



State of Oregon  
Department of  
Environmental  
Quality

Oregon Department of Environmental Quality  
January 18-19, 2017  
Oregon Environmental Quality Commission Meeting  
Rulemaking Action Item **NO. XX**

**Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan**

**DEQ recommendation to the EQC**

DEQ recommends that the Environmental Quality Commission:

1. Adopt the Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan in Attachment A as part of chapter 340 of the Oregon Administrative Rules;
2. Approve incorporating these rule amendments into the Oregon Clean Air Act State Implementation Plan under OAR 340-200-0040;
3. Direct DEQ to submit the SIP revision to the U.S. Environmental Protection Agency for approval.

**Overview**

Short summary of proposed rule changes

LRAPA proposes the Oregon Environmental Quality Commission approve the proposed Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan for incorporation into the Oregon Clean Air Act State Implementation Plan (SIP) and submittal to the U. S. Environmental Protection Agency (EPA) for its approval under the federal Clean Air Act (CAA).

This proposed rulemaking adopts the supplement to the 2012 Attainment Plan which did not meet the CAA deadline of December 2015. In December 2015, Oakridge-LRAPA-DEQ requested a one-year deadline extension to December 2016 consistent with CAA criteria, and EPA approved the extension in July 2016. The proposed Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan will reduce fine particulate (PM<sub>2.5</sub>) pollution and protect the health of the residents in the Oakridge area. The plan and associated rules are designed to bring this area into compliance with National Ambient Air Quality Standards for PM<sub>2.5</sub> by the extended federal deadline of December 2016.

Background of reasons for doing this rulemaking

The Oakridge community in Lane County, Oregon, has steadily improved air quality over the past 25 years but did not attain the national health standard for PM<sub>2.5</sub> by the federal Clean Air Act deadline of December 31, 2015. This Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan outlines the work by the community from 2014-2016 to complete the attainment of the national health standards adopted in 2006 (24-hour) and 2012 (annual), and to ensure continued attainment of those standards in future years.

Oakridge is a forest-oriented community (population 3,240 as of July 2015) in a valley of the Middle Fork Willamette River in the foothills of the Cascade Mountains about 45 miles southeast of Eugene-Springfield. Many of the homes are heated by wood as the primary or secondary heat source, or even sole source in some

cases. As a result, the major contributor to the historical particulate air pollution has been home wood heating, especially on stagnant winter days when temperature inversions form over the small valley.

The Lane Regional Air Protection Agency (LRAPA) has been monitoring in Oakridge for inhalable particulate matter (PM<sub>10</sub> – particles 10 microns and smaller) since 1988 and for respirable particulate matter (PM<sub>2.5</sub> – particles 2.5 microns and smaller) since 1999.

The U.S. Environmental Protection Agency (EPA) designated Oakridge as a moderate PM<sub>10</sub> nonattainment area in 1994. The Oakridge PM<sub>10</sub> attainment strategy was adopted by the City of Oakridge, LRAPA, and the Oregon Environmental Quality Commission (EQC) in 1996 and submitted to EPA as part of the State Implementation Plan (SIP). EPA approved the plan in 1999. The Oakridge PM<sub>10</sub> strategy focused primarily on control of residential wood combustion. The attainment strategy was successful in achieving the PM<sub>10</sub> standards in Oakridge on schedule. In 2001, EPA published a finding of attainment for the Oakridge PM<sub>10</sub> area.

The 1996 Oakridge PM<sub>10</sub> attainment plan was successful in not only meeting the PM<sub>10</sub> standards on schedule, but also meeting the initial national PM<sub>2.5</sub> standard of 65 micrograms per cubic meter (µg/m<sup>3</sup>) adopted by EPA in 1997. In 1997, EPA adopted an annual average PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup>, and tightened that annual standard to 12 µg/m<sup>3</sup> in 2012. The Oakridge area has met the 12 µg/m<sup>3</sup> annual average PM<sub>10</sub> standard since 2006 as a by-product of the strategies to meet the 24-hour PM<sub>10</sub> and PM<sub>2.5</sub> standards.

