

Oregon Department of Environmental Quality

**March 1, 2014**

Notice of Proposed Rulemaking

 **Air Quality Rule Changes and Updates**

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|  **Overview** |

Short summary

DEQ proposes changes to rules as a continuing effort to streamline, reorganize and update Oregon’s air quality permit programs to improve air quality with a more efficient and effective permitting program. Previous improvements began with the Environmental Quality Commission’s adoption of Revisions to Point Source Air Management Rules in 2001, and Air Quality Permit Program Streamlining and Updates in 2007.

The proposed rules include changes to statewide particulate matter standards and the pre-construction permitting program. This would align with EPA’s adoption of the ambient air quality standard for fine particulates, commonly called PM2.5, and ensure Oregon’s permitting program protects air quality. The proposal also includes additional pre-construction permitting flexibility for smaller businesses.

To improve community outreach, the proposed rules would allow the use of technological advances when holding public hearings and meetings.

DEQ proposes minor changes to the Heat Smart program and the gasoline dispensing facility rules to improve implementation.

This document organizes and describes the proposed rules under the following nine main categories:

1. Clarify and update air quality regulations

2. Update particulate matter emission standards

3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment

4. Establish two new state air quality area designations – “sustainment” and “reattainment” – to help areas avoid and more quickly end a federal nonattainment designation

5. Identify Lakeview as a state sustainment area while retaining its federal attainment designation

6. Change the pre-construction permitting program, also called the New Source Review

7. Provide more flexibility for public hearings and meetings

8. Reestablish Heat Smart exemption for small commercial solid fuel boilers that the permitting program regulates

9. Remove annual reporting requirements for small gas stations

Regulated parties

The proposed rules affect all businesses, agencies, and local governments with air quality permits and those regulated by non-permitting rules included in this rulemaking.

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|  **Statement of need** |

| 1. Clarify and update air quality regulations
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| After years of rulemakings and updates, DEQ proposes reorganizing Oregon’s air quality rules. Multiple definitions for the same term, missing details, obsolete or outdated rules and rules that do not align with EPA rules cause confusion and create an ongoing need to clarify and make corrections. This proposal would clarify and update air quality rules to accomplish the following. |
| What need is DEQ trying to address? | How would the proposed rule address the need? |
| Air quality rules lack clarity because some important details are missing. This creates problems implementing the air quality program. An example of missing details is the identification of specific compliance methods for determining compliance with an emission standard.  | Include missing compliance methods with all standards to make sure businesses know how to comply with the standards. |
| Procedures included in definitions rather than specific rules cause confusion. Examples of procedures included in definitions are those for determining a *major modification*, *actual emissions* and *netting basis*.  | Remove procedures from definitions to procedural rules. For example, DEQ proposes moving the procedure for how to determine actual emissions from the definition of “actual emissions” to a procedural rule.  |
| Different definitions for the same term and definitions located in multiple divisions makes it difficult to find a definition or know which definition applies.  | Move all common definitions to division 200, General Air Pollution Procedures and Definitions. Provide only one definition per term; and add definitions for undefined terms such as “control efficiency”, “internal combustion source” and “removal efficiency.”  |
| Tables separate from rule text are difficult to find. | Move tables into the text whenever possible to make the information easier to find, such as: significant emission rates, de minimis levels, generic Plant Site Emission Limits, significant impact levels and PSD increments.  |
| Some industries no longer operate in Oregon and there is no longer a need for rules specific to these industries.  | Repeal rules for the following specific types of businesses that no longer exist in Oregon:  * + Neutral Sulfite Semi-Chemical Pulp Mills
	+ Sulfite Pulp Mills
	+ Primary Aluminum Standards
	+ Laterite Ore Production of Ferronickel
	+ Charcoal Producing Plants

If one of these types of businesses wants to build in Oregon, they would be permitted under the more stringent federal requirements for new sources already in Oregon rules. |
| Some DEQ rules no longer align with more stringent EPA standards. | This proposal would repeal the following rules made unnecessary by adoption of other federal or state standards: * EPA adopted national rules that apply to manufacturers of consumer spray paint. Therefore, DEQ proposes repealing incompatible state rules. The federal rules will continue to reduce ozone from consumer products.
* DEQ worked with the western states on a general sulfur dioxide trading program to address regional haze. The trading program is no longer needed because Oregon subsequently adopted individual emission limits based on Best Available Retrofit Technology requirements to directly reduce haze-causing emissions from sources like the PGE Boardman plant.
* EPA’s rules for commercial and industrial solid waste incineration require forced-air pit or air curtain incinerators to have Title V air quality permits. Therefore, open burning rules are no longer needed to regulate emissions from forced-air pit or air curtain incinerators because the less stringent DEQ rules would create a conflict with EPA’s rules.
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| DEQ last updated the Source Sampling Manual and Continuous Monitoring Manual in 1992. Portions of the manuals are no longer current. | The proposal would adopt updates to the manuals that incorporate revised EPA methods for fine particulate standards and other changes to sampling and monitoring methods made since 1992. |

| 1. Update particulate matter emission standards
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| Like many other states, Oregon adopted statewide particulate matter standards in 1970 that included less protective standards for grandfathered businesses in operation at that time. With changes in ambient air quality standards over the years, the statewide standards for grandfathered businesses no longer protect air quality. Therefore, DEQ proposes to phase-in a transition for the few remaining grandfathered businesses that have not already upgraded to the standard that applies to businesses built since 1970. The proposal includes flexible options and potential extensions to minimize costs and ensure that no biomass boilers would need to convert to fossil fuel. DEQ also proposes changes to the compliance demonstration method used for the visible emission standard.  |
|  What need would this address? |  How would the proposed rule address the need? |
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| Update particulate matter emission standards  |
| What need would this address?? | Emissions from grandfathered businesses subject to particulate matter standards for sources built before 1970 can harm public health and create barriers to economic development. Work on the Klamath Falls fine particulate attainment plan showed that impacts from a single grandfathered business could “consume” a significant portion of the available airshed when considering background concentrations. DEQ found similar results when analyzing emissions from a grandfathered business near Lakeview. Routine exposure to air pollution at these levels can cause significant health impacts to sensitive individuals. In addition to the risk to public health, emissions from the grandfathered businesses can interfere with economic development. If a single business consumes the majority of the airshed that is available in an area, other businesses may not be able to expand and new businesses may not be able to come into the area. DEQ relies on two types of general standards to control emissions from permitted sources of particulate matter such as dust or smoke. One type of standard sets concentration-based emission limits as mass per unit volume of exhaust gas. A second type of standard eferred to as a visible emissions standard limits the maximum visual density, or opacity, of a plume. The rules include different particulate concentration and opacity standards for units installed before or after 1970:* Pre-1970 unit: 0.2 grain/dry standard cubic foot (gr/dscf) and 40 percent opacity
* Post-1970 unit: 0.1 gr/dscf and 20 percent opacity

These statewide particulate matter standards were adopted in the early 1970’s as part of Oregon’s initial State Implementation Plan. Since that time, health researchers have concluded that exposure to particulate pollution is more harmful than previously indicated. As a result, EPA lowered the ambient air quality standard for particulates from 260 micrograms/cubic meter and established separate standards for coarse particulates at 150 micrograms/cubic meter and fine particulates at 35 micrograms/cubic meter. With the adoption of the fine particulate ambient air quality standard in 2011, Klamath Falls and Oakridgeare now designated nonattainment for fine particulate, Lakeviewviolates the standard and numerous other areas in Oregon are just below the standard. The intent of the proposed amendments to statewide particulate matter standards is to help prevent additional violations of the fine particulate standard in the future. Once EPA designates an area as nonattainment, DEQ and the local government must adopt an attainment plan. Attainment plans for fine particulate nonattainment areas typically include stringent regulations to reduce emissions from existing and new industry, residences and commercial establishments. Reducing emissions from grandfathered businesses before areas exceed ambient air quality standards and are designated nonattainment helps avoid the costs of developing and implementing attainment plans. This would help avoid severe restrictions for businesses that want to build or expand in these areas. The rules adopted for the Medford/Ashland AQMA PM10 attainment plan (OAR 340-240-0100 through 340-240-0250) are an example of the type of restrictions that might be imposed upon businesses when developing PM2.5 attainment plans.The intent of this proposal is to ensure that Oregon’s particulate standards are consistent with current EPA policy for significant figures when determining compliance with standards. Oregon’s current standards have only one significant figure (e.g., 0.1 gr/dscf) whereas EPA expects all standards to have two significant figures (e.g., 0.10 gr/dscf) when comparing measured emissions data to the standards. This proposal would help ensure that Oregon businesses use a reliable method to measure compliance with the statewide opacity standard that is consistent with EPA and other states’ methods. When Oregon first adopted the opacity standard, it was based on an aggregate of three minutes in a 60-minute period. However, Oregon never developed a reference test method for the 3-minute aggregate limit. Not having a reference method for showing compliance makes it difficult to comply with and enforce a standard. Oregon businesses have used a *modified* EPA Method 9 as a workaround to show compliance with this standard. The proposal would address similar problems with a local opacity standard that applies in the Portland area. Current rules for the four-county area around Portland include a 20 percent opacity standard that is an aggregate of 30 seconds in a 60-minute period for non-fuel burning equipment such as material handling equipment. However, just like the statewide standard, Oregon never developed a reference method for the 30-second aggregate limit. The lack of a compliance method makes it difficult to comply with and enforce emissions standards. There is also difficulty reading opacity from fugitive emission sources. Fugitive particulate matter emissions are not emitted from a stack and typically originate from storage piles, material conveying systems, unpaved roads or other dusty activities. In many situations, it is possible to take opacity readings to determine if the emitting source exceeded the opacity standard and then require action to abate the emissions. However, in other situations opacity readings are difficult to take or the emissions do not exceed the opacity standard but are nevertheless objectionable. Therefore, DEQ needs a different method for addressing opacity from fugitive emission sources.  |
| How would the proposed rule address the need?  | The proposed amendments to existing rules would improve and maintain air quality and facilitate economic development. The amendmentswould:* Minimize particulate matter emissions from pre-1970 grandfathered units.
* Align the particulate matter standard with EPA policy on determining compliance.
* Increase compliance and enforceability of the opacity standard by aligning it with the reference compliance method.
* Require abatement of any visible fugitive emissions that leave a business's property, regardless of the actual opacity level.

