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**HOUSE BILL 2483**

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**State of Washington**

**68th Legislature**

**2024 Regular Session**

**By** Representative Chapman

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** ---