

Proposed Rulemaking Announcement

Small and Mid-size Boiler Rule Amendments

Conditional exemptions for small-scale commercial, industrial and institutional boilers from Heat Smart certification requirements and registration requirements for small and mid-sized boilers subject to National Emission Standards for Hazardous Air Pollutants.

Background

Biomass boilers are used across the state in a variety of commercial, industrial and institutional applications. Biomass fuels include organic materials such as wood, wood debris and compressed pellets. While combustion of biomass in boilers may have lower emissions of greenhouse gases than combustion of fossil fuels like heating oil, biomass boilers can be significant sources of particulate pollution as well as air toxics such as polycyclic aromatic hydrocarbons and benzene. As a result, DEQ and the Environmental Protection Agency (EPA) have a number of requirements to limit emissions from these boilers, as well as from boilers burning other fuels such as oil or natural gas.

All commercial, industrial and institutional boilers are required to meet state limits on particulate emissions and opacity, as well as federal limits on hazardous air pollutants. Operators of these boilers are required to receive construction approval from DEQ before installation, and boilers with emissions over established thresholds are required to obtain air quality permits before operating. As part of this construction approval and permitting process, operators are required to verify that the installation is compatible with local land use zoning. These requirements are designed to ensure that boilers meet emission standards during operation.

A subset of small commercial, industrial and institutional boilers (those with a heat output equal to or less than 1 million Btu per hour that burn solid fuel such as biomass) are also regulated through DEQ's Heat Smart program (found in Oregon Administrative Rules chapter 340, division 262). The Heat Smart rules prohibit the sale of woodstoves and other small solid fuel burning devices unless they are certified for emissions performance by DEQ or EPA.

Why are the rule changes needed?

The primary goal of the Heat Smart program is to reduce emissions from woodstoves and other similar devices used for residential and commercial space heating, but the Heat Smart rules also apply to other solid fuel burning

devices such as boilers. Low-emitting certified woodstoves have been sold in Oregon since the mid 1980's, but currently there are no small solid fuel boilers (less than 1 million Btu/hr heat output capacity) that are certified by DEQ or EPA. While DEQ anticipates that boiler technology will improve in the future to allow these boilers to be certified, these devices cannot currently be sold in Oregon.

What is the objective of this rulemaking?

The objective of this rulemaking is to allow the sale of small-scale commercial, industrial and institutional solid fuel boilers in Oregon, and to establish a registration process for small-scale and mid-size boilers to ensure that they meet all existing state and federal air quality regulations.

DEQ is proposing permanent rules to replace the temporary rules, which expire in December 2011. The temporary rules exempt these boilers from Heat Smart if they are subject to federal limits on hazardous air pollutants and the owners or operators register them with DEQ. The registration includes confirmation that the devices comply with applicable state and federal emission standards. This ensures that air pollution from small boilers is addressed under either the Heat Smart certification program or by emission standards that apply to boilers at commercial, industrial and institutional facilities, but not both.

The proposed permanent rules would exempt small-scale commercial, industrial and institutional boilers from the Heat Smart regulations if they are subject to federal emissions standards for hazardous air pollutants and the user complies with existing construction approval requirements. The proposed rules would also require the user to register the boiler with DEQ, which includes confirmation of compliance with existing applicable state and federal particulate and air toxics standards. DEQ is also proposing that mid-size commercial, industrial and institutional boilers that are subject to state and federal air quality standards register with DEQ if they are below air quality permitting thresholds. This rulemaking will amend the State of Oregon Clean Air Act Implementation Plan.



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Comment-

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The Department and the EQC have the statutory authority to address this issue under ORS 468, ORS 468.020, ORS 468A, ORS 468A.025, ORS 468A.050, ORS 468A.070, and ORS 468A.460 to 468A.515.