However, subsequent national health studies supported a more protective 24-hour national PM<sub>2.5</sub> health standard, and EPA adopted the 35 µg/m<sup>3</sup> standard in 2006. Between 2006 and 2011, PM<sub>2.5</sub> concentrations in Oakridge on worst winter days violated the new 24-hour national health standard.

#### Affected parties

In 2012, the City of Oakridge, LRAPA, and Oregon EQC developed and submitted to the EPA the 2012 Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan. The 2012 plan confirmed the dominant source of PM<sub>2.5</sub> in Oakridge on the problem winter days as residential wood combustion (RWC) in woodstoves and fireplaces. This was determined by PM<sub>2.5</sub> emission inventories, chemical speciation of particulate filter samples, and diurnal PM<sub>2.5</sub> concentration fluctuations. Therefore, the strategies in the 2012 PM<sub>2.5</sub> SIP submittal focused primarily on RWC emission reductions, as did the previous PM<sub>10</sub> strategy.

The above-mentioned control measures in the 2012 Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan included: woodstove change outs; a mandatory curtailment program; removal of uncertified woodstoves at the time of home sale; and a 40% opacity limit on residential chimneys. However, these strategies proved to be inadequate to fully reach attainment status. Adverse meteorological and winter weather conditions proved to be a real challenge to fully achieve the wood heating emission reductions in Oakridge. Limitations on woodstove change out requirements prevented many rentals from benefiting from the program. A lack of dedicated code enforcement officer and not enough police officers trained in EPA Method 9 smoke-reading procedures led to limited enforcement and education of the curtailment program.

#### How this rulemaking addresses the reasons for doing the rulemaking

Air quality conditions were gradually improving, but in 2014 it became clear that the standards would not be met by the Clean Air Act deadline. The particulate concentrations measured in Oakridge for the calendar year 2015 and the three-year period 2013-2015 were the lowest measured in the 25 years of monitoring in Oakridge, but the 3-year 98<sup>th</sup> percentile value of 37 µg/m<sup>3</sup> did not meet the 35 µg/m<sup>3</sup> national PM<sub>2.5</sub> standard by December 31, 2015 as required by the federal Clean Air Act.

## Outreach efforts and public and stakeholder involvement

Therefore, in 2014 the City of Oakridge and LRAPA triggered the contingency plan portion of the 2012 PM<sub>2.5</sub> SIP submittal and initiated monthly meetings with the other Oakridge stakeholders including Lane Electric Cooperative, Southern Willamette Forest Collaborative, Oregon Economic Development Committee, St. Vincent de Paul, Oregon Regional Solutions, EPA, and other interested parties. These meetings sought to revisit the past plan’s strategies and implement the triggered contingency measures to ensure attainment of standards as soon as possible. The standing advisory committee established under state statutes, the LRAPA Citizens Advisory Committee, reviewed the proposed plan prior to recommendation to the LRAPA Board of Directors.

## Key policy and technical issues

The federal Clean Air Act gives the EPA Administrator discretionary authority to grant a 1-year extension to the attainment date for moderate nonattainment areas such as Oakridge. Two criteria were required to be met: first, the community must have implemented all of the control strategies promised in the previous attainment plan; second, the 98<sup>th</sup> percentile PM<sub>2.5</sub> concentration in the community in the extension year has to be less than or equal to the 35 µg/m<sup>3</sup> standard. In Oakridge, the community implemented all of the control strategies promised in the 2012 attainment plan. In addition, the 98<sup>th</sup> percentile PM<sub>2.5</sub> concentration in 2015 was 28.9 µg/m<sup>3</sup>, which is less than the 35 µg/m<sup>3</sup> standard. Therefore, on December 14, 2015, the City of Oakridge, LRAPA, and the Oregon Department of Environmental Quality (ODEQ) jointly requested and was granted a 1-year attainment date extension by EPA to December 31, 2016. This extension allowed the City of Oakridge and LRAPA to determine the adequacy of the more aggressive control measures implemented in 2014.

