

1 S.239

2 Introduced by Senator Lyons

3 Referred to Committee on

4 Date:

5 Subject: Conservation and development; natural resources; air pollution

6 control; outdoor wood-fired boilers; use of settlement funds to retire

7 and replace old boilers

8 Statement of purpose: This bill proposes to direct the agency of natural
9 resources to use funds from the 2007 American Electric Power Service Corp.
10 settlement to establish a change-out program to retire and replace outdoor
11 wood-fired boilers that do not meet the emission standard for fine particulate
12 matter that went into effect in 2008.

13 An act relating to retiring outdoor wood-fired boilers that do not meet the
14 2008 emission standard for particulate matter

15 It is hereby enacted by the General Assembly of the State of Vermont:

16 Sec. 1. FINDINGS

17 The general assembly finds that:

18 (1) On October 9, 2007, in the case of *United States, et al. v. American*
19 *Elec. Power Service Corp., et al.*, Civil Actions No. C2-99-1182, C2-99-1250,
20 C2-04-1098, C2-05-360, the Environmental Protection Agency, citizen groups,

1 and eight states, including Vermont, signed a settlement (the AEP settlement)
2 with American Electric Power Service Corporation (AEP) and others,
3 regarding alleged violations of the Clean Air Act.

4 (2) The AEP settlement includes an agreement under which substantial
5 funds are allocated to the plaintiff states, including Vermont, to conduct
6 mitigation projects that pertain to energy efficiency, pollution reduction, or
7 both. These funds consist of annual amounts paid to the relevant states for no
8 less than five years.

9 (3) Outdoor wood-fired boilers (OWB) emit significant pollutants and
10 pose a serious risk to human health.

11 (A) OWBs are often found in association with residential or small
12 commercial uses.

13 (B) OWBs emit hundreds, and sometimes thousands, of times more
14 fine particulate matter than produced from the burning of oil or gas.

15 (C) These particulates are pollutants that contribute to human health
16 problems, including cardiovascular disease, chronic lung conditions, and
17 premature death.

18 (D) Recent research has shown that the health impacts of fine
19 particulates are worse than previously realized, prompting the U.S.
20 Environmental Protection Agency (EPA) to issue stricter standards in 2006.

1 (E) Because most existing OWBs employ inefficient combustion
2 design, they emit more fine particulates per energy unit produced than do
3 EPA-certified indoor wood stoves or properly designed wood furnaces.

4 (F) Wood smoke also contains organic pollutants associated with the
5 incomplete combustion of the wood. These can include toxic air pollutants
6 such as benzene, formaldehyde, dioxin, and polycyclic aromatic hydrocarbons,
7 all of which can cause cancer.

8 (4) On April 27, 2007, the Vermont Agency of Natural Resources'
9 (ANR) "Phase I" rule for control of particulate matter from OWBs went into
10 effect. This rule instituted an emission limit for particulate matter of 0.44
11 pounds per million British thermal units (BTUs) of heat input. The rule
12 applied to any OWB distributed or sold in Vermont or for installation in
13 Vermont on or after March 31, 2008. It did not apply to any OWB that is or
14 has been owned by an individual for his or her own personal use and is
15 distributed or sold to another for his or her own personal use. It also did not
16 apply to any OWB that was purchased and received by a person in Vermont
17 other than the manufacturer on or before October 1, 2007.

18 (5) On October 1, 2009, ANR "Phase II" rule for control of particulate
19 matter from OWBs went into effect. The Phase II OWB emissions limit for
20 particulate matter is set at 0.32 pounds per million BTUs of heat output. From
21 October 1, 2009 to March 31, 2010, the rule prohibits distribution, sale, or

1 purchase of an OWB that is not a Phase I or Phase II OWB. On and after
2 March 31, 2010, the rule prohibits distribution, sale, or purchase of an OWB
3 that is not a Phase II OWB. The rule continues not to apply to any OWB that
4 is or has been owned by an individual for his or her own personal use and is
5 distributed or sold to another for his or her own personal use, provided the
6 OWB meets installation requirements related to setbacks and stack height and
7 other provisions related to fuel use, operation and maintenance, compliance
8 with applicable laws, and not creating a public nuisance. In addition,
9 previously installed OWBs may continue to be used if they meet these
10 requirements.

11 (6) Because existing law and rules allow previously installed OWBs to
12 continue operation if they meet certain requirements, investment of funds from
13 the AEP settlement into retiring these boilers and replacing them with available
14 cleaner boiler technology would reduce pollution and the health hazard created
15 from these dirtier, less efficient boilers.

