



# Oregon

John A. Kitzhaber, MD, Governor

January 13, 2012

Dennis J. McLerran, Regional Administrator  
U.S. Environmental Protection Agency, Region 10  
1200 Sixth Avenue  
Mail Code: RA-140  
Seattle, WA 98101

## Department of Environmental Quality

Headquarters  
811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
FAX (503) 229-6124  
TTY: 711

RE: Revision to the Oregon State Implementation Plan – Adoption of the Eugene-Springfield PM<sub>10</sub> Maintenance Plan

Dear Mr. McLerran:

The Oregon Department of Environmental Quality (DEQ) requests approval of revisions to the Oregon State Implementation Plan (SIP) from the Office of Air, Waste, and Toxics, State and Tribal Air Programs Unit of the U.S. EPA, Region 10. Enclosed for your review is one hard copy of the amendments and one electronic copy of the amendments are saved on the disk included.

The Lane Regional Air Protection Agency (LRAPA) has jurisdiction over air quality in Lane County. Since DEQ has oversight authority to ensure LRAPA meets Clean Air Act requirements, proposed rule amendments are jointly presented by DEQ and LRAPA to the Environmental Quality Commission for adoption. The Environmental Quality Commission adopted the revisions to the SIP under OAR 340-200-0040 on December 15, 2011. DEQ submits these revisions to EPA as part of the SIP and pursuant to 40 CFR 51.104.

I certify that public notices were published in newspapers of general circulation on August 26, 2011 and in the Secretary of State's Oregon Bulletin on September 1, 2011. The notices included a statement that adoption of the rules would revise the SIP. I further certify that a public hearing was held on September 26, 2011 in Springfield, Oregon.

Thank you for your assistance with these revisions to Oregon's SIP. The staff contact for this submittal is Nicole Vick, SIP Coordinator at (503) 229-5946.

Sincerely,

Joni Hammond,  
Deputy Director

Enclosures

cc Donna Deneen, EPA, Region 10  
Andrew Ginsburg, DEQ AQ Administrator  
Merlyn Hough, LRAPA Agency Director  
Paul Koprowski, EPA Oregon Operations office  
Robbye Lanier, LRAPA Rules Coordinator  
Nicole Vick, DEQ AQ SIP Coordinator





SIP Submittal Checklist		
Included	Attachment	Title
	<b>1</b>	<b>Evidence the state has adopted the revision</b>
X	1.1	Staff Report, Agenda Item D of the December 15-16, 2011, EQC meeting
X	1.2	Agenda Item 6, Lane Regional Air Protection Agency (LRAPA) Board of Directors Meeting, September 26, 2011
X	1.3	Minutes, LRAPA Board of Directors Meeting, September 26, 2011
		Also see Certificate and Order for Filing Permanent Administrative Rules in Attachment 4.2
	<b>2</b>	<b>Evidence that the state has the necessary legal authority</b>
X		See Attachment 1.1 "Commission Authority" (page #2 of Staff Report, Agenda Item D, December 15-16, 2011, EQC meeting)
	<b>3</b>	<b>Provisions submitted for approval</b>
X	3.1	<b>Adopted and amended rules submitted to Secretary of State*</b>
X	3.1a	General Air Pollution Procedures and Definitions: OAR 340-200-: 0040. Effective December 21, 2011
X	3.1b	Stationary Source Notification Requirements: OAR 340-204-: 0010, 0030, 0040. Effective December 21, 2011
X	3.1c	LRAPA Request for Redesignation to Attainment and Maintenance Plan for Eugene/Springfield PM <sub>10</sub> Maintenance Plan. LRAPA Board of Directors adopted September 26, 2011*
X	3.1d	Designation of Air Quality Areas: LRAPA Title 29. LRAPA Board of Directors adopted September 26, 2011*
X	3.1e	Emission Standards: LRAPA Title 32. LRAPA Board of Directors adopted September 26, 2011*
X	3.2	<b>Redline/strikeout version of adopted, amended and repealed rules submitted to Secretary of State*</b>
X	3.2a	General Air Pollution Procedures and Definitions: OAR 340-200-: 0040. Effective December 21, 2011
X	3.2b	Stationary Source Notification Requirements: OAR 340-204-: 0010, 0030, 0040. Effective December 21, 2011
X	3.2c	LRAPA Request for Redesignation to Attainment and Maintenance Plan for Eugene/Springfield PM <sub>10</sub> Maintenance Plan. LRAPA Board of Directors adopted September 26, 2011*
X	3.2d	Designation of Air Quality Areas: LRAPA Title 29. LRAPA Board of Directors adopted September 26, 2011*
X	3.2e	Emission Standards: LRAPA Title 32. LRAPA Board of Directors adopted September 26, 2011*
	<b>4</b>	<b>Evidence that the state followed the Administrative Procedures Act</b>
X	4.1	Public notice in the Secretary of State's <u>Oregon Bulletin</u> , September 1, 2011 publication
X	4.2	Certificate and Order for Filing Permanent Administrative Rules, filed and effective December 21, 2011
X	4.3	DEQ Authorization for LRAPA to conduct a hearing on EQC's behalf, dated August 30, 2011
	<b>5</b>	<b>Evidence of adequate public notice</b>
X	5.1	Affidavit of Publication: The Register Guard, Notice of August 26, 2011, publication
	<b>6</b>	<b>Certification of public hearing</b>
X	6.1	See paragraph #3 of cover letter and Attachment 7.1
X	<b>7</b>	<b>Compilation of public comment and department's response</b>
X	7.1	Hearings Officer report for rulemaking hearing on September 26, 2011, dated November 3, 2011
X	7.2	Summary of public comment and agency response, dated November 1, 2011

\*Denotes rules and maintenance plan that were not submitted to Oregon Secretary of State. Oregon's Secretary of State only files Oregon Administrative Rules, therefore does not accept local municipality rule amendments. The rules and maintenance plan were adopted by Lane Regional Air Protection Agency's Board of Directors and Oregon Environmental Quality Commission. These rules are being submitted to EPA in order to show a complete account of the rulemaking package.





## ATTACHMENTS

### **Attachment 1: Evidence the state has adopted the revision**

- 1.1 Staff Report, Agenda Item D of the December 15-16, 2011, EQC meeting
  - 1.2 Agenda Item 6, Lane Regional Air Protection Agency (LRAPA) Board of Directors Meeting, September 26, 2011
  - 1.3 Minutes, LRAPA Board of Directors Meeting, September 26, 2011
- Also see Certificate and Order for Filing Permanent Administrative Rules in Attachment 4.2

### **Attachment 2: Evidence that the state has the necessary legal authority**

See Attachment 1.1 "Commission Authority" (page # 2 of Staff Report, Agenda Item D, December 15-16, 2011, EQC meeting)

### **Attachment 3: Provisions submitted for approval**

- 3.1 Adopted and amended rules submitted to Secretary of State\*
  - 3.1a General Air Pollution Procedures and Definitions: OAR 340-200-: 0040. Effective December 21, 2011
  - 3.1b Stationary Source Notification Requirements: OAR 340-204-: 0010, 0030, 0040. Effective December 21, 2011
  - 3.1c LRAPA Request for Redesignation to Attainment and Maintenance Plan for Eugene/Springfield PM<sub>10</sub> Maintenance Plan. LRAPA Board of Directors adopted September 26, 2011\*
  - 3.1d Designation of Air Quality Areas: LRAPA Title 29. LRAPA Board of Directors adopted September 26, 2011\*
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  - 3.2e Emission Standards: LRAPA Title 32. LRAPA Board of Directors adopted September 26, 2011\*

### **Attachment 4: Evidence that the state followed the Administrative Procedures Act**

- 4.1 Public notice in the Secretary of State's Oregon Bulletin, September 1, 2011 publication

- 4.2 Certificate and Order for Filing Permanent Administrative Rules, filed and effective December 21, 2011
- 4.3 DEQ Authorization for LRAPA to conduct a hearing on EQC's behalf, dated August 30, 2011

**Attachment 5: Evidence of adequate public notice**

- 5.1 Affidavit of Publication: The Register Guard, Notice of August 26, 2011, publication

**Attachment 6: Certification of public hearing**

See paragraph #3 of cover letter and Attachment 7.1

**Attachment 7: Compilation of public comment and department's response**

- 7.1 Hearings Officer report for rulemaking hearing on September 26, 2011, dated November 3, 2011
- 7.2 Summary of public comment and agency response, dated November 1, 2011

\*Denotes rules and maintenance plan that were not submitted to Oregon Secretary of State. Oregon's Secretary of State only files Oregon Administrative Rules, therefore does not accept local municipality rule amendments. The rules and maintenance plan were adopted by Lane Regional Air Protection Agency's Board of Directors and Oregon Environmental Quality Commission. These rules are being submitted to EPA in order to show a complete account of the rulemaking package.

## **Attachment 1**

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1.2 Agenda Item 6, Lane Regional Air Protection Agency (LRAPA) Board of Directors Meeting, September 26, 2011

1.3 Minutes, LRAPA Board of Directors Meeting, September 26, 2011

Also see Certificate and Order for Filing Permanent Administrative Rules in Attachment 4.2



State of Oregon

## Department of Environmental Quality

## Memorandum

**Date:** Dec. 12, 2011

**To:** Environmental Quality Commission

**From:** Dick Petersen, Director

**Subject:** Agenda item D, Action item: Eugene-Springfield Air Quality PM<sub>10</sub> Maintenance Plan  
Dec. 15-16, 2011, EQC meeting

**Why this is important**

This rulemaking will officially change the legal status of the Eugene-Springfield area from PM<sub>10</sub> nonattainment to a PM<sub>10</sub> maintenance area, and the proposed PM<sub>10</sub> maintenance plan will ensure continued attainment with the standard. In addition, this rulemaking will include DEQ's request to the U.S. Environmental Protection Agency for the Eugene-Springfield area to be federally redesignated as in attainment with the PM<sub>10</sub> standard.

**DEQ recommendation and EQC motion**

DEQ recommends that the commission (1) adopt the proposed rule amendments as presented in Attachment A1, (2) approve LRAPA's rules and maintenance plan in Attachments A2 and A3, pursuant to ORS 468A.135(2), and (3) direct DEQ to submit Attachments A1, A2 and A3 to EPA as revisions to Oregon's Clean Air Act State Implementation Plan under OAR 340-200-0040.

**Background and need for rulemaking**

The Lane Regional Air Protection Agency has jurisdiction over air quality in Lane County. LRAPA is responsible for ensuring that Lane County communities comply with federal air quality health standards, including enacting plans, in consultation with DEQ and EPA, to restore healthy air quality in any area violating standards. DEQ has oversight authority to ensure LRAPA meets Clean Air Act requirements. The Eugene-Springfield area is currently designated a PM<sub>10</sub> nonattainment area in DEQ rules and in the State Implementation Plan currently approved by EPA.

In 1987, EPA designated the Eugene-Springfield area in violation of the 24-hour federal public health standard for particulate matter of ten microns and less, also known as PM<sub>10</sub>. LRAPA adopted a PM<sub>10</sub> attainment plan in 1990 that included control strategies to bring the area into compliance. Since 1987, LRAPA has not exceeded the PM<sub>10</sub> standard. EPA adopted a new fine particulate, or PM<sub>2.5</sub>, standard in 2006 and it was uncertain if EPA would retain the PM<sub>10</sub> standard and if the Eugene-Springfield area would meet the new standard. For these

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 Dec. 15-16, 2011, EQC meeting  
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reasons, LRAPA delayed preparing a PM<sub>10</sub> maintenance plan and requesting redesignation to attainment until now. Recent monitoring confirms that the area meets the new PM<sub>2.5</sub> standard, and thus complies with both particulate health standards.

Earlier this year and in consultation with DEQ and EPA, LRAPA prepared a PM<sub>10</sub> maintenance plan for the Eugene-Springfield area. DEQ and LRAPA intend to submit this plan to EPA with a request that the Eugene-Springfield area be federally redesignated to attainment for PM<sub>10</sub>. DEQ has reviewed and approved LRAPA's proposed plan and supports this redesignation request. This maintenance plan follows similar plans adopted by DEQ for other nonattainment areas in the state. A mandatory residential wood combustion curtailment program has been the primary mechanism for the area being able to attain the PM<sub>10</sub> standard. This program will continue to be implemented under the PM<sub>10</sub> maintenance plan to ensure continued attainment with the standard. Under this plan, industrial emissions growth will be controlled through existing New Source Review regulations for maintenance areas, which reduces the stringency and costs of emission control requirements for new sources, from the lowest achievable emission rate to the best available control technology. All other requirements on sources will remain the same.

As part of this rulemaking, DEQ is amending its rules to change the status of the Eugene-Springfield area to a PM<sub>10</sub> maintenance area.

<b>Effect of rule</b>	EQC approval of this item would result in DEQ submitting a revision of the Oregon Clean Air Act State Implementation Plan to EPA so that EPA can designate the Eugene-Springfield area as meeting attainment status and be reclassified as a PM <sub>10</sub> maintenance area.
<b>Commission authority</b>	The commission has authority to take this action under ORS 468.020, 468A.025.
<b>Key issues</b>	Ambient PM <sub>10</sub> levels in this area are well within the health standard, and since existing control measures on the primary source of PM <sub>10</sub> emissions will be maintained, there are no significant issues with this action.
<b>Public outreach</b>	Both DEQ and LRAPA engaged the public on this proposed rulemaking in advance of the public comment process, through website postings, mailings and legal notices. LRAPA, on behalf of DEQ, held a public hearing on September 26, 2011 at its office in Springfield. During the public comment period, LRAPA received four comments. One of the comments required a minor correction to the maintenance plan to clarify transportation conformity requirements. LRAPA

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addressed the other comments, as seen in attachment B. The LRAPA Board of Directors approved the maintenance plan and rule amendments after the public hearing.

**Next steps** If approved, DEQ will submit the maintenance plan and revised rules to EPA as a revision to the Oregon Clean Air Act State Implementation Plan.