The proposed rules would affect both the statewide particulate matter and opacity standards for grandfathered units built before June 1970 by phasing in a requirement for these businesses to meet lower standards based on typically available control technology. The proposal would allow businesses a five-year transition period with an opportunity for an additional extension if necessary. The proposed rules provide an option to request a source specific limit if boiler/multiclone optimization does result in emissions low enough to meet the revised standards. This would ensure that that the proposal would not require any business to replace a boiler or convert to fossil fuel.To align the particulate matter standard with the EPA policy that standards have 2 significant figures, DEQ proposes adding a significant figure to all the particulate matter standards. Businesses would have until January 1, 2020 to comply with the revised opacity and particulate matter standards. This five-year compliance schedule would allow businesses time to design and implement the most cost-effective option for meeting the revised standards. The proposal would also allow businesses to apply for an extension if needed.The proposed rules would change all opacity standards, both statewide and industry specific, to a 6-minute block average, consistent with other states in the region and EPA. DEQ does not expect this to change the overall stringency of the standards.The proposal would repeal the Portland-area four-county 20 percent opacity standard, so that non-fuel burning equipment in this area would be subject to the statewide opacity standard. This would solve the problems of limited applicability and unenforceability.The proposed amendments would require businesses to take reasonable precautions to prevent fugitive emissions and to develop and implement a fugitive emissions control plan upon request by DEQ to prevent visible emissions from leaving the property. This is a simpler, more comprehensive and more effective approach to controlling these emissions than the current approach, which requires DEQ to make a nuisance determination outside of special control areas. EPA Method 22, Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares would determined compliance. Method 22 is specific for fugitive sources and would be a much better method for determining compliance than the current use of EPA Method 9.  |

| 3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment |
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| When Oregon established the Title V permitting program in 1993, DEQ developed a list of insignificant activities to account for all emissions in Title V permits as required by federal law. This list was called “categorically insignificant activities” and includes examples like:* Janitorial activities
* Groundskeeping activities
* Emergency generators
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|  What need would this address? |  How would the proposed rule address the need? |
| EPA recently adopted National Emission Standards for Hazardous Air Pollutants for stationary reciprocating internal combustion engines. That adoption added requirements for emergency generators currently exempt from permitting in Oregon because DEQ determined they had insignificant emissions. Similarly, current rules exempt small gas and oil-fired equipment from permitting, although the emissions from groups of this equipment can be significant in the aggregate. The proposed rules would require permits for these types of sources. The EPAnew emission standards for emergency generators need to be specifically addressed in permits. Businesses indicate they have the categorically insignificant activities in their permit applications, but these activities are exempt from rigorous monitoring requirements. DEQ determined that small fuel burning equipment, currently listed as categorically insignificant because each unit has low emissions, could have significant emissions in the aggregate if a business has multiple units. For example, DEQ identified one business that has 8 small boilers that together have significant potential emissions of approximately 12 tons per year of nitrogen oxides. | The proposal would remove emergency generators and small natural gas or oil-fired equipment from the list of categorically insignificant activities if:* Those units are above size thresholds subject to emission limits, or
* Their emissions in the aggregate are greater than de minimis levels.

For businesses with an existing permit, these activities would be added to the permit. In cases where emissions from these activities exceed permitting thresholds, a business could need a permit for these activities alone.If the aggregate emissions are less than permitting thresholds, the owner or operator may only need to obtain pre-construction approval from DEQ when installing new units. |

| 4. Title Establish two new state air quality area designations – “sustainment” and “reattainment” – to help areas avoid and more quickly end a federal nonattainment designation |
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| EPA designates areas that violate federal air quality standards as “nonattainment” areas and designates all other areas as “attainment” or “unclassifiable” areas. Oregon law designates former nonattainment areas that EPA reclassified to attainment as “maintenance” areas to ensure those areas avoid future violations. If the Environmental Quality Commission approves the proposed rules, DEQ would recommend EPA designate specific areas of the state as sustainment or reattainment based on a local air quality analysis and public comment. These designations would provide communities and businesses with additional tools and incentives to improve air quality. |
|  What need would this address? |  How would the proposed rule address the need? |
|  There are gaps in this designation system that can create disincentives to improve air quality and unnecessary impediments to economic development. | DEQ proposes two new state-only classifications: * “Sustainment” area for a federal attainment area that is approaching or over federal air quality standards that EPA has not yet designated a nonattainment area.
* “Reattainment” area for a federal nonattainment area that is meeting air quality standards that EPA has not yet redesignated an attainment area.

 These classifications would provide communities and businesses with additional tools and incentives to improve air quality.Based on a local air quality analysis, DEQ recommendations and public comment, EQC would designate specific areas of the state as sustainment or reattainment. DEQ would recommend a state sustainment area designation for a federal attainment area that is approaching or over federal air quality standards but is not yet designated as nonattainment by EPA. DEQ would recommend a state reattainment area designation for a federal nonattainment area that is meeting air quality standards but has not yet been redesignated to attainment by EPA.Sustainment areas:DEQ would work with the local community to determine if a state sustainment designation would be the best approach to improve air quality and prevent a nonattainment designation. DEQ would identify potential sustainment areas based on an air quality analysis that may include monitoring, development of an emission inventory, and air quality modeling. The analysis would identify the air pollution sources that primarily contribute to public health concerns, and a boundary for the potential sustainment area. DEQ would then propose the sustainment designation for public comment through the rulemaking process.An area designated as sustainment by the EQC would remain a federal attainment area. DEQ, working closely with the local community, would develop and implement a sustainment plan to improve air quality and prevent a nonattainment designation. Within a sustainment area, new and modified facilities would receive incentives to obtain emission offsets from the existing air pollution sources identified as the primary cause of degraded air quality in the sustainment area (see section 6 below).Reattainment areas:DEQ would propose a state reattainment designation for a federal nonattainment area with an approved attainment plan in which air quality is reliably meeting the federal ambient air quality standard. The potential for a reattainment area designation would create an incentive for a community to improve air quality as quickly as possible. The boundary for the reattainment area would be the same as the nonattainment area boundary. An area designated as reattainment by EQC would remain a federal nonattainment area, and all elements of its attainment plan would continue to apply until EPA approves a maintenance plan and redesignates the area to attainment. However, within the reattainment area, new and modified facilities that fall below the federal major source threshold would be subject to less stringent requirements provided they were not identified as a primary cause of air quality violations in the attainment plan under category 6 below. |
| One gap is for attainment areas in which the air quality is close to or above the federal ambient air quality standard. While air pollution in these areas can cause health effects, there is no process to implement prevention planning to avoid a federal nonattainment designation. The air pollution levels also make it difficult or impossible for new and expanding industrial facilities to demonstrate that their added emissions will not cause air quality violations, and the attainment area permitting rules do not include provisions for these businesses to offset their emission increases by reducing emissions from existing sources in the area. Designating these areas as nonattainment may be appropriate in some cases, but in other cases a nonattainment designation could interfere with more effective local efforts to improve air quality by imposing prescriptive federal requirements and timelines. |  |
| A second gap is for nonattainment areas that have met federal ambient air quality standards by implementing an approved attainment plan. For these areas to be designated as federal attainment areas and state maintenance areas, DEQ must develop and EPA must approve a long-term air quality maintenance plan. In developing the maintenance plan, DEQ may determine that some elements of the attainment plan are no longer required to maintain air quality. However, until the area is redesignated to attainment by EPA – a process that can take years – all of the elements of the attainment plan must continue to be implemented. |  |
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| 5. Identify Lakeview as a state sustainment area while retaining its federal attainment designation |
| Air quality in Lakeview currently exceeds the ambient air quality standards for fine particulates. However, EPA has not yet designated Lakeview a nonattainment area because Lakeview was not exceeding the standard at the time EPA made its designations throughout the country. This makes it nearly impossible for industrial business to build or expand in the Lakeview area because permitting provisions for areas that violate federal air quality standards are not available in attainment areas. However, designating Lakeview as a nonattainment area would preclude the community’s active voluntary efforts to meet federal air quality standards under the PM Advance program. Designating Lakeview as a state sustainment area would retain the benefits of a federal attainment designation while providing Lakeview with new tools to improve ambient air quality and more flexible permitting requirements. |
|  What need would this address? |  How would the proposed rule address the need? |
| The air quality in Lakeview currently violates the PM2.5 ambient air quality standard although EPA has not yet designated the area as nonattainment. At the time EPA last required the designations, Oregon did not have the required three years of monitoring data to determine if the area was violating the federal standards. However, Lakeview’s status as violating the federal air quality standard without a nonattainment designation has created problems in permitting new and modified facilities. The construction approval process for attainment and unclassified areas includes an analysis that a new or expanding major source will not cause or contribute to a violation of air quality standards. However, this test is not possible to meet for an area that already violates the standards. This, in effect, prevents DEQ from approving construction permits for new and expanding facilities in Lakeview. | The proposed rules would designate Lakeview as a state sustainment area proposed under category 4 aboveWhile Lakeview would retain its federal designation as an attainment area, a state designation of sustainment would help the community in its efforts to improve air quality and avoid a federal nonattainment designation. DEQ’s technical analysis to identify the boundary and primary sources of air pollution in the proposed sustainment area are included in Attachment A. |
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| 6. Change the pre-construction permitting program also called New Source Review |
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| DEQ proposes changes to the New Source Review program to improve air quality in all areas of the state, especially those that are close to or exceed ambient air quality standards. The proposed rules would clarify permitting requirements, provide more opportunities for businesses to reduce pollution and make it possible for construction projects to demonstrate air quality improvements attributable to the project. The proposal would separate New Source Review requirements for sources above and below the federal major source threshold and would establish New Source Review requirements for the proposed new sustainment and reattainment area designations. |
|  What need would this address? |  How would the proposed rule address the need? |
| New Source Review is a federally required preconstruction program that ensures new or modified facilities install the latest control technologies and do not have adverse impacts on ambient air quality standards. The New Source Review program design:* Includes Prevention of Significant Deterioration to prevent degradation of air quality in areas that meet federal air quality standards.
* Designates nonattainment areas that violate air quality standards to improve the air quality.
 | The proposed rules for new and proposed facilities would distinguish those facilities above the federal major source threshold from facilities below the threshold. To do this, the amendments would:* Amend the definition of a major source to match the EPA definition.
* Establish a minor New Source Review program for smaller businesses called ‘State New Source Review.’
* Tailor New Source ReviewNew Source Review requirements for smaller businesses to the air quality needs of an area in ways that cannot be applied to larger businesses because of EPA requirements.
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| The current New Source Review program rules do not distinguish between requirements for facilities that emit more than the federal major source threshold and those that emit less. Federal law requires states to have both a major and a minor New Source Review program. The requirements for the major New Source Review program are very prescriptive. States have more flexibility in designing the minor New Source Review program if the state demonstrates that it will protect air quality. Oregon requirements for minor and major New Source Review are the same. This limits the most way to use the minor New Source Review program to protect air quality and enabling economic development.  | The proposal would:* Amend major New Source Review requirements.
* Establish minor New Source Review requirements for attainment, nonattainment and maintenance areas.
* Establish New Source Review requirements for the two new proposed area classifications, sustainment and reattainment.
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| Criteria used to determine if a major new or modified facility would improve air quality in or near a nonattainment or maintenance area: * Are based solely on air quality modeling
* Makes it impossible for businesses to meet, unless the increasing and offsetting businesses are co-located.
* Prevents potentially more beneficial local air pollution reduction projects from occurring, thereby creating an unnecessary construction ban.
* Requires businesses to reduce emissions from other existing businesses and demonstrate that together the emission increases and reductions result in a net air quality benefit.
 | The rule amendments would establish a new process for companies proposing a new or modified facility in or near a nonattainment, sustainment or maintenance area. The proposal provides a simplified modeling demonstration that requires emission offsets to be greater than emission increases. The ratio would depend on:* the area classification, and
* whether any emission increase would be above or below the federal major source threshold.

