
HOUSE BILL 2483

State of Washington

68th Legislature

2024 Regular Session

By Representatives Chapman, Shavers, and Kloba

Read first time 01/26/24. Referred to Committee on Environment & Energy.

1 AN ACT Relating to biochar production from agricultural and
2 forestry biomass; amending RCW 70A.15.1030, 70A.15.5090, 70A.15.5120,
3 and 70A.15.5140; and creating a new section.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** The legislature finds that the use of
6 distributed, small-scale biochar production units for forestry and
7 agricultural waste management of clean cellulosic biomass is
8 consistent with the sustainable agriculture goals of the climate
9 commitment act under RCW 70A.65.260, the sustainable farms and fields
10 grant program identified in RCW 89.08.615, and the forest restoration
11 goals identified in RCW 70A.65.270. Therefore, the legislature finds
12 that the development of distributed small-scale biochar production
13 units to generate local place-based sources of biochar from clean
14 cellulosic biomass is a necessary component of an integrated land
15 management strategy that:

- 16 (1) Reduces greenhouse gas emissions;
17 (2) Produces durable biogenic carbon storage, either in situ or
18 for distribution elsewhere; and
19 (3) Minimizes air quality impacts from open burning.

1 **Sec. 2.** RCW 70A.15.1030 and 2020 c 20 s 1081 are each amended to
2 read as follows:

3 The definitions in this section apply throughout this chapter
4 unless the context clearly requires otherwise.

5 (1) "Air contaminant" means dust, fumes, mist, smoke, other
6 particulate matter, vapor, gas, odorous substance, or any combination
7 thereof.

8 (2) "Air pollution" is presence in the outdoor atmosphere of one
9 or more air contaminants in sufficient quantities and of such
10 characteristics and duration as is, or is likely to be, injurious to
11 human health, plant or animal life, or property, or which
12 unreasonably interfere with enjoyment of life and property. For the
13 purpose of this chapter, air pollution shall not include air
14 contaminants emitted in compliance with chapter 17.21 RCW.

15 (3) "Air quality standard" means an established concentration,
16 exposure time, and frequency of occurrence of an air contaminant or
17 multiple contaminants in the ambient air which shall not be exceeded.

18 (4) "Ambient air" means the surrounding outside air.

19 (5) "Authority" means any air pollution control agency whose
20 jurisdictional boundaries are coextensive with the boundaries of one
21 or more counties.

22 (6) "Best available control technology" (BACT) means an emission
23 limitation based on the maximum degree of reduction for each air
24 pollutant subject to regulation under this chapter emitted from or
25 that results from any new or modified stationary source, that the
26 permitting authority, on a case-by-case basis, taking into account
27 energy, environmental, and economic impacts and other costs,
28 determines is achievable for such a source or modification through
29 application of production processes and available methods, systems,
30 and techniques, including fuel cleaning, clean fuels, or treatment or
31 innovative fuel combustion techniques for control of each such a
32 pollutant. In no event shall application of "best available control
33 technology" result in emissions of any pollutants that will exceed
34 the emissions allowed by any applicable standard under 40 C.F.R. Part
35 60 and Part 61, as they exist on July 25, 1993, or their later
36 enactments as adopted by reference by the director by rule. Emissions
37 from any source utilizing clean fuels, or any other means, to comply
38 with this subsection shall not be allowed to increase above levels
39 that would have been required under the definition of BACT as it

1 existed prior to enactment of the federal clean air act amendments of
2 1990.

3 (7) "Best available retrofit technology" (BART) means an emission
4 limitation based on the degree of reduction achievable through the
5 application of the best system of continuous emission reduction for
6 each pollutant that is emitted by an existing stationary facility.
7 The emission limitation must be established, on a case-by-case basis,
8 taking into consideration the technology available, the costs of
9 compliance, the energy and nonair quality environmental impacts of
10 compliance, any pollution control equipment in use or in existence at
11 the source, the remaining useful life of the source, and the degree
12 of improvement in visibility that might reasonably be anticipated to
13 result from the use of the technology.