Oakridge and LRAPA are confident that the strategies currently being implemented will be adequate to fully meet the national 24-hour PM<sub>2.5</sub> health standards by December 31, 2016, and in subsequent years. To illustrate, the 1999-2015 PM<sub>2.5</sub> trends indicate:

- Worst-day PM<sub>2.5</sub> concentrations (i.e., the 98<sup>th</sup> percentile design values) in Oakridge improved an average 1.5 µg/m<sup>3</sup> per year compared to an average annual improvement of 0.8 µg/m<sup>3</sup> at the non-Oakridge monitoring sites (i.e., areas not affected by the Oakridge-specific strategies) in Lane County.
- Using the worst-day PM<sub>2.5</sub> concentrations at the non-Oakridge sites as a reference, it appears that meteorological conditions in 2012-2014 and 2013-2015 were more adverse than average (and similarly, the conditions in 2009-2011 and 2010-2012 were better than average).
- Annual average PM<sub>2.5</sub> concentrations in Oakridge improved an average 0.4 µg/m<sup>3</sup> per year compared to an average annual improvement of 0.2 µg/m<sup>3</sup> at the non-Oakridge monitoring sites in Lane County.
- In Oakridge, most of the improvement in the PM<sub>2.5</sub> annual average was in November-February (0.6 µg/m<sup>3</sup> per year improvement in the seasonal average) when the RWC strategies were most effective, compared to 0.2 µg/m<sup>3</sup> per year improvement the rest of the year (March-October) when the RWC strategies were less applicable.

The Air Pollution Control Ordinances adopted by the City of Oakridge are a critical part of the Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan. The PM<sub>2.5</sub> emission reductions and air quality improvements are summarized in the following table, including the implementation timeframes, the corresponding emission inventory, and the Oakridge Air Pollution Control Ordinance that was in effect.

RWC Strategy Category	Reductions on Worst Winter Days		Time	Emission	Oakridge	Ordinance
	lb/day	ug/m3	Period	Inventory	Ordinance	Date
Long-Term RWC Strategies	38	2.6	2009-2014	2015	#903	Oct-2012
Short-Term Curtailment	107	7.1	2009-2014	2015	#903	Oct-2012
Supplemental Underway	25	1.7	2015	2016	#914	Oct-2015
Conditional Contingency	42	2.8	Future	Future	#920	Oct-2016

This Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan includes contingency control measures to be implemented if standards are not achieved on schedule, quantitative milestones to be achieved during

implementation of the attainment plan, and the process for determining reasonable further progress in future years. The Oakridge PM<sub>2.5</sub> concentrations measured thus far in 2016 are similar to the record low Oakridge PM<sub>2.5</sub> concentrations measured in 2015, further strengthening confidence that the 24-hour PM<sub>2.5</sub> health standards will be fully achieved by December 31, 2016. During 2016, the City of Oakridge and LRAPA intend to document the adequacy of the new aggressive control measures implemented since October 2014 and to record the additional air quality data needed to demonstrate full attainment of PM<sub>2.5</sub> standards.

#### Regulated parties

The proposed amendment of Oregon Administrative Rule 340-200-0040 to incorporate the Updated Oakridge-Westfir PM<sub>2.5</sub> Attainment Plan into the State of Oregon Clean Air Act Implementation Plan does not change the regulated parties. The updated plan continues to focus on reduction of home wood heating emissions, especially on stagnant winter days. The City of Oakridge and LRAPA continue to partner on implementation of the home wood heating programs.

#### Public hearing testimony

During the public comment period in October 2016, LRAPA requested public comment on whether to consider other options for achieving the rule's substantive goals while reducing negative economic impact on the community. LRAPA did not receive any comments on this topic during the public notice period or at the public hearing on November 10, 2016 during the meeting of the LRAPA Board of Directors.