A method for demonstrating that a proposed facility together with offsetting emission reductions would create a net air quality benefit. The proposed rules would provide incentives for new or modified businesses to help address ambient air quality problems. The incentive would reduce the emission-offset ratio if the business obtains reductions from priority sources that primarily cause the local area air quality problem.  |
| The current New Source Review program of construction permits forThe rules do not include or denyingof construction permits  |  The proposed rules provide two 18-month extensions and procedures for requesting and approving extensions for tNew Source Review construction permits.  |

| 7. Provide more flexibility for public hearings and meetings |
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| DEQ is committed to public engagement and staying up-to-date with emerging and innovative ways to reach people and hold hearings. This proposal would make it easier and cheaper for people to participate. Current rules require DEQ to hold informational meetings on the most complex permit actions and public hearings when requested. The requirements are very prescriptive and in some cases do not allow DEQ to use technology such as the internet to hold “virtual” meetings.  |
|  What need would this address? |  How would the proposed rule address the need? |
| The existing rules are very prescriptive regarding how public hearings and meetings must be held. The rules were first adopted in 1974, long before the technological advances that are currently available. Traveling to hearings and meetings around the state can be resource intensive and wasteful if no one shows up. | The proposed rules would make it easier and cheaper for people to participate in public hearings and meetings by removing the prescriptive language from the rules. DEQ is committed to public engagement and is looking for new and innovative ways to reach people and hold hearings, including teleconferences, video conferences and webinars. |

| 8. Reestablish Heat Smart exemption for small commercial solid fuel boilers that are regulated by the permitting program |
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| DEQ proposes revisions to residential wood heating rules to remedy the inadvertent prohibition to sell small commercial biomass boilers in Oregon. DEQ’s Heat Smart program requires biomass and other solid fuel burning devices that have heat output less than 1 million Btu per hour to meet certification requirements. The existing rules exempt small biomass boilers from certification requirements if they are subject to federal National Emission Standards for Hazardous Air Pollutants. However, EPA revised its rules in 2012 to exempt small biomass boilers from these standards. The proposed rules reestablish the Heat Smart exemption for small commercial biomass boilers regulated through the construction approval and permit programs. |
|  What need would this address? |  How would the proposed rule address the need? |
| DEQ’s existing rules exempt small biomass boilers from the Heat Smart program if they are subject to National Emission Standards for Hazardous Air Pollutants. The Heat Smart Program is intended to ensure that commercial and residential wood stoves and other wood heating devices meet certification standards, which were not designed to apply to biomass boilers. However, EPA recently exempted small biomass boilers from the National Emission Standards for Hazardous Air Pollutants, which inadvertently subjected these devices to the Heat Smart rules. This, in effect, prevents small commercial biomass boilers with heat output less than 1 million Btu per hour from being sold in Oregon. | The proposed rule changes would provide a pathway for small scale commercial biomass boilers to be sold in Oregon again, while ensuring they are still subject to existing state limits on particulate matter and opacity. This proposal would eliminate the reference to the federal regulations and allow these boilers (those with a heat output less than 1 million Btu per hour) to be sold in Oregon. |

| 9. Remove annual reporting requirements for small gas stations |
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| DEQ proposes repealing the annual reporting requirement for small gasoline dispensing facilities after finding it unnecessary to ensure compliance with emission standards that prevent leaks and spills.  |
|  What need would this address? |  How would the proposed rule address the need? |
| A gasoline dispensing facility with a monthly throughput of less than 10,000 gallons of gasoline is currently required to:* Meet work practice standards
* Have a submerged fill tube installed on any tank at the facility that has a capacity of 250 gallons or more
* If subject to the submerged fill tube requirement, submit a one-time initial notification and later a notification of compliance status
* Submit annual reports of throughput

These facilities are not required to have an air quality permit. DEQ collected one time data on throughput data from these facilities and may request additional information if needed. Therefore, DEQ determined the annual reporting requirement for these small gasoline dispensing facilities is unnecessary. | The proposed rules address this by removing the annual reporting requirement for facilities with monthly throughput less than 10,000 gallons. As mentioned above, DEQ would still have the authority to request throughput information from these facilities. DEQ will request this information as needed for businesses close to the 10,000 gallon permitting threshold. |

How will DEQ know the problem has been solved?

If adopted by the EQC after consideration of public comments, DEQ would submit the rules to EPA to update Oregon’s State Implementation Plan. DEQ would know the goals of this rulemaking have been addressed when EPA reviews and approves the State Implementation Plan revision.

Request for other options

During the public comment period, DEQ requests public comment on whether to consider other options for achieving the substantive goals of the proposed rules while reducing any negative economic impact of the rules on business.

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|  Rules affected, authorities, supporting documents |

Adopt OAR:

340-200-0035, 340-202-0225, 340-204-0300, 340-204-0310, 340-204-0320, 340-222-0046, 340-222-0048, 340-222-0051, 340-224-0025, 340-224-0045, 340-224-0055, 340-224-0200, 340-224-0210, 340-224-0245, 340-224-0250, 340-224-0255, 340-224-0260, 340-224-0270, 340-224-0500, 340-224-0510, 340-224-0540, 340-224-0550, 340-234-0540, 340-240-0050

Amend OAR:

340-200-0010, 340-200-0020, 340-200-0025, 340-200-0030, 340-200-0040, 340-202-0010, 340-202-0050, 340-202-0110, 340-202-0200, 340-202-0210, 340-204-0010, 340-204-0020, 340-204-0030, 340-204-0060, 340-204-0090, 340-206-0010, 340-206-0020, 340-206-0030, 340-206-0040, 340-206-0050, 340-206-0060, 340-206-0070, 340-208-0010, 340-208-0110, 340-208-0210, 340-208-0300, 340-208-0310, 340-208-0320, 340-208-0450, 340-209-0010, 340-209-0020, 340-209-0030, 340-209-0040, 340-209-0050, 340-209-0060, 340-209-0070, 340-209-0080, 340-210-0010, 340-210-0020, 340-210-0100, 340-210-0110, 340-210-0120, 340-210-0205, 340-210-0215, 340-210-0225, 340-210-0230, 340-210-0240, 340-210-0250, 340-212-0010, 340-212-0120, 340-212-0130, 340-212-0140, 340-212-0150, 340-212-0200, 340-212-0210, 340-212-0220, 340-212-0230, 340-212-0240, 340-212-0250, 340-212-0260, 340-212-0270, 340-212-0280, 340-214-0010, 340-214-0110, 340-214-0114, 340-214-0130, 340-214-0200, 340-214-0210, 340-214-0220, 340-214-0300, 340-214-0310, 340-214-0320, 340-214-0330, 340-214-0340, 340-214-0350, 340-214-0360, 340-216-0020, 340-216-0025, 340-216-0030, 340-216-0040, 340-216-0052, 340-216-0054, 340-216-0056, 340-216-0060, 340-216-0062, 340-216-0064, 340-216-0066, 340-216-0068, 340-216-0070, 340-216-0082, 340-216-0084, 340-216-0090, 340-216-0094, 340-218-0010, 340-218-0020, 340-218-0030, 340-218-0040, 340-218-0050, 340-218-0060, 340-218-0070, 340-218-0080, 340-218-0090, 340-218-0100, 340-218-0110, 340-218-0120, 340-218-0140, 340-218-0150, 340-218-0160, 340-218-0170, 340-218-0190, 340-218-0200, 340-218-0210, 340-218-0220, 340-218-0230, 340-218-0240, 340-220-0010, 340-220-0020, 340-220-0030, 340-220-0040, 340-220-0050, 340-220-0060, 340-220-0070, 340-220-0080, 340-220-0090, 340-220-0100, 340-220-0110, 340-220-0120, 340-220-0130, 340-220-0170, 340-220-0180, 340-220-0190, 340-222-0010, 340-222-0020, 340-222-0030, 340-222-0040, 340-222-0041, 340-222-0042, 340-222-0060, 340-222-0080, 340-222-0090, 340-224-0010, 340-224-0020, 340-224-0030, 340-224-0040, 340-224-0050, 340-224-0060, 340-224-0070, 340-225-0010, 340-225-0020, 340-225-0030, 340-225-0040, 340-225-0045, 340-225-0050, 340-225-0060, 340-225-0070, 340-226-0010, 340-226-0100, 340-226-0120, 340-226-0130, 340-226-0140, 340-226-0210, 340-226-0310, 340-226-0320, 340-226-0400, 340-228-0020, 340-228-0120, 340-228-0130, 340-228-0200, 340-228-0210, 340-228-0300, 340-232-0010, 340-232-0020, 340-232-0030, 340-232-0040, 340-232-0060, 340-232-0080, 340-232-0085, 340-232-0090, 340-232-0100, 340-232-0110, 340-232-0140, 340-232-0150, 340-232-0160, 340-232-0170, 340-232-0180, 340-232-0190, 340-232-0200, 340-232-0220, 340-232-0230, 340-234-0010, 340-234-0200, 340-234-0210, 340-234-0220, 340-234-0240, 340-234-0250, 340-234-0270, 340-234-0500, 340-234-0510, 340-234-0520, 340-234-0530, 340-236-0010, 340-236-0310, 340-236-0320, 340-236-0330, 340-236-0410, 340-236-0420, 340-236-0440, 340-236-0500, 340-240-0030, 340-240-0110, 340-240-0120, 340-240-0130, 340-240-0140, 340-240-0160, 340-240-0180, 340-240-0210, 340-240-0220, 340-240-0250, 340-240-0320, 340-240-0330, 340-240-0350, 340-240-0360, 340-240-0410, 340-240-0420, 340-240-0430, 340-240-0510, 340-240-0550, 340-240-0560, 340-240-0610, 340-242-0400, 340-242-0410, 340-242-0420, 340-242-0430, 340-242-0440, 340-242-0510, 340-242-0520, 340-242-0610, 340-242-0620, 340-242-0630, 340-244-0232, 340-244-0234, 340-244-0236, 340-244-0238, 340-244-0239, 340-244-0240, 340-244-0242, 340-244-0244, 340-244-0246, 340-244-0248, 340-244-0250, 340-244-0252, 340-262-0450, 340-264-0010, 340-264-0030, 340-264-0040, 340-264-0050, 340-264-0060, 340-264-0070, 340-264-0075, 340-264-0078, 340-264-0110, 340-264-0120, 340-264-0130, 340-264-0140, 340-264-0160, 340-264-0170, 340-264-0180, 340-268-0030

Renumber OAR:

Current OAR 340-222-0070 renumbered to 340-222-0035(5) and (6)

Amend and renumber OAR:

current OAR 340-216-0020 Table 1 amended and renumbered to 340-216-8005;

current OAR 340-216-0020 Table 2 amended and renumbered to 340-216-8010;

current OAR 340-222-0043 amended and renumbered to 340-222-0035;

current OAR 340-222-0045 amended and renumbered to 340-222-0055;

current OAR 340-224-0080 amended and renumbered to 340-224-0034;

current OAR 340-224-0100 amended and renumbered to 340-224-0038;

current OAR 340-225-0090 amended and renumbered to 340-224-0060, 340-224-0510,

340-224-0520, 340-224-0540, 340-224-0550;

current OAR 340-226-0310 Table 1 amended and renumbered to 340-226-8005;

Repeal OAR:

340-208-0100, 340-208-0200, 340-208-0600, 340-209-0070, 340-214-0400, 340-214-0410, 340-214-0420, 340-214-0430, 340-218-0250, 340-228-0400, 340-228-0410, 340-228-0420, 340-228-0430, 340-228-0440, 340-228-0450, 340-228-0460, 340-228-0470, 340-228-0480, 340-228-0490, 340-228-0500, 340-228-0510, 340-228-0520, 340-228-0530, 340-234-0300, 340-234-0310, 340-234-0320, 340-234-0330, 340-234-0340, 340-234-0350, 340-234-0360, 340-234-0400, 340-234-0410, 340-234-0420, 340-234-0430, 340-236-0100, 340-236-0110, 340-236-0120, 340-236-0130, 340-236-0140, 340-236-0150, 340-236-0200, 340-236-0210, 340-236-0220, 340-236-0230, 340-236-0430, 340-240-0170, 340-240-0230, 340-240-0310, 340-242-0700, 340-242-0710, 340-242-0720, 340-242-0730, 340-242-0740, 340-242-0750, 340-242-0760, 340-242-0770, 340-242-0780, 340-242-0790, 340-264-0190

Divisions 210, 216 and 218 include rules, programs or activities considered land use programs under the DEQ State Agency Coordination Program.

Statutory authority

ORS 468 and 468A

Statutes implemented

ORS 468, 468A, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055, 468A.070, 468A.135, 468A.155, 468A.310, 468A.327, 468A.460 through 468A.515

Documents relied on for rulemaking [ORS 183.335(2)(b)(C)](http://www.leg.state.or.us/ors/183.html)

| Document title | Document location |
| --- | --- |
| 06/06/90 EPA guidance titled “Performance Test Calculation”  | <http://www.epa.gov/ttn/emc/rounding.pdf> |
| Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | <http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartIIII.pdf> |
| Standards of Performance for Stationary SparkIgnition Internal Combustion Engines | <http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartJJJJ.pdf> |
| National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines | <http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf> |
| Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; Final Rule | <http://www.epa.gov/ttn/atw/area/fr18ja08.pdf> |
| Regulations Pertaining to NPDES and WPCF Permits (OAR 340-45) | <http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_045.html> |
| 2011 Oregon Air Quality Data Summaries | <http://www.deq.state.or.us/aq/forms/2011AirQualityAnnualReport.pdf> |
| Regulations Pertaining to NPDES and WPCF Permits (OAR 340-45) | <http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_045.html> |
| National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; Final Rule | <http://www.gpo.gov/fdsys/pkg/FR-2013-02-01/pdf/2012-31645.pdf> |
| Stationary Source Reporting Requirements - OAR 340-214-0110 | <http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_214.html> |
| 40 CFR Part 58, Appendix D — Network Design Criteria for Ambient Air Quality Monitoring | <http://www.gpo.gov/fdsys/granule/CFR-2012-title40-vol6/CFR-2012-title40-vol6-part58-appD/content-detail.html> |

A crosswalk of all rules changes, including the rules in the State Implementation Plan, with more detail is available as part of the rulemaking package.

|  |
| --- |
|  Fee Analysis  |

This rulemaking does not involve any change in fees.

|  |
| --- |
|  Statement of fiscal and economic impact [ORS 183.335 (2)(b)(E)](http://www.leg.state.or.us/ors/183.html) |

Fiscal and economic impacts

The proposed rules would have fiscal and economic impacts on the public, businesses, state agencies and units of local governments. DEQ proposes:

* Streamlining, reorganizing and updating Oregon’s air quality permit programs to improve air quality with a more efficient and effective permitting program
* Amending statewide particulate matter standards and the pre-construction permitting program to align with EPA’s adoption of the ambient air quality standard for fine particulate (PM2.5) and respond to problems identified with Oregon’s permitting program that must be addressed to protect air quality
* Adding pre-construction permitting flexibility for smaller businesses
* Improving community outreach
* Making minor changes to the Heat Smart program and the gasoline dispensing facility rules to improve implementation.

Statement of Cost of Compliance

Impacts state agencies, units of local government and the public

1. **Clarify and update air quality regulations**

State agencies: The proposed rules in this category would not have fiscal or economic impacts on other state agencies. DEQ workload would increase until staff becomes familiar with the proposed rules and then would decrease due to improved reorganization and added clarity.

Units of local governments: Proposed rules in this category may have a slight positive fiscal or economic impact on local governments if the rules are easier to use and understand. The magnitude of the impact cannot be quantified because it is too difficult to estimate how much time is saved for an individual person by having rules that are easier to use and understand.

Public: This category does not affect the stringency of the rules; therefore, DEQ does not anticipate any direct or indirect fiscal or economic impacts on the public.

1. **Update particulate matter emission standards**

General Impacts: By proactively updating the particulate matter standards, DEQ hopes to avoid additional nonattainment area designations in Oregon. If EPA designates an area as nonattainment, DEQ is responsible for collaborating with communities that violate federal air pollution health standards to develop a plan that decreases the pollution to safe levels. The recent plan for the Klamath Falls area took two years to develop. It required DEQ to work with the Klamath Falls Air Quality Advisory Committee and other community members. Approval of the plan by EPA could take an additional 2 to 3 years.

During the development of an attainment plan, DEQ extensively considers impacts on local businesses and the economy. Plan elements try to minimize local economic impacts as much as possible. When EPA designates an area as nonattainment, federal requirements automatically apply to industrial sources, such as requiring the most stringent control equipment for new or expanding sources or reasonable control measures, such as opacity standards, operation and maintenance plans, and fugitive emission plans for existing sources. While DEQ recognizes that these restrictions may prevent some industries from expanding or moving to the nonattainment area, they are designed to help clean the air and ensure the health of all residents.

In addition, if DEQ does not adopt a plan, the federal restrictions become more stringent, such as a higher offset ratio requirement for industry, and the area could even risk losing federal highway funds, both of which could have negative economic impacts.

State agencies: DEQ anticipates the 26 state (6 federal government) agencies currently subject to air permitting regulations could experience the negative impacts described in the general impacts section above. Direct compliance with proposed particulate matter standards is not expected to affect any state agencies holding air quality permits. DEQ workload would initially increase but eventually decrease as staff becomes familiar with the proposed rules. Preventing areas from becoming nonattainment would avoid future increases in DEQ workload.

Units of local governments: DEQ anticipates the 55 county and local governments currently subject to air permitting regulations could experience the impacts described in the general impacts section above. Direct compliance with revised particulate matter standards is not expected to affect any units of local government holding air quality permits.

Public: DEQ does not anticipate the proposed rules would have any direct fiscal or economic impacts on the public due to the lower particulate matter standards. However, indirect impacts could occur if the costs of additional control or process equipment installed to meet lower particulate matter standards increase the costs for services or products. DEQ expects any such price increases to be small but lacks available information to estimate potential increases accurately.

Particulate matter causes serious health problems ranging from increased respiratory and pulmonary symptoms, hospital admissions and emergency room visits to premature death for people with heart and lung disease. These health problems have negative economic impacts. The proposed rules could create positive economic benefits and improvements in public health and welfare by reducing particulate matter emissions statewide. When EPA adopted the current 24-hour PM2.5 national ambient air quality standard in 2006, they estimated the following:

* The cost of meeting the revised 24-hour PM2.5 standards at $5.4 billion in 2020. This estimate includes the costs of purchasing and installing controls for reducing pollution to meet the standard.
* The revised standards will yield $9 billion to $76 billion a year in health and visibility benefits in 2020. Health benefits include reductions in premature death, diseases and symptoms associated with fine particle pollution exposure.
1. **Change permitting requirements for emergency generators and small natural gas or oil-fired equipment**

General Impacts: The proposed rules may have a negative fiscal and economic impact on state agencies and units of local governments that own emergency generators or multiple small natural gas or oil-fired equipment if these units are required to be permitted. The cost of the permit would be approximately $1,600. For permitted facilities that have this equipment, DEQ would add the new requirements to existing permits at the time of renewal. There may be costs associated with additional recordkeeping depending on current environmental management systems in place but DEQ lacks available information to estimate this cost accurately.

State agencies: DEQ anticipates the 26 state (6 federal government) agencies currently subject to air permitting regulations could experience the negative impacts described in the general impacts section above although DEQ has not identified any state agencies that would be required to get new permits because of emergency generators or small natural gas or oil-fired equipment. DEQ workload would increase but could level off or decrease depending on the number of new facilities that require permits.

Units of local governments: DEQ anticipates the 55 county and local governments currently subject to air permitting regulations could experience the negative impacts described in the general impacts section above although DEQ has not identified any units of local governments that would be required to get new permits because of emergency generators or small natural gas or oil-fired equipment.

Public: DEQ does not anticipate any direct fiscal or economic impacts from the proposed rules on the public because of the requirement to get a new permit or modify an existing permit to add emergency generators or small natural gas or oil-fired equipment. However, the cost of the new permits could increase the cost of services or products, creating an indirect fiscal or economic impact to the public although DEQ has not identified any businesses that would be required to get new permits because of emergency generators or small natural gas or oil-fired equipment. DEQ expects such price increases to be small but lacks available information to estimate potential increases accurately.

1. **Establish two new state air quality area designations – “sustainment” and “reattainment” - to help areas avoid and more quickly end a federal nonattainment designation.**

State agencies: Proposed rules under this category would have no fiscal or economic impacts for other agencies because they are not involved in permitting businesses in the proposed areas. DEQ workload would initially increase as staff becomes familiar with the proposed rules. Designating sustainment areas would avoid future DEQ workload increases if nonattainment area designations are prevented. Designating reattainment areas would require approximately the same work as designating a maintenance area but would happen sooner.

Units of local governments: The proposed rules would have a positive fiscal and economic impact in sustainment areas by allowing businesses to build or expand in the area as long as air quality is protected. The proposed rules would have a positive fiscal and economic impact in reattainment areas because new and modified facilities that fall below the federal major source threshold would be subject to less stringent requirements provided they were not identified as a primary cause of air quality violations in the attainment plan. DEQ lacks available information to estimate the positive fiscal and economic impacts accurately.