14 (8) "Board" means the board of directors of an authority.

15 (9) "Control officer" means the air pollution control officer of
16 any authority.

17 (10) "Department" or "ecology" means the department of ecology.

18 (11) "Emission" means a release of air contaminants into the
19 ambient air.

20 (12) "Emission standard" and "emission limitation" mean a
21 requirement established under the federal clean air act or this
22 chapter that limits the quantity, rate, or concentration of emissions
23 of air contaminants on a continuous basis, including any requirement
24 relating to the operation or maintenance of a source to assure
25 continuous emission reduction, and any design, equipment, work
26 practice, or operational standard adopted under the federal clean air
27 act or this chapter.

28 (13) "Fine particulate" means particulates with a diameter of two
29 and one-half microns and smaller.

30 (14) (a) "Lowest achievable emission rate" (LAER) means for any
31 source that rate of emissions that reflects:

32 ~~((a))~~ (i) The most stringent emission limitation that is
33 contained in the implementation plan of any state for such class or
34 category of source, unless the owner or operator of the proposed
35 source demonstrates that such limitations are not achievable; or

36 ~~((b))~~ (ii) The most stringent emission limitation that is
37 achieved in practice by such class or category of source, whichever
38 is more stringent.

39 (b) In no event shall the application of this term permit a
40 proposed new or modified source to emit any pollutant in excess of

1 the amount allowable under applicable new source performance
2 standards.

3 (15) "Modification" means any physical change in, or change in
4 the method of operation of, a stationary source that increases the
5 amount of any air contaminant emitted by such source or that results
6 in the emission of any air contaminant not previously emitted. The
7 term modification shall be construed consistent with the definition
8 of modification in Section 7411, Title 42, United States Code, and
9 with rules implementing that section.

10 (16) "Multicounty authority" means an authority which consists of
11 two or more counties.

12 (17) "New source" means (a) the construction or modification of a
13 stationary source that increases the amount of any air contaminant
14 emitted by such source or that results in the emission of any air
15 contaminant not previously emitted, and (b) any other project that
16 constitutes a new source under the federal clean air act.

17 (18) "Permit program source" means a source required to apply for
18 or to maintain an operating permit under RCW 70A.15.2260.

19 (19) "Person" means an individual, firm, public or private
20 corporation, association, partnership, political subdivision of the
21 state, municipality, or governmental agency.

22 (20) "Reasonably available control technology" (RACT) means the
23 lowest emission limit that a particular source or source category is
24 capable of meeting by the application of control technology that is
25 reasonably available considering technological and economic
26 feasibility. RACT is determined on a case-by-case basis for an
27 individual source or source category taking into account the impact
28 of the source upon air quality, the availability of additional
29 controls, the emission reduction to be achieved by additional
30 controls, the impact of additional controls on air quality, and the
31 capital and operating costs of the additional controls. RACT
32 requirements for a source or source category shall be adopted only
33 after notice and opportunity for comment are afforded.

34 (21) "Silvicultural burning" means burning of wood fiber on
35 forestland consistent with the provisions of RCW 70A.15.5120.

36 (22) "Source" means all of the emissions units including
37 quantifiable fugitive emissions, that are located on one or more
38 contiguous or adjacent properties, and are under the control of the
39 same person, or persons under common control, whose activities are

1 ancillary to the production of a single product or functionally
2 related group of products.

3 (23) "Stationary source" means any building, structure, facility,
4 or installation that emits or may emit any air contaminant.

5 (24) "Trigger level" means the ambient level of fine
6 particulates, measured in micrograms per cubic meter, that must be
7 detected prior to initiating a first or second stage of impaired air
8 quality under RCW 70A.15.3580.

9 (25) "Biochar" means a carbon-rich material produced during the
10 pyrolysis process or solid material obtained from the thermochemical
11 conversion of biomass in an oxygen-limited environment, derived from
12 clean cellulosic biomass from forest and agricultural sources.