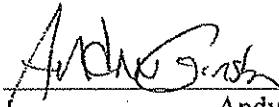
**Attachments**

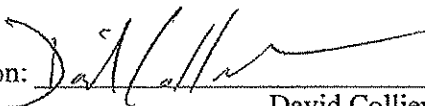
- A. Proposed rulemaking documents:
  - 1. Revisions to Division 204 and Division 200
  - 2. Revisions to LRAPA's Title 29 and Title 32
  - 3. LRAPA Request for redesignation to attainment and Maintenance Plan for Eugene-Springfield PM<sub>10</sub>
- B. Summary of public comments and agency response
- C. Hearing Officer's Report of Public Hearing
- D. Relationship to Federal Requirements questions
- E. Statement of Need and Fiscal and Economic Impact
- F. Land Use Evaluation statement

**Available upon request**

- 1. DEQ proposed rulemaking announcement
- 2. Legal Notice of Hearing
- 3. Written comments received
- 4. LRAPA minutes from public hearing

Approved:

Division:   
 Andy Ginsburg

Section:   
 David Collier

Report prepared by: Brian Finneran  
 Phone: 503-229-6278





A G E N D A

LANE REGIONAL AIR PROTECTION AGENCY  
MONTHLY BOARD OF DIRECTORS MEETING  
MONDAY, SEPTEMBER 26, 2011

12:15 P.M.

LRAPA MEETING ROOM  
1010 MAIN STREET, SPRINGFIELD, OREGON

(Note: Start times for agenda items are approximate.)

1. (12:15 p.m.) CALL TO ORDER
2. (12:15 p.m.) ADJUSTMENTS TO AGENDA
3. (12:20 p.m.) PUBLIC PARTICIPATION (time limited to three minutes per speaker)
  - A. Comments On an Item On Today's Agenda
  - B. Comments On a Topic Not Included On Today's Agenda (Note: This is an opportunity for the public to bring up unscheduled items. The board may not act at this time but may, if it deems necessary, place such items on future agendas. Issues brought up under this agenda item are to be limited to three minutes' speaking time by the person raising the issue. If additional time is necessary, the item may be placed on a future agenda.)
4. (12:35 p.m.) ACTION ITEM: Consent Calendar
  - A. Approval of Minutes of July 25, 2011 Board of Directors Meeting
  - B. Approval of Expense Reports Through August 31, 2011
5. (12:45 p.m.) Advisory Committee
6. (12:55 p.m.) ACTION ITEM: Public Hearing for PM<sub>10</sub> Limited Maintenance Plan for Eugene/Springfield
7. (1:20 p.m.) ACTION ITEM: Request to Dismiss and Approval of Final Order for Enforcement Action Number 10-3234, Jean Lake

REPORTS

8. (1:30 p.m.) DIRECTOR'S REPORT

WORK SESSION

9. (1:45 p.m.) Old Business
  - A. LRAPA Board Reference Guide Binder
  - B.\*Organizational Dynamics and Collaborative Approaches--Next Steps
  - C. Air Toxics Program Development Committee-Status Report
  - D. Personnel Policy Review Committee--Status Report
10. (2:00 p.m.) New Business
11. (2:10 p.m.) EXECUTIVE SESSION: The executive session part of the meeting is closed to the general public. Oregon law allows for executive sessions for specific purposes. The

purpose of this Executive Session is for the Board to evaluate the director's job performance over the past year, and to perform a merit review for possible salary adjustment.

A G E N D A  
LRAPA BOARD OF DIRECTORS MEETING

SEPTEMBER 26, 2011  
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- LRAPA's policy and practice relating to compliance with Oregon government ethics laws, Oregon Revised Statute (ORS) 192.660(i)[to review and evaluate the employment-related performance of the chief executive officer of any public body, a public officer, employee or staff member who does not request an open hearing] authorizes the Board to convene in Executive Session for this purpose.

12. (2:40 p.m.) Action item: Result of Director's Performance Evaluation and Merit Review

#### WRAP-UP

13. (2:50 p.m.) Meeting Wrap-Up and Next Steps

14. (2:55 p.m.) Adjournment

The next regular meeting of the LRAPA Board of Directors is will be announced when a new schedule is set. It will take place in the LRAPA Meeting Room at 1010 Main Street in Springfield, Oregon.

*If you have questions regarding items on this agenda, would like to request a copy of backup material for an agenda item, or would like to be added to the mailing list to receive the agendas for the monthly LRAPA Board of Directors meetings, please call Merrie Dinteman at (541)736-1056 Ext. 225.*

*Location is wheelchair accessible (WCS). American Sign Language (ASL) interpretation is available with 48 hours notice. Please call Merrie Dinteman at (541)736-1056 Ext. 225.*

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\* The board retreat in December 2010 produced a list of eight long-term goals. In order to ensure progress on those goals, board members agreed to select a few to keep in the forefront in the coming months, for regular review to determine whether or not progress is being made. Board members ranked the eight goals in order of importance, and selected the three they believe are initially the most important. Other goals from the list will be selected, over time, for the same consideration. The first three goals agreed to by board members include:

1. Industry wants to work with LRAPA to go beyond minimum pollution requirements. Local residents and industry feel their investments in LRAPA are worthwhile and important.
2. The board and staff get their functions sorted out and go forward in a cooperative spirit. The board will set thoughtful and effective policies, and the entire staff will work to implement board policies.

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3. We implement this process on future issues. You get what you accept and the participants utilize skills learned over the two days. (Referring to collaborative approaches learned in December workshop)

**MINUTES**  
**LANE REGIONAL AIR PROTECTION AGENCY**  
**BOARD OF DIRECTORS MEETING**  
**MONDAY-SEPTEMBER 26, 2011**  
**LRAPA MEETING ROOM**  
**1010 MAIN STREET**  
**SPRINGFIELD, OREGON**

**ATTENDANCE**

**Board:** David Monk, Chair-Eugene; Bill Brommelsiek, Vice-Chair-At-Large (Springfield Area); Mike Fleck--Cottage Grove/Oakridge; Brian Forge-At-Large (General); Scott Lucas-Eugene; Andrea Ortiz-Eugene; Jeannine Parisi-Eugene; Dave Ralston-Springfield; Faye Stewart-Lane County  
(ABSENT: None)

**Staff:** Merlyn Hough-Director; Merrie Dinteman; Tom Freeman; Max Hueftle; Ralph Johnston; Matt Lee; Nasser Mirhosseyn

**Other:** Earl Koenig, Vice Chair, Russ Ayers, Jim Daniels and Laura Seyler-LRAPA Advisory Committee; Ruth Duemler, Eugene; Diana Ebersbacher-Seneca Sawmill; Larry Sanderson-Trus Joist

1. OPENING: Board Chair **Monk** called the meeting to order at 12:18 p.m.
2. ADJUSTMENTS TO AGENDA: **Hough** brought up three adjustments to the agenda.

Postponement of Agenda Item Number 7. **Hough** reported that staff had been notified by the respondent in the enforcement case that there had been a death in the family, and they had requested that the board's action on this item be postponed until the October board meeting. **Hough** said staff agreed to do that.

Stipulated Final Order for Seneca Sustainable Energy. **Hough** said the SFO for the enforcement action was signed after the packets for this board meeting had been prepared and distributed. The board decided to discuss this under the Director's Report agenda item.

Expiration of **Hough's** Current Term on Board of Directors of Cascade Sierra Solutions. The board decided to discuss this under the Director's Report agenda item.

3. PUBLIC PARTICIPATION:

**Ruth Duemler, Eugene.** **Duemler** noted that the board would be considering adoption of a Limited Maintenance Plan for PM10 for Eugene-Springfield, in a later agenda item, and spoke of the high rate of asthma and lung cancer among residents of the area. She suggested that LRAPA establish a medical advisory board, specifically lung experts, to advise the Board of Directors regarding the health effects of air pollution. **Duemler** cited the American Lung Association's reports which give this area poor marks for air pollution; and **Ralston** pointed out that the ALA report is erroneous because it extrapolates Oakridge's wintertime high particulate levels throughout the county. He added that, even though LRAPA has explained Lane County's separate airsheds to ALA and tried to get them to use the correct information, the annual ALA report continues to publish the erroneous data..

**Brommelsiek** commented that there is a medical doctor, Dr. **Larry Dunlap**, on the LRAPA Advisory Committee, and **Duemler** indicated she is familiar with Dr. **Dunlap**.

**Stewart** said Lane County has a Health Advisory Committee made up of a lot of people from the medical field, and suggested that LRAPA tie into that committee rather than establishing a separate committee. **Ortiz** said she was going to suggest the same thing because there is a lot of expertise on Lane County's committee, and there would be a natural connection between that committee and LRAPA. There was brief discussion about how to get LRAPA's concerns on that committee's agenda.

**Hough** said that LRAPA does work in conjunction with Lane County's Health Advisory Committee to put out joint news releases about specific air pollution situations and the potential health threats to area residents. He gave two examples: earlier this September when smoke from wildfires east of the Cascades drifted into the Valley; and in 2008, during the Olympic trials in Eugene, when smoke from California wildfires impacted this area.

#### 4. CONSENT CALENDAR:

- A. Approval of Minutes of July 25, 2011 Board of Directors Meeting. **Lucas** noted that on page 2 of the minutes, he and **Ralston** were reported to have initiated the action to approve the expense reports through May 31, 2011. He said neither he nor **Ralston** was present at the July 25 meeting. **Dinteman** said she would look at the transcript of the meeting and make the necessary correction. *[According to the transcript, the motion was made by **Brommelsiek** and seconded by **Forge**.]*

**ACTION: MSP (Ortiz/Brommelsiek)(8 in favor and 1 [Lucas] abstention) approval of minutes of the July 25, 2011 LRAPA Board of Directors Meeting, as corrected.**

- B. Approval of Expense Reports Through July 31, 2011 and August 31, 2011. **Brommelsiek** noted that the reports include a new column and asked **Mirhosseyini** to explain it. **Mirhosseyini** said the old column was called "Estimated To Date," and he changed it to "Periodic Averages," meaning that the number in that column represents what should be normal for the percentage of the fiscal year that has passed at the time of the report. If the figures are not what they would normally be, the actuals would show in that column.

**Forge** noted that the income from grants and local dues is indicated to be much higher than what is anticipated for the year, with some partners not being able to contribute this year. **Mirhosseyini** explained that the budget was approved based on the requested dues from local partners and the amounts anticipated from state and federal grants. He said he normally adjusts those figures mid-year to represent a more accurate picture of revenues and expenditures.

**Forge** asked if there were a specific reason to wait half-way through the year to make those adjustments, or if they could be made quarterly to give the board a better idea of the agency's fiscal situation. **Mirhosseyini** explained that at the time these reports were prepared, there were a couple of supplemental grant requests which were not yet determined, and he did not want to adjust the figures until the outcome of those requests was known. He said he found out recently that LRAPA did not secure either of those grants. He will make the necessary adjustments for the next monthly reports, and further adjustments will be made at the end of the fiscal year to reflect actuals.

**Monk** said he had some questions about the Everybody Wins section of the expense reports. In the total actuals for the July 31 report, the beginning fund balance was negative \$135,000, and an additional negative \$17,000 made the ending fund balance negative \$152,000. In the August 31 report, the beginning balance began again with negative \$135,000, with another negative \$36,000 and an ending balance of negative \$72,000. **Monk** said he thought the ending balance should be more like a negative \$171,000 rather than \$72,000, and he wondered if there was a typo in the report or if he was misunderstanding the figures. **Mirhosseyini** said the ending fund balance is basically a formula which takes the beginning fund balance and what takes places between revenues and expenditures and modifies the balance, based on the formula. He said he would look to see if perhaps the formula is incorrect. **Mirhosseyini** said he agreed with **Monk**, that the ending balance should be more like negative \$171,000, unless there were some revenues which were not captured in the report. He said LRAPA did receive a ODOE Energy Tax Credit during that month, which may have

impacted the ending balance. **Monk** asked **Mirhosseyni** to send an e-mail to board members when he figured out what the numbers in the report should be.

**ACTION: MSP (Stewart/Forge)(Unanimous) approval of expense reports through July 31, 2011 and August 31, 2011 , as presented.**

5. **ADVISORY COMMITTEE:** Committee Chair **Amy Peccia** was unable to attend this board meeting. In her absence, Vice-Chair **Earl Koenig** reported on the committee's activities for July and August. He said the committee continued to discuss the various sources of information about functions of the board, staff and advisory committee, and would continue that at their meeting the day after this board meeting. They also talked about the possibility of doing quarterly tours of industrial facilities. He said there have been good comments regarding previous tours that have been done to familiarize people with what industry is doing to maintain air quality.

**Ortiz** asked if the committee had received the link to the League of Oregon Cities website, to access the information they have available on functions of boards, committees and staffs. **Hough** said he was not sure what-all they had received, and he would check to be sure they get all the information they have been promised.

**Ortiz** announced that the city of Eugene is doing some training for commissions and board, and anyone who is affiliated with the city of Eugene would be able to attend. She said the training covers public meetings, ethics and legal points of serving on city boards, commissions and committees; and she would find out if others can also attend, so that LRAPA board and committee members could get that training if they want it.

6. **PUBLIC HEARING FOR PM<sub>10</sub> LIMITED MAINTENANCE PLAN FOR EUGENE-SPRINGFIELD:** **Hough** noted that this has been on the board's agenda for the past couple of meetings, the first time just as an overview and the second, to authorize public hearing at today's meeting. **Hough** said there were two parts to the action being requested, one to re-designate the area, officially, as attainment for PM<sub>10</sub>, and the other to adopt a maintenance plan to outline the reasons that LRAPA is confident that the area will stay within the standards for the foreseeable future. **Hough** said the Eugene-Springfield area has been well within the PM<sub>10</sub> standards for quite a few years and has, in fact, been running at about half the standard in recent years.

**Ralph Johnston** explained that the action also included a couple of rule changes, to update some definitions. **Johnston** said the maintenance plan keeps the same controls that are currently in place and just re-designates the area from non-attainment status to what is called a "maintenance area."

**Hough** said the proposal was advertised as required, and several comments were received. Most of those simply required staff to explain an aspect of the plan to the commenter. For example, a person asked if the redesignation would affect the Plant Site Emission Limits for industries in Eugene-Springfield, and the answer is that it would have no effect on Plant Site Emission Limits. Another individual asked whether the maintenance plan would address all permits, and not just a specific source category. The answer, again, was that the maintenance plan would affect any source of PM<sub>10</sub>. The monitoring network is located where it will give LRAPA a continuing sense of PM<sub>10</sub> emissions from residential wood heating, mobile sources and industrial emissions, which are the three source categories of most interest for PM<sub>10</sub>.