Public: DEQ does not anticipate the proposed rules under this category would have any direct fiscal or economic impacts on the public. However, positive indirect fiscal or economic impacts to the public could occur as more businesses locate in the sustainment or reattainment areas. DEQ lacks available information to estimate the positive fiscal and economic impacts accurately.

1. **Identify Lakeview as a state sustainment area while retaining its federal attainment designation**

State agencies: Proposed rules under this category would have no fiscal or economic impacts for other agencies because they are not involved in permitting businesses in the Lakeview area. DEQ workload would initially increase as staff becomes familiar with the proposed rules. Preventing areas from becoming nonattainment would avoid future DEQ workload increases.

Units of local governments: The proposed rules would have a positive fiscal and economic impact in Lakeview by allowing businesses to build or expand in the area as long as air quality is protected. DEQ lacks available information to estimate the positive fiscal and economic impacts accurately.

Public: DEQ does not anticipate the proposed Lakeview sustainment area designation would have any direct fiscal or economic impacts on the public. However, positive indirect fiscal or economic impacts to the public could occur as more businesses locate in Lakeview. In addition, if a new business locates in Lakeview and buys woodstove offsets, some members of the public may benefit from woodstove replacements. DEQ expects any monetary benefits in the form of price decreases to be small and lacks available information to estimate potential decreases accurately.

1. **Change the pre-construction permitting program (New Source Review)**

State agencies: DEQ anticipates the 26 state (6 federal government) agencies currently subject to air permitting regulations could experience impacts described under the impact on businesses section below. However, impacts are not likely because these agencies would probably never trigger New Source Review. The Federal Land Managers of the National Forest Service and the National Park Service currently review New Source Review permit applications for businesses located close to Class I areas (usually designated wilderness areas). Their workload based on the proposed rule changes is not expected to change. DEQ workload would increase, but would eventually decrease, as staff becomes familiar with the proposed rules. Preventing areas from becoming nonattainment would avoid future increases in DEQ workload.

Units of local governments: DEQ anticipates the 55 county and local governments currently subject to air permitting regulations could experience impacts described under the impact on businesses section below. However, impacts are not likely because these units of local governments would probably never trigger New Source Review.

Public: DEQ does not anticipate any direct fiscal or economic impacts from the proposed rules on the public. However, the cost of the new permits ($50,400 for a New Source Review Permit) could increase the cost of services or products creating an indirect fiscal or economic impact to the public. DEQ expects any such price increases for goods or services to be small and lacks available information upon which it could accurately estimate potential increases.

1. **Provide more flexibility for public hearings and meetings**

General Impacts: The proposed rules would have a positive fiscal and economic impact on hearing/meeting attendees because they would be able to call in from around the state rather than traveling to the hearing or meeting. Cost savings depend on the physical location of the hearing/meeting. DEQ lacks available information to estimate costs to attendees because the travel distance is unknown.

State agencies: The proposed rules could decrease travel and associated staff expenses for state agencies. DEQ lacks available information to estimate costs to attendees because the travel distance is unknown. The proposed rules would have a positive fiscal and economic impact on DEQ because DEQ would have the flexibility to hold virtual hearings with people calling in from around the state. This would reduce travel expenses. Currently, DEQ staff travels to hearings/meetings, not knowing whether there will be any attendees. DEQ tries to hold hearings/meetings in offices that are free of charge. The cost of using a state car is $0.565/mile and accommodation rates are approximately $83 to $126 per night. The average hourly rate of a permit writer, including benefits, is $70 to $85/hour. The cost of the hearing/meeting depends on how far staff must travel. If the physical location is 2 hours away, the cost could be approximately $2000. At least $800 of that cost is due to transportation. DEQ workload may increase initially depending on implementation of the proposed rule changes but is expected to decrease as staff becomes familiar with the procedures of holding virtual hearings and meetings.

Units of local governments: The proposed rules could decrease travel and associated staff expenses for local governments. DEQ lacks available information to estimate costs to attendees because the travel distance is unknown.

Public: The proposed rules could decrease travel expenses for the public because it has more flexibility in attending public hearings and meetings. The public may experience positive indirect fiscal or economic impacts due to efficient use of resources and the ease of attending meetings anywhere in the state. DEQ expects costs to be small per individual but lacks available information to estimate potential decreases accurately because the travel distance is unknown.

1. **Reestablish Heat Smart exemption for small commercial solid fuel boilers that are regulated by the permitting program**

State agencies: The proposed rules in this category would not have fiscal or economic impacts on other state agencies because they do not sell commercial solid fuel boilers. DEQ workload would not change because these rules reestablish a pathway for small-scale industrial, commercial and institutional boilers to be sold in Oregon again.

Units of local governments: Units of local governments would not have a fiscal and economic impact under this category because they do not sell commercial solid fuel boilers.

Public: DEQ does not anticipate any direct, negative fiscal or economic impacts from the proposed rules on the public because they do not buy commercial solid fuel boilers.

1. **Remove annual reporting requirement for small gasoline dispensing facilities**

General Impacts: DEQ anticipates a positive fiscal and economic impact from proposed rules that remove the annual reporting requirement for gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline. The estimated number of gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline is 540. Removing the annual reporting requirement for small gasoline dispensing facilities would reduce the impact of reporting, recordkeeping and other administrative activities on small businesses.

State agencies: DEQ anticipates the 26 state (6 federal government) agencies currently subject to air permitting regulations could experience the positive impacts described in the general impacts section above. The proposed rules would decrease DEQ workload because there would be fewer reports to process and review.

Units of local governments: DEQ anticipates the 55 county and local governments currently subject to air permitting regulations could experience the positive impacts described in the general impacts section above.

Public: DEQ anticipates that there would be a positive fiscal and economic impact on the public as a result of EQC removing the annual reporting requirement for gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline. DEQ estimates that this impact would be very small and would probably not be passed on to the public or customers.

Impact on businesses – general (see specific impacts on small businesses below)

DEQ anticipates the following fiscal and economic impact on approximately 1130 large businesses and 1550 small businesses.

1. **Clarify and update air quality regulations**

The proposed rules under this category would not have fiscal or economic impacts on businesses because the stringency of the rules is not affected.

1. **Update particulate matter emission standards**

Under DEQ’s original concept to require all sources to meet 0.10 gr/dscf and 20% opacity, 11 businesses (3 small businesses) were identified that could risk non-compliance with the proposed lower particulate standards without process changes or new or upgraded control equipment. Seven of these businesses are wood products facilities with wood-fired boilers, one is a pulp mill that operates their boiler on residual oil only during natural gas curtailment and three are asphalt plants. The following cost estimates are DEQ’s original concept of 0.10 gr/dscf and 20% opacity.

Wood-fired Boilers

Boiler Tune-ups: Some businesses may need to optimize their boiler operations to comply with the particulate matter standards. Close monitoring of fuel quality may help some boilers comply while others may need tune-ups. Vendors estimated a typical boiler tune-up that requires no replacement parts would cost between $2,000 and $11,000. A tune-up may include:

* A visual inspection of the system while operating, looking for obvious things that need repair
* Review of past performance checks & expected performance data
* Gathering performance data (O2 & CO2 readings, stack temperature, feed water temperature, fuel moisture, steam flow)
* Making adjustments to furnace air delivery settings

A more comprehensive boiler tune-up costs from $33,000 to $65,000. A boiler tune-up may or may not allow sources to comply with the new standards over time but could provide other benefits such as reduced fuel costs.

If optimizing operations does not achieve compliance with lower grain loading and opacity standards, businesses may need to upgrade or install pollution control equipment. Wood-fired boilers have traditionally been controlled via multiclones and more recently via electrostatic precipitators. Baghouses have been avoided in the forest products industry because of the potential for fires. However, baghouses have been installed on newer boilers designed to produce steam for electric generation. Costs for the addition of wet scrubbers are not included because many wood products businesses do not have wastewater treatment facilities onsite, making wet scrubber technology cost prohibitive.

Multiclone Optimization: Emissions from wood-fired boilers can be reduced by inspecting the integrity of all parts of the multiclone and checking for and repairing plugged or damaged tubes. A thorough multiclone inspection costs approximately $3,000 to $4,000. As part of the inspection, it may be necessary to install access panels and a gauge for accurately measuring the pressure drop across the collector at an additional cost of $1,000 to $2,000. Most wood-fired boilers already have gauges to measure pressure drop. Installation or upgrade of multiclone technology is estimated to range in cost from $10,000 to $200,0000 per boiler, depending on the upgrades that are employed.

Flue gas recirculation: Optimum performance of a multiclone occurs within a pressure drop range of about 2 to 4 inches of water column. However, the pressure drop can vary significantly, depending on the gas flow rate through the multiclone. The actual gas flow rate for a wood-fired boiler varies due to many factors, including firing rate and fuel quality. It is possible, however, to optimize multiclone performance with varying firing rates by using flue gas recirculation, which provides a nearly constant gas flow rate and a consistent pressure drop across the multiclone. Installation of flue gas recirculation ranges in cost from $30,000 to $100,000.

Vendors state that compliance with a 0.15 gr/dscf particulate matter standard is possible with multiclones, especially ceramic high efficiency cones but is not guaranteed. Ceramic high efficiency cones have been source tested at as low as 0.06 gr/dscf. The range of costs for regular multiclones and installation is approximately $60,000 to $100,000 with annual operating costs about $10,000 to $20,000/year. Installed ceramic high efficiency multiple cyclones cost approximately $110,000 to $120.000. Typical iron multiclones last approximately 12 to 15 years before needing replacement. Ceramic multiclones last 3 to 5 times longer than iron multiclones.

Engineering Analysis: The owner or operator of a wood-fired boiler may request a source specific particulate matter limit if the cost of installing new pollution control equipment is cost prohibitive. Before receiving a source specific particulate matter limit, the owner or operator must submit a report by a registered professional engineer that specializes in boiler/multiclone optimization to evaluate existing equipment optimization options and the cost of additional controls. The cost of this engineering report will vary, but is expected to be at least $8,000 to $24,000, depnds on what’s invovled.

Source Testing: In order to determine if changes to wood fired boilers or pollution control equipment were effective, source testing is required. A particulate matter source test costs approximately $12.000.

