

State of Oregon

Department of Environmental Quality

Memorandum

Date: Jan. 23, 2012

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda item F, Action item, Rulemaking: Small and mid-size boiler rule amendments
Feb. 16-17, 2012, EQC meeting

Why this is important

DEQ's Heat Smart rules, as revised and approved by the commission in 2011, had the unintended consequence of limiting the sale and use of some small-scale biomass or solid-fuel-burning commercial, industrial and institutional boilers. These boilers are necessary for biomass energy initiatives planned in Oregon. DEQ proposes the attached rule revisions to exempt such boilers from Heat Smart rules, provided they meet certain conditions.

DEQ recommendation and EQC motion

DEQ recommends that the commission adopt the proposed revisions to Oregon Administrative Rules, Chapter 340, divisions 200, 210, 228 and 262 as presented in attachment A. DEQ also recommends that the commission amend the Oregon Clean Air Act State Implementation Plan, and authorize DEQ to submit these revisions to the U.S. Environmental Protection Agency for approval as revisions to Oregon's plan.

Background and need for rulemaking

In February 2011, the commission revised the Heat Smart rules to require small-scale solid fuel burning devices with maximum heat output capacities below one million BTUs per hour to meet EPA's New Source Performance Standards for residential wood heating appliances¹ in order to be sold in Oregon. After adopting the revisions, it came to DEQ's attention that the rules had the unintended consequence of affecting small-scale commercial, industrial and institutional wood-fired boilers.

The Heat Smart rules primarily address residential wood heating devices, including residential outdoor wood-fired boilers, also known as hydronic heaters, but can also apply to some small-scale commercial space heating systems that use wood as a primary fuel. Small and mid-size biomass boilers used for commercial, institutional and industrial facilities are at a different scale than those used for residential or small-

¹ 40 CFR Part 60, Subpart AAA

scale commercial space heating, and should not be subject to Heat Smart rules. Typically, these boilers are for wood drying applications and for heating much larger spaces, such as schools or hospitals. Such boilers are already subject to existing state and federal air quality standards, including federal air toxics standards. The current Heat Smart rules unintentionally restrict the sale of these units in Oregon.

To resolve this concern, DEQ is proposing to exempt small-scale industrial, commercial, and institutional solid fuel boilers with heat outputs less than one million BTUs per hour from Heat Smart rules if they obtain construction approval from DEQ and are also subject to National Emission Standards for Hazardous Air Pollutants. This exemption would allow the sale of these small biomass boilers in Oregon.

The proposed rule amendments also contain clarifications to existing rules affecting smaller emissions sources not subject to DEQ permitting requirements. Existing rules require that all air contaminant sources provide DEQ a Notice to Construct, and require sources, at DEQ's request, to register annually with DEQ. The proposed rules clarify these requirements generally and make clear that registration applies to the owner or operator of industrial, commercial and institutional boilers that are located at unpermitted facilities and are subject to National Emission Standards for Hazardous Air Pollutants. With registration, DEQ can provide technical assistance and can verify that the solid fuel-burning device complies with applicable NESHAPs as well as state standards for opacity and particulate grain loading.

Effect of rule The commission adopted a temporary rule June 17, 2011, that provided an exemption to Heat Smart rules for small-scale biomass boilers. That temporary rule expired Dec. 19, 2011, in accordance with the six-month time limit for temporary rules. If adopted, these proposed rules would make permanent the Heat Smart exemption and allow the sale of commercial, industrial and institutional solid fuel boilers subject to National Emissions Standards for Hazardous Air Pollutants with heat outputs less than one million BTUs per hour that have obtained construction approval from DEQ.

The proposed rules also clarify that DEQ may require source testing or registration as a condition of approving construction of an emission source not subject to permitting. Registrations would be triggered in the future upon DEQ request, allowing DEQ to phase-in the registration process and manage the workload of providing technical assistance to boiler owners. Registrants would be required to update their registration information annually. An owner or operator of a boiler at an existing facility with an air quality permit will continue to

demonstrate compliance with applicable emissions standards through permitting.

There is no registration fee associated with the proposed rule amendments, but there could be costs to owners and operators of the relevant devices. Those costs would be for any source testing DEQ determines is necessary for the device to demonstrate compliance with the grain loading standard.

The proposed rule amendments also improve readability of rules for sulfur dioxide standards (OAR 340-228-0200) and grain loading standards (OAR 340-228-0120) for fuel burning equipment.

This proposed rulemaking would amend the State of Oregon Clean Air Act State Implementation Plan.

**Commission
authority**

The commission has authority to take this action under ORS 468, ORS 468A, ORS 468.020, ORS 468A.025, ORS 468A.035, ORS 468A.050, ORS 468A.055, ORS 468A.070, ORS 468A.460 to 468A.515, and ORS 468A.310.

Key issues

Several small-scale commercial, industrial and institutional biomass boiler projects are under development across the state as part of Oregon's biomass initiative. These projects are relying on federal and Oregon Department of Energy funding, with critical project timelines. Without these proposed rule amendments, some projects under the state biomass initiative would not be allowed in Oregon.

DEQ's temporary Heat Smart rule, adopted June 2011, required all new small and mid-size commercial, industrial and institutional solid fuel burning devices to register with DEQ within six months of construction, and the subsequent permanent rulemaking documents proposed for public comment in July 2011 were drafted to reflect that proposal. DEQ has modified its permanent proposal to require registration only upon DEQ's request. This allows DEQ more flexibility to require registration only when necessary under the initial construction approval process, and to phase in any ongoing registration requirements as DEQ's resources allow.

Public outreach

DEQ held a stakeholder meeting to discuss the proposed temporary rule amendments in Portland in June 2011. DEQ's public comment period for the proposed permanent rule amendments was open July 15 to Aug. 25, 2011, and DEQ held a public hearing Aug. 18, 2011. No one from the public attended the hearing. DEQ received written comments from one commenter during the comment period.

Next steps If adopted, the proposed permanent rule amendments would become effective upon filing with the Secretary of State. DEQ's Air Quality Division will provide technical assistance to owners and operators of biomass boilers and other solid fuel burning devices. Outreach activities will be coordinated and implemented through DEQ's Small Business Assistance Program. DEQ will develop a simple, web-based construction approval and registration tool for solid fuel burning devices affected by these rules. For more information, the technical assistance implementation plan is available upon request.

Attachments

- A. Proposed rules (redline)
- B. Public hearing officer's report
- C. Public comment and agency responses
- D. Relationship to Federal Requirements questions
- E. Statement of Need and Fiscal and Economic Impact
- F. Land use evaluation statement

Available upon request

- 1. Rulemaking announcement
- 2. Technical Assistance Implementation Plan
- 3. Temporary Rulemaking documents
- 4. EPA Area Source MACT rules

Approved:

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