**Hough** said a revision was made to the proposal in response to a comment from ODOT, and **Hough** referred to a redlined, revised page 13 of the explanatory document for this agenda item. He stressed that the revision would not change the intent of the proposal, but would simply clarify it. ODOT requested clarification of whether or not hot-spot analysis would be required for transportation projects. **Hough** said staff believes it is appropriate to require hot-spot analysis if the project is of a magnitude great enough to warrant it. **Johnston** explained that the magnitude that would require the analysis would be 125,000 Average Daily Traffic (ADT); and peak traffic at this time in Lane County is on I-5, just south of Beltline, and is about 66,000 ADT. ADT in the Portland area would require hot-spot analysis, but Lane County does not have those significant ADT numbers. **Johnston** said the threshold would not apply to anything that has been done in Lane County before. He said an example of a project that would require the hot-spot analysis for PM<sub>10</sub> would be a mega-diesel truck

terminal. The redesignation and maintenance plan would exempt the analysis for regional PM<sub>10</sub> conformity; however, hot-spot conformity analysis still needs to be done for major transportation projects.

**Monk** noted that there was a proposal several years ago to put in a truck/rail link in northern Eugene, but it did not happen. He asked if that would trigger the hot-spot requirement, and **Johnston** said it would not meet the threshold for the requirement.

**Parisi** asked if ODOT's request was just to clarify the proposal or to recommend that LRAPA change the proposal. **Hough** responded that it was two-fold. Staff wanted to be sure the agency's intent was clear in the proposal; but ODOT also suggested that LRAPA exempt hot-spot analysis, just from a program efficiency standpoint. ODOT's specific request was for LRAPA to determine whether a risk for PM<sub>10</sub> hot-spot violations still exists and, if it does not, incorporate that into the maintenance plan before it becomes final. This reduces the level of analysis that would currently be necessary to carry out mega-projects in the Eugene-Springfield area, and acceptable streamlining measures would reduce the administrative burden and the costs of such mega-projects during the environmental phase. When LRAPA staff looked at what it would take to trigger the requirements, it was so large that staff could not make a case to include in the plan a basis for a project that large.

**Ortiz** asked what will happen if, in the future, the economy improves and traffic increases to levels that would trigger the hot-spot analysis requirement. **Johnston** explained mobile sources are the primary source for carbon monoxide, and conformity analysis is done regionally for carbon monoxide. It has been demonstrated that mobile sources are very low contributors to particulate matter. Mobile sources have been exempt from regional conformity analysis for PM for a long time; but regional conformity analysis must be done for carbon monoxide every three or four years.

**Hough** said, even in the 1980s when emissions of everything, including PM<sub>10</sub>, were higher, regional conformity, for particulate matter, was not required for transportation, because mobile source emissions were not a big enough part of the emission inventory. ODOT did not question that part and even sent a letter in 1994 making it clear that they agreed that the analysis should not be required. ODOT has changed its rules over time, to get more specific about criteria for hot-spot analysis, and they asked for clarification so that they would know if LRAPA was asking for a relaxation of that requirement.

**Forge** referred to the Land Use Evaluation Statement portion of the report, in the section regarding industrial emissions control technology. He noted that, because Eugene-Springfield has been a nonattainment area for PM<sub>10</sub>, industrial sources have been required to use Lowest Achievable Emission Rate (LAER) technology. He asked if changing the area to attainment would weaken those requirements by requiring Best Available Control Technology (BACT) instead of LAER. **Forge** also asked if the Seneca Sustainable Energy permit was written based on LAER or BACT.

Regarding the Seneca Sustainable Energy permit, **Hough** explained that because their PM emissions would be under the 15 Ton Per Year threshold, the permit did not require either LAER or BACT analyses for particulate matter. He added that, even though they did not have to do the analysis, the control technology they chose to use would probably be in the category of LAER because it is a four-field electrostatic precipitator which is beyond anything that had been seen in Oregon, or in the Pacific Northwest, before.

**Hough** went on to explain that both LAER and BACT are very stringent levels of control; however economics can be considered in the case of BACT but not with LAER. LAER is used because you are in an area that violates federal standards, and a new industry wants to locate in the area. Allowing the new industry would typically require that they use the best control technology that has been used by any facility, anywhere, at any time, regardless of cost. The fact that BACT allows consideration of cost/effectiveness is why it is considered a more workable level of control technology.

**Monk** asked if any new industry coming into the area, or a major modification to an existing source, would fall under these requirements. **Hough** said each specific pollutant is viewed differently. The Seneca Sustainable Energy facility did have to undergo BACT analysis for carbon monoxide because the area is a maintenance area for CO. It also had to undergo threshold analysis for PM<sub>10</sub>, and a separate modeling analysis for nitrogen oxides.

Public Hearing. **Monk** opened the public hearing at 12:53 p.m., asking if anyone in the audience wished to comment regarding the proposal. No one responded, and **Monk** closed the public hearing at 12:54 p.m.

**Hough** said notice of this hearing was put out to the public in several ways. Notice of hearing and solicitation of public comment was published in the Eugene *Register Guard* and in the Secretary of State's *Oregon Bulletin*. In addition, notice was sent to LRAPA's list of interested persons. Because today's hearing was a joint LRAPA/DEQ hearing, DEQ also sent the notice to its own list of interested persons.

**ACTION: MSP (Stewart)(Ralston)(Unanimous) adoption of the proposed Eugene-Springfield Limited Maintenance Plan for PM<sub>10</sub> and associated amendments to LRAPA rules, as revised.**

**Brommelsiek** thanked **Johnston** for an outstanding job of putting the maintenance plan and rulemaking package together and working with the advisory committee to bring it to the board.

**Monk** said he is glad this plan is finally in place but did note that being a nonattainment area probably has afforded LRAPA some opportunities to get grant funding that it would not otherwise have gotten. He said it will be good, however, to finally have the area redesignated as attainment, since it has been complying with the standards for so many years.

**Parisi** asked if there will be press release regarding this accomplishment. **Hough** responded that, while staff does need to get the word out about major accomplishments, this one will not be completed until the Oregon Environmental Quality Commission had adopted it, probably in December, and the EPA has accepted it and made the official redesignation. **Hough** said he will work with staff to put out some kind of release to the public about the board's having adopted this plan.

7. REQUEST TO DISMISS, AND APPROVAL OF FINAL ORDER, FOR ENFORCEMENT ACTION NUMBER 10-3234, **JEAN LAKE**: This item was postponed until the October board meeting, in response to a request from the respondent. Board members turned in their copies of the case review to staff, to be re-distributed in the packets for the October meeting.
8. DIRECTOR'S REPORTS FOR JULY AND AUGUST 2011:

Air Quality. **Hough** reported that the most interesting air quality conditions happened a week or two after the director's report was prepared. Smoke from Central Oregon wildfires impacted this area, sending the Air Quality Index into the moderate range for a few days, for both ozone and particulate. He added that some other areas of the state, closer to the fires, had AQIs into the unhealthy and even the hazardous ranges. **Hough** said LRAPA worked with Lane County health to prepare press releases, to alert people to health issues related to the smoke getting into the Valley.

Monthly Board Meeting Schedule. **Hough** said staff had surveyed board members regarding changing the monthly board meeting day and time, to accommodate **Fleck**'s other commitments, and that a noon meeting on the third Thursday of each month seemed to be the best possibility. Board members agreed to that.

**Brommelsiek** asked if the advisory committee will also need to change its schedule, as a consequence, and **Koenig** said that was not yet known.

The next LRAPA Board of Directors meeting will be held at 12:15 p.m. on Thursday, October 20, 2011.

**Hough** added that the plan still is not to have a meeting in August or December unless the board feels it is critical to have more than ten meetings per year.

Complaints. **Lucas** pointed out that a dent collision repair shop in central Eugene had 32 complaints in July and none in August, and he wondered whether that was a neighbor calling every day for a month, or a lot of people calling on one day, and whether they fixed something that resulted in no complaints the following month. Staff checked on that situation and found that the shop had only two complaints in July. **Dinteman** said she had put the wrong number in the report.

Train Idling in West Eugene Railyard. **Ortiz** referred to a meeting held in Eugene which she was unable to attend, and asked **Hough** about the meeting. **Hough** said LRAPA had sent out invitations to elected officials to attend, but told them it was not necessary for them to attend the first meeting for scoping. Among those in attendance were **Brenda Wilson** from the city of Eugene, Lane County Commissioner **Rob Handy**, **Kevin Downing** from Oregon DEQ, and a couple of people from Oregon Toxics Alliance. LRAPA staff went through the history of complaints received from residents of the area, of which there were not a great many in recent years. He added that the city of Eugene had no recorded complaints. The session was mainly to share information. **Hough** said **Downing** had a lot of helpful information about the work he's done with some things that are being explored in California and in Spokane. He said railroad activities have been at a generally lower operating level, and there is some evidence that they are trying to accommodate the location of the idling. **Hough** said **Brenda Wilson** planned to brief Mayor **Piercy** and Councilor **Ortiz**.

**Hough** said there is some interest in expanding railroad operations in Eugene because of the Coast Line increasing service levels to Eugene. **Ortiz** asked if anyone from Union Pacific was at the meeting, and **Hough** said no. He said the meeting was intended to be the first in a series of two or three meetings, where more elected officials and Union Pacific representatives would be involved if there is a specific request. Staff wanted to be sure there is support from elected officials before pressing forward with the issue. **Ortiz** said there is another line that runs north/south, which she believes is a Burlington line, which seems to do most of the idling in her neighborhood. She said she hopes they will get into the conversation, as well.

Wetlands Burning. **Stewart** said he had received a couple of calls about smoke from open burning in the wetlands in West Eugene, and he asked if they had a permit from LRAPA, and who was doing the burning. **Hough** responded that it is a coalition of The Nature Conservancy, BLM, the city of Eugene, the Corps of Engineers, and others. They submit a joint application to LRAPA each year, outlining their plans for open burning and the conditions under which they plan to burn. LRAPA issues a permit, either agreeing with their proposal or adding more restrictions to it. They burned three parcels last Tuesday, and it became clear to them, as well as to LRAPA, that the third burn occurred too late in the day. They are looking at perhaps putting a 4:00 p.m. end time on their burns, because the winds start to shift about that time in the afternoon. **Stewart** said he observed the smoke as he was headed home that day, and the smoke seemed to drift along closer to the ground and linger in the Valley, rather than going straight up like open burning of grass seed fields used to do. **Stewart** said he had no calls on either of the first two burns, but did get some about the third one. **Hough** said the coalition does a lot of outreach before burning, and they have a lot of equipment on the ground to help manage the burns. He said he expects future applications and permits to specify end times for the burning, to try to avoid having this same problem in the future.

Seneca Sustainable Energy (SSE), Stipulated Final Order (SFO). **Hough** reported that LRAPA and SSE had signed an SFO as part of an enforcement action taken after the facility did not pass its first compliance source test. **Hough** explained that SSE conducted stack testing during April-July 2011 as required by the Air Contaminant Discharge Permit issued by LRAPA. SSE encountered an issue with the testing which appears to be related to the combination of air pollution control equipment installed to reduce particulate matter (PM) and nitrogen oxides (NOx) emissions. When all of the NOx emission controls were operating, including the Selective Non-Catalytic Reduction (SNCR) equipment, the PM emission test results were outside the permit limits; when all of the NOx emission controls except the SNCR were operating, the PM emission test results were well within the permit limits. Engineering testing indicates that the operation of the SNCR equipment may be causing the test method to generate false readings of PM emissions.

**Hough** said the SFO requires SSE to an conduct alternative, more sophisticated and accurate PM stack testing method which does not have that interaction and so is considered more accurate. The alternative test method is also more expensive. The SFO outlines the conditions and penalties for SSE to operate without the SNCR equipment (except during the test itself), until the test results are reviewed and approved, in order to reduce the risk of exceeding the more restrictive PM emission limits. **Hough** said SSE was required to submit the source test protocol, for LRAPA approval, by September 28, 2011; and the source testing is to be completed by October 12, 2011, with a written report documenting the test results submitted to LRAPA no later than 45 days after the testing is completed. If the new PM stack testing indicates compliance with the PM



emissions limits with the SNCR operating, then SSE is required to resume continuous operation of the SNCR immediately upon LRAPA approval of the test results.

SSE believes the increased PM emissions shown in their initial test is an artifact of the test method, and they are hoping the more accurate test method will prove that to be the case. They have said they are prepared to not operate the SNCR until they get the results of the new testing back, and **Hough** said that is what triggered the SFO. There are penalties required because there are parts of their permit conditions with which they will not comply if the SNCR is not operating. SSE has agreed to an initial civil penalty as part of the signed SFO. Depending on what the tests show, there could be additional penalties assessed, depending on how much their NOx emissions exceed the permitted limits during this period. **Hough** added that SSE has been committed to doing the more expensive testing and to paying whatever penalties are assessed by LRAPA.

Without the SNCR equipment operating, **Hough** said, the NOx emissions are expected to exceed the 42.3 pounds per hour rolling average permit limit, possibly up to 56 pounds per hour. NOx emissions are considered ozone precursors and are of greatest concern in July-August during the summer ozone season.

**Hough** said the SFO includes the additional testing requirements, compliance schedules, interim emission limits, and specified penalties. The initial stipulated penalty is \$9,856; additional penalties of \$3,800 to \$15,200 are imposed if the NOx emissions exceed the annual permit limit. He added that the SSE emissions during the SFO time period are not expected to cause or contribute to any violations of the ambient air quality standards in the Eugene-Springfield area.

**Hough** said staff knows that there is a lot of interest in this facility. If the more sophisticated testing shows that the facility is able to operate both the PM and NOx controls and meet the permit limits, then the SFO will phase out. If the testing identifies some continuing problem, the SFO will go to Phase II.

**Ralston** asked why SSE is being fined if the SNCR control equipment is causing a false PM reading. **Hough** explained that the test method they chose to use costs several thousand dollars, whereas the more sophisticated testing they will now do is in the tens of thousands of dollars. In addition, there was another alternative they could have chosen, which would have been to put their argument in the case that this is an artifact. What they did not want to do, though, is to take the risk of being wrong and violating the permit limits. **Hough** explained further that PM is a higher priority in Lane County than NOx, especially after August when there is less of an ozone issue. They have chosen to temporarily turn off the NOx controls in order to prove compliance with PM limits. **Hough** said the tests will hopefully show that the facility is in compliance, and they will be able to be back up to full normal operation shortly after the testing is completed; and the SFO will be settled. If the facility is shown not to be in compliance, LRAPA will work through the situation with SSE.

**Parisi** commented that this issue reminds her of when you build a LEED-certified building with really high environmental standards for building efficiency, you go through a process called "commissioning," which is a test to see if all the equipment that you put on your building, to bring energy usage down to really small standards, actually performs. She said when the city of Eugene, and EWEB, did that very early on, the investment of the substantial amount of money to do the commissioning really did prove whether or not the investments were worthy. Sometimes they do not perform as installed, and you have to do a lot of fine-tuning; and it is worth the extra investment to have the assurance that the equipment is performing as you expected it to perform. **Parisi** asked how LRAPA will know what the accurate particulate readings are at the facility, if the tests keep giving false readings; and what would be the long-term strategy if testing shows that the high readings were not an artifact and a false positive.