 ***Table 2: Particulate Control Systems Cost Analysis (ER =0.71 Lb/MM Btu, Cap Factor =30%)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Capital Cost** | **ESP Dry** | **ESP Wet** | **Core Separator** | **Multiclone** | **Cyclone** |
| Equipment | $170,769 | $183,386 | $19,875 | $18,315 | $7,600 |
| Site and Facilties | $13,969 | $13,969 | $2,000 | $2,000 | $2,000 |
| Installation | $114,415  | $122,868 | $6,956 | $7,365 | $6,000 |
| **Total Direct Capital Cost** | **$299,153**  | **$320,223** | **$28,831** | **$27,680** | **$15,600** |
|  |  |  |  |  |  |
| **Annual Cost** |  |  |  |  |  |
| Total Direct | $37,883  | $23,414 | $4,984 | $2,892 | $2,838 |
| Capital recovery factor | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  |
| Capital recovery | $44,574  | $47,713 | $4,296 | $4,124 | $2,324 |
| **Total Annual Cost** | **$82,457**  | **$71,127** | **$9,280** | **$7,017** | **$5,162** |
|  |  |  |  |  |  |
| PM10 Unit Cost of Control at 30% annual Capacity Factor |  |  |  |  |  |
| Control Efficiency PM10 | 99.0%  | 99.0% | 90.0% | 73.0% | 50.0% |
| Emission Rate PM10 uncontrolled lb/MMBtu | 0.71  | 0.71  | 0.71  | 0.71  | 0.71  |
| Emission Rate PM10 controlled lb/MMBtu | 0.0071  | 0.0071 | 0.071 | 0.1917 | 0.355 |
| Annual Emissiosn PM10 uncontrolled tpy | 6.997  | 6.997  | 6.997  | 6.997  | 6.997  |
| Annual Emission PM10 after control tpy | 0.070  | 0.070 | 0.700 | 1.889 | 3.499 |
| Annual Emission PM10 controlled tpy | 6.927  | 6.927 | 6.297 | 5.108 | 3.499 |
| **Annual Cost per ton controlled** | $11,903.52  | $10,267.93 | $1,473.57 | $1,373.70 | $1,475.59 |

COSTS TAKE INTO ACCOUNT THE COST OF MATERIALS, WHICH ARE NOT UPDATED IN THE EPA COST MANUAL

Capital and operating costs were estimated with quotes from and personal communication with

equipment vendors as well as the equations and methods presented in the “EPA Cost Control Manual.”[[1]](#footnote-1) Information used to generate costs is detailed in the appendix. In addition to the size of the biomass combustor, there are a number of other factors which cause variability in the capital costs. Here is a selected list of factors affecting price variability:

• **Change in the price of steel.** This change had a significant affect on the price of the Core

Separator™ and other mechanical collectors.

• **Foreign exchange rates.** For equipment purchased overseas, specifically Europe, the cost is

significantly affected by the exchange rate, which now increases price for US installations. The

two high efficiency multicyclones featured in this report were purchased from a European

vendor.

• **Pollution control device design.** Capital costs are also affected by the pollution control

equipment design. For example, the price of electrostatic precipitators is sensitive to the size of

the particle collection plates. Collection efficiency is related to collection plate size; therefore,

projects requiring relatively high collection efficiency will result in larger collection plates and a

more expensive electrostatic precipitator.

• **Fuel characteristics.** As mentioned systems having variable firing rates burning wet fuels are

susceptible to filter clogging if a baghouse is installed. As a result, baghouses are now typically

designed with additional components which mitigate the problem, but significantly increase

price.

• **Space requirements.** The amount of horizontal and vertical space required for a given control

can affect the installation cost. For examples, baghouses can require more space than

electrostatic precipitators. The additional space required can increase the footprint and/or

height of the building housing the equipment, thereby increasing construction costs.

• **Ancillary equipment.** For example, baghouses require more ancillary equipment, such as

insulated ductwork and a mechanical collector (to reduce fire risk), than an ESP.

• **Shipping costs.** The proximity of the location to major transportation hubs as well as the

equipment production location can affect costs.

• **Duplicated equipment & services.** In some cases, the wood boiler vendor and emission control vendor may inadvertently include a number of similar equipment items and services in their quotes. This can significantly increase costs if overlapping equipment items are not identified and re‐allocated.[[2]](#footnote-2)

Examples of duplicated equipment and services could include the support stand, draft fan,

sensors, dampers, control panel with plc, vfd for draft fan, inlet and outlet expansion/isolation

joints, rotary air lock, duct work, engineering services, assembling and commissioning.



Table 12 and Table 13 show estimated cost effectiveness PM10 and PM2.5 removal respectively, from the system summarized in Table 11. A best estimate has been made to assign control efficiencies, capital costs and operating costs. Control efficiencies were estimated with the emission test information reviewed for this report, AP 42 uncontrolled and controlled emission factors, the RSG 2001 BACT report, personal communication with equipment vendors, and a draft report written by the Northeast States for Coordinated Air Use Management (NESCAUM).[[3]](#footnote-3) Assumed control efficiency values reflect optimal operating conditions are occurring for both the combustor and the control equipment. It should be noted that both HEMCs listed and only the 12” Core Separator control efficiencies are based on vendor calculations, not actual performance. Furthermore, as evidenced by the stack test in Rhode Island, actual control efficiency will be lower for “un‐valved” HEMC’s whose wood boiler is operating below full load.

As mentioned, there are many factors which cause variability in capital and operating costs. In addition, cost effectiveness (especially in mechanical collectors) is also affected by particle size distribution.[[4]](#footnote-4)2

Therefore, actual costs could vary considerably from what is quoted below.

Table 12: Cost Effectiveness for Controlling PM10 Emissions [[5]](#footnote-5)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Pollution Control Device | Control Efficiency | PM10 Emissions Removed (tons/year) | Installed Capital Cost of Equipment | Annual Operating Costs | Total Annual Costs | Total Cost per Ton Removed |
| Cyclone | 50% | 0.9 | $2,243 | $580 | $791 | $930 |
| Multicyclone | 75% | 1.3 | $9,424 | $580 | $1,469 | $1,151 |
| HE Multicyclone | 99% | 1.3 | $62,878 | $800 | $6,980 | $4,159 |
| HE Multicyclone (valved) | 99% | 1.7 | $125,756 | $800 | $12,915 | $7,695 |
| Core Separator (12”) | 94% | 1.7 | $111,709 | $1,239 | $12,350 | $7,685 |
| Core Separator (24”) | 72% | 1.2 | $63,337 | $1,459 | $8,004 | $6,519 |
| Cyclone + Baghouse | 99% | 1.7 | $109,878 | $3,920 | $14,291 | $8,483 |
| ESP | 95% | 1.6 | $138,005 | $1,867 | $14,894 | $9,213 |

An owner or operator may voluntarily choose to install a continuous opacity monitor to ensure compliance with opacity limits at all times. The responsible official for each Title V source is required to submit a compliance certification report every 6 months, saying whether compliance is continuous or intermittent. Opacity is a good indicator of how well a boiler is operated. High opacity is a result of high emissions and can tell the operator that adjustments are needed to reduce emissions. Adding a continuous opacity monitoring system (COMS), along with FGR, would help the operator run the boiler efficiently and in compliance with the emissions standards at all times.

COMS range in costs from $13,000 to $30,000 for the monitoring system itself. Installation costs vary, depending on the situation, but range from $5,000 to $40,000. Annual operating costs range from $300 to $6,000 per year. Equipment and installation of a recently installed COMS on a wood-fired boiler cost $27,800, which does not include the cost of a computer.

While not required by the proposed rules, some businesses may voluntarily elect to install electrostatic precipitators, which can easily meet 0.15 gr/dscf. The advantage of an ESP is that it can control emissions over a wider range of operating conditions that may vary significantly due to steam demand and fuel quality. Information from vendors indicates a new ESP costs approximately $700,000 to $2.7 million with annual operating costs about $50,000 to $70,000/year. One vendor stated that the cost could vary by plus or minus 40 percent, and another vendor indicated a smaller electrostatic precipitator could be used if the goal were simply to comply with the 0.15 gr/dscf standard. Smaller electrostatic precipitators for the affected wood fired boilers range in costs from approximately $420,000 to $700,000 installed. One business was looking at a used wood-fired package boiler with an ESP for approximately $500,000. Ash handling equipment \_\_\_\_\_\_\_\_\_

The worst case scenario for a facility if they cannot optimize current boilers or pollution control equipment would be to replace an existing boiler with a new wood burning boiler. This outcome is not expected but a 2006 boiler/ESP installation cost $7 million, not including demolition costs.

Asphalt Plants: The three asphalt plants that may not meet the lower standards are older plants that utilize wet scrubber controls. In general, asphalt plants with old wet scrubbers that have not been well maintained are the businesses that cannot meet lower particulate matter standards. A major tune-up of an asphalt plant costs approximately $3,000. Asphalt plant tune-ups can also save money by reducing fuel usage.

 A recent extensive rebuild of an asphalt plant scrubber cost $13,500 and was tested at 0.035 gr/dscf. New scrubbers are not used to control particulate matter emissions. Asphalt plants need to collect these fine particulate emissions and add them back into their process to meet state void content requirements so the cost of a new scrubber was not included in this analysis.

Most asphalt plants have upgraded their control equipment to baghouses, especially portable asphalt plants since sources of water can be difficult to find. An asphalt plant consultant recommended changing to a baghouse rather than upgrades to old wet scrubbers to meet the proposed lower standards. Installing a used baghouse costs approximately $50,000 to $250,000 and the cost of a new baghouse is approximately $550,000 to $600,000. Bags should be replaced every 5 years for a pulse jet baghouse and every 8 or 9 years for a rotary baghouse. Bags cost about $35 each. A baghouse can have 850 to 1,300 bags for a total bag replacement cost of $30,000 to $45,500.

The New Source Performance Standard for asphalt plants constructed or modified after June 11, 1973 is 0.04 grains/dry standard cubic foot, much lower than DEQ’s proposal of 0.15 grain/dry standard cubic foot. Many asphalt plants in Oregon are required to meet the New Source Performance Standard.

Source tests cost $12,000 to $13,000. DEQ has source test data from asphalt plants with older inefficient scrubbers that comply with the lower particulate matter standard, so new equipment or additional control equipment may not be necessary.

Input from businesses indicated that compliance with these standards could have significant impacts, possibly requiring boiler replacement.

Are there “secondary” fiscal impacts that DEQ should consider?

* One committee member stated that a secondary impact would occur if small businesses were affected if a mill shut down.
* One committee member said the costs for capital improvements are benefits to companies that manufacture and install pollution control equipment.
* One committee member stated that there would be a secondary impact if businesses were forced to burn fossil fuel rather than wood.
1. **Change permitting requirements for emergency generators and small natural gas or oil-fired equipment**

The proposed rules may have a negative fiscal and economic impact on businesses that own emergency generators or multiple small natural gas or oil-fired equipment if these units are required to get permits. The cost of the permit is approximately $1,600. DEQ has not identified any business that would be required to get a permit under the proposed rule. Most of these units would be added to existing permits at the time of renewal. There may be costs associated with additional recordkeeping depending on current environmental managements systems in place. DEQ lacks available information to estimate those costs accurately.

1. **Establish two new state air quality area designations – “sustainment” and “reattainment” - to help areas avoid and more quickly end a federal nonattainment designation**

New Source Review permitting is a case-by-case analysis and the type of pollution controls and computer modeling varies for each case; therefore, DEQ lacks available information to estimate costs to business accurately.