16 Sec. 2. 10 V.S.A. § 584 is added to read:

17 § 584. INEFFICIENT OUTDOOR WOOD-FIRED BOILER

18 CHANGE-OUT PROGRAM

19 (a) At the earliest feasible date, the secretary shall create and put into effect
20 a change-out program within the air pollution control division of the
21 department of environmental conservation to purchase the retirement of

1 inefficient, high emission outdoor wood-fired boilers (OWB) that will be
2 replaced with OWBs with substantially lower emissions and higher fuel
3 efficiency.

4 (b) The secretary shall fund this program using at least \$500,000.00 of the
5 funds available to the state of Vermont for environmental mitigation projects
6 under the consent decree approved on or about October 9, 2007 in the case of
7 *United States, et al. v. American Elec. Power Service Corp., et al.*, Civil
8 Actions No. C2-99-1182, C2-99-1250, C2-04-1098, C2-05-360 (the AEP
9 consent decree). The secretary may add to this funding such additional
10 moneys as may be appropriated to the program authorized under this section or
11 otherwise may be available by grant, contribution, or donation.

12 (c) The secretary shall take all steps necessary to secure use of the funds
13 from the AEP consent decree in the manner described in subsection (a) of this
14 section.

15 (d) In consultation with the American Lung Association, the secretary shall
16 develop criteria for the identification of OWBs that are eligible for the
17 program. At a minimum, an eligible OWB shall meet each of the following
18 criteria:

19 (1) An eligible OWB shall be one that is not certified under the air
20 pollution control regulations as meeting either the Phase I emission limit for
21 particulate matter of 0.44 pounds per million British thermal units (BTUs) of

1 heat input or the Phase II emission limit for particulate matter of 0.32 pounds
2 per million BTUs of heat output.

3 (2) An OWB shall be retired within a specified period not to exceed six
4 months after acceptance into the program authorized by this section.

5 (3) An eligible OWB shall be replaced with an OWB that is certified
6 under the air pollution control regulations as a Phase II OWB with a particulate
7 matter emission rate of no more than 0.32 pounds per million BTUs of heat
8 output or another type of heating appliance that the secretary determines has an
9 equivalent or more stringent emission rate.

10 (e) In implementing the program required by this section, the secretary:

11 (1) May give priority to replacing an eligible OWB that is located
12 within 100 feet of a residence, school, or health care facility and that is neither
13 served by the OWB nor owned by the owner or lessee of the OWB, provided
14 the secretary has received verified citizen complaints regarding air contaminant
15 emissions from the OWB. For such OWBs, the replacement OWB or heating
16 appliance may be located within 100 feet of such residence, school, or health
17 care facility, provided that the replacement OWB or appliance does not cause a
18 public nuisance and complies with all applicable local ordinances and bylaws.

19 (2) To the extent feasible, should give priority to replacing those OWBs
20 that have the highest particulate emission rates; are in closest proximity to
21 residences, schools, or health care facilities; or cause public nuisance.

1 (3) To the extent practical, should provide over time for decreasing
2 emission rates and increasing fuel efficiency requirements for replacement
3 OWBs under this program as new technology for boilers becomes
4 commercially available.

5 (f) All OWBs that are not certified under the air pollution control
6 regulations to meet the Phase I, Phase II, or a more stringent emission limit
7 shall be retired on or before December 31, 2016.

8 (g) For the purpose of this section:

9 (1) “Outdoor wood-fired boiler” or “OWB” means a fuel-burning device
10 designed to burn primarily wood that the manufacturer specifies should or may
11 be installed outdoors or in structures not normally occupied by humans, such
12 as attached or detached garages or sheds, and that heats spaces or water by the
13 distribution through pipes of a fluid heated in the device, typically water or a
14 mixture of water and antifreeze. In addition, this term also means any
15 wood-fired boiler that is actually installed outdoors or in structures not
16 normally occupied by humans, such as attached or detached garages or sheds,
17 regardless of whether such use has been specified by the manufacturer.

18 (2) “Retire” means to remove an OWB permanently from service,
19 disassemble it into its component parts, and either recycle those parts or
20 dispose of them in accordance with applicable law.

21 (h) The secretary may adopt rules to implement this section.

- 1 Sec. 3. EFFECTIVE DATE
- 2 This act shall take effect from passage.