13 (26) "Biochar micro unit" means a mobile biochar production unit
14 utilizing fire physics to attain reduced emissions relative to open
15 burning that consumes a maximum of 25 green tons per month of clean
16 cellulosic biomass.

17 (27) "Biochar mini unit" means a mobile biochar production unit
18 utilizing air curtain incinerator technology that consumes a maximum
19 of 150 green tons per month of clean cellulosic biomass.

20 (28) (a) "Clean cellulosic biomass" means those residuals that are
21 akin to traditional cellulosic biomass including, but not limited to:
22 (i) Agricultural and forest-derived biomass including green wood,
23 forest thinnings, clean and unadulterated bark, sawdust, trim, tree
24 harvesting residuals from logging and sawmill materials, hogged fuel,
25 and wood pellets; (ii) urban wood including tree trimmings, stumps,
26 and related forest-derived biomass from urban settings; (iii) corn
27 stover and other biomass crops used specifically for the production
28 of cellulosic biofuels including energy cane, other fast growing
29 grasses, and by-products of ethanol natural fermentation processes;
30 (iv) bagasse and other crop residues including peanut shells, vines,
31 orchard trees, hulls, seeds, spent grains, cotton by-products, corn
32 and peanut production residues, rice milling, and grain elevator
33 operation residues; and (v) wood collected from forest fire clearance
34 activities, trees and clean wood found in disaster debris, and clean
35 biomass from land clearing operations.

36 (b) These fuels are not secondary materials or solid wastes
37 unless discarded.

38 (c) Clean biomass is biomass that does not contain contaminants
39 at concentrations not normally associated with virgin biomass
40 materials.

1 **Sec. 3.** RCW 70A.15.5090 and 2020 c 20 s 1140 are each amended to
2 read as follows:

3 (1) Any person who proposes to set fires in the course of
4 agricultural activities shall obtain a permit from an air pollution
5 control authority, the department of ecology, or a local entity
6 delegated permitting authority under RCW 70A.15.5100. General permit
7 criteria of statewide applicability shall be established by the
8 department, by rule, after consultation with the various air
9 pollution control authorities.

10 (a) Permits shall be issued under this section based on seasonal
11 operations or by individual operations, or both.

12 (b) Incidental agricultural burning consistent with provisions
13 established in RCW 70A.15.5070 is allowed without applying for any
14 permit and without the payment of any fee.

15 (2) The department of ecology, local air authorities, or a local
16 entity with delegated permit authority shall:

17 (a) Condition all permits to ensure that the public interest in
18 air, water, and land pollution and safety to life and property is
19 fully considered;

20 (b) Condition all burning permits to minimize air pollution
21 insofar as practical;

22 (c) Act upon, within seven days from the date an application is
23 filed under this section, an application for a permit to set fires in
24 the course of agricultural burning for controlling diseases, insects,
25 weed abatement, or development of physiological conditions conducive
26 to increased crop yield;

27 (d) Provide convenient methods for issuance and oversight of
28 agricultural burning permits; and

29 (e) Work, through agreement, with counties and cities to provide
30 convenient methods for granting permission for agricultural burning,
31 including telephone, facsimile transmission, issuance from local city
32 or county offices, or other methods.

33 (3) A local air authority administering the permit program under
34 subsection (2) of this section shall not limit the number of days of
35 allowable agricultural burning, but may consider the time of year,
36 meteorological conditions, and other criteria specified in rules
37 adopted by the department to implement subsection (2) of this
38 section.

39 (4) In addition to following any other requirements established
40 by the department to protect air quality pursuant to other laws,

1 applicants for permits must show that the setting of fires as
2 requested is the most reasonable procedure to follow in safeguarding
3 life or property under all circumstances or is otherwise reasonably
4 necessary to successfully carry out the enterprise in which the
5 applicant is engaged, or both. Nothing in this section relieves the
6 applicant from obtaining permits, licenses, or other approvals
7 required by any other law.