1. **Identify Lakeview as a state sustainment area while retaining its federal attainment designation**

New Source Review permitting is a case-by-case analysis and the type of pollution controls and computer modeling varies for each case; therefore, DEQ lacks available information to estimate costs to business accurately.

1. **Change the pre-construction permitting program (New Source Review)**

The proposed rules may have a negative or positive fiscal and economic impact on businesses that trigger the New Source Review program, depending on the situation.

Establishing a separate minor New Source Review program (State New Source Review) would have a positive fiscal and economic impact on businesses. For businesses not allowed to build or modify under the existing rules, there would be a positive fiscal and economic impact since that construction would probably be allowed as long as air quality is protected. In areas where DEQ wants to transition back to attainment quicker than EPA could redesignate the area, the proposed rules would allow businesses in the State New Source Review program to meet the maintenance area requirements rather than the more stringent nonattainment area requirements. The control technology in a maintenance area may be less expensive but if it results in lower emission reductions than could be achieved with more expensive technology required in a nonattainment area, more offsets would be required. As a result, there may be higher emission offset costs in maintenance areas if the less expensive control technology allows higher emissions.

The proposed rules addressing how new or modified businesses must improve air quality would raise the amount of offsets a business may be required to get. The cost of industrial offsets varies from $2,500 per ton to $100,000 per ton, depending on the pollutant and the demand for offsets. If the business chooses to get the offsets from the sources causing the problem in areas where air quality is close to an ambient air quality standard, the proposed rules allow reduced offsets. Based on current information, the proposed rules would offer the opportunity to obtain offsets from woodstoves. The cost to replace an uncertified woodstove is approximately $3,000. A certified woodstove would reduce emissions about 0.03 tons per woodstove. The cost of one ton of offsets from woodstoves is approximately $100,000 per ton.

Providing extensions of a construction permit if construction is delayed would have a positive fiscal and economic impact on the business getting an extension. Fees for extensions are lower than the initial application fee and the business would be allowed to continue to use any offsets obtained under the original application as long as they did not expire.

New Source Review permitting requires a case-by-case analysis, and the type of pollution controls and computer modeling varies for each case; therefore, DEQ is unable to estimate costs in this category accurately.

1. **Provide more flexibility for public hearings and meetings**

The proposed rules would also have a positive fiscal and economic impact on hearing/meeting attendees because they would be able to call in from around the state rather than travel to the hearing/meeting. Cost savings depend on the physical location of the hearing/meeting.

1. **Reestablish Heat Smart exemption for small commercial solid fuel boilers that are regulated by the permitting program**

DEQ anticipates there would be a positive economic benefit for businesses that wish to manufacture or use small biomass heating systems in commercial, industrial and institutional applications. The proposed rules would re-establish a pathway for small biomass boilers to be sold for commercial, industrial and institutional uses in Oregon.

1. **Remove annual reporting requirement for small gasoline dispensing facilities**

DEQ anticipates a positive fiscal and economic impact from proposed rules that remove the annual reporting requirement for gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline. The estimated number of gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline is 540. Removing the annual reporting requirement for small gasoline dispensing facilities would reduce the impact of reporting, recordkeeping and other administrative activities on small businesses.

you could identify affected North American Industry Classification System codes and I could run those codes against Q3 2013 Oregon census data. Through our agreement with Employment, our quarterly census data download includes, employer name, type of employer, number of employees, address, county and NAICS code. We could reference this analysis in the fiscal.

Impact on small businesses (those with 50 or fewer employees) [ORS 183.336](http://www.leg.state.or.us/ors/183.html)

In addition to the fiscal and economic impact described under Impact on business – general above, the proposed rules could have the following impacts on small business.

|  |  |
| --- | --- |
| a) Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule. | The proposed rules would require the approximate 1550 small businesses to comply with lower grain loading and opacity standards, many of which already have the lower standards in their permits. Current compliance information indicates that most small businesses already comply with the proposed standards. Approximately 3 businesses may have to optimize operations or upgrade existing controls.  |
| b) Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule. | Fewer costs for reporting, recordkeeping or other administrative activities are expected if the amendments are adopted because approximately 540 gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline would not be required to report. There would be more recordkeeping and reporting for emergency generators and small natural gas or oil-fired equipment.  |
| c) Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule. | DEQ does not expect additional costs for equipment, supplies, labor or administration if the EQC adopts the proposed rules.  |
| d) Describe how DEQ involved small businesses in developing this proposed rule. | DEQ informed small businesses by announcements on the DEQ website, through direct mailings and email lists, stakeholder meetings, a fiscal advisory committee meeting, notices in the Secretary of State Bulletin, and ads in local papers. DEQ requests comments during the public comment period and at public hearings held in the spring of 2014. DEQ staff will participate in the December Northwest Environmental Conference in Portland informing people about the rulemaking. Attendees at this conference include representatives from large and small businesses.  |

 Documents relied on for fiscal and economic impact

For Air Contaminant Discharge Permits – Table 1, DEQ relied on OAR 340-216-0020

<http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/_340_tables/340-216-0020_3-27.pdf>

EPA Air Pollution Control Cost Manual, Report No. 452/B-02-001, January 2002, Section 6, Chapter 1, Baghouses and Filters. <http://www.epa.gov/ttn/catc/dir1/cost_toc.pdf>

Consumer Price Index Conversion Factors 1774 to estimated 2021 to Convert to Dollars of 1998. 2013 Robert C. Sahr, Political Science, Oregon State University, Rev 05/08/2013. <http://oregonstate.edu/cla/polisci/sites/default/files/faculty-research/sahr/inflation-conversion/excel/cv1998.xls>

Advisory committee for fiscal and economic impact statement

DEQ appointed a fiscal and economic impact advisory committee for this rulemaking. Members of the fiscal advisory committee included representatives from affected businesses, environmental groups and the general public. The fiscal advisory committee met in January and its recommendations were included in the fiscal and economic impact statement. DEQ will accept comment on the fiscal and economic impact statement during the public notice period.

Housing cost

1. **Clarify and update air quality regulations**

DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rule only affects the ease of use of DEQ’s rules.

1. **Update particulate matter emission standards**

DEQ determined the proposed rules may have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel if the costs for additional control or process equipment are passed through by businesses providing products and services for such development and construction. The possible impact appears to be minimal. DEQ cannot quantify the impact at this time because the information available to it does not indicate whether the costs would be passed on to consumers and any such estimate would be speculative.

1. **Change permitting requirements for emergency generators and small natural gas or oil-fired equipment**

DEQ determined the proposed rules may have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel if the costs for additional permits are passed through by businesses providing products and services for such development and construction. The possible impact appears to be minimal. DEQ cannot quantify the impact at this time because the information available to it does not indicate whether the costs would be passed on to consumers and any such estimate would be speculative.

1. **Establish two new state air quality area designations – “sustainment” and “reattainment” - to help areas avoid and more quickly end a federal nonattainment designation**

DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rule only affects whether businesses can construct or modify in sustainment or reattainment areas.

1. **Identify Lakeview as a state sustainment area while retaining its federal attainment designation**

DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rule only affects whether businesses can construct or modify in the Lakeview area.

1. **Change the pre-construction permitting program (New Source Review)**

DEQ determined the proposed rules may have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel if the costs for additional permits, control or process equipment are passed through by businesses providing products and services for such development and construction. The possible impact appears to be minimal. DEQ cannot quantify the impact at this time because the information available to it does not indicate whether the costs would be passed on to consumers and any such estimate would be speculative.

1. **Provide more flexibility for public hearings and meetings**

DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rule only affects how DEQ can hold public hearings and informational meetings.

1. **Reestablish Heat Smart exemption for small commercial solid fuel boilers that are regulated by the permitting program**

DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. These proposed rules re-establish a pathway for small biomass boilers to be sold for commercial, industrial, and institutional uses in Oregon.

1. **Remove annual reporting requirement for small gasoline dispensing facilities**

DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rule only affects gasoline dispensing facilities with a monthly throughput of less than 10,000 gallons of gasoline.

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| --- |
|  **Federal relationship**  |

*"It is the policy of this state that agencies shall seek to retain and promote the unique identity of Oregon by considering local conditions when an agency adopts policies and rules. However, since there are many federal laws and regulations that apply to activities that are also regulated by the state, it is also the policy of this state that agencies attempt to adopt rules that correspond with equivalent federal laws and rules..."* [ORS 183.332](http://www.oregonlaws.org/ors/183.332)

Relationship to federal requirements

This section complies with [OAR 340-011-0029](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_011.html) and [ORS 468A.327](http://www.oregonlaws.org/ors/468A.327) to clearly identify the relationship between the proposed rules and applicable federal requirements.

1. **Clarify and update air quality regulations**

Proposed rules in this categoryare “in addition to federal requirements” to address administrative issues. EPA does not have identical rules to the proposed rules that clarify and update existing DEQ rules.

What alternatives did DEQ consider, if any?

DEQ considered doing nothing, but did not pursue this alternative because there would still be confusion and possible misinterpretations. Also, errors in the rules would be unchanged.

1. **Update particulate matter standards**

Proposed rules in this category are “in addition to federal requirements” to protect public health and the environment. DEQ has statewide opacity limits for new and existing sources including fugitive emission sources. There is no equivalent opacity standard for all businesses in EPA regulations. Some New Source Performance Standard have opacity and particulate matter limits for specific regulated industries but nothing that applies to all.

DEQ identified two New Source Performance Standards that have opacity limits for fugitive emissions. The proposed rules are in addition to federal requirements because they would require abatment of any fugitive emissions that leaves the property. Using EPA Method 9 to determine compliance, the New Source Performance Standard for:

* Metallic Mineral Processing Plants (Subpart LL) requires fugitive emissions to meet 10 percent opacity. The proposed rules
* Nonmetallic Mineral Processing Plants (Subpart OOO) contains a limit of 7 percent opacity and allows an affected facility to rely on water carryover from upstream water sprays to control fugitive emissions. The proposed rules

Proposed amendments to the current statewide visible emission standards that apply to non-fugitive sources would put DEQ’s standards is substantively equivalent to EPA’s visible emissions standards. DEQ proposes changing the standards from an aggregate period to a six-minute average in order to use EPA Method 9 for determining compliance. The proposed change to add a significant figure to the particulate matter standard from 0.1 gr/dscf to 0.10 gr/dscf would align DEQ rules with applicable federal requirements and policies.

What alternatives did DEQ consider, if any?

DEQ considered not amending Oregon’s particulate matter standards. DEQ did not persue this alternative because protecting air quality and supporting economic development are important to Oregon. Most businesses constructed before 1970 have already updated their facilities and now meet the lower particulate matter standards. This proposal would provide equity for pre-1970 and post-1970 businesses.

DEQ considered not amending the averaging time for opacity standards at the aggregate 3 minutes in 60 minutes and the 30 seconds in 60 minutes. DEQ did not persue this alternative because enforcing the standard is questionable without a reference test method for compliance.