**Hough** explained that in the standard test method for a combustion source like SSE, there is a front half that is primarily filtering the particles out; and there is a back half which is an ice bath that condenses particles. What happens is that, because it is an ice bath, the condensibles can be more extreme than what atmospheric conditions would do. He added that some of the salts that are part of the urea addition that's part of the SNCR process get caught in that, as well, and that has been recognized as a problem. He said it is only when you get down to these very restrictive limits that having a back half complication like that becomes an issue. He said the front-half testing has been better than they anticipated.

**Parisi** asked if it will be possible to back calculate the methodology to back out whatever the false reading is, and **Hough** said that would be the next step, after comparison testing with the other, more sophisticated method. He said the other method is a dilution-tunnel method in which you have this condensable force but you are simulating what the atmosphere does. He said it is the method used for woodstove laboratory testing, but it is very expensive to set up and operate and requires a team of the best source testers to be able to handle this type of a testing operation. If SSE complies using that method, **Hough** said, LRAPA will need to decide whether they will be required to use the same method every time or to use the standard method, which **Hough** said he believes they will be using in tandem with the more sophisticated method for the October 12 source testing. He said they could look at the front half and compare it to the results of the dilution tunnel and also look at the back half and how much it adds compared with what the dilution tunnel adds to the front-half concentration. It may be that the standard method could be used with the information they gather from the comparison testing done on October 12.

**Parisi** asked how frequently SSE will be required to do compliance source testing, and **Hough** said source testing is required to be performed annually, in addition to the continuous emissions monitoring performed at the site. If the annual source testing is not compliant, a source is required to test quarterly instead, until compliance is demonstrated.

**Brommelsiek** asked if the testing is based on PM<sub>10</sub>, PM<sub>2.5</sub> or whole particulate; and **Hough** said it is technically based on PM<sub>10</sub> because that was the permit requirement in effect at the time the permit was written. **Hough** added that for combustion processes like this one, PM<sub>10</sub> is essentially the same as PM<sub>2.5</sub>, or all fine particulate.

Woodstove Changeout Program. **Hough** reported that ODOE and ODEQ did an audit of LRAPA's woodstove replacement program, and they were quite pleased with how LRAPA is operating the program. **Hough** said it has given the other agencies some ideas for improvements to programs in other places. He explained that the funding comes from the US Department of Energy and, in Oregon, the Oregon Department of Energy and the Oregon Department of Environmental Quality are involved. This was the first time that US DOE had someone come to LRAPA and review some of the highlights of the program and how it is being operated.

**Parisi** asked if LRAPA is going to be able to spend all the grant money for the woodstove changeout program in Eugene-Springfield by the November or December deadline and said if there is anything EWEB can do to help market the program, she would be glad to do that. She said EWEB has an electronic newsletter going out in the next couple of weeks, and they have mechanisms to get the word out which might be useful. **Hough** said he believes **Markos** has enough people signed up for the program to use the available funding, in Eugene-Springfield and Cottage Grove. He said the agency's bigger issue has been making sure the interest level in Oakridge is being fully met, because that area is the higher priority. **Hough** added that LRAPA might be getting another \$50,000 for that same program, but **Markos** has enough people on the waiting list to use all of that, as well. He thanked **Parisi** for her offer and said he would be sure **Markos** knows she is willing to help if help is needed.

#### Complaints.

- *Pacific Recycling.* **Monk** noted that Pacific Recycling had two violations, back to back, and he asked what was happening with that situation and where the facility is located. **Hough** said Pacific Recycling is located near J. H. Baxter. A part of their process is to recycle metal, and some of the equipment that they're getting for metal recycling has other things on it. If they are not diligent in avoiding fires or quickly extinguishing fires, there is an obvious smoke problem, and LRAPA gets complaints about it. LRAPA is continuing to work with Pacific Recycling to establish a good understanding of the requirements and a strong compliance working relationship with them. **Lucas** noted that they were cited on June 27 for burning rubber hoses, and then were cited again on July 8 for the same thing. He commented that the civil penalty for the second violation went up only slightly, and he wondered at what point the fine would go up substantially to be sure the respondent understands the consequences of violating LRAPA's rules. **Hough** responded that prior violations is one of the aggravating/mitigating factors that are part of the civil penalty matrix calculation. A subsequent citation for burning rubber hoses is not as big a factor as the overall category into which the violation falls, as far as the size of the penalty. **Hough** said subsequent burning of anything would add to the amount of a civil penalty; however, it would not add substantially. **Lucas**

asked if at some point, those subsequent actions do add substantially to the amount of penalty, or if a business might just figure a fine of \$1,000 every few weeks is cheaper than changing their practices and just accept periodic fines as a part of doing business; making it to their advantage to continue to violate the rules. **Hough** responded that there are multiple factors which affect the amount of the penalty, such as the level of cooperativeness, the intent of the respondent (whether it's reckless, intentional or negligent), and those factors can add 10, 20, or 30 percent to the base penalty; however, the penalty will not double or quadruple.

- *Cottage Grove Manor.* **Fleck** said he had an e-mail contact with the board of that facility, and he understands that they are selling the property to St. Vincent DePaul. He asked how that works, when the property changes ownership with an enforcement action pending. **Hough** suggested that **Fleck** get together with himself and **Tom Freeman** to talk about the situation.

- *Northwest Mineral Resources.* **Forge** asked how the enforcement action with Northwest Mineral Resources at Saginaw is coming, and **Hough** said his understanding is that the problem deals with whether a section of land was authorized for use as a road. He said he believed the county had sued the company and has asked LRAPA for input along the way. LRAPA inspector **John Morrissey** has been to the location and has given background information to the county, but it has not related to violation of LRAPA rules or permits. He said that was the case to which **Stewart** had referred at the previous meeting when he commented on **Morrissey's** level of inspection activity at the site. **Forge** said he has noticed excessive dust events a couple of times, and **Hough** asked him to contact LRAPA if he sees more such events.

Oakridge PM<sub>2.5</sub> Advisory Committee. **Brommelsiek** said he had received several agendas for these advisory committee meetings in his packet, but no meeting notes. **Hough** said he had intended to give board members the agendas so that they can see the type of information the committee is covering. He said if board members are interested, he can give them copies of the same information discussed with the advisory committee. **Brommelsiek** said he would like to have a copy of it, or perhaps have it put on the agency's website.

Cascade Sierra Solutions (CSS) Board of Directors. **Hough** said his term on the CSS Board of Directors will expire in December; and, although other CSS board members have welcomed him to apply for another term, he is not inclined to do so. He said he is very comfortable with where CSS is at this point and is inclined not to continue on that board; however, if the LRAPA board feels it is important for him to continue, he will certainly factor that into his plans for the coming year.

**Monk** commented that, when CSS was first established, he believed **Sharon Banks** had said LRAPA would have a permanent position on its board. He asked if that is still the case and asked **Hough** to get clarification, because he was confident that Banks had told the LRAPA board that the agency would have a permanent seat on the CSS board, whether it be **Hough** or another staff member. **Hough** said he really was asking the board for feedback about how important they believe it is for him to remain on the board.

**Monk** said this item should be placed on the October meeting agenda so that the board can talk about it before the term actually expires.

**Lucas** asked **Hough** to also consider who else at LRAPA might be appropriate to sit on that board, if the board decides to allow **Hough** to step down but still wants someone from LRAPA there.

**Fleck** said he would like to get some background information on CSS. **Mirhosseyni** suggested he look at the CSS website, which has extensive information. He also said he might have an electronic version of the information **Banks** presented to the board in 2010, which he could forward to **Fleck**. **Dinteman** said she would send **Fleck** a copy of the minutes of that 2010 meeting, or get him the specific meeting date so that he will know where to find them on LRAPA's website.

## 9. OLD BUSINESS:

- A. LRAPA Board Information Binders. Staff will soon have the contents of the binders on flash drives or CDs for board members.
- B. Organizational Dynamics and Collaborative Approaches. **Hough** said he had originally put on today's agenda an item to discuss scheduling board tours of industrial facilities; however, the agenda was too full, and that item was postponed until October. In the meantime, the advisory committee will be discussing it, as well, to perhaps frame some issues for the board to talk about at its October meeting.

**Monk** said he had spoken with **Bob Chadwick** of Consensus Associates, who had suggested that having some face-to-face meetings between board members and industrial facility managers would be a way to engage industry and build a better working relationship between industry and LRAPA.

- C. Air Toxics Program Development Committee. **Brommelsiek** reported that the committee discussed the efforts underway to develop the plan for the Oakridge PM<sub>2.5</sub> nonattainment area. Staff will be looking at the effect of the woodstove changeout program on fine particulate levels; and, if the program is not adequate to reduce those levels sufficiently to meet the new standard, the Oakridge advisory committee will need to look at additional changeouts and more restrictive wood-burning practices. **Brommelsiek** noted that more than half of the business of replacing the old, uncertified woodstoves in Oakridge has come to Springfield businesses.

Air toxics monitoring has stopped at both the Amazon Park and Petersen Barn sites, due to lack of funding. Final analysis of the sampling which has been done at the two sites is still being completed. When all the information is in, hopefully in about a month, the committee can look at the comparison between the two sites, which should help to determine where LRAPA should go from here with regard to air toxics.

Much of the last PATSAC meeting was devoted to discussion of environmental justice, and they have come up with a technique using census tract information about minority populations, and overlaid that with the information on potential long-term exposures identifying those census tracts that have elevated levels compared to the average. They are using that in their decision-making, regarding which control strategies to propose, to address air toxics in the Portland area. The LRAPA committee talked a bit about what direction LRAPA should take. **Brommelsiek** said the biggest question was how much of what PATSAC has done can LRAPA steal to use in Lane County. There was a sense that the committee believes the area and residential wood combustion, on-road, off-road equipment emissions, etc., are probably similar in Lane County to what has been found in Portland; however, the point source information from PATSAC probably is not as usable, because Lane County's point sources are not that similar to those in the Portland area.

**Brommelsiek** said the main questions the committee is working with, regarding the PATSAC data are:

- Does adopting PATSAC's environmental justice tool for Lane County make sense?
- What processes should we follow, if we decide to move forward with some of the results of the PATSAC study?
- How should we go forward in Lane County?
- Can we assume that air toxics chemistry is similar in Portland, vs. Lane County? This is something scientists will need to review.
- What are DEQ and EQC going to do for follow-up to the PATSAC? If they accept the committee's recommendations and develop some programs that are appropriate for Portland, perhaps LRAPA can adopt them for Lane County, as well.
- Are there any legal or regulatory limitations on what, or how, LRAPA can move forward?

**Brommelsiek** said the committee will likely meet again early in November, assuming that the combined results are back from Amazon Park and Petersen Barn monitoring.

- D. Personnel Policy Review Committee. **Monk** reported the committee went over the draft personnel policy manual, and he had a few suggested changes. He said he thinks the draft is close to being ready to bring to the board. He said he knew that staff were still getting information, and **Hough** said he is waiting for legal review of the insurance benefits portion of the manual. **Monk** said **Sharon Rudnick** had advised the committee not to be too specific in what is included in the manual, with regard to insurance and other things that could change periodically, to avoid having to change the manual, itself, too frequently.

**Monk** said once the legal review is completed, the committee will get the draft manual to the board. He said **Hough** had brought a request to the committee, regarding the agency's ability to borrow money, and that it would be easier to do that if LRAPA had an organizational commitment from participating governments, support LRAPA. **Monk** said **Fleck** and **Stewart** were both unsure whether that would be possible at this time. **Hough** explained that a five-year commitment by the local participating governments would be helpful for the personnel policy, regarding retirement plan decisions. There has been some discussion of going with a PERS hybrid plan which would have less liability than the traditional PERS plans but would provide a better retirement for employees. Going to such a plan, however, would require that the agency continue to exist for a minimum of five more years, because it takes five years to employees to become fully vested in the plan. If the agency were to be eliminated prior to that, the amount put into the plan by employees would still be there for them; however, the amount put in by the agency would be lost. **Hough** said a second way to get into the PERS hybrid plan would be to have a line of credit, secured by the office building, and that would have to be endorsed by one or more of the IGA partners, to allow LRAPA to go lower on its reserves in tough financial times than would otherwise be possible. **Hough** said that will be part of the committee's conversation at its next meeting.

**Monk** said there are some possible legislative changes which the board had talked about, and a lot of the statutory language that creates LRAPA might be modified if the five-year commitment were achieved, from any or all of the partner governments. He it is not clear whether the up-coming sort legislative session would be the right time to make those requests. **Hough** said the short legislative session is intended more for fine-tuning the budget and other adjustments, rather than for substantive discussions.

**Ortiz** said LRAPA should be very cautious about taking this kind of request to the Legislature, because once you start making that kind of changes, you don't know what the end result will be by the time the request makes it through the legislative process. It could be problematic down the road. She said she understands that, at this point, the five-year commitment is just a concept, and that the committee will not make any decisions about it without first bringing it to the full board.

**Fleck** reiterated remarks he has made at other meetings, that the Cottage Grove City Council believes that, if the city is expected to pay dues to LRAPA, it should have its own full-time seat on the board. He said it is a big issue for the council and must be taken into consideration when talking about changing the statutory language governing LRAPA.

#### 10. NEW BUSINESS:

Performance Measurement Tools. **Monk** said he hoped this year's evaluation of **Hough's** performance as director will produce some additional performance measurement tools for use in future evaluations.

LRAPA Use of Civil Penalty Money Paid to the Agency. **Brommelsiek** noted the conversation at the July meeting regarding the penalties collected by LRAPA going to Lane County, and possible legislative change or discussion with the county, to have that money given back to LRAPA for use in air quality programs. He said he would like to put the subject on a future agenda so that the board can develop a path forward.

**Parisi** again cautioned the board about the risk involved in opening up legislative change, especially at the state level, because you don't know what you will get by the time your request goes through the legislative process. She said broader conversations with individual legislators would help to evaluate the risks and the chances of success. **Parisi** suggested that, rather than trying for a legislative fix, an intergovernmental agreement with the county should be explored. **Monk** agreed,

and said the county does not earmark those funds because it is not known, from year to year, how much money will be collected by LRAPA and forwarded to the county. Perhaps if the county were not in a position to contribute, that money coming from LRAPA could be used as the county's contribution.