8 (5) The department of ecology, the appropriate local air
9 authority, or a local entity with delegated permitting authority
10 pursuant to RCW 70A.15.5100 at the time the permit is issued shall
11 assess and collect permit fees for burning under this section. All
12 fees collected shall be deposited in the air pollution control
13 account created in RCW 70A.15.1010, except for that portion of the
14 fee necessary to cover local costs of administering a permit issued
15 under this section. Fees shall be set by rule by the permitting
16 agency at the level determined by the task force created by
17 subsection (6) of this section, but fees for field burning shall not
18 exceed (~~three dollars and seventy-five cents~~) \$3.75 per acre to be
19 burned(~~(7)~~) or, in the case of pile burning, shall not exceed (~~one~~
20 ~~dollar~~) \$1.00 per ton of material burned or, in the case of biochar
21 production fees, shall be \$1.00 per ton of agricultural waste
22 consumed.

23 (6) An agricultural burning practices and research task force
24 shall be established under the direction of the department. The task
25 force shall be composed of a representative from the department who
26 shall serve as chair; one representative of eastern Washington local
27 air authorities; three representatives of the agricultural community
28 from different agricultural pursuits; one representative of the
29 department of agriculture; two representatives from universities or
30 colleges knowledgeable in agricultural issues; one representative of
31 the public health or medical community; and one representative of the
32 conservation districts. The task force shall:

33 (a) Identify best management practices for reducing air
34 contaminant emissions from agricultural activities and provide such
35 information to the department and local air authorities;

36 (b) Determine the level of fees to be assessed by the permitting
37 agency pursuant to subsection (5) of this section, based upon the
38 level necessary to cover the costs of administering and enforcing the
39 permit programs, to provide funds for research into alternative
40 methods to reduce emissions from such burning, and to the extent

1 possible be consistent with fees charged for such burning permits in
2 neighboring states. The fee level shall provide, to the extent
3 possible, for lesser fees for permittees who use best management
4 practices to minimize air contaminant emissions;

5 (c) Identify research needs related to minimizing emissions from
6 agricultural burning and alternatives to such burning; and

7 (d) Make recommendations to the department on priorities for
8 spending funds provided through this chapter for research into
9 alternative methods to reduce emissions from agricultural burning.

10 (7) Conservation districts and the Washington State University
11 agricultural extension program in conjunction with the department
12 shall develop public education material for the agricultural
13 community identifying the health and environmental effects of
14 agricultural outdoor burning and providing technical assistance in
15 alternatives to agricultural outdoor burning.

16 (8)(a) Outdoor burning that is normal, necessary, and customary
17 to ongoing agricultural activities, that is consistent with
18 agricultural burning authorized under this section and RCW
19 70A.15.5110, is allowed within the urban growth area as described in
20 RCW 70A.15.5020 if the burning is not conducted during air quality
21 episodes, or where a determination of impaired air quality has been
22 made as provided in RCW 70A.15.3580, and the agricultural activities
23 preceded the designation as an urban growth area.

24 (b) Outdoor burning of cultivated orchard trees, whether or not
25 agricultural crops will be replanted on the land, shall be allowed as
26 an ongoing agricultural activity under this section if a local
27 horticultural pest and disease board formed under chapter 15.09 RCW,
28 an extension office agent with Washington State University that has
29 horticultural experience, or an entomologist employed by the
30 department of agriculture, has determined in writing that burning is
31 an appropriate method to prevent or control the spread of
32 horticultural pests or diseases.

33 **Sec. 4.** RCW 70A.15.5120 and 2020 c 20 s 1143 are each amended to
34 read as follows:

35 (1) The department of natural resources is responsible for
36 issuing and regulating burning permits required by it relating to the
37 following activities for the protection of life or property and for
38 the public health, safety, and welfare:

39 (a) Abating or prevention of a forest fire hazard;

