

**No. 94. An act relating to retiring outdoor wood-fired boilers that do not meet the 2008 emission standard for particulate matter.**

(S.239)

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

Sec. 1. FINDINGS

The general assembly finds that:

(1) On October 9, 2007, in the case of *United States, et al. v. American Elec. Power Service Corp., et al.*, Civil Actions No. C2-99-1182, C2-99-1250, C2-04-1098, C2-05-360, the Environmental Protection Agency, citizen groups, and eight states, including Vermont, signed a settlement (the AEP settlement) with American Electric Power Service Corporation (AEP) and others, regarding alleged violations of the Clean Air Act.

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

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

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

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

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

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

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

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

(4) On April 27, 2007, the Vermont Agency of Natural Resources' (ANR) "Phase I" rule for control of particulate matter from OWBs went into effect. This rule instituted an emission limit for particulate matter of 0.44 pounds per million British thermal units (BTUs) of heat input. The rule applied to any OWB distributed or sold in Vermont or for installation in Vermont on or after March 31, 2008. It did not apply to any OWB that is or

has been owned by an individual for his or her own personal use and is distributed or sold to another for his or her own personal use. It also did not apply to any OWB that was purchased and received by a person in Vermont other than the manufacturer on or before October 1, 2007.

(5) On October 1, 2009, ANR “Phase II” rule for control of particulate matter from OWBs went into effect. The Phase II OWB emissions limit for particulate matter is set at 0.32 pounds per million BTUs of heat output. From October 1, 2009 to March 31, 2010, the rule prohibits distribution, sale, or purchase of an OWB that is not a Phase I or Phase II OWB. On and after March 31, 2010, the rule prohibits distribution, sale, or purchase of an OWB that is not a Phase II OWB. The rule continues not to apply to any OWB that is or has been owned by an individual for his or her own personal use and is distributed or sold to another for his or her own personal use, provided the OWB meets installation requirements related to setbacks and stack height and other provisions related to fuel use, operation and maintenance, compliance with applicable laws, and not creating a public nuisance. In addition, previously installed OWBs may continue to be used if they meet these requirements.

(6) Because existing law and rules allow previously installed OWBs to continue operation if they meet certain requirements, investment of funds from the AEP settlement into retiring these boilers and replacing them with available

cleaner boiler technology would reduce pollution and the health hazard created from these dirtier, less efficient boilers.

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

§ 584. INEFFICIENT OUTDOOR WOOD-FIRED BOILER CHANGE-OUT PROGRAM; RETIREMENT

(a) At the earliest feasible date, the secretary shall create and put into effect a change-out program within the air pollution control division of the department of environmental conservation to purchase the retirement of inefficient, high emission outdoor wood-fired boilers (OWB) that will be replaced with OWBs or other heating appliances with substantially lower emissions and higher fuel efficiency.

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

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

(d)(1) To be eligible for the program under this section, an OWB shall be one that is not certified under the air pollution control regulations as meeting either the Phase I emission limit for particulate matter of 0.44 pounds per million British thermal units (BTUs) of heat input or the Phase II emission limit for particulate matter of 0.32 pounds per million BTUs of heat output.

(2) The secretary may develop program eligibility criteria that are in addition to the criteria of subdivision (1) of this subsection. Such additional criteria may allow an OWB to be eligible for the program under this section even if the OWB does not meet the requirements of subdivision (1) of this subsection. In developing these additional criteria, the secretary shall consult with affected persons and entities such as the American Lung Association.

(e) An eligible OWB that is accepted into the change-out program under this section shall be:

(1) Replaced with an OWB that is certified under the air pollution control regulations as a Phase II OWB with a particulate matter emission rate of no more than 0.32 pounds per million BTUs of heat output or another heating appliance that the secretary determines has an equivalent or more stringent emission rate; and

(2) Retired within a specified period not to exceed six months after acceptance into the program.

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

(1) Shall give priority to replacing eligible OWBs that have resulted in complaints regarding emissions, including particulate matter or smoke, that the agency has determined are valid, and have the highest emission rates, cause nuisance, or are within 200 feet of a residence, school, or health care facility.

(2) May allow replacement of an eligible OWB that is less than the required setback distance from a residence, school, or health care facility that is neither served by the OWB nor owned by the owner or lessee of the OWB with an OWB or heating appliance that is also less than the required setback distance from a residence, school, or health care facility, unless such location of the replacement OWB or heating appliance will cause a nuisance or will not comply with all applicable local ordinances and bylaws. For the purposes of this subdivision (2), “required setback distance” means the setback distance applicable to the OWB that is required by the air pollution control regulations.

(3) May require that an eligible OWB be replaced with a heating appliance that is not an OWB if, based on the secretary’s consideration of area topography, air flows, site conditions, and other relevant factors, the secretary determines that the replacement OWB would cause nuisance.

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

(g) Any OWB in the state that is not certified under the air pollution control regulations to meet the Phase I, Phase II, or a more stringent emission limit shall be retired on or before December 31, 2012, if the OWB is located within 200 feet of a residence, school, or health care facility that is neither served by the OWB nor owned by the owner or lessee of the OWB or has resulted or results in a complaint regarding emissions, including particulate matter or smoke, that the agency has determined is valid.

(h) For the purpose of this section:

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

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

(i) For the purpose of determinations under subdivisions (f)(1) (priority for change-out), (2) (installation of replacement OWB closer than the setback distance) and (3) (non-OWB replacement) of this section, “nuisance” means interference with the ordinary use or enjoyment of property caused by particulate matter, smoke, or other emissions of an OWB that a reasonable person would find disturbing, annoying, or physically uncomfortable. Precedence in time and balancing of harm shall be irrelevant to such determinations. This section shall not affect the burden or elements of proof with respect to a claim of nuisance caused by an OWB brought in a civil court under common law.

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

### Sec. 3. USE OF FUNDS

The agency of natural resources is authorized to use funds from the American Electric Power Service Corporation Settlement Funds described in 10 V.S.A. § 584(b), for the purposes of this act, as follows:

(1) In fiscal year 2011, the agency is authorized to use \$360,000.00 of these funds, which amount is included in the sum appropriated in Sec. B.710 of H.789 of the 2009 adjourned session, as enacted; and



(2) In fiscal year 2012, it is the intent of the general assembly that the agency be authorized to use at least \$140,000.00 from that same Settlement Fund source.

Sec. 4. EFFECTIVE DATE

This act shall take effect from passage.

Approved: May 7, 2010