

SENATE, No. 4666

STATE OF NEW JERSEY
222nd LEGISLATURE

INTRODUCED OCTOBER 1, 2026

Sponsored by:
Senator JOHN J. BURZICHELLI
District 3 (Cumberland, Gloucester and Salem)

SYNOPSIS

Establishes biochar processing permit.

CURRENT VERSION OF TEXT

As introduced.



1 AN ACT establishing biochar processing permit and supplementing
2 Title 13 of the Revised Statutes.

3
4 **BE IT ENACTED** *by the Senate and General Assembly of the State*
5 *of New Jersey:*

6
7 1. The Legislature finds and declares:

8 a. Biochar is a carbon-dense porous solid produced through
9 pyrolysis, a thermochemical conversion of organic matter in an
10 oxygen-limited environment.

11 b. Biochar can be converted from many forms of organic matter,
12 including whole trees, residual forest materials, wood chips, wheat
13 straw, spoiled hay, food processing waste, demolition waste,
14 sewage sludge, invasive species, and many other forms of
15 agricultural and municipal waste.

16 c. The production and use of biochar can have a significant,
17 positive impact in the areas of energy, agriculture, and the
18 environment.

19 d. Biochar offers diverse physiochemical characteristics such as
20 high porosity, large surface area, and slow degradation timelines,
21 making it an effective strategy for soil fertilization, water treatment,
22 and carbon sequestration.

23 e. Biochar application has been shown to improve soil fertility,
24 increase crop yields between 10 and 42 percent, improve water
25 quality, and reduce soil erosion, as a result of enhanced nutrient and
26 water retention, increased microbial activity, and reduced organic
27 matter density.

28 f. Soil, contaminated with high levels of per- and
29 polyfluoroalkyl substances (PFAS), and treated through pyrolysis to
30 become biochar, may be reapplied as fertilizer, thus limiting
31 contaminant leaching into groundwaters, reducing PFAS
32 bioavailability through competitive absorption, and supplementing
33 standard phytoremediation strategies.

34 g. This soil retreatment method may accelerate soil restoration
35 timelines by over a decade, decreasing land remediation costs by an
36 order of magnitude compared to conventional approaches.

37 h. In forest ecosystems, biochar contributes to healthier and
38 more resilient forests and soils, better air quality, reduced incidence
39 of air-pollution-driven health problems, reduced runoff and soil
40 erosion, reduced risk of catastrophic wildfires, and enhanced carbon
41 sequestration.

42 i. The production of biochar could enhance agricultural
43 economic development and employment, including by providing a
44 market for unused cellulosic biomass, contributing to agricultural
45 resource reuse, and cultivating a circular energy economy.

46 j. Therefore, to fully realize the soil health, energy generation,
47 and economic benefits of the use of biochar in agriculture, it is in
48 the best interest of the State to establish a biochar permit process.

1 2. As used in this act:

2 “Air pollution” means the presence in the outdoor atmosphere of
3 one or more air contaminants in such quantities and durations as
4 are, or tend to be, injurious to the human health or welfare, animal
5 or plant life, or property, or would unreasonably interfere with the
6 enjoyment of life or property anywhere in the State as may be
7 affected thereby, but excludes all aspects of employer-employee
8 relationships with respect to health and safety hazards within the
9 confines of a place of employment.

10 “Biochar” means material derived from the thermochemical
11 conversion of biomass in an oxygen-limited environment,
12 containing at least 60 percent carbon, which sequesters carbon and
13 which is capable of being used as a soil amendment.

14 “Clean cellulosic biomass” means those residuals that are akin to
15 traditional cellulosic biomass, including, but not limited to:
16 agricultural and forest-derived biomass; urban wood; corn stover
17 and other biomass crops used specifically for the production of
18 cellulosic biofuels; bagasse and other crop residues; wood collected
19 from forest fire clearance activities, trees and clean wood found in
20 disaster debris, clean biomass from land clearing operations, and
21 clean construction and demolition wood. The term “clean cellulosic
22 biomass” shall not include biomass that contains contaminants at
23 concentrations greater than those normally associated with organic
24 biomass materials.