11. EXECUTIVE SESSION FOR DIRECTOR'S PERFORMANCE EVALUATION: The board went into executive session, with the intention of coming back into open session afterwards. Open session resumed at 3:05 p.m., and members of the audience who wished to do so were invited back into the room for the remainder of the open session.
12. RESULTS OF DIRECTOR'S PERFORMANCE EVALUATION AND MERIT REVIEW: No action was taken at this time.
13. MEETING WRAP-UP AND NEXT STEPS: The board will discuss, at its October 20 meeting, the strategic plan and updated priorities. **Monk** said he would like to do some scenario planning and determine what the board can do to help support LRAPA and provide a greater sense focus. **Monk** also suggested that board members use **Brommelsiek's** comments to help redo the director's performance evaluation form, including any different management review evaluation points brought up under the strategic plan and updated priorities discussion.
14. ADJOURNMENT: The meeting adjourned at 3:10 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Thursday, October 20, 2011, 12:15 p.m., in the LRAPA meeting room at 1010 Main Street in Springfield, Oregon.

Respectfully submitted,

**Merrie Dinteman**  
Recording Secretary

## **Attachment 2**

### **Evidence that the state has the necessary legal authority**

See Attachment 1.1 "Commission Authority" (page #2 of Staff Report, Agenda Item D of the December 15-16, 2011, EQC meeting)





## **Attachment 3**

### **Provisions submitted for approval**

#### **3.1 Adopted and amended rules submitted to Secretary of State\***

- 3.1a General Air Pollution Procedures and Definitions: OAR ~~340-200-~~: 0040. Effective December 21, 2011
- 3.1b Stationary Source Notification Requirements: OAR ~~340-204-~~: 0010, 0030, 0040. Effective December 21, 2011
- 3.1c LRAPA Request for Redesignation to Attainment and Maintenance Plan for Eugene/Springfield PM<sub>10</sub> Maintenance Plan. LRAPA Board of Directors adopted September 26, 2011\*
- 3.1d Designation of Air Quality Areas: LRAPA Title **29**. LRAPA Board of Directors adopted September 26, 2011\*
- 3.1e Emission Standards: LRAPA Title **32**. LRAPA Board of Directors adopted September 26, 2011\*

#### **3.2 Redline/strikeout version of adopted, amended and repealed rules submitted to Secretary of State\***

- 3.2a General Air Pollution Procedures and Definitions: OAR ~~340-200-~~: 0040. Effective December 21, 2011
- 3.2b Stationary Source Notification Requirements: OAR ~~340-204-~~: 0010, 0030, 0040. Effective December 21, 2011
- 3.2c LRAPA Request for Redesignation to Attainment and Maintenance Plan for Eugene/Springfield PM<sub>10</sub> Maintenance Plan. LRAPA Board of Directors adopted September 26, 2011\*
- 3.2d Designation of Air Quality Areas: LRAPA Title 29. LRAPA Board of Directors adopted September 26, 2011\*
- 3.2e Emission Standards: LRAPA Title 32. LRAPA Board of Directors adopted September 26, 2011\*

\*Denotes rules and maintenance plan that were not submitted to Oregon Secretary of State. Oregon's Secretary of State only files Oregon Administrative Rules, therefore does not accept local municipality rule amendments. The rules and maintenance plan were adopted by Lane Regional Air Protection Agency's Board of Directors and Oregon Environmental Quality Commission. These rules are being submitted to EPA in order to show a complete account of the rulemaking package.



**DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION 200  
GENERAL AIR POLLUTION  
PROCEDURES AND DEFINITIONS**

**General**

**340-200-0040**

**State of Oregon Clean Air Act Implementation Plan**

(1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by the Department of Environmental Quality and is adopted as the state implementation plan (SIP) of the State of Oregon pursuant to the federal Clean Air Act, 42 U.S.C.A 7401 to 7671q.

(2) Except as provided in section (3), revisions to the SIP will be made pursuant to the Commission's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval. The State Implementation Plan was last modified by the Commission on December 15, 2011.

(3) Notwithstanding any other requirement contained in the SIP, the Department may:

(a) Submit to the Environmental Protection Agency any permit condition implementing a rule that is part of the federally-approved SIP as a source-specific SIP revision after the Department has complied with the public hearings provisions of 40 CFR 51.102 (July 1, 2002); and

(b) Approve the standards submitted by a regional authority if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

**NOTE:** Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the United States Environmental Protection Agency. If any provision of the federally approved Implementation Plan conflicts with any provision adopted by the Commission, the Department shall enforce the more stringent provision.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 35, f. 2-3-72, ef. 2-15-72; DEQ 54, f. 6-21-73, ef. 7-1-73; DEQ 19-1979, f. & ef. 6-25-79; DEQ 21-1979, f. & ef. 7-2-79; DEQ 22-1980, f. & ef. 9-26-80; DEQ 11-1981, f. & ef. 3-26-81; DEQ 14-1982, f. & ef. 7-21-82; DEQ 21-1982, f. & ef. 10-27-82; DEQ 1-1983, f. & ef. 1-21-83; DEQ 6-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 25-1984, f. & ef. 11-27-84; DEQ 3-1985, f. & ef. 2-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 10-1986, f. & ef. 5-9-86; DEQ 20-1986, f. & ef. 11-7-86; DEQ 21-1986, f. & ef. 11-7-86; DEQ 4-1987, f. & ef. 3-2-87; DEQ 5-1987, f. & ef. 3-2-87; DEQ 8-1987, f. & ef. 4-23-87; DEQ 21-1987, f. & ef. 12-16-87; DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88; DEQ 2-1991, f. & cert. ef. 2-14-91; DEQ 19-1991, f. & cert. ef. 11-13-91; DEQ 20-1991, f. & cert. ef. 11-13-91; DEQ 21-1991, f. & cert. ef. 11-13-91; DEQ 22-1991, f. & cert. ef. 11-13-91; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 24-1991, f. & cert. ef. 11-13-91; DEQ 25-1991, f. & cert. ef. 11-13-91; DEQ 1-1992, f. & cert. ef. 2-4-92; DEQ 3-1992, f. & cert. ef. 2-4-92; DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 19-1992, f. & cert. ef. 8-11-92; DEQ 20-1992, f. & cert. ef. 8-11-92; DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 26-1992, f. & cert. ef. 11-2-92; DEQ 27-

1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 8-1993, f. & cert. ef. 5-11-93; DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, f. & cert. ef. 11-4-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 1-1994, f. & cert. ef. 1-3-94; DEQ 5-1994, f. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996(Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef. 10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03; DEQ 14-2003, f. & cert. ef. 10-24-03; DEQ 19-2003, f. & cert. ef. 12-12-03; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 10-2004, f. & cert. ef. 12-15-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 7-2005, f. & cert. ef. 7-12-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 5-2008, f. & cert. ef. 3-20-08; DEQ 11-2008, f. & cert. ef. 8-29-08; DEQ 12-2008, f. & cert. ef. 9-17-08; DEQ 14-2008, f. & cert. ef. 11-10-08; DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 3-2009, f. & cert. ef. 6-30-09; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 2-2010, f. & cert. ef. 3-5-10; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 14-2010, f. & cert. ef. 12-10-10; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION 204  
DESIGNATION OF AIR QUALITY AREAS**

**340-204-0010**

**Definitions**

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and 340-200-0020, the definition in this rule applies to this division. Definitions of boundaries in this rule also apply to OAR 340 division 200 through 268 and throughout the State of Oregon Clean Air Act Implementation Plan adopted under 340-200-0040.

- (1) "AQCR" means Air Quality Control Region.
- (2) "AQMA" means Air Quality Maintenance Area.
- (3) "CO" means Carbon Monoxide.
- (4) "CBD" means Central Business District.
- (5) "Criteria Pollutant" means any of the six pollutants set out by the Clean Air Act (sulfur oxides, particulate matter, ozone, carbon monoxide, nitrogen dioxide, and lead) for which the EPA has promulgated standards in 40 CFR 50.4 through 50.12 (July, 1993).
- (6) "Eugene-Springfield UGB" means the area within the bounds beginning at the Willamette River at a point due east from the intersection of East Beacon Road and River Loop No.1; thence southerly along the Willamette River to the intersection with Belt Line Road; thence easterly along Belt Line Road approximately one-half mile to the intersection with Delta Highway; thence northwesterly and then northerly along Delta Highway and on a line north from the Delta Highway to the intersection with the McKenzie River; thence generally southerly and easterly along the McKenzie River approximately eleven miles to the intersection with Marcola Road; thence southwesterly along Marcola Road to the intersection with 42nd Street; thence southerly along 42nd Street to the intersection with the northern branch of US Highway 126; thence easterly along US Highway 126 to the intersection with 52nd Street; thence north along 52nd Street to the intersection with High Banks Road; thence easterly along High Banks Road to the intersection with 58th Street; thence south along 58th Street to the intersection with Thurston Road; thence easterly along Thurston Road to the intersection with the western boundary of Section 36, T17S, R2W; thence south to the southwest corner of Section 36, T17S, R2W; thence west to the Springfield City Limits; thence following the Springfield City Limits southwesterly to the intersection with the western boundary of Section 2, T18S, R2W; thence on a line southwest to the Private Logging Road approximately one-half mile away; thence southeasterly along the Private Logging Road to the intersection with Wallace Creek; thence southwesterly along Wallace Creek to the confluence with the Middle Fork of the Willamette River; thence generally northwesterly along the Middle Fork of the Willamette River approximately seven and one-half miles to the intersection with the northern boundary of Section 11, T18S, R3W; thence west to the northwest corner of Section 10, T18S, R3W; thence south to the intersection with 30th Avenue; thence westerly along 30th Avenue to the intersection with the Eugene City Limits; thence following the Eugene City Limits first southerly then westerly then northerly and finally westerly to the intersection with the northern boundary of Section 5, T18S, R4W; thence west to the intersection with Greenhill Road; thence north along Greenhill Road to the intersection with Barger Drive; thence east along Barger Drive to the intersection with the Eugene City Limits (Ohio Street); thence following the Eugene City Limits first north then east then north then east then south then east to the intersection with Jansen Drive; thence east along Jansen

Drive to the intersection with Belt Line Road; thence northeasterly along Belt Line Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection with Clear Lake Road; thence west along Clear Lake Road to the intersection with the western boundary of Section 9, T17S, R4W; thence north to the intersection with Airport Road; thence east along Airport Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection East Enid Road; thence east along East Enid Road to the intersection with Prairie Road; thence southerly along Prairie Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with the Southern Pacific Railroad Line; thence southeasterly along the Southern Pacific Railroad Line to the intersection with Irving Road; thence east along Irving Road to the intersection with Kalmia Road; thence northerly along Kalmia Road to the intersection with Hyacinth Road; thence northerly along Hyacinth Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with Spring Creek; thence northerly along Spring Creek to the intersection with River Road; thence northerly along River Road to the intersection with East Beacon Drive; thence following East Beacon Drive first east then south then east to the intersection with River Loop No.1; thence on a line due east to the Willamette River and the point of beginning.

(7) "Grants Pass CBD" means the area within the City of Grants Pass enclosed by "B" Street on the north, 8th Street to the east, "M" Street on the south, and 5th Street to the west.

(8) Grants Pass Control Area means the area of the state beginning at the northeast corner of Section 35, T35S, R5W; thence south to the southeast corner of Section 11, T37S, R5W; thence west to the southwest corner of Section 9, T37S, R6W; thence north to the northwest corner of Section 33, T35S, R6W; thence east to the point of beginning.

(9) "Grants Pass UGB" as shown on the Plan and Zoning maps for the City of Grants Pass as of Feb. 1, 1988 is the area within the bounds beginning at the NW corner of Sec. 7, T36S, R5W; thence south to the SW corner of Sec. 7; thence west along the southern boundary of Sec. 12, T36S, R5W approx. 2000 feet; thence south approx. 100 feet to the northern right of way of the Southern Pacific Railroad Line (SPRR Line); thence southeasterly along said right of way approx. 800 feet; thence south approx. 400 feet; thence west approx. 1100 feet; thence south approx. 700 feet to the intersection with the Hillside Canal; thence west approx. 100 feet; thence south approx. 550 feet to the intersection with Upper River Road; thence southeasterly along Upper River Road and continuing east along Old Upper River Road approx. 700 feet; thence south approx. 1550 feet; thence west approx. 350 feet; thence south approx. 250 feet; thence west approx. 1000 feet; thence south approx. 600 feet to the north end of Roguela Lane; thence east approx. 400 feet; thence south approx. 1400 feet to the intersection with Lower River Road; thence west along Lower River Road approx. 1400 feet; thence south approx. 1350 feet; thence west approx. 25 feet; thence south approx. 1200 feet to the south bank of the Rogue River; thence northwesterly along said bank approx. 2800 feet; thence on a line southwesterly and parallel to Parkhill Place approx. 600 feet; thence northwesterly at a 90 degree angle approximately 300 feet to the intersection with Parkhill Place; thence southwesterly along Parkhill Place approx. 250 feet; thence on a line southeasterly forming a 90 degree angle approximately 300 feet to a point even with Leonard Road; thence west approx. 1500 feet along Leonard Road; thence north approx. 200 feet; thence west to the west side of Schroeder Lane; thence north approx. 150 feet; thence west approx. 200 feet; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 450 feet; thence north approx. 300 feet; thence east approx. 150 feet; thence north approx. 400 feet; thence west approx. 500 feet; thence south approx. 300 feet; thence west to the intersection with Coutant Lane; thence south along Coutant Lane to the intersection with Leonard Road; thence west along Leonard Road to the intersection with Buena Vista Lane; thence north along the west side of Buena Vista Lane approx. 200 feet; thence west approx. 150 feet; thence north approx. 150 feet; thence west approx. 200 feet; thence north approx. 400 feet; thence west approx. 600 feet to the intersection with the western boundary of Sec. 23, T36S, R6W; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 300 feet; thence north approx. 600 feet to the intersection with Darneille Lane; thence northwesterly along Darneille Lane approx. 200 feet; thence west approx. 300 feet; thence south approx. 600 feet to the intersection with Leonard Road; thence west along Leonard Road approx. 700 feet; thence south approx. 1350 feet; thence east approx. 1400 feet to the intersection with Darneille Lane; thence south along Darneille Lane approx. 600 feet; thence west approx. 300 feet; thence south to the intersection with Redwood