DEQ considered not amending the opacity limits for fugitive emission sources. DEQ did not pursue this alternative because it would perpetuate problems implementing the standard and abating fugitive emissions leaving the property boundary reduces emissions more than trying to determine compliance with 20 percent opacity.

1. **Change permitting requirements for emergency generators and small natural gas or oil-fired equipment**

The proposed rules are “in addition to federal requirements” and protect public health and the environment. The proposed rules would require construction approvals or permits for units whose emissions are significant, but were previously treated as insignificant activities. EPA requires states to have permitting programs for smaller units but does not specify the details of a minor New Source Review program. Because of the Plant Site Emission Limit rules, DEQ permits regulate smaller units than EPA requires.

What alternatives did DEQ consider, if any?

DEQ did not consider any alternatives because leaving the permitting requirements for small sources as is would cause potential violations of the internal combustion engine standards and DEQ rules for operating without a permit.

1. **Establish two new state air quality area designations – “sustainment” and “reattainment” - to help areas avoid and more quickly end a federal nonattainment designation**

The proposed rules are “in addition to federal requirements.” EPA only designates nonattainment areas but the proposed rules would designate other areas, sustainment and reattainment. This would improve Oregon’s New Source Review program to improving air quality in areas where needed and providing permitting flexibility for smaller businesses.

What alternatives did DEQ consider, if any?

DEQ considered not designating sustainment and reattainment areas. DEQ did not pursue this alternative because EPA indicated support of the new designations.

1. **Identify Lakeview as a state sustainment area while retaining its federal attainment designation**

The proposed rules are “in addition to federal requirements.” EPA only designates nonattainment areas but the proposed rules would designate other areas, sustainment and reattainment. This would, would improve Oregon’s New Source Review program to protect public health by improving air quality in areas where needed and providing permitting flexibility for smaller businesses.

What alternatives did DEQ consider, if any?

DEQ considered not designating Lakeview a sustainment area. DEQ did not pursue this alternative because Lakeview and county officials support the designation.

1. **Change the pre-construction permitting program (New Source Review)**

The proposed rules are “in addition to federal requirements.” The proposed amendments would modify Oregon’s existing permitting rules to protect public health and the environment. Starting in 1982, Oregon’s permitting program has a different structure than the federal program though EPA considers it substantively equivalent.The proposed rules would align some aspects of Oregon’s program with EPA’s federal program.

Proposed amendments to the definition of a major source would match the EPA definition but would propose different requirements for small and large businesses. The program for smaller businesses would be called State New Source Review. This change, along with the designation of sustainment and reattainment areas would allow more flexibility in permitting smaller sources while continuing to protect the ambient air quality.

The proposed rules would create new differences between the Oregon and EPA New Source Review preconstruction programs by defining two new area designations, sustainment and reattainment. These two new areas would have an important role in avoiding exceedances of the ambient air quality standard and encouraging economic development when a nonattainment area has improved air quality.

DEQ’s program, although substantially different from EPA’s regulations, provides a workable program equivalent to EPA’s to accomplish the same Clean Air Act goal of preventing significant deterioration of air quality.

What alternatives did DEQ consider, if any?

DEQ considered not changing the New Source Review rules. DEQ did not persue this alternative because there is essentially a construction ban in areas that are over the standard but still designated as attainment. Current rules for demonstrating net air quality benefit in nonattainment areas are overly prescriptive and do not meet the goals of the program.

1. **Provide more flexibility for public hearings and meetings**

The proposed rules are not “different from or in addition to federal requirements” and impose stringency equivalent to federal requirements.

What alternatives did DEQ consider, if any?

DEQ considered not proposing amendments to the requirements for public hearings and meetings. DEQ did not pursue this alterantive because the economic benefits and improved effectiveness of using recent technology would improve access to hearings and meetings. This would be easier and cheaper for the public.

1. **Reestablish Heat Smart exemption for small commercial solid fuel boilers that are regulated by the permitting program**

Heat Smart rules are “in addition to federal requirements.” EPA does not have similar rules.

What alternatives did DEQ consider, if any?

DEQ did not consider other alternatives because this proposal wouldamend the rules to return it to its previous state, before EPA amended the NESHAP rules.

1. **Remove annual reporting requirement for small gasoline dispensing facilities**

Proposed rule amendments would remove annual reporting requirement for gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline consistent with federal requirements. Federal gasoline dispensing facility NESHAP does not require gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline to submit annual reports.

What alternatives did DEQ consider, if any?

DEQ considered not changing the annual reporting requirement for gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline. DEQ did not pursue this alternative because the annual reporting requirement for these small gasoline dispensing facilities is unnecessary. DEQ would still have the authority to request throughput information from these facilities for businesses close to the 10,000 gallon permitting threshold.

|  |
| --- |
|  Land use  |

*“It is the Commission's policy to coordinate the Department's programs, rules and actions that affect land use with local acknowledged plans to the fullest degree possible.”* [OAR 340-018-0010](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_018.html)

Land-use considerations

To determine whether the proposed rules involve programs or actions that are considered a *land-use action*, DEQ considered:

* Statewide planning goals for specific references. Section III, subsection 2 of the DEQ State Agency Coordination Program document identifies the following statewide goal relating to DEQ's authority:

 **Goal Title**

 5 Open Spaces, Scenic and Historic Areas, and Natural Resources

 6 Air, Water and Land Resources Quality

 11 Public Facilities and Services

 16 Estuarial resources

 19 Ocean Resources

* [OAR 340-018-0030](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_018.html) for EQC rules on land-use coordination. Division 18 requires DEQ to determine whether proposed rules would significantly affect land use. If yes, how will DEQ:
	+ Comply with statewide land-use goals, and
	+ Ensure compatibility with acknowledged comprehensive plans, which DEQ most commonly achieves by requiring a [Land Use Compatibility Statement](http://www.deq.state.or.us/pubs/permithandbook/lucs.htm).
* DEQ’s mandate to protect public health and safety and the environment.
* Whether DEQ is the primary authority that is responsible for land-use programs or actions in the proposed rules.
* Present or future land uses identified in acknowledged comprehensive plans.

Determination

DEQ determined that the following proposed rules, listed under the Chapter 340 Action section above, are existing rules that affect programs or activities that the DEQ State Agency Coordination Program considers a land-use program:

OAR 340-210 Source Notification Requirements

OAR 340-216 Air Contaminant Discharge Permits

OAR 340-218 Oregon Title V Operating Permits

The air quality permit programs require that a new business provide a Land Use Compatibility Statement from local government when applying for a permit. This assures that the business has an approved use for the property where it is located. Existing permittees have provided a Land Use Compatibility Statements, which are on file with DEQ. This rule proposal does not include any changes to land use procedures in the air quality permitting program.

DEQ’s statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules.

* OAR 340-018-0040(1) - compliance with statewide planning goals achieved by ensuring compatibility with acknowledged comprehensive plans
* OAR 340-018-0050(2)(a) - ensuring compatibility with acknowledged comprehensive plans may be accomplished through a Land Use Compatibility Statement.

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|   Stakeholder and public involvement |

 Advisory committee

DEQ did not use an Advisory Committee but held several stakeholder meetings in Portland, Pendleton, Eugene and Medford to discuss and allow preliminary input on the potential rules. DEQ sent meeting information to all permitted facilities and people who expressed interest in air quality rulemakings. DEQ sent meeting notifications by postcards; email using Oregon’s GovDelivery system, a free e-mail subscription service that provides subscribers with automatic notices of updates to the Oregon DEQ Web page on topics they select; and posted the announcement on the DEQ website. EPA was involved throughout the rule development process.

DEQ also called all the businesses identified as being affected by the more stringent particulate standards and offered to meet with them individually.

 EQC prior involvement

DEQ shares general rulemaking information with EQC through the monthly Directors Report and Information Items. DEQ shared information about this rulemaking with the EQC in the Dec. 11, 2013 Director’s Report and in Information Item ## on the \_\_\_\_\_\_\_\_\_\_\_ 2014 EQC agenda.

Public notice

The \_\_\_\_\_\_\_ 2014[*Oregon Bulletin*](http://arcweb.sos.state.or.us/pages/rules/bulletin/past.html) publishes the Notice of Proposed Rulemaking with Hearing for this rulemaking. On March 17, 2014, DEQ also:

* Posted notice on DEQ’s webpage <http://www.oregon.gov/deq/RulesandRegulations/Pages/2013/aqperm.aspx> E-mailed notice to:
* Approximately 6,500 interested parties through GovDelivery.
* 1,562 stakeholders, including representatives of facilities holding Title V and Air Contaminant Discharge Permits, through GovDelivery.
* The following key legislators required under [ORS 183.335](http://www.leg.state.or.us/ors/183.html):
	+ Michael Dembrow, Chair, Senate Environment and Natural Resources
	+ Representative Jules Bailey, Chair, House Energy and Environment
* Mailed the notice by U.S. Postal Service to 449 stakeholders including representatives of facilities holding Title V and Air Contaminant Discharge Permits.
* Provided legal notice in *The Oregonian* and *Daily Journal of Commerce*.
* Sent notice to EPA.

Public hearings

DEQ plans to hold one statewide public hearing accessible at our regional offices listed in the table below.

Before taking public comment and according to [Oregon Administrative Rule 137-001-0030](http://arcweb.sos.state.or.us/pages/rules/oars_100/oar_137/137_001.html), the staff presenter will summarize the content of the notice given under [Oregon Revised Statute 183.335](http://www.leg.state.or.us/ors/183.html) and respond to any questions about the rulemaking.

DEQ will add the names, addresses and affiliations of all hearing attendees to the interested parties list for this rule if provided on a registration form or the attendee list. DEQ will consider all oral and written comments received at the hearing before completing the draft rules. DEQ will summarize all comments and respond to comments on the Environmental Quality Commission staff report.

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Close of public comment period

The comment period will close on \_\_\_\_\_\_\_\_\_\_, 2014 at 5 p.m.

1. EPA Cost Control Manual, Sixth Edition. U.S EPA report #EPA/452/B‐02‐001. January, 2002. Available at: http://www.epa.gov/ttn/catc/dir1/c\_allchs.pdf. [↑](#footnote-ref-1)
2. Duplicated costs were identified for a project RSG participated in which included an HEMC, and where it was determined that the price

of the HEMC could be substantially reduced because the wood boiler vendor had already specified the equipment and services in its

quote. [↑](#footnote-ref-2)
3. “Controlling Emissions from Wood Boilers.” Northeast States for Coordinated Air Use Management (NESCAUM). October, 2008. Available at: http://www.nescaum.org/topics/commercial‐wood‐boilers. [↑](#footnote-ref-3)
4. The particle size distribution corresponds to the collective percentages of each particle size. [↑](#footnote-ref-4)
5. The quantity of emissions controlled is a function of the particle size distribution. The values in this table assume 100% of the inlet

emissions are evenly distributed from 2.5 microns up to 10 microns. [↑](#footnote-ref-5)