#### Brief summary of fiscal impact

The proposed attainment plan should not create barriers to economic growth. The largest impacts of this proposed plan continue to be to the wood-burning homeowner, as some of the emission reduction strategies may result in increased heating costs due to curtailment of wood-burning during air pollution episodes. However, the homeowner could also experience benefits as a result of the proposed plan through the improvement of air quality in Oakridge, potentially decreasing individual health care costs such as those related to asthma. Many homeowners have benefited during 2009-2016 from financial assistance to install cleaner burning woodstoves, pellet stoves, or ductless heat pumps. The plan also includes contingency measures that will be implemented if the community does not reach attainment by the Clean Air Act deadline of December 2016. These contingency measures include a stricter green-yellow-red advisory program which could require wood-burning curtailment on more days, and prohibition of fireplace use not only on red days but also on yellow days.

## Statement of Need

What need would the proposed attainment plan address?

Winter air pollution levels in Oakridge violate the federal 24-hour fine particulate health standard also known as the PM<sub>2.5</sub> standard. PM<sub>2.5</sub>, or fine particulate matter less than 2.5 micrometers (µm) in diameter, can be inhaled deeply into the lungs and can cause heart or respiratory damage especially in the young, the elderly and those with respiratory or circulatory problems. Because the Oakridge area violates the PM<sub>2.5</sub> standard, EPA designated Oakridge as a nonattainment area for PM<sub>2.5</sub> effective in December 2009. As required under the Clean Air Act, Oregon must submit a plan to return Oakridge to attainment. The attainment plan specifies the emission reduction strategies and actions to return Oakridge into compliance with PM<sub>2.5</sub> health standards by the extended Clean Air Act deadline of December 2016.

The plan is based on recommendations from the Oakridge Advisory Committee and a subsequent Oakridge stakeholder group, and describes the proposed PM<sub>2.5</sub> reduction strategies, including what action will be taken,

who will conduct the work, and when and how it will be done. The proposed attainment plan will aid the community and state in controlling emissions to ensure clean air in Oakridge.

Since residential wood burning emissions comprise most of the harmful particulate in Oakridge, most of the proposed particulate reductions would come from enhancements to the community’s woodstove curtailment program implemented through local ordinances adopted by the City of Oakridge. Other attainment strategies include the continuing replacement of uncertified woodstoves, a public awareness and education program, and LRAPA rules requiring reasonably available controls on particulate from industrial sources.

If adopted by the EQC, the proposed Updated Oakridge-Westfir PM2.5 attainment plan will be incorporated into the Oregon State Clean Air Act Implementation Plan and submitted to EPA for approval under the federal Clean Air Act.

How would the proposed attainment plan address the need?

The plan would ensure Oakridge is in compliance with the federal health standard.

How will LRAPA know the rule addressed the need?

The LRAPA air monitoring network will document when air quality in Oakridge meets the federal health standard.

## Rules affected, authorities, supporting documents

Lead division

Lane Regional Air Protection Agency

Program or activity

Local air quality agency

Chapter 340 action

Amend

OAR 340-200-0040

Statutory authority

ORS 468 and 468A, specifically 468.020, 468A.025, 468A.035, 468.105, 468.120, 468.130  
Statute implemented

ORS 468A.035, 468A.135, 468A.150

Documents relied on for rulemaking

[ORS 183.335\(2\)\(b\)\(C\)](#)

Document title	Document location
<ul style="list-style-type: none"> <li>The federal Clean Air Act, EPA guidance for the development of attainment plans, guidance for the preparation of emission inventories, and air quality modeling protocol.</li> <li>Materials provided to the Oakridge Advisory Committee members and information LRAPA received from the committee and placed into a report.</li> </ul>	<p><a href="http://www.lrapa.org">www.lrapa.org</a> Lane Regional Air Protection Agency 1010 Main Street Springfield, Oregon 97477</p>

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| <ul style="list-style-type: none"><li>American Resource and Recovery Act Grant results – Areas of Oakridge and Westfir within the non-attainment boundary.</li></ul> |  |
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## Fee Analysis

This rulemaking does not involve fees.

## Statement of fiscal and economic impact

### Fiscal and Economic Impact

The proposed attainment plan includes emission reduction strategies that can be implemented through rules and local ordinances. The proposed changes should not create barriers to economic growth. The largest impacts of this proposed plan will be to the wood-burning homeowner, as some of the emission reduction strategies may result in increased heating costs. However, the homeowner could also experience benefits as a result of the proposed plan through the improvement of air quality in Oakridge, potentially decreasing individual health care costs such as those related to asthma.