Avenue; thence east along Redwood Avenue to the intersection with Hubbard Lane and the western boundary of Sec. 23, T36S, R6W; thence south along Hubbard Lane approx. 1850 feet; thence west approx. 1350 feet; thence south to the south side of U.S. Highway 199; thence westerly along U.S. 199 approx. 1600 feet to the intersection with the north-south midpoint of Sec. 27, T36S, R6W; thence south approx. 2200 feet; thence east approx. 1400 feet; thence north approx. 1000 feet; thence east approx. 300 feet; thence north approx. 250 feet to the intersection with the Highline Canal; thence northerly along the Highline Canal approx. 900 feet; thence east to the intersection with Hubbard Lane; thence north along Hubbard Lane approximately 600 feet; thence east approx. 200 feet; thence north approx. 400 feet to a point even with Canal Avenue; thence east approx. 550 feet; thence north to the south side of U.S. 199; thence easterly along the southern edge of U.S. 199 to the intersection with Willow Lane; thence south along Willow Lane to the intersection with Demaray Drive; thence easterly along Demaray Drive and continuing along the southern edge of U.S. 199 to the intersection with Dowell Road; thence south along Dowell Road approx. 550 feet; thence easterly approx. 750 feet; thence north to the intersection with the South Canal; thence easterly along the South Canal to the intersection with Schutzwahl Lane; thence south approx. 1300 feet to a point even with West Harbeck Road; thence east approx. 2000 feet to the intersection with Allen Creek; thence southerly along Allen Creek approx. 1400 feet to a point even with Denton Trail to the west; thence west to the intersection with Highline Canal; thence southerly along Highline Canal to the intersection with the southern boundary of Sec. 25, T36S, R6W; thence east to the intersection with Allen Creek; thence southerly along Allen Creek to the intersection with the western boundary of Sec. 31, T36S, R5W; thence south to the SW corner of Sec. 31; thence east to the intersection with Williams Highway; thence southeasterly along Williams Highway approx. 1300 feet; thence east approx. 200 feet; thence north approx. 400 feet; thence east approx. 700 feet; thence north to the intersection with Espey Road; thence west along Espey Road approx. 150 feet; thence north approx. 600 feet; thence east approx. 300 feet; thence north approx. 2000 feet; thence west approx. 2100 feet; thence north approx. 1350 feet; thence east approx. 800 feet; thence north approx. 2800 feet to the east-west midline of Sec. 30, T36S, R5W; thence on a line due NE approx. 600 feet; thence north approx. 100 feet; thence east approx. 600 feet; thence north approx. 100 feet to the intersection with Highline Canal; thence easterly along Highline Canal approx. 1300 feet; thence south approx. 100 feet; thence east to the intersection with Harbeck Road; thence north along Harbeck Road to the intersection with Highline Canal; thence easterly along Highline Canal to a point approx. 250 feet beyond Skyway Road; thence south to the intersection with Skyway Road; thence east to the intersection with Highline Canal; thence southeasterly along Highline Canal approx. 1200 feet; thence on a line due SW to the intersection with Bluebell Lane; thence southerly along Bluebell Lane approx. 150 feet; thence east to the intersection with Sky Crest Drive; thence southerly along Sky Crest Drive to the intersection with Harper Loop; thence southeasterly along Harper Loop to the intersection with the east-west midline of Sec. 29, T36S, R5W; thence east approx. 400 feet; thence south approx. 1300 feet to a point even with Troll View Road to the east; thence east to the intersection with Hamilton Lane; thence north along Hamilton Lane to the intersection with the Highline Canal; thence northeasterly along the Highline Canal to the northern boundary of Sec. 28, T36S, R5W; thence east approx. 1350 feet to the transmission line; thence north to the intersection with Fruitdale Drive; thence southwesterly along Fruitdale Drive approx. 700 feet; thence north to the northern edge of U.S. 199; thence easterly along the northern edge of U.S. 199 approx. 50 feet; thence north to the north bank of the Rogue River; thence northeasterly along the north bank of the Rogue River approx. 2100 feet to a point even with Ament Road; thence north to Ament Road and following Ament Road to U.S. Interstate Highway 5 (U.S. I-5); thence continuing north to the 1200 foot contour line; thence following the 1200 foot contour line northwesterly approx. 7100 feet to the city limits and a point even with Savage Street to the west; thence north following the city limits approx. 400 feet; thence west to the intersection with Beacon Street; thence north along Beacon Street and the city limits approx. 250 feet; thence east along the city limits approx. 700 feet; thence north along the city limits approx. 2200 feet; thence southwesterly along the city limits approximately 800 feet to the intersection with the 1400 foot contour line; thence northerly and northwesterly along the 1400 foot contour line approx. 900 feet to the intersection with the northern boundary of Sec. 9, T36S, R5W; thence west along said boundary approx. 100 feet to the NW corner of Sec. 9; thence south along the western boundary of Sec. 9 approx. 700 feet; thence west approx. 1400 feet; thence north approx. 2400 feet; thence west approx. 1350 feet; thence north approx. 1100 feet to the city limits; thence following the city limits first west approx. 1550 feet, then south approx. 800 feet, then west approx. 200 feet, then south approx. 200 feet, then east approx. 200 feet, then south approx. 300 feet, and finally westerly approx. 1200 feet to the intersection with the western boundary of Sec. 5,

T36S, R5W; thence south along said boundary to the northern side of Vine Avenue; thence northwesterly along the northern side of Vine Avenue approx. 3150 feet to the intersection with the west fork of Gilbert Creek; thence north to the intersection with the southern right of way of U.S. I-5; thence northwesterly along said right of way approx. 1600 feet; thence south to the intersection with Old Highland Avenue; thence northwesterly along Highland Avenue approx. 650 feet; thence west approx. 350 feet; thence south approx. 1400 feet; thence east approx. 700 feet; thence south approx. 1000 feet; thence on a line SW approx. 800 feet; thence south approx. 1400 feet to the intersection with the northern boundary of Sec. 7, T36S, R5W; thence west to the NW corner of Sec. 7, the point of beginning.

(10) Klamath Falls Control Area means the area of the state beginning at the northeast corner of Section 8, T38S, R10E, thence south to the southeast corner of Section 5, T40S, R10E; thence west to the southwest corner of Section 3, T40S, R8E; thence north to the northwest corner of Section 10, T38S, R8E; thence east to the point of beginning.

(11) "Klamath Falls UGB" means the area within the bounds beginning at the southeast corner of Section 36, Township 38 South, Range 9 East; thence northerly approximately 4500 feet; thence westerly approximately 1/4 mile; thence northerly approximately 3/4 mile into Section 25, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 24, T38S, R9E; thence westerly approximately 1/2 mile to the southeast corner of Section 23, T38S, R9E; thence northerly approximately 1/2 mile; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 14, T38S, R9E; thence generally northwesterly along the 5000 foot elevation contour line approximately 3/4 mile; thence westerly 1 mile; thence north to the intersection with the northern boundary of Section 15, T38S, R9E; thence west 1/4 mile along the northern boundary of Section 15, T38S, R9E; thence generally southeasterly following the 4800 foot elevation contour line around the old Oregon Institute of Technology Campus to meet with the westerly line of Old Fort Road in Section 22, T38S, R9E; thence southwesterly along the westerly line of Old Fort Road approximately 1 and 1/4 miles to Section 27, T38S, R9E; thence west approximately 1/4 mile; thence southwesterly approximately 1/2 mile to the intersection with Section 27, T38S, R9E; thence westerly approximately 1/2 mile to intersect with the Klamath Falls City Limits at the northerly line of Loma Linda Drive in Section 28, T38S, R9E; thence northwesterly along Loma Linda Drive approximately 1/4 mile; thence southwesterly approximately 1/8 mile to the Klamath Falls City Limits; thence northerly along the Klamath Falls City Limits approximately 1 mile into Section 21, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1 mile into Section 17, T38S, R9E; thence westerly approximately 3/4 mile into Section 17, T38S, R9E; thence northerly approximately 1/4 mile; thence westerly approximately 1 mile to the west boundary of Highway 97 in Section 18, T38S, R9E; thence southeasterly along the western boundary of Highway 97 approximately 1/2 mile; thence southwesterly away from Highway 97; thence southeasterly to the intersection with Klamath Falls City Limits at Front Street; thence westerly approximately 1/4 mile to the western boundary of Section 19, T38S, R9E; thence southerly approximately 1 and 1/4 miles along the western boundary of Section 19, T38S, R9E and the Klamath Falls City Limits to the south shore line of Klamath Lake; thence northwesterly along the south shore line of Klamath Lake approximately 1 and 1/4 miles across Section 25, T38S, R9E and Section 26, T38S, R9E; thence westerly approximately 1/2 mile along Section 26, T38S, R9E; thence southerly approximately 1/2 mile to Section 27, T38S, R9E to the intersection with eastern boundary of Orindale Draw, thence southerly along the eastern boundary of Orindale Draw approximately 1 and 1/4 miles into Section 35, T38S, R9E; thence southerly approximately 1/2 mile into Section 2, T39S, R8E; thence easterly approximately 1/4 mile; thence northerly approximately 1/4 mile to the southeast corner of Section 35, T38S, R8E and the Klamath Falls City Limits; thence easterly approximately 1/2 mile to the northern boundary of Section 1, T38S, R8E; thence southeasterly approximately 1/2 mile to Orindale Road; thence north 500 feet along the west side of an easement; thence easterly approximately 1 and 1/4 miles through Section 1, T38S, R8E to the western boundary of Section 6, T39S, R9E; thence southerly approximately 3/4 mile to the southwest corner of Section 6, T39S, R9E; thence easterly approximately 1/8 mile to the western boundary of Highway 97; thence southwesterly along the Highway 97 right-of-way approximately 1/4 mile; thence westerly approximately 1/2 mile to Agate Street in Section 7, T39S, R8E; thence northerly approximately 1/4 mile; thence westerly approximately 3/4 mile to Orindale Road in Section 12, T39S, R8E; thence northerly approximately 1/4 mile into Section 1, T39S, R8E;



thence westerly approximately 3/4 mile to the Section 2, T39S, R8E boundary line; thence southerly approximately 3/4 mile along the Section 2, T39S, R8E boundary line to the northwest corner of Section 12, T39S, R8E; thence westerly approximately 1/8 mile into Section 11, T39S, R8E; thence southerly approximately 1/8 mile; thence northeasterly approximately 3/4 mile to the southern boundary of Section 12, T39S, R8E at Balsam Drive; thence southerly approximately 1/4 mile into Section 12, T39S, R8E; thence easterly approximately 1/4 mile to Orindale Road; thence southeasterly approximately 500 feet to Highway 66; thence southwesterly approximately 1/2 mile along the boundary of Highway 66 to Holiday Road; thence southerly approximately 1/2 mile into Section 13, T39S, R8E; thence northeasterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/4 mile along the eastern boundary of Section 13, T39S, R8E; thence westerly approximately 1/4 mile to Weyerhaeuser Road; thence northerly approximately 1/8 mile; thence easterly approximately 1/8 mile; thence northerly approximately 1/8 mile; thence westerly approximately 1/8 mile to Farrier Avenue; thence northerly approximately 1/4 mile; thence easterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/8 mile along the eastern boundary of Section 13, T39S, R8E; thence easterly approximately 1/4 mile along the northern section line of Section 18, T39S, R8E; thence southerly approximately 1/4 mile; thence easterly approximately 1/2 mile to the boundary of Highway 97; thence southerly approximately 1/3 mile to the Burlington Northern Right-of-Way; thence northeasterly approximately 1 and 1/3 miles along the high water line of the Klamath River to the Southside Bypass in Section 8, T39S, R9E; thence southeasterly along the Southside Bypass to the Southern Pacific Right-of-Way in Section 9, T39S, R9E; thence southerly approximately 1/2 mile along the Southern Pacific Right-of-Way; thence southwesterly approximately 1/4 mile along the Midland Highway; thence southeasterly approximately 1/4 mile to the old railroad spur; thence easterly 1/4 mile along the old railroad spur; thence southerly approximately 1/4 mile in Section 16, T39S, R9E; thence westerly approximately 1/3 mile; thence southerly approximately 1/4 mile; thence easterly approximately 1/16 mile in Section 21, T39S, R9E; thence southerly approximately 1/8 mile to the Lost River Diversion Channel; thence southeasterly approximately 1/4 mile along the northern boundary of the Lost River Diversion Channel; thence easterly approximately 3/4 mile along Joe Wright Road into Section 22, T39S, R9E; thence southeasterly approximately 1/8 mile on the eastern boundary of the Southern Pacific Right-of-Way; thence southeasterly approximately 1 mile along the western boundary of the Southern Pacific Right-of-Way across Section 22, T39S, R9E and Section 27, T39S, R9E to a point 440 yards south of the northern boundary of Section 27, T39S, R9E; thence easterly to Kingsley Field; thence southeasterly approximately 3/4 mile to the southern boundary of Section 26, T39S, R9E; thence east approximately 1/2 mile along the southern boundary of Section 26, T39S, R9E to a pond; thence north-northwesterly for 1/2 mile following the Klamath Falls City Limits; thence north 840 feet; thence east 1155 feet to Homedale Road; thence north along Homedale Road to a point 1/4 mile north of the southern boundary of Section 23, T39S, R9E; thence west 1/4 mile; thence north 1 mile to the Southside Bypass in Section 14, T39S, R9E; thence east 1/2 mile along the Southside Bypass to the eastern boundary of Section 14, T39S, R9E; thence north 1/2 mile; thence east 900 feet into Section 13, T39S, R9E; thence north 1320 feet along the USBR 1-C 1-A to the southern boundary of Section 12, T39S, R9E; thence north 500 feet to the USBR A Canal; thence southeasterly 700 feet along the southern border of the USBR A Canal back into Section 13, T39S, R9E; thence southeast 1600 feet to the northwest parcel corner of an easement for the Enterprise Irrigation District; thence east-northeast 2200 feet to the eastern boundary of Section 13, T39S, R9E; thence north to the southeast corner of Section 12, T39S, R9E; thence along the Enterprise Irrigation Canal approximately 1/2 mile to Booth Road; thence east 1/2 mile to Vale Road; thence north 1 mile to a point in Section 6, T39S, R10E that is approximately 1700 feet north of the southern boundary of Section 6, T39S, R10E; thence west approximately 500 feet; thence south approximately 850 feet; thence west approximately 200 feet; thence north approximately 900 feet; thence west approximately 1600 feet to the western boundary of Section 6, T39S, R10E; thence north approximately 1/2 mile to the southeast corner of Section 36, T38S, R9E, the point of beginning.