The proposed rules would establish simple registration requirements for small-scale and mid-size commercial, industrial and institutional boilers. The registration would include confirmation that these boilers meet existing state and federal air quality standards (grain loading limits under OAR 340-228-0210; opacity limits under OAR 340-208-0110; and National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63, subpart JJJJJ). There would be no fee for the registration, but there could be costs associated with source testing in order to demonstrate compliance with the grain loading standard.

Who may be affected?

The proposed rule would affect purchasers, owners or operators of small-scale and mid-size commercial, industrial and institutional boilers that are below permitting thresholds, as well as manufacturers and retailers of these boilers.

- New small-scale commercial, industrial, and institutional biomass boiler projects (e.g. biomass utilization projects) are being developed across the state by various public-private partnerships. The exemption from Heat Smart and clarification of applicable emission standards for small-scale boilers (< 1 million Btu/hr) would allow these projects to proceed under the applicable air quality rules.
- Owners or operators of small-scale and mid-size boilers would be subject to registration requirements that would phase in over time.
- Manufacturers and retailers of commercial, industrial and institutional solid fuel boilers below 1 million Btu/hr heat output could now sell their products in Oregon.
- Boiler manufacturers may be asked by owners or operators to test boilers to demonstrate compliance with existing state emission standards.

How was this proposal developed?

DEQ met with stakeholders to discuss the proposed temporary rule changes. Stakeholders included manufacturers of small boilers who are affected by the rules and are participating in biomass projects currently in development.

Copies of the documents relied upon in the development of this rulemaking proposal can be reviewed at DEQ's office at 811 S.W. 6th Ave., Portland, Oregon. Contact Carrie Capp for times when the documents are available for review.

Additional materials available

- [Proposed Rule changes](#)
- [Statement of Need and Fiscal Impact](#)
- [Land Use Evaluation Statement](#)
- [Relationship to Federal Requirements](#)

The above documents provide additional information related to this proposed rulemaking and can be viewed at "Proposed Rule Revisions" www.deq.state.or.us/regulations/rulesandlaws.htm

How to comment

Comments on the proposed rulemaking may be submitted in writing via mail, fax or email any time prior to the comment deadline of 5 p.m., August 25, 2011. Written and oral comments can be submitted during any of the public hearings specified below. It is not necessary to attend a hearing in order to comment. Written comments received prior to the deadline are treated equally with oral comments.

Written comments may be mailed to Carrie Capp, Oregon DEQ, Air Quality Division, 811 SW 6th Ave., Portland, Oregon 97204.

Comments may be faxed to Carrie Capp at 503-229-5675, or emailed to:

Comment-SmBoilerPerm@deq.state.or.us

(Email comments will be acknowledged immediately. Comments and attachments are limited to 10 MB. If you do not receive an automatic response, or your comments and attachments will exceed this limit, please contact the DEQ staff listed above. If there is a delay between servers, emails may not be received before the deadline.)

Public hearings

Public hearings will be held at DEQ Headquarters in Portland on August 18, 2011. The hearing will begin with a brief overview of the proposed rule changes, followed by opportunity for members of the public to provide oral and written comment. All comments will be recorded and reviewed by DEQ.

- Portland, 6 p.m., August 18, 2011.
Presiding Officer: Carrie Capp

Comment deadline is August 25, 2011.

All comments are due to DEQ by 5 p.m., August 25, 2011. DEQ cannot consider comments from any party **received** after the deadline for public comment.

How will rules be adopted?

DEQ will prepare a response to all comments received during the public hearing and comment period and may modify the proposed rules based on the public comment received. DEQ plans to recommend that the Oregon Environmental Quality Commission (EQC) adopt the rules at the December, 2011 EQC meeting. DEQ will notify persons of the time and place for final EQC action if they submit comments during the hearing or comment period or request to be placed on DEQ's mailing list for this rulemaking.

Accessibility information

DEQ is committed to accommodating people with disabilities. Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ Communications and Outreach at 503-229-5696 or call toll-free in Oregon at 800-452-4011; fax to 503-229-6762; or email deqinfo@deq.state.or.us.

People with hearing impairments may call 711.