The plan also includes contingency measures that will be implemented if the community does not reach attainment by the Clean Air Act deadline of December 2016. These contingency measures include a stricter green-yellow-red advisory program, and prohibition of fireplace use not only on red days but also on yellow days.

### Statement of Cost of Compliance

Heating costs: The attainment plan includes a city ordinance that would increase restrictions on wood burning when weather conditions could lead to accumulation of particulate in the Oakridge area. The more curtailment (red) days called, the more costs could be accrued by wood-burning residents in terms of higher electric or oil heating costs. In the most likely scenario, a resident who burned three cords of wood and shifted to using more electric heat or other heat sources would see heating cost rise during the heating season. These heating costs are variable depending on the alternative heat source used, the number of curtailment days called during the winter heating season, the cost to purchase cordwood or the transportation costs for a homeowner to cut and haul wood. This additional cost for non-wood fuels could be offset by the positive economic impact of lower health care costs and fewer missed work days if Oakridge is able to maintain particulate levels below standards.

Health impacts: There are a number of studies linking PM<sub>2.5</sub> effects with respiratory causes and cardiac diseases. U.S. and Canadian studies report statistically significant relationships between an increase in PM<sub>2.5</sub> and an increase in hospitalizations for all respiratory causes, including chronic obstructive pulmonary disease, pneumonia and asthma. In addition to the greatly expanded body of evidence on hospitalization or emergency department visits for cardiovascular diseases, new epidemiologic studies have also reported associations between more subtle physiological changes in the cardiovascular system and short-term exposures to PM<sub>2.5</sub> concentrations (EPA, 2004, p. 9–67). These impacts could result in days of missed work that would affect the

economy. LRAPA expects that the proposed attainment plan will have a positive effect on the health of Oakridge residents.

Contingency measures: Should Oakridge not meet the standard, the contingency measures that could impact the general public are more frequent woodstove curtailment (red) days and further restrictions on use of fireplaces.

#### State and federal agencies

##### **Oregon Department of Transportation**

DEQ is requesting EPA provide an adequacy finding that waives the need for a Regional Conformity Determination. Should this waiver be granted, it will streamline the workload for ODOT because a regional conformity analysis will not be required.

##### **Oregon Department of Forestry**

This rulemaking does not change the smoke management requirements of Oregon Department of Forestry.

#### Local governments

LRAPA funds the local air quality program with a combination of DEQ grant funds and local funds. This rulemaking will likely result in some direct negative economic impacts to the city government through the implementation and enforcement of the ordinance. LRAPA plans to continue spending between \$5,000 and \$6,000 annually to help implement the air quality program. There may be additional costs to implement the strategies added in this new plan that could include implementing contingency strategies for residential wood burning.

#### Public

Heating costs: The attainment plan includes a city ordinance that would increase restrictions on wood burning when weather conditions could lead to accumulation of particulate in the Oakridge area. The more curtailment (red) days called, the more costs could be accrued by wood-burning residents in terms of higher electric or oil heating costs. In the most likely scenario, a resident who burned three cords of wood and shifted to using more electric heat or other heat sources would see heating cost rise during the heating season. These heating costs are variable depending on the alternative heat source used, the number of curtailment days called during the winter heating season, the cost to purchase cordwood or the transportation costs for a homeowner to cut and haul wood. This additional cost for non-wood fuels could be offset by the positive economic impact of lower health care costs and fewer missed work days if Oakridge is able to maintain particulate levels below standards.

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Contingency measures: Should Oakridge not meet the standard, the contingency measures that could impact the general public are more frequent woodstove curtailment (red) days and further restrictions on use of fireplaces.

**Large businesses - businesses with more than 50 employees**

Existing industry: There are no major existing industrial sources within the affected area.