(12) "LaGrande UGB" means the area within the bounds beginning at the point where U.S. Interstate 84 (I-84) intersects Section 31, Township 2 South, Range 38 East; thence east along I-84 to the Union County Fairgrounds; thence north and then east on a line encompassing the Union County Fairgrounds to the intersection with Cedar Street; thence further east approximately 500 feet, encompassing two (2) residential properties; thence on a line south to the intersection with the northern bank of the Grande Ronde River; thence

westerly along the northern bank of the Grande Ronde River to the intersection with the western edge of Mount Glenn Road and Riverside Park; thence north along the western edge of Mount Glenn Road and Riverside Park to the intersection with Fruitdale Road; thence east along Fruitdale Road and the northern boundary of Riverside Park to the eastern boundary of Riverside Park; thence south along the eastern boundary of Riverside Park to the north bank of the Grande Ronde River; thence on a line southeast to the intersection with the northern edge of I-84; thence easterly along the northern edge of I-84 to May Street; thence easterly along May Street to the intersection with State Highway 82; thence northeasterly along State Highway 82 to a point approximately 1/4 mile from the eastern edge of Section 4, T3S, R38E; thence south to the intersection with Section 9, T3S, R38E, and the southern edge of Buchanan Avenue; thence west along the southern edge of Buchanan Avenue to the intersection with the northern edge of I-84; thence on a line south to the southern edge of I-84; thence southeasterly along the southern edge of I-84 approximately 2500 feet; thence on a line due west approximately 1400 feet; thence on a line due south to the intersection with the Union Pacific Railroad Line; thence southeasterly along the Union Pacific Railroad Line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with U.S. Highway 30; thence southeast along U.S. Highway 30 to the intersection with the western boundary of Section 15, T3S, R38E; thence on a line west following existing property boundaries approximately 2900 feet; thence on a line north following existing property boundaries approximately 250 feet; thence on a line east following existing property boundaries approximately 650 feet; thence north on a line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with 20th Avenue; thence south along 20th Avenue to the intersection with Foothill Road; thence southeasterly along Foothill Road approximately 2900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line south following existing property boundaries approximately 1250 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north following existing property boundaries approximately 450 feet to the intersection with the southernmost part of the La Grande City Limits; thence westerly and northwesterly along the southernmost part of the La Grande City Limits approximately 1100 feet to the intersection with the 3000 foot elevation contour line; thence westerly following the 3000 foot elevation contour line and existing property boundaries approximately 2200 feet; thence on a line north following existing property boundaries approximately 1900 feet; thence on a line west following existing property boundaries approximately 500 feet; thence on a line north to the La Grande City Limits; thence west along the La Grande City Limits and following existing property boundaries approximately 650 feet; thence on a line south following existing property boundaries approximately 900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north to the intersection with the La Grande City Limits; thence west along the southern boundary of the La Grande City Limits to the intersection with the western boundary of the La Grande City Limits; thence north along the western boundary of the La Grande City Limits and following existing property lines approximately 500 feet; thence on a line west following existing property boundaries approximately 200 feet; thence on a line north following existing property boundaries approximately 700 feet; thence east to the first 3000 foot elevation contour line west of the La Grande City Limits; thence northerly following that 3000 foot elevation contour line to the intersection with Deal Canyon Road; thence easterly along Deal Canyon Road to the intersection with the western boundary of the La Grande City Limits; thence northerly along the western boundary of the La Grande City Limits to the intersection with U.S. Highway 30; thence northwesterly along U.S. Highway 30 and following existing property boundaries approximately 1400 feet; thence on a line west to the intersection with the western boundary of Section 6, T3S, R38E; thence north along the western boundaries of Section 6, T3S, R38E and Section 31, T2S, R38E to the point of beginning.

(13) "Lakeview UGB" means the area beginning at the corner common to sections 21, 22, 27, and 28, T39S, R20E; thence north on the section line between section 21 and 22 to the section corner common to section 15, 16, 21, and 22; thence west along the section line between section 21 and 16 to the section corner common to sections 16, 17, 20, and 21; thence north along the section line between section 16 and 17 approximately 3550 feet to the east branch of Thomas Creek; thence northwesterly along the east branch of Thomas Creek to the center line of Highway 140; thence east along the center line of Highway 140 to the section corner common to sections 8, 9, 16, and 17, T39S, R20E; thence north along the section line between sections 8 and 9 to the section corner common to sections 4, 5, 8, and 9, T39S, R20E; thence north along the section line between section 4 and 5 to the section corner common to section 4 and 5, T39S, R20E and sections 32 and 33, T38S,

R20E; thence east along the section line between sections 4 and 33 to the section corner common to sections 3 and 4, T39S, R20E and sections 33 and 34, T38S, R20E; thence south along the eastern boundary of section 4 approximately 4,1318.6 feet; thence S 89 degrees, 11 minutes W 288.28 feet to the east right of way line of the old Paisley/Lakeview Highway; thence S 21 degrees, 53 minutes E along the eastern right of way of the old Paisley/Lakeview Highway 288.4 feet; thence S 78 degrees, 45 minutes W 1375 feet; thence S 3 degrees, 6 minutes, and 30 seconds W 200 feet; thence S 77 degrees, 45 minutes W 136 feet to the east right of way line of U.S. Highway 395; thence southeasterly along the east right of way line of U.S. Highway 395 53.5 feet; thence N 77 degrees, 45 minutes E 195.6 feet; thence S 38 degrees, 45 minutes E 56.8 feet; thence S 51 degrees, 15 minutes W 186.1 feet to the east right of way of U.S. Highway 395; thence southeast along the eastern right of way line of U.S. Highway 395 2310 feet; thence N 76 degrees, 19 minutes 544.7 feet; thence S 13 degrees, 23 minutes, 21 seconds E 400 feet; thence N 63 degrees, 13 minutes E 243.6 feet to the western line of the old American Forest Products Logging Road; thence southeast along the old American Forest Products Logging Road to the western line of the northeast quadrant of the northwest quadrant of section 10, T39S, R20E; thence southeast to a point on the south line of the northeast quadrant of the northwest quadrant of Section 10, T39S, R20E (this point also bears N 89 degrees, 33 minutes E 230 feet from the center line of U.S. Highway 395); thence south on a line parallel to the east right of way line of U.S. Highway 395 to the south line of the northwest quadrant of section 10, T39S, R20E; thence south 491 feet to the east right of way of U.S. Highway 395; thence southeasterly following the east right of way of U.S. Highway 395 255 feet to the south line of the northeast quadrant of the northeast quadrant of the southwest quadrant of section 10, T39S, R20E; thence east along that south line to the center line of section 10, T39S, R20E; thence continuing east along the same south line to the eastern boundary of section 10, T39S, R20E; thence south along the eastern boundary of section 10 to the section corner common to sections 10, 11, 14, and 15, T39S, R20E; thence south along the section line between section 14 and 15 to the section corner common to sections 14, 15, 22, and 23, T39S, R20E; thence west along the section line between sections 15 and 22 to the northwest corner of the northeast quadrant of the northeast quadrant of section 22, T39S, R20E; thence south along the eastern line of the western half of the eastern half of section 22 to the southern boundary of section 22, T39S, R20E; thence west along the southern boundary of section 22 to the point of beginning.

(14) "Maintenance Area" means any area that was formerly nonattainment for a criteria pollutant but has since met EPA promulgated standards and has had a maintenance plan to stay within the standards approved by the EPA pursuant to 40 CFR 51.110 (July, 1993).

(15) "Medford-Ashland Air Quality Maintenance Area" (AQMA) means the area defined as beginning at a point approximately two and quarter miles northeast of the town of Eagle Point, Jackson County, Oregon at the northeast corner of Section 36, Township 35 South, Range 1 West (T35S, R1W); thence South along the Willamette Meridian to the southeast corner of Section 25, T37S, R1W; thence southeast along a line to the southeast corner of Section 9, T39S, R2E; thence south-southeast along line to the southeast corner of Section 22, T39S, R2E; thence South to the southeast corner of Section 27, T39S, R2E; thence southwest along a line to the southeast corner of Section 33, T39S, R2E; thence West to the southwest corner of Section 31, T39S, R2E; thence northwest along a line to the northwest corner of Section 36, T39S, R1E; thence West to the southwest corner of Section 26, T39S, R1E; thence northwest along a line to the southeast corner of Section 7, T39S, R1E; thence West to the southwest corner of Section 12, T39S, R1W, T39S, R1W; thence northwest along a line to southwest corner of Section 20, T38S, R1W; thence West to the southwest corner of Section 24, T38S, R2W; thence northwest along a line to the southwest corner of Section 4, T38S, R2W; thence West to the southwest corner of Section 6, T38S, R2W; thence northwest along a line to the southwest corner of Section 31, T37S, R2W; thence North and East along the Rogue River to the north boundary of Section 32, T35S, R1W; thence East along a line to the point of beginning.

(16) "Medford-Ashland CBD" means the area beginning at the intersection of Crater Lake Highway (Highway 62) south on Biddle Road to the intersection of Fourth Street, west on Fourth Street to the intersection with Riverside Avenue (Highway 99), south on Riverside Avenue to the intersection with Tenth Street, west on Tenth Street to the intersection with Oakdale Avenue, north on Oakdale Avenue to the intersection with Fourth Street, east on Fourth Street to the intersection with Central Avenue, north on Central Avenue to the intersection with

Court Street, north on Court Street to the intersection with Crater Lake Highway (Highway 62) and east on Crater Lake Highway to the point of beginning, with extensions along McAndrews Road east from Biddle Road to Crater Lake Avenue, and along Jackson Street east from Biddle Road to Crater Lake Avenue.

**NOTE:** This definition also marks the area where indirect sources are required to have indirect source construction permits in the Medford area. See OAR 340-254-0040.

(17) "Medford UGB" means the area beginning at the line separating Range 1 West and Range 2 West at a point approximately 1/4 mile south of the northwest corner of Section 31, T36S, R1W; thence west approximately 1/2 mile; thence south to the north bank of Bear Creek; thence west to the south bank of Bear Creek; thence south to the intersection with the Medford Corporate Boundary; thence following the Medford Corporate Boundary west and southwesterly to the intersection with Merriman Road; thence northwesterly along Merriman Road to the intersection with the eastern boundary of Section 10, T36S, R2W; thence south along said boundary line approximately 3/4 mile; thence west approximately 1/3 mile; thence south to the intersection with the Hopkins Canal; thence east along the Hopkins Canal approximately 200 feet; thence south to Rossanely Drive; thence east along Rossanely Drive approximately 200 feet; thence south approximately 1200 feet; thence west approximately 700 feet; thence south approximately 1400 feet; thence east approximately 1400 feet; thence north approximately 100 feet; thence east approximately 700 feet; thence south to Finley Lane; thence west to the end of Finley Lane; thence approximately 1200 feet; thence west approximately 1300 feet; thence north approximately 150 feet; thence west approximately 500 feet; thence south to Highway 238; thence west along Highway 238 approximately 250 feet; thence south approximately 1250 feet to a point even with the end of Renault Avenue to the east; thence east approximately 2200 feet; thence south approximately 1100 feet to a point even with Sunset Court to the east; thence east to and along Sunset Court to the first (nameless) road to the south; thence approximately 850 feet; thence west approximately 600 feet; thence south to Stewart Avenue; thence west along Stewart Avenue approximately 750 feet; thence south approximately 1100 feet; thence west approximately 100 feet; thence south approximately 800 feet; thence east approximately 800 feet; thence south approximately 1000 feet; thence west approximately 350 feet to a point even with the north-south connector street between Sunset Drive and South Stage Road; thence south to and along said connecting road and continuing along South Stage Road to Fairlane Road; thence south to the end of Fairlane Road and extending beyond it approximately 250 feet; thence east approximately 250 feet; thence south approximately 250 feet to the intersection with Judy Way; thence east on Judy Way to Griffin Creek Road; thence north on Griffin Creek Road to South Stage Road; thence east on South Stage Road to Orchard Home Drive; thence north on Orchard Home Drive approximately 800 feet; thence east to Columbus Avenue; thence south along Columbus Avenue to South Stage Road; thence east along South Stage Road to the first road to the north after Sunnyview Lane; thence north approximately 300 feet; thence east approximately 300 feet; thence north approximately 700 feet; thence east to King's Highway; thence north along King's Highway to Experiment Station Road; thence east along Experiment Station Road to Marsh Lane; thence east along Marsh Lane to the northern boundary of Section 6, T38S, R1W; thence east along said boundary approximately 1100 feet; thence north approximately 1200 feet; thence east approximately 1/3 mile; thence north approximately 400 feet; thence east approximately 1000 feet to a drainage ditch; thence following the drainage ditch southeasterly approximately 500 feet; thence east to the eastern boundary of Section 31, T37S, R1W; thence south along said boundary approximately 1900 feet; thence east to and along the loop off of Rogue Valley Boulevard, following that loop to the Southern Pacific Railroad Line (SPRR); thence following SPRR approximately 500 feet; thence south to South Stage Road; thence east along South Stage Road to SPRR; thence southeasterly along SPRR to the intersection with the west fork of Bear Creek; thence northeasterly along the west fork of Bear Creek to the intersection with U.S. Highway 99; thence southeasterly along U.S. Highway 99 approximately 250 feet; thence east approximately 1600 feet; thence south to East Glenwood Road; thence east along East Glenwood Road approximately 1250 feet; thence north approximately 1/2 mile; thence west approximately 250 feet; thence north approximately 1/2 mile to the Medford City Limits; thence east along the city limits to Phoenix Road; thence south along Phoenix Road to Coal Mine Road; thence east along Coal Mine Road approximately 9/10 mile to the western boundary of Section 35, T37S, R1W; thence north to the midpoint of the western boundary of Section 35, T37S, R1W; thence west approximately 800 feet; thence north approximately 1700 feet to the intersection with Barnett Road; thence easterly along Barnett Road to the southeast corner of Section 27, T37S, R1W; thence north along the

eastern boundary line of said section approximately 1/2 mile to the intersection with the 1800 foot contour line; thence east to the intersection with Cherry Lane; thence following Cherry Lane southeasterly and then northerly to the intersection with Hillcrest Road; thence east along Hillcrest Road to the southeast corner of Section 23, T37S, R1W; thence north to the northeast corner of Section 23, T37S, R1W; thence west to the midpoint of the northern boundary of Section 22; T37S, R1W; thence north to the midpoint of Section 15, T37S, R1W; thence west to the midpoint of the western boundary of Section 15, T37S, R1W; thence south along said boundary approximately 600 feet; thence west approximately 1200 feet; thence north approximately 600 feet; thence west to Foothill Road; thence north along Foothill Road to a point approximately 500 feet north of Butte Road; thence west approximately 300 feet; thence south approximately 250 feet; thence west on a line parallel to and approximately 250 feet north of Butte Road to the eastern boundary of Section 8, T37S, R1W; thence north approximately 2200 feet; thence west approximately 1800 feet; thence north approximately 2000 feet; thence west approximately 500 feet; thence north to Coker Butte Road; thence east along Coker Butte Road approximately 550 feet; thence north approximately 1250 feet; thence west to U.S. Highway 62; thence north approximately 3000 feet; thence east approximately 400 feet to the 1340 foot contour line; thence north approximately 800 feet; thence west approximately 200 feet; thence north approximately 250 feet to East Vilas Road; thence east along East Vilas Road approximately 450 feet; thence north approximately 2000 feet to a point approximately 150 feet north of Swanson Creek; thence east approximately 600 feet; thence north approximately 850 feet; thence west approximately 750 feet; thence north approximately 650 feet; thence west approximately 2100 feet; thence on a line southeast approximately 600 feet; thence east approximately 450 feet; thence south approximately 1600 feet; thence west approximately 2000 feet to the continuance of the private logging road north of East Vilas Road; thence south along said logging road approximately 850 feet; thence west approximately 750 feet; thence south approximately 150 feet; thence west approximately 550 feet to Peace Lane; thence north along Peace Lane approximately 100 feet; thence west approximately 350 feet; thence north approximately 950 feet; thence west approximately 1000 feet to the western boundary of Section 31, T36S, R1W; thence north approximately 1300 feet along said boundary to the point of beginning.

