processing,
90 disposal, electric or steam generation or any other method by which solid waste is incinerated.

91 ~~(16)~~ (20) “Incinerator” means an enclosed device using controlled flame combustion to
92 thermally break down solid waste, including refuse-derived fuel, to an ash residue that contains
93 little or no combustible materials.

94 ~~(17)~~ (21) “Landfill” means any solid waste facility for the disposal of solid waste on or in
95 the land for the purpose of permanent disposal. Such facility is situated, for purposes of this article,
96 in the county where the majority of the spatial area of such facility is located.

97 ~~(18)~~ (22) “Materials recovery facility” means any solid waste facility at which source-
98 separated materials or materials recovered through a mixed waste processing facility are
99 manually or mechanically shredded or separated for purposes of reuse and recycling, but does
100 not include a composting facility.

101 ~~(19)~~ (23) “Mature compost” means compost which has been produced in an aerobic,
102 microbial, thermophilic manner and does not exhibit phytotoxic effects.

103 ~~(20)~~ (24) “Mixed solid waste” means solid waste from which materials sought to be reused
104 or recycled have not been source-separated from general solid waste.

105 ~~(21)~~ (25) “Mixed waste processing facility” means any solid waste facility at which
106 materials are recovered from mixed solid waste through manual or mechanical means for
107 purposes of reuse, recycling or composting.

108 ~~(22)~~ (26) “Municipal solid waste incineration” means the burning of any solid waste
109 collected by any municipal or residential solid waste disposal company.

110 ~~(23)~~ (27) “Open dump” means any solid waste disposal which does not have a permit
111 under this article, or is in violation of state law, or where solid waste is disposed in a manner that
112 does not protect the environment.

113 ~~(24)~~ (28) “Person” or “persons” means any industrial user, public or private corporation,
114 institution, association, firm or company organized or existing under the laws of this or any other
115 state or country; State of West Virginia; governmental agency, including federal facilities; political
116 subdivision; county commission; municipal corporation; industry; sanitary district; public service
117 district; drainage district; soil conservation district; watershed improvement district; partnership;
118 trust; estate; person or individual; group of persons or individuals acting individually or as a group;
119 or any legal entity whatever.

120 (29) “Post-use polymer” means a plastic to which all of the following apply:

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

123 (B) It is not mixed with solid waste or hazardous waste onsite or during processing at the
124 advanced recycling facility.

125 (C) The plastic’s use or intended use is as a feedstock for the manufacturing of plastic and
126 chemical feedstocks, other basic hydrocarbons, raw materials, or other intermediate products or

127 final products using advanced recycling.

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

131 (E) The plastic is processed at an advanced recycling facility or held at such facility prior
132 to processing.

133 ~~(25)~~ (30) "Publicly owned treatment works" means any treatment works owned by the state
134 or any political subdivision thereof, any municipality or any other public entity which processes
135 raw domestic, industrial or municipal sewage by any artificial or natural processes in order to
136 remove or so alter constituents as to render the waste less offensive or dangerous to the public
137 health, comfort or property of any of the inhabitants of this state before the discharge of the plant
138 effluent into any of the waters of this state, and which produces sewage sludge.

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

145 (32) "Recovered feedstock" means one or more of the following materials that has been
146 processed so that it may be used as feedstock in an advanced recycling facility:

147 (A) Post-use polymers.

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

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

152 (D) Recovered feedstock is not mixed with solid waste or hazardous waste onsite or

153 during processing at an advanced recycling facility.

154 ~~(26)~~ (33) "Recycling facility" means any solid waste facility for the purpose of recycling at
155 which neither land disposal nor biological, chemical or thermal transformation of solid waste
156 occurs: *Provided*, That mixed waste recovery facilities, sludge processing facilities and
157 composting facilities are not considered recycling facilities nor considered to be reusing or
158 recycling solid waste within the meaning of this article, article fifteen-a of this chapter and article
159 four, chapter twenty-two-c of this code.