25 “Commissioner” means the Commissioner of Environmental
26 Protection.

27 “Department” means the Department of Environmental
28 Protection.

29 “Solid waste” means garbage, refuse, and other discarded
30 materials resulting from industrial, commercial and agricultural
31 operations, and from domestic and community activities, and
32 includes all other waste materials including liquids disposed of
33 incident thereto.

34 “Volatile organic compound” means the same as defined at
35 section 2 of the “Air Pollution Control Act (1954),” P.L.1954, c.212
36 (C.26:2C-1 et seq.).

37

38 3. a. Beginning 180 days after the date of enactment of this
39 act, no person or facility shall engage in biochar processing unless
40 the person or facility obtains a permit, as established by the
41 department pursuant to the provisions of this section.

42 b. The department, in consultation with the Department of
43 Agriculture, shall adopt rules and regulations establishing a biochar
44 processing permit. The biochar processing permit shall allow the
45 holder of the permit to process biochar only from clean cellulosic
46 biomass. The department shall issue a biochar processing permit to
47 any person or facility that qualifies for the permit, pursuant to the

1 provisions of this section, and meets any additional requirements
2 established by the departments pursuant to this act.

3 c. The department shall require an applicant for a biochar
4 processing permit to provide the following information, at a
5 minimum:

6 (1) the applicant's name, business location, and mailing address;

7 (2) the geographical area to be serviced for the term of the
8 permit, including a map and a list of zip codes in that area;

9 (3) an identification of clean cellulosic biomass sources to be
10 used in biomass processing; and

11 (4) any additional requirements as determined appropriate by
12 the department.

13 d. The department shall issue a biochar processing permit to an
14 applicant after the department, in consultation with the Department
15 of Agriculture, has received, independently reviewed, and approved
16 of an application for a biochar processing permit from the applicant.
17 The department shall review and issue a decision on any biochar
18 processing permit application within six months of receipt of the
19 application. The department may deny an application for a permit
20 or permit renewal if, based upon a review of application material,
21 the applicant does not meet the requirements established pursuant to
22 this act.

23 e. A holder of a biochar processing permit shall:

24 (1) comply and, once a permit has been issued, maintain
25 compliance, with any air contaminant and emissions requirements
26 established by the department;

27 (2) comply with any inspection or audit requirement established
28 by the department;

29 (3) comply with any reporting requirements established by the
30 department; and

31 (4) maintain financial assurance, in the amount of no less than
32 \$150,000 per facility, to ensure that adequate funds are available for
33 organic waste disposal and potential environmental mitigation. The
34 financial assurance shall be in a form approved by the department,
35 including, but not limited to, insurance, bonds, or other financial
36 instruments. The department may assess the financial qualifications
37 of a permitted biochar processing facility based on its financial
38 statements and operational history and may determine an alternative
39 amount of financial assurance that meets the same level of
40 protection.

41 f. The department, in consultation with the Department of
42 Agriculture, shall establish, through the biochar processing permit
43 program, requirements for air pollution and solid waste control,
44 which take into consideration the unique air contamination, soil
45 toxicity, and emissions potentials of processed biochar, and which
46 are distinct from:

1 (1) the air contaminant, fuel capacity, and facility class
2 requirements of the “Air Pollution Control Act (1954)” (C.26:2C-2
3 et seq.);

4 (2) the matter composition and toxicity requirements of existing
5 solid waste control rules; and

6 (3) existing volatile organic compound rules.

7 g. An application for a biochar processing permit or biochar
8 processing permit renewal shall be accompanied by an application
9 fee, to be established by the department, which shall be sufficient to
10 cover all costs of processing the application and issuing the permit
11 or permit renewal. The department may also determine an annual
12 renewal fee, which shall be charged to a person or facility that
13 qualifies for a biochar processing permit. The revenue from the
14 annual fees shall be sufficient to cover all costs of administering
15 and enforcing the biochar processing permit.

16 h. Any facility found processing biochar in a manner
17 incongruous with the requirements of this act shall be subject to the
18 penalties enumerated in section 4 of this act, as well as the
19 suspension or revocation of their biochar processing permit.