New and expanding industry: Currently, new and expanding industrial sources within the Oakridge Nonattainment Area with emissions greater than 10 tons per year of PM<sub>2.5</sub> are required to install the most stringent level of pollution control equipment, known as Lowest Achievable Emission Rate, and to provide emission offsets. Oakridge first became subject to more stringent requirements for PM<sub>2.5</sub> in 2009, when EPA designated the Oakridge area as nonattainment for PM<sub>2.5</sub>. Any new or expanding industrial source in Oakridge must install Lowest Achievable Emission Rate controls, obtain emission offsets (i.e. offset their emission increases with equal emission reductions from other sources) and model their emissions to demonstrate that the proposed increase from their facility will not jeopardize compliance with health standards. Costs for Lowest Achievable Emission Rate controls vary widely depending on the type of process being controlled, and the associated cost of modeling analysis can range from \$4,000 to \$6,000 per model run.

These potential costs, however, are all existing costs resulting from existing requirements. This proposed attainment plan does not impose any new additional costs for new source review.

**Small businesses – businesses with 50 or fewer employees**

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

There are two minor LRAPA-permitted sources, a rock crusher and a concrete batch plant, located in the area affected by the proposed rules and plan. No new industrial rules are included in the proposal. Reasonably available control technology and fugitive dust control requirements already apply to existing facilities.

b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

No new reporting, recordkeeping or other administrative activities are required for small businesses.

c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

Home heating retailers and installers will not face new requirements for equipment, supplies, labor or administration unless there is a need to account for the added woodstove replacements. This effect would be indirect and offset by positive economic benefits of increased sales.

d. Describe how LRAPA involved small businesses in developing this proposed rule.

Currently, there are no small businesses in Oakridge that sell, install or maintain wood heating devices. The proposed plan and strategies are based on recommendations from the 2011-2012 Oakridge Advisory Committee and a subsequent group of Oakridge stakeholders during 2015-2016, which included representatives from local government, the electric utility, Oakridge/Westfir residents, and

LRAPA’s board of directors and advisory committee.  
 The advisory committee members prepared strategies upon which LRAPA based the plan and rules. In the process, various committee members discussed and agreed on the economic and job impact of each strategy. As a whole, members of the committee were highly interested in maintaining a viable economy in Oakridge and improving the livability of the community. The meetings were open to the public, and LRAPA heard from the public at most meetings.

Documents relied on for fiscal and economic impact

Document title	Document location
2012 Oakridge-Westfir Attainment Plan	LRAPA website: <a href="http://www.lrapa.org">www.lrapa.org</a>

Advisory committee

LRAPA did not appoint a new advisory committee for the 2016 updated attainment plan. LRAPA relied on recommendations from a group of Oakridge stakeholders and the review of the LRAPA Citizens Advisory Committee. The 2015-2016 Oakridge stakeholder group included representation from a wide range of community interests. The stakeholder group helped develop this plan.

Housing cost

LRAPA has determined that this proposed rulemaking will have no effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel.

## Federal relationship

Relationship to federal requirements

This rulemaking imposes additional requirements to implement the applicable federal requirements for compliance with particulate standards. Section 110 of the Clean Air Act, 42 U.S.C. §7410 requires DEQ/LRAPA to adopt an attainment plan to reduce particulate matter of 2.5 micrometers and less (PM<sub>2.5</sub>) in order to bring the Oakridge area into compliance with the National Ambient Air Quality Standards (NAAQS) by December 2016. The plan must also show the area will continue to meet NAAQS in the future and provide contingency measures in case it fails. Federal requirements mandate adoption of a plan that demonstrates the area will reach attainment of the standard; however, the specific strategies to achieve the standard are not mandated.

The Oakridge PM<sub>2.5</sub> Attainment Plan is a comprehensive mixture of emission reduction strategies consisting of local ordinances, LRAPA regulations, DEQ regulations, and non-regulatory elements including incentives

and education. Residential wood combustion is the most significant contributor to PM<sub>2.5</sub> in Oakridge. The strategies targeting reduction in woodstove emissions include: revised woodstove curtailment levels to increase number of days when burning is restricted or prohibited, requiring removal of an uncertified woodstove upon sale of a home, tightening enforcement of wood stove curtailment, opacity limit on residential woodburning emissions, and expansion of educational efforts to reduce PM<sub>2.5</sub> from woodsmoke. The plan also requires public agencies to avoid prescribed burning if the smoke is expected to affect Oakridge.