1 (b) Reducing the risk of a wildfire under RCW 70A.15.5020(5);
2 (c) Instruction of public officials in methods of forest
3 firefighting;
4 (d) Any silvicultural operation to improve the forestlands of the
5 state, including but not limited to forest health and resiliency,
6 decreasing forest insect or disease susceptibility, maintaining or
7 restoring native vegetation, or otherwise enhancing resiliency to
8 fire; (~~and~~)
9 (e) Producing biochar with biochar micro units or biochar mini
10 units from the burning of clean cellulosic biomass from forestry
11 operations; and
12 (f) Silvicultural burning used to improve or maintain fire
13 dependent ecosystems for rare plants or animals within state,
14 federal, and private natural area preserves, natural resource
15 conservation areas, parks, and other wildlife areas.
16 (2) The department of natural resources shall not retain such
17 authority, but it shall be the responsibility of the appropriate fire
18 protection agency for permitting and regulating outdoor burning on
19 lands where the department of natural resources does not have fire
20 protection responsibility, except for the issuance of permits for
21 reducing the risk of wildfire under RCW 70A.15.5020(5). The
22 department of natural resources may enter into cooperative agreements
23 with local fire protection agencies to issue permits for reducing
24 wildfire risk under RCW 70A.15.5020(5).
25 (3) Permit fees shall be assessed for wildfire risk reduction,
26 biochar production, and for silvicultural burning under the
27 jurisdiction of the department of natural resources and collected by
28 the department of natural resources as provided for in this section.
29 All fees shall be deposited in the air pollution control account,
30 created in RCW 70A.15.1010. The legislature shall appropriate to the
31 department of natural resources funds from the air pollution control
32 account to enforce and administer the program under this section and
33 RCW 70A.15.5130, 70A.15.5140, and 70A.15.5150. Fees shall be set by
34 rule by the department of natural resources at the level necessary to
35 cover the costs of the program after receiving recommendations on
36 such fees from the public.

37 **Sec. 5.** RCW 70A.15.5140 and 2020 c 20 s 1144 are each amended to
38 read as follows:

1 (1) The department of natural resources, in granting burning
2 permits for fires for the purposes set forth in RCW 70A.15.5120,
3 shall condition the issuance and use of such permits to comply to the
4 extent feasible with air quality standards established by the
5 department of ecology. Such burning shall not cause the state air
6 quality standards to be exceeded in the ambient air up to two
7 thousand feet above ground level over critical areas designated by
8 the department of ecology, otherwise subject to air pollution from
9 other sources. Air quality standards shall be established and
10 published by the department of ecology which shall also establish a
11 procedure for advising the department of natural resources when and
12 where air contaminant levels exceed or threaten to exceed the ambient
13 air standards over such critical areas. The air quality shall be
14 quantitatively measured by the department of ecology or the
15 appropriate local air pollution control authority at established
16 monitoring stations over such designated areas. Further, such
17 permitted burning shall not cause damage to public health or the
18 environment. All permits issued under this section shall be subject
19 to all applicable fees, permitting, penalty, and enforcement
20 provisions of this chapter. The department of natural resources shall
21 set forth smoke dispersal objectives designed consistent with this
22 section to minimize any air pollution from such burning and the
23 procedures necessary to meet those objectives.

24 (2)(a) The department of natural resources shall encourage more
25 intense utilization in logging and alternative silviculture practices
26 to reduce the need for burning. The department of natural resources
27 shall, whenever practical, encourage landowners to develop and use
28 alternative acceptable disposal methods subject to the following
29 priorities:

- 30 ~~((1))~~ (i) Slash production minimization~~((2) slash)~~; i
31 (ii) Slash utilization~~((3) nonburning)~~; i
32 (iii) Nonburning disposal~~((4) silvicultural)~~; i
33 (iv) Silvicultural burning; and
34 (v) Producing biochar using biochar micro units or biochar mini
35 units.

36 (b) Such alternative methods shall be evaluated as to the
37 relative impact on air, water, and land pollution, public health, and
38 their financial feasibility.

39 (3) The department of natural resources shall not issue burning
40 permits and shall revoke previously issued permits at any time in any

1 area where the department of ecology or local board has declared a
2 stage of impaired air quality as defined in RCW 70A.15.3580.

--- **END** ---