20

21 4. a. Whenever the Commissioner of Environmental Protection
22 finds that a person or facility has violated this act, or any rule or
23 regulation adopted pursuant thereto, the commissioner may:

24 (1) issue an order requiring the person found to be in violation to
25 comply in accordance with subsection b. of this section;

26 (2) bring a civil action in accordance with subsection c. of this
27 section;

28 (3) levy a civil administrative penalty in accordance with
29 subsection d. of this section; or

30 (4) bring an action for a civil penalty in accordance with
31 subsection e. of this section.

32 b. Whenever the commissioner finds that a person or facility has
33 violated any rule or regulation adopted pursuant to this act, the
34 commissioner may issue an order specifying the rule or regulation
35 adopted pursuant to this act, of which the person or facility is in
36 violation, citing the action that constituted the violation, ordering
37 abatement of the violation, and giving notice to the person or the
38 facility of the right to a hearing on the matters contained in the
39 order. The ordered person or facility shall have 20 calendar days
40 from receipt of the order within which to deliver to the
41 commissioner a written request for a hearing. After the hearing and
42 upon finding that a violation has occurred, the commissioner may
43 issue a final order. If no hearing is requested, the order shall
44 become final after the expiration of the 20-day period. A request
45 for hearing shall not automatically stay the effect of the order.

46 c. The commissioner may institute an action or proceeding in the
47 Superior Court for injunctive and other relief to enforce the
48 provisions of this act, and to prohibit and prevent a violation of any

1 rule or regulation adopted pursuant to this act, and the court may
2 proceed in the action in a summary manner. In any such proceeding
3 the court may grant temporary or interlocutory relief.

4 Such relief may include, singly or in combination:

5 (1) a temporary or permanent injunction;

6 (2) assessment of the violator for the reasonable costs of any
7 inspection that led to the establishment of the violation, and for the
8 reasonable costs of preparing and litigating the case under this
9 subsection.

10 d. The commissioner may assess a civil administrative penalty
11 of not more than \$7,500 for a first offense, not more than \$10,000
12 for a second offense, and not more than \$15,000 for a third and
13 every subsequent offense. Each day that a violation continues shall
14 constitute an additional, separate, and distinct offense. No
15 assessment may be levied pursuant to this section until after the
16 violator has been notified by certified mail or personal service. The
17 notice shall include a reference to the section of the statute, rule,
18 regulation, or order violated, a concise statement of the facts
19 alleged to constitute a violation, a statement of the amount of the
20 civil administrative penalties to be imposed, and a statement of the
21 person's right to a hearing. The ordered person or facility shall have
22 20 calendar days from receipt of the notice within which to deliver
23 to the commissioner a written request for a hearing. After the
24 hearing and upon finding that a violation has occurred, the
25 commissioner may issue a final order, after assessing the amount of
26 the fine specified in the notice. If no hearing is requested, the
27 notice shall become a final order after the expiration of the 20-day
28 period. Payment of the assessment is due when a final order is
29 issued or the notice becomes a final order. The authority to levy a
30 civil administrative penalty is in addition to all other enforcement
31 provisions in this act, and the payment of any assessment shall not
32 be deemed to affect the availability of any other enforcement
33 provisions in connection with the violation for which the
34 assessment is levied. The commissioner may compromise any civil
35 administrative penalty assessed under this subsection in an amount
36 the commissioner determines appropriate.

37 e. A person or facility that violates any rule or regulation
38 adopted pursuant to this act shall be liable for a penalty of not more
39 than \$7,500 per day, to be collected in a civil action commenced by
40 the commissioner. A person or facility that violates an
41 administrative order issued pursuant to subsection b. of this section,
42 or a court order issued pursuant to subsection c. of this section, or
43 who fails to pay an administrative assessment in full pursuant to
44 subsection d. of this section is subject upon order of a court to a
45 civil penalty not to exceed \$25,000 per day of each violation. Any
46 penalty imposed pursuant to this subsection may be collected, with
47 costs, in a summary proceeding pursuant to the "Penalty
48 Enforcement Law of 1999," P.L.1999, c.274 (C.2A:58-10 et seq.).