160 ~~(27)~~ (34) "Sewage sludge" means solid, semisolid or liquid residue generated during the
161 treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited
162 to, domestic septage, scum or solids removed in primary, secondary or advanced wastewater
163 treatment processes and a material derived from sewage sludge. "Sewage sludge" does not
164 include ash generated during the firing of sewage sludge in a sewage sludge incinerator.

165 ~~(28)~~ (35) "Secretary" means the Secretary of the Department of Environmental Protection
166 or such other person to whom the Secretary has delegated authority or duties pursuant to article
167 one of this chapter.

168 ~~(29)~~ (36) "Sewage sludge processing facility" is a solid waste facility that processes
169 sewage sludge for: (A) Land application; (B) incineration; or (C) disposal at an approved landfill.
170 Such processes include, but are not limited to, composting, lime stabilization, thermophilic,
171 microbial and anaerobic digestion.

172 ~~(30)~~ (37) "Sludge" means any solid, semisolid, residue or precipitate, separated from or
173 created by a municipal, commercial or industrial waste treatment plant, water supply treatment
174 plant or air pollution control facility or any other such waste having similar origin.

175 ~~(34)~~ (38) "Solid waste" means any garbage, paper, litter, refuse, cans, bottles, waste
176 processed for the express purpose of incineration; sludge from a waste treatment plant; water
177 supply treatment plant or air pollution control facility; and other discarded materials, including
178 offensive or unsightly matter, solid, liquid, semisolid or contained liquid or gaseous material

179 resulting from industrial, commercial, mining or community activities but does not include solid or
180 dissolved material in sewage or solid or dissolved materials in irrigation return flows or industrial
181 discharges which are point sources and have permits under article five-a of this chapter, or
182 source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as
183 amended, including any nuclear or byproduct material considered by federal standards to be
184 below regulatory concern, or a hazardous waste either identified or listed under article five-e of
185 this chapter or refuse, slurry, overburden or other wastes or material resulting from coal-fired
186 electric power or steam generation, the exploration, development, production, storage and
187 recovery of coal, oil and gas and other mineral resources placed or disposed of at a facility which
188 is regulated under chapter twenty-two, twenty-two-a or twenty-two-b of this code, so long as
189 placement or disposal is in conformance with a permit issued pursuant to such chapters, or post-
190 use polymers and recovered feedstocks converted at an advanced recycling facility or held at
191 such facility prior to conversion.

192 ~~(32)~~ (39) "Solid waste disposal" means the practice of disposing of solid waste including
193 placing, depositing, dumping or throwing or causing any solid waste to be placed, deposited,
194 dumped or thrown.

195 ~~(33)~~ (40) "Solid waste disposal shed" means the geographical area which the solid waste
196 management board designates and files in the state register pursuant to section eight, article
197 twenty-six, chapter sixteen of this code.

198 ~~(34)~~ (41) "Solid waste facility" means any system, facility, land, contiguous land,
199 improvements on the land, structures or other appurtenances or methods used for processing,
200 recycling or disposing of solid waste, including landfills, transfer stations, materials recovery
201 facilities, mixed waste processing facilities, sewage sludge processing facilities, commercial
202 composting facilities and other such facilities not herein specified, but not including land upon
203 which sewage sludge is applied in accordance with section twenty of this article. Such facility shall
204 be deemed to be situated, for purposes of this article, in the county where the majority of the

205 spatial area of such facility is located: *Provided*, That a salvage yard, licensed and regulated
206 pursuant to the terms of article twenty-three, chapter seventeen of this code, is not a solid waste
207 facility and an advanced recycling facility is not a solid waste facility.

208 ~~(35)~~ (42) "Solid waste facility operator" means any person or persons possessing or
209 exercising operational, managerial or financial control over a commercial solid waste facility,
210 whether or not such person holds a certificate of convenience and necessity or a permit for such
211 facility.

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

217 ~~(36)~~ (44) "Source-separated materials" means materials separated from general solid
218 waste at the point of origin for the purpose of reuse and recycling but does not mean sewage
219 sludge.

NOTE: The purpose of this bill is to allow advanced recycling facilities in the state and to facilitate the conversion of plastics and other recovered materials through advanced recycling processes.

Strike-throughs indicate language that would be stricken from a heading or the present law and underscoring indicates new language that would be added.