

## Oakridge Air Attainment Plan for Particulate Matter 2.5

Since 2009 Oakridge has been designated by the Environmental Protection Agency (EPA) as a nonattainment area for the 24-hour national air quality standards for fine particulate matter. Despite the [Oakridge Fine Particulate Matter \(PM2.5\) Attainment Plan](#) and local ordinances, Oakridge has been unable to meet the EPA standard of 35 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) based on an average of the most recent three years of federal reference monitoring data.

Emissions inventory data gathered by the Lane Regional Air Pollution Agency (LRAPA) demonstrates that the main source of PM2.5 during the winter season is residential wood burning emissions. Local climate and topography make the city of Oakridge prone to wintertime temperature inversions, low wind speeds and poor atmospheric dispersion. During the winter months, Oakridge air quality is often susceptible to high concentrations of smoke from woodstoves settling on the valley floor. As a result, Oakridge will be designated by the EPA as a “serious” non-attainment area for wood smoke pollution if exceeds acceptable levels before December 31, 2015. A “serious” designation includes the following sanctions: a two-to-one offset for any new source of emissions, disqualification for federal highway funds in the non-attainment area, and implementation of an EPA federal plan for compliance (see addendum).

Since November 2014 community partners have been meeting monthly to discuss options to improve Oakridge: The City of Oakridge, LRAPA, Lane Electric Cooperative (LEC), St. Vincent De Paul of Oakridge (SVDP), the Southern Willamette Forest Collaborative, and various elected officials. The EPA has advised the committee that if Oakridge can avoid exceeding the standard through 2015 a one-year extension can be granted.

The Air Attainment partners have developed a three-part strategy that focuses on 1) Education, 2) Enforcement, and 3) Economic Assistance. Related short-term and long-term measures for each area have been identified.

### Current short-term measures:

#### 1. Education:

- a. The City, LRAPA and SVDP will work together to distribute education materials including how to comply with wood burning advisories, proper wood burning techniques, and alternatives to wood heat.
- b. The City of Oakridge has contracted to produce an educational video that explains the pollution problem, best practices for wood burning, and how to comply with burning advisories.
- c. The Oakridge municipal court will create a diversion program for first time offenders, offering an educational course instead of a fine.
- d. The Mayor and City Council are sharing information via newsletters in the local paper, upcoming Town Hall meetings (Oct. 20<sup>th</sup>, 7PM), water bill, Facebook for virtual town hall meetings, and the City's Website.

## **2. Enforcement:**

- a. Code enforcement – the City is revising local wood burning codes to clarify burn ban exemptions and fines and updating the home heating exemption application based on LRAPA recommendations.
- b. Smoke School –Oakridge Police Department will send staff to specialized courses to certify them to read smoke opacity. Once trained, the OPD will begin issuing tickets for wood burning violations.
- c. New code enforcement officer – LRAPA and the City of Oakridge have combined efforts to fund a part time City of Oakridge code enforcement position. This position will focus on wood burning code enforcement from Nov-Feb.

## **3. Economic Assistance**

- a. LEC has offered free (up to \$3,800) to both homeowners and rental property owners of low-income occupied Oakridge housing until December 31, 2015. LEC has also extended it's Member Assistance Program to make the cost of using the heat pump effectively free on declared "red days" to encourage less burning on those days.

## **Potential long-term measures (with additional funding):**

### **1. Education:**

- a. Hire a full time coordinator to implement all air attainment programs and act as a coordinator between partner agencies and organization. A coordinator that would be extremely essential in reaching the cities established PM 2.5 goals.
  - i. Estimated costs are \$100,000 per year for 3 years to pay for salary, benefits, and travel for a full time coordinator.
- b. A designated budget for educational materials and videos for a three-year period is \$30,000.
  - i. With these funds a programs could be created that target messaging for youth and the broader population.
  - ii. Create interactive presentations for school age children
  - iii. Talk face to face with people and provide education materials at the local food pantry, senior meals, church luncheons, and community events.
  - iv. Train volunteer community members to act as ambassadors to connect neighbors and friends to information and resources.
- c. The municipal court diversion program will be primarily an educational program. A fee will be assessed to the offender. There will be additional duties added to the Municipal Court Clerk. Annual additional costs are estimated at \$5,000 a year for 3 years.

### **2. Enforcement:**

- d. Train neighborhood watch, fire department, and public works personnel on how to measure wood smoke opacity.

- e. Extend the code enforcement officer to a full time position. The City has identified a code enforcement officer as a top priority to enforce no-burning and proper burning ordinances.
  - i. It will cost approximately \$70,000 a year for a full time code enforcement person.

### **3. Economic Assistance**

- f. Fund a pilot program that first targets the 110 wood burning exemption households for free ductless heat pump (DHP) replacements and comprehensive home weatherization.
- g. Expand the DHP program to the entire community, both homeowners and renters, while allowing homeowners to keep certified wood stoves.
  - i. The estimated costs for DHP replacement is \$4,000 per household. A program targeting 100 homes would cost approximately \$400,000.
- h. Replace non-certified wood stoves. According to the 7/15 home heating survey 22% of respondents use a non-certified wood stove or fireplace for home heating. A wood stove replacement program would target these homes. The program would also include renter occupied homes and homes located outside of Oakridge, which were ineligible for past wood stove replacement programs.
  - i. The estimated cost for a certified wood stove replacement is \$4000 per household. A program targeting 100 homes would cost approximately \$400,000.
- i. Red Day Home Heating Credit offering electric-dependent homes compensation for electric bill on no-burnings days.
  - i. There are approximately 1400 homes in Oakridge, and an estimated 30% depend solely on electric heat. Estimating \$10-15 a day per household would cost \$4,500 for each red day. As more homes are outfitted with DHPs and weatherization the cost for daily offsets should decrease per household. The cost to fund a credit program, for approximately 10 days a year, is \$45,000.
- j. Increase Housing and Community Services Agency (HACSA) weatherization efforts in Oakridge.
  - i. HACSA estimates it costs about \$10,000 to weatherize Oakridge homes. \$500,000 would provide funding to properly weatherize at least 50 homes.
- k. Implement a community firewood program to provide seasoned firewood at affordable rates based on household income. There is no funding request for this program at this time.
- l. Reimburse homeowners for woodshed building materials. There is no funding request for this program at this time.
  - i. According to the 7/15 Home Heating Survey, 40% of those surveyed store their firewood under tarps or in the open.

Projected cost for all Oakridge Air Attainment initiatives will be in the range of \$2,000,000\*. The city is working with its partners to find these funds through grants and other initiatives. Assistance from the state and federal government will be paramount to the success of our community.

	<b>Cost</b>	<b>Duration</b>	<b>Total</b>
<b>PROGRAMS</b>			
<b>Education Supplies</b>	\$10,000	3 years	\$30,000
<b>Municipal Court Diversion</b>	\$5,000	3 years	\$15,000
<b>DHP Pilot Program</b>	\$400,000	As long as funding lasts	\$400,000
<b>Certified Wood Stove Replacement</b>	\$400,000	As long as funding lasts	\$400,000
<b>Home Weatherization</b>	\$500,000	As long as funding lasts	\$500,000
<b>Red Day Credits</b>	\$45,000	3 years	\$135,000
<b>STAFF</b>			
<b>Air Attainment Coordination</b>	\$100,000	3 years	\$300,000
<b>Code Enforcement Officer</b>	\$70,000	3 years	\$210,000
<b>TOTAL</b>			\$1,990,000