In the event that listed strategies fail to bring Oakridge into attainment with the standard, a set of contingency strategies would become effective. These contingency measures include a stricter green-yellow-red advisory program, and prohibition of fireplace use not only on red days but also on yellow days.

Federal requirements set by EPA outline the procedures for preparing, adopting and submitting attainment plans, but Oregon has flexibility about how to meet the standards by establishing specific requirements. LRAPA worked with a local advisory committee to select the emission reduction strategies that are included in the plan and are necessary to meet the federal standard. The elements of the Oakridge plan include emission inventories, modeling, air quality monitoring and analysis, attainment demonstration, and enforcement mechanisms.

What alternatives did DEQ consider if any?

In developing the proposed strategies for the Oakridge plan, LRAPA, the advisory committee and Oakridge City officials considered a number of alternatives. The proposed strategies were recommended over alternatives based on evaluation of their technological feasibility and environmental, health, economic, and social impacts. The advisory committee recommended two sets of strategies: an initial set of strategies that will bring the community into compliance with the federal PM<sub>2.5</sub> air quality standard by 2016 and a second set of contingency strategies, with stricter requirements for residents who use wood stoves, which would be implemented in the event that the federal PM<sub>2.5</sub> standard is not met in 2016. Both sets of strategies are included in the Oakridge plan.

## Land Use

Land-use considerations

The Lane Regional Air Protection Agency along with the Oregon Department of Environmental Quality is proposing to adopt an air quality attainment plan and associated rule amendments for the Oakridge area, to meet federal public health standards for particulate matter 2.5 micrometers and less (PM<sub>2.5</sub>). These rules and the attainment plan are an amendment to Oregon's Air Quality State Implementation Plan. The attainment plan specifies how the community will meet the particulate standard by the federal Clean Air Act deadline of December 2016, including who will conduct the work, and when and how it will be done.

The attainment plan, based on recommendations from Oakridge's Advisory Committee, is a comprehensive mixture of emission reduction strategies consisting of local ordinances, LRAPA regulations, DEQ regulations, and non-regulatory elements including incentives and education. The plan contains additional strategies recommended by the local advisory committee that, while not needed for NAAQS compliance, will benefit air quality in general. The plan also provides contingency measures to meet the PM<sub>2.5</sub> standard should the community fail to reduce particulate emissions by the 2016 deadline. The proposed attainment plan will aid the state and the community in controlling emissions to ensure clean air in Oakridge.

Since residential wood burning emissions comprise most of the harmful particulate emissions in Oakridge, most of the proposed particulate reductions will come from enhancements to the community's woodstove curtailment program, implemented through local ordinances. Other attainment strategies include continuing the program of replacing polluting uncertified woodstoves, a public awareness and education program,

agreements to limit forest burning and LRAPA rules requiring reasonably available controls to reduce particulate from industrial sources.

If the attainment plan fails to achieve the federal standard by December 2016, additional regulations in the contingency plan will further reduce particulate emissions from wood burning. These strategies include: a stricter opacity limit, revising the current 40% opacity limit to a more restrictive 20% limit, as has been done in some other northwest communities; a stricter green-yellow-red advisory program, with more yellow and red advisory days each winter; and further restrictions on the city woodstove curtailment exemptions (for sole source, economic hardship).

Determination

LRAPA has reviewed the proposed rules and determined that no procedures in addition to those already in the rules are needed to ensure compliance with statewide land use goals. The rules are not expected to significantly affect or conflict with existing or future land uses under local comprehensive plans or regulations. LRAPA has concluded that the rules affect Goal 6 and that the rules directly advance the objectives of this goal.

## Stakeholder and public involvement

LRAPA has a standing Citizens Advisory Committee. The advisory committee provided feedback on the plan. The committee information is located on the LRAPA website at: <http://www.lrapa.org/157/Advisory-Committee>. The committee included representatives from Lane County.