1 The Superior Court and the municipal court shall have jurisdiction
2 to enforce the provisions of the “Penalty Enforcement Law of 1999”
3 in connection with this act.

4 f. Pursuit of any of the remedies specified under this section
5 shall not preclude the seeking of any other remedy specified.
6

7 5. The Commissioner of Environmental Protection, in
8 consultation with the Secretary of Agriculture, shall in accordance
9 with the “Administrative Procedure Act,” P.L.1968, c.410
10 (C.52:14B-1 et seq.), adopt rules and regulations as necessary to
11 implement this act.
12

13 6. This act shall take effect immediately.
14
15

16 STATEMENT 17

18 This bill would require, beginning 180 days of the date of
19 enactment of the bill, any person or facility engaged in biochar
20 processing to obtain a biochar processing permit.

21 The Department of Environmental Protection (department), in
22 consultation with the Department of Agriculture, would be directed
23 to adopt rules and regulations establishing a biochar processing
24 permit. The biochar processing permit would allow the holder of a
25 biochar permit to process biochar from clean cellulosic biomass.
26 The Department of Environmental Protection would issue a biochar
27 permit to any person or facility that qualifies for the permit,
28 pursuant to the provisions of this bill, and that is compliant with any
29 requirements established pursuant to this act.

30 An applicant for a permit would be required to provide the
31 applicant’s name, business location, and mailing address; the
32 geographical area to be serviced for the term of the license,
33 including a map and a list of zip codes in that area; an identification
34 of clean cellulosic biomass sources to be used in biochar
35 processing, and any additional requirements as determined
36 appropriate by the department.

37 The Department of Environmental Protection would be directed
38 to issue a biochar processing permit to an applicant after it, in
39 consultation with the Department of Agriculture, has received,
40 reviewed, and approved of an application for a biochar processing
41 permit from the applicant. The department would review and
42 approve of any application for a biochar processing permit within
43 six months of receipt. The department would be authorized to deny
44 an application for a permit or permit renewal if, based upon a
45 review of application material, the processing facility would not
46 meet the requirements established pursuant to this act.

47 The biochar processing permit, established by the bill, would
48 require compliance with any air contaminant and emissions

1 regulations established by the departments; compliance with any
2 inspection or audit requirements established by the departments;
3 compliance with any reporting requirements established by the
4 departments; and maintenance of financial assurance, to be made
5 available for organic waste disposal and potential environmental
6 mitigation.

7 The department, in consultation with the Department of
8 Agriculture, would establish, through the biochar permit program,
9 requirements for air pollution and solid waste control, which take
10 into consideration the unique air contamination, soil toxicity, and
11 emissions potentials of processed biochar, and which are distinct
12 from: (1) the air contaminant, fuel capacity, and facility class
13 requirements of the “Air Pollution Control Act (1954)”; (2) the
14 matter composition and toxicity requirements of existing solid
15 waste control rules; and (3) existing volatile organic compound
16 rules.

17 Any person or facility found processing biochar in a manner
18 incongruous with the requirements of this act would be subject to
19 the penalties enumerated in section 4 of the act, as well as a permit
20 suspension or revocation.

21 The bill includes penalty and enforcement provisions,
22 authorizing the departments to establish legal recourses and
23 financial penalties necessary to enforce compliance with any
24 adopted rules and regulations. The bill would also authorize the
25 department to establish an application fee and a renewal fee,
26 sufficient to cover all costs of administering and enforcing the
27 program.

28 The permitting process established in this bill is necessary to
29 fully realize the soil health, energy generation, and economic
30 benefits of the use of biochar in agriculture. Biochar application
31 has been shown to improve soil fertility, increase crop yields
32 between 10 and 42 percent, improve water quality, reduce soil
33 erosion, and increase microbial activity. The production of biochar
34 could enhance agricultural economic development and employment
35 by providing a market for unused cellulosic biomass, contributing
36 to agricultural resource reuse, and cultivating a circular energy
37 economy.