

Focus on: Wood Stove Emissions Standards and Fee



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More information

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Proposed legislation

Ecology proposes to amend RCW 70.94.483 and RCW 70.94.457 to:

- Strengthen fine particle emissions standards for new woodstoves
- Increase the fee set in 1991 on the sale of new woodstoves in Washington from \$30 to \$50.
- Update the existing fee adjustment mechanism.

The problem

Many people in Washington rely on woodstoves to heat their homes. Woodstoves, however, are the largest contributors to particulate pollution in much of Washington during the winter months. Without proactive steps to reduce this pollution, federal air quality standards could force the use of woodstoves to be greatly restricted in the near future.

Fine particle pollution from wood home heating poses a health threat, especially for people with existing heart or lung disease, the elderly and small children. Although all of Washington currently meets national standards, 1.6 million people live in areas that are at high risk of violating fine particle air quality standards because of woodstoves.

Fortunately, we already have the tools and technology needed to address woodstove particulate pollution. Woodstove change-out programs in Washington have removed more than 6,700 old, inefficient stoves since 2006, preventing more than 165 tons of fine particulate pollution each year. However, more than 200,000 uncertified wood stoves are still in use in our state.

Health effects of wood smoke

Wood smoke is one of the main sources of air pollution in Washington. Woodstoves, fireplaces, and other wood burning devices put out hundreds of times more air pollution than other sources of heat, such as natural gas or electricity.

Wood smoke is a common trigger for asthma attacks. Smoke from wood-burning has also been implicated as a factor in other chronic respiratory diseases as well as cardiovascular disease.

Fine particles less than 2.5 microns in diameter (PM_{2.5}), the kind most associated with health problems, come from combustion. In the winter, when PM_{2.5} pollution is highest, woodstoves and fireplaces account for 56 percent of this pollution.

Air pollution from particulate matter (PM), especially PM_{2.5}, is associated with development and worsening of lung and cardiovascular disease. Death rates from these diseases increase as PM levels rise. Even very low levels of PM_{2.5}, below the current federal standard, have been linked to health effects in some people.

More information

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We also offer education and technical assistance for woodstove users, and support targeted compliance activities carried out by local air agencies. Educating woodstove users on proper use results in clean burning, better heating efficiency, and less smoke.

These programs are paid for by a point of sale fee on new woodstoves, which has not been increased since it was established in 1991. Today the fee is \$30 on the sale of new woodstoves, inserts or other wood home heating appliances sold in Washington. To account for inflation and provide the same level of service the fee funded in 1991, the fee would be \$55 today.

The emission standards for new woodstoves sold in Washington were set in 1991 and have not been updated, despite large improvements in woodstove technology and performance. Setting standards that match current technology will mean new woodstoves burn cleanly, efficiently and minimize particulate pollution. Sixty five percent of stoves made by Washington manufacturers already meet the proposed 2.0 grams per hour standard for PM_{2.5} emissions.

Ecology's proposal

Ecology proposes a base fee increase from \$30 to \$50 – and to update the existing inflation mechanism in statute to allow the fee to rise consistent with the state's fiscal growth factor.

The increase will support enhanced woodstove education and fund compliance programs to protect air quality.

Ecology proposes adopting a 2.0 gram/hour performance standard for woodstoves. Adopting the 2.0 gram per hour standard ensures that stoves sold in our state are the cleanest available. Manufacturers would have 18 months to sell their existing stock.

Protecting Washington's communities

Enhanced public education and strong woodstove emission standards are critical to keeping fine particulate pollution in check. With statutorily defined emissions standards at least as stringent as the federal standards, we create regulatory consistency, and ensure continued progress in reducing emissions and protecting public health while continuing to keep wood home heating as a viable option for Washington residents.

