+ AMERICAN LUNG ASSOCIATION.

February 28, 2018

To: Senator Chris Bray, Chair, Committee on Natural Resources and Energy

- From: Rebecca Ryan, Sr. Director, Health Education & Public Policy
- Subj: S.276: Advanced Wood Heat Language

On behalf of the American Lung Association in Vermont, I am writing to voice concern about the proposed tax credit for advanced wood heat (AWH) boilers in §5930l of S.276. Biomass combustion releases pollutants including carbon monoxide, nitrogen oxide and particulate pollution (PM) into the air we breathe. Exposure to these pollutants is a health hazard for everyone, but in particular for children, older adults and people with chronic heart and lung disease.

There are state and federal emissions standards in place for residential wood-burning devices: In 2015, the U.S. Environmental Protection Agency's (EPA) updated its clean air standards for residential wood heaters, including woodstoves, wood-fired forced air furnaces and indoor and outdoor wood boilers.

While Vermont has had emissions standards for residential wood-burning devices since 1997, the Department of Environmental Conservation adopted amendments to the existing regulation for outdoor hydronic heaters to update the requirements for outdoor hydronic heaters and include other wood-fired central heaters, woodstoves and wood pellet stoves in 2016.

There is a major gap in regulations for commercial wood-burning devices: The federal NSPS only applies to residential wood-burning devices, not commercial units. In Vermont, devices with a heat output of less than 2.5 million British thermal units (BTUs) are regulated and permits are required for boilers with a heat input of 7 million BTUs or greater. This leaves a large gap of unregulated emissions from commercial wood-burning boilers. In fact, very few of the Vermont schools that installed wood-chip boilers were required to apply for a permit. The boilers are too small.

To protect public health, we encourage you to hold off on this tax credit until the State implements regulations to close the gap between units with a heat output less than 2.5 million and heat input greater than 7 million BTUs.

If you do proceed with the AWH provisions in S.276, we ask that you replace §5930I (2) and (4) (and similarly in the Definitions) with:

Advance Wood Boiler means a boiler or furnace:

(2) rated as high-efficiency, meaning a higher heating value or gross caloric value of **85%** or more (this is in keeping with other states' standards, including New York).

(4) meeting other efficiency and air emissions standards as set by the Department of Environmental Conservation, in consultation with the Department of Health, and determine such standards are compatible with the state and federal air quality regulations.

Thank you for your consideration of these requests. If you have any questions, please contact me at <u>rebecca.ryan@lung.org</u> or 876-6862.