Roster

Name	Representing
Maurie Denner, Chair	General Public
Chuck Gottfried, Vice-Chair	Agriculture
Russ Ayers, Member	General Public
Jim Daniels, Member	Large Industry
Larry Dunlap, Member	Public Health
Paul Engelking, Member	General Public
Randy Hledik, Member	Large Industry
Terry S. Richardson, Member	General Public
Laura Seyler, Member	Large Industry
Link Smith, Member	Fire Suppression
John Tamulonis, Member	Public Planning
Gary Vander Meer, Member	General Public
Kathleen Lamberg, Member	General Public
Leonard Epstein, Member	General Public

## Meeting notifications

To notify people about advisory committee’s activities, LRAPA posts the meeting agenda and meeting notes on the LRAPA website and a free e-mail subscription service for Citizen Advisory Committee information is available via “Notify me.”

## LRAPA Board prior involvement

LRAPA shares general rulemaking information with the LRAPA Board through the monthly Director’s Report and periodic agenda item updates.

## Public notice

LRAPA provided notice of the Notice of Proposed Rulemaking with Hearing for this rulemaking.

On October 1, 2016, LRAPA provided notice to:

- Secretary of State for publication in the October 2016 *Oregon Bulletin* on October 3, 2016.
- The LRAPA Public Notice Web page <http://www.lrapa.org/Calendar.aspx?EID=63> from October 1, 2016 to November 10, 2016.
- 4,215 interested parties on the ODEQ Agency Rulemaking List through GovDelivery.
- 53 stakeholders on the LRAPA interested parties list received email or text.
- 0 interested parties through mail by U.S. Postal Service notice.

LRAPA provided legal notice(s) in the following newspapers:

<i>Register Guard (Eugene)</i>	October 1, 2016
<i>Dead Mountain Echo (Oakridge)</i>	September 29, 2016

## Public hearings

LRAPA held one public hearing on November 10, 2016. The table below explains how the public could participate in the hearing.

Before taking public comment and according to [Oregon Administrative Rule 137-001-0030](#), the presiding officer and staff presenter will summarize the content of the notice given under [Oregon Revised Statute 183.335](#) and respond to any questions about the rulemaking.

LRAPA 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. LRAPA will consider all oral comments received at the hearing before completing the updated plan. LRAPA will summarize all comments and respond to comments on the Environmental Quality Commission staff report.

Hearing	
Date	Thursday, November 10, 2016
Time	12:30 p.m.
Address line 1	Lane Regional Air Protection Agency (LRAPA)
	1010 Main Street
City	Springfield, Oregon 97477
Presiding officer	Merlyn Hough, Agency Director
Staff presenter	Merlyn Hough, Agency Director
Conference number	541-736-1056, ext. 302

Close of public comment period

The comment period closed Thursday, November 10, 2016 at 12:30 p.m. No comments were received on the proposed action.

**LRAPA Office:**

Lane Regional Air Protection Agency (LRAPA)  
 1010 Main Street  
 Springfield, Oregon 97477  
 541-736-1056

**Summary of comments and DEQ responses**

No comments were received on the proposed action.

**Implementation**

**Notification**

The critical elements of the proposed plan are already in effect under the City of Oakridge Air Pollution Control Ordinances and ongoing programs of the Lane Regional Air Protection Agency (LRAPA).

The overall plan would become effective upon filing in late January 2017 and would be submitted to EPA immediately thereafter. DEQ would notify LRAPA in person or by email, and LRAPA would similarly notify the City of Oakridge.

**Compliance and Enforcement**

LRAPA and Oakridge staff are already trained in the air monitoring, forecasting, compliance, enforcement and reporting functions necessary for implementation of the proposed plan.

### **Requirement**

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review. DEQ based its analysis on the law in effect when EQC adopted these rules.

### **Exemption from five-year rule review**

The Administrative Procedures Act exempts the proposed rules from the five-year review because the proposed rules would amend an existing rule. ORS 183.405(4).