(18) "Nonattainment Area" means any area that has been designated as not meeting the standards established by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR 51.52 (July, 1993) for any criteria pollutant.

(19) "O3" means Ozone.

(20) "Oakridge UGB" means the area enclosed by the following: Beginning at the northwest corner of Section 17, T21S, R3E and the city limits; thence south along the western boundary of Section 17, T21S, R3E along the city limits approximately 800 feet; thence southwesterly following the city limits approximately 750 feet; thence west along the city limits approximately 450 feet; thence northwesterly along the city limits approximately 450 feet; thence on a line south along the city limits approximately 250 feet; thence on a line east along the city limits approximately 100 feet; thence southwesterly along the city limits approximately 200 feet; thence on a line east along the city limits approximately 400 feet; thence on a line south along the city limits to the channel of the Willamette River Middle Fork; thence south-easterly up the Willamette River Middle Fork along the city limits approximately 7200 feet; thence exiting the Willamette River Middle Fork with the city limits in a northerly manner and forming a rough semicircle with a diameter of approximately one-half mile before rejoining the Willamette River Middle Fork; thence diverging from the city limits upon rejoining the Willamette River Middle Fork and moving southeasterly approximately 5600 feet up the Willamette River Middle Fork to a point on the river even with the point where Salmon Creek Road intersects with U.S. Highway 58; thence on a line east from the channel of the Willamette River Middle Fork across the intersection of Salmon Creek Road and U.S. Highway 58 to the intersection with the Southern Pacific Railroad Line; thence northerly along the Southern Pacific Railroad Line to the intersection with the northern boundary of Section 22, T21S, R3E; thence west along the northern boundary of Section 22, T21S, R3E to the intersection with Salmon Creek Road; thence on a line north to the intersection with the Southern Pacific Railroad Line; thence east along the Southern Pacific Railroad Line approximately 600 feet; thence on a line north to the intersection with High Prairie Road; thence on a line west approximately 400 feet; thence on a line north to the intersection with the northern boundary of Section 15, T21S, R3E; thence west along the northern boundary of Section 15, T21S, R3E to the intersection

with the southeastern corner of Section 9, T21S, R3E; thence north along the eastern boundary of Section 9, T21S, R3E approximately 1300 feet; thence on a line west approximately 1100 feet; thence on a line south to the intersection with West Oak Road; thence northwesterly along West Oak Road approximately 2000 feet; thence on a line south to the intersection with the northern boundary line of the city limits; thence westerly and northwesterly approximately 8000 feet along the city limits to the point of beginning.

(21) "Particulate Matter" has the meaning given that term in OAR 340-200-0020(82).

(22) PM10: has the meaning given that term in OAR 340-200-0020(90).

(23) "PM2.5" has the meaning given that term in OAR 340-200-0020(91). (24) "Portland AQMA" means the area within the bounds beginning at the point starting on the Oregon-Washington state line in the Columbia River at the confluence with the Willamette River, thence east up the Columbia River to the confluence with the Sandy River, thence southerly and easterly up the Sandy River to the point where the Sandy River intersects the Clackamas County-Multnomah County line, thence west along the Clackamas County-Multnomah County line to the point where the Clackamas County-Multnomah County line is intersected by H. Johnson Road (242nd), thence south along H. Johnson Road to the intersection with Kelso Road (Boring Highway), thence west along Kelso Road to the intersection with Deep Creek Road (232nd), thence south along Deep Creek Road to the point of intersection with Deep Creek, thence southeasterly along Deep Creek to the confluence with Clackamas River, thence easterly along the Clackamas River to the confluence with Clear Creek, thence southerly along Clear Creek to the point where Clear Creek intersects Springwater Road then to Forsythe Road, thence easterly along Forsythe Road to the intersection with Bradley Road, thence south along Bradley Road to the intersection with Redland Road, thence west along Redland Road to the intersection with Ferguson Road, thence south along Ferguson Road to the intersection with Thayler Road, thence west along Thayler Road to the intersection with Beaver Creek Road, thence southeast along Beaver Creek Road to the intersection with Henrici Road, thence west along Henrici Road to the intersection with State Highway 213 (Mollala Avenue), thence southeast along State Highway 213 to the point of intersection with Beaver Creek, thence westerly down Beaver Creek to the confluence with the Willamette River, thence southerly and westerly up the Willamette River to the point where the Willamette River intersects the Clackamas County-Yamhill County line, thence north along the Clackamas County-Yamhill County line to the point where it intersects the Washington County-Yamhill County line, thence west and north along the Washington County-Yamhill County line to the point where it is intersected by Mount Richmond Road, thence northeast along Mount Richmond Road to the intersection with Patton Valley Road, thence easterly and northerly along Patton Valley Road to the intersection with Tualatin Valley State Highway, thence northerly along Tualatin Valley State Highway to the intersection with State Highway 47, thence northerly along State Highway 47 to the intersection with Dilley Road, thence northwesterly and northerly along Dilley Road to the intersection with Stringtown Road, thence westerly and northwesterly along Stringtown Road to the intersection with Gales Creek Road, thence northwesterly along Gales Creek Road to the intersection with Timmerman Road, thence northerly along Timmerman Road to the intersection with Wilson River Highway, thence west and southwesterly along Wilson River Highway to the intersection with Narup Road, thence north along Narup Road to the intersection with Cedar Canyon Road, thence westerly and northerly along Cedar Canyon Road to the intersection with Banks Road, thence west along Banks Road to the intersection with Hahn Road, thence northerly and westerly along Hahn Road to the intersection with Mountindale Road, thence southeasterly along Mountindale Road to the intersection with Glencoe Road, thence east-southeasterly along Glencoe Road to the intersection with Jackson Quarry Road, thence north-northeasterly along Jackson Quarry Road to the intersection with Helvetia Road, thence easterly and southerly along Helvetia Road to the intersection with Bishop Road, thence southerly along Bishop Road to the intersection with Phillips Road, thence easterly along Phillips Road to the intersection with the Burlington Northern Railroad Track, thence northeasterly along the Burlington Northern Railroad Line to the intersection with Rock Creek Road, thence east-southeasterly along Rock Creek Road to the intersection with Old Cornelius Pass Road, thence northeasterly along Old Cornelius Pass Road to the intersection with Skyline Boulevard, thence easterly and southerly along Skyline Boulevard to the intersection with Newberry Road, thence northeasterly along Newberry Road to the intersection with State Highway 30 (St. Helens Road), thence northeast on a line over land across State Highway 30 to the Multnomah Channel, thence east-southeasterly up



Willamette River to the confluence with the Columbia River and the Oregon-Washington state line (the point of beginning).

(25) "Portland Metropolitan Service District Boundary" or "Portland Metro" means the boundary surrounding the urban growth boundaries of the cities within the Greater Portland Metropolitan Area. It is defined in the Oregon Revised Statutes (ORS) 268.125 (1989).

(26) "Portland Vehicle Inspection Area" means the area of the state included within the following census tracts, block groups, and blocks as used in the 1990 Federal Census. In Multnomah County, the following tracts, block groups, and blocks are included: Tracts 1, 2, 3.01, 3.02, 4.01, 4.02, 5.01, 5.02, 6.01, 6.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10, 11.01, 11.02, 12.01, 12.02, 13.01, 13.02, 14, 15, 16.01, 16.02, 17.01, 17.02, 18.01, 18.02, 19, 20, 21, 22.01, 22.02, 23.01, 23.02, 24.01, 24.02, 25.01, 25.02, 26, 27.01, 27.02, 28.01, 28.02, 29.01, 29.02, 29.03, 30, 31, 32, 33.01, 33.02, 34.01, 34.02, 35.01, 35.02, 36.01, 36.02, 36.03, 37.01, 37.02, 38.01, 38.02, 38.03, 39.01, 39.02, 40.01, 40.02, 41.01, 41.02, 42, 43, 44, 45, 46.01, 46.02, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.01, 60.02, 61, 62, 63, 64.01, 64.02, 65.01, 65.02, 66.01, 66.02, 67.01, 67.02, 68.01, 68.02, 69, 70, 71, 72.01, 72.02, 73, 74, 75, 76, 77, 78, 79, 80.01, 80.02, 81, 82.01, 82.02, 83.01, 83.02, 84, 85, 86, 87, 88, 89, 90, 91, 92.01, 92.02, 93, 94, 95, 96.01, 96.02, 97.01, 97.02, 98.01, 98.02, 99.01, 99.02, 99.03, 100, 101, 102, 103.01, 103.02, 104.02, 104.04, 104.05, 104.06, 104.07; Block Groups 1, 2 of Tract 105; Blocks 360, 361, 362 of Tract 105; that portion of Blocks 357, 399 of Tract 105 beginning at the intersection of the Oregon-Washington State Line ("State Line") and the northeast corner of Block Group 1 of Tract 105, thence east along the State Line to the intersection of the State Line and the eastern edge of Section 26, Township 1 North, Range 4 East, thence south along the section line to the centerline of State Highway 100 to the intersection of State Highway 100 and the western edge of Block Group 2 of Tract 105. In Clackamas County, the following tracts, block groups, and blocks are included: Tracts 201, 202, 203.01, 203.02, 204.01, 204.02, 205.01, 205.02, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216.01, 216.02, 217, 218, 219, 220, 221.01, 221.02, 222.02, 223, 224, 225, 226, 227.01, 227.02, 228, 229, 230, 231, 232, 233, 234.01, 234.02, , 235, 236, 237; Block Groups 1, 2 of Tract 241; Block Groups 1, 2, 3, 4 of Tract 242; Block Groups 1, 2 of Tract 243.02. In Yamhill County, the following tract is included: Tract 301, except those areas in Tract 301 that lie within the Newberg City Limits defined as of July 12, 1996, and the following blocks within Tract 301: 102B, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121D, 122B, 122C, 123, 126, and 127B. In Washington County the following tracts, block groups, and blocks are included: Tracts 301, 302, 303, 304.01, 304.02, 305.01, 305.02, 306, 307, 308.01, 308.02, 309, 310.03, 310.04, 310.05, 310.06, 311, 312, 313, 314.01, 314.02, 315.01, 315.04, 315.05, 315.06, 315.07, 315.08, 316.03, 316.04, 316.05, 316.06, 316.07, 317.02, 317.03, 317.04, 318.01, 318.02, 318.03, 319.01, 319.03, 319.04, 320, 321.01, 321.02, 322, 323, 324.02, 324.03, 324.04, 325, 326.01, 326.02, 328, 329, 330, 331, 332, 333; Block Groups 1, 2 of Tract 327; Block Group 1 of Tract 334; Block Group 2 of Tract 335; Block Group 1 of Tract 336. In Columbia County the following tracts, block groups, and blocks are included: Tract 9710.98; Block Groups 2, 3 of Tract 9709.98; Blocks 146B, 148, 152 of Tract 9709.98.

(27) "Rogue Basin" means the area bounded by the following line: Beginning at the NE corner of T32S, R2E, W.M., thence south along range line 2E to the SE corner of T39S; thence west along township line 39S to the NE corner of T40S, R7W; thence south to the SE corner of T40S, R7W; thence west to the SE corner of T40S, R9W; thence north on range line 9W to the NE corner of T39S, R9W; thence east to the NE corner of T39S, R8W; thence north on range line 8W to the SE corner of Section 1, T33S, R8W on the Josephine-Douglas County line; thence east on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1W; thence east along township line 32S to the NE corner of T32S, R2E to the point of beginning.

(28) "Salem-Keizer Area Transportation Study" or "SKATS" means the area within the bounds beginning at the intersection of U.S. Interstate Highway 5 (I-5) with Battle Creek Road SE and Wiltsey Road, south along I-5 to the intersection with the western boundary of Section 24, T8S, R3W; thence due south on a line to the intersection with Delaney Road; thence easterly along Delaney Road to the intersection with Sunnyside Road; thence north along Sunnyside Road to the intersection with Hylo Road SE; thence west along Hylo Road SE to the intersection with Liberty Road; thence north along Liberty Road to the intersection with Cole Road; thence west along Cole Road to the intersection with Bates Road; thence northerly and easterly along Bates Road to the

intersection with Jory Hill Road; thence west along Jory Hill Road to the intersection with Stone Hill Avenue; thence north along Stone Hill Avenue to the intersection with Vita Springs Road; thence westerly along Vita Springs Road to the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where the western boundary of Section 30, T7S, R3W intersects the Southern Pacific Railroad Line; thence westerly along the Southern Pacific Railroad Line to the intersection with State Highway 51; thence northeasterly along State Highway 51 to the intersection with Oak Grove Road; thence northerly along Oak Grove Road to the intersection with State Highway 22; thence west on State Highway 22 to the intersection with Oak Grove Road; thence north along Oak Grove Road to the intersection with Orchard Heights Road; thence east and north along Orchard Heights Road to the intersection with Eagle Crest Drive; thence northerly along Eagle Crest Drive to the intersection with Hunt Road; thence north along Hunt Road to the intersection with Fourth Road; thence east along Fourth Road to the intersection with Spring Valley Road; thence north along Spring Valley to the intersection with Oak Knoll Road; thence east along Oak Knoll Road to the intersection with Wallace Road; thence south along Wallace Road to the intersection with Lincoln Road; thence east along Lincoln Road on a line to the intersection with the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where Simon Street starts on the East Bank; thence east and south along Simon Street to the intersection with Salmon; thence east along Salmon to the intersection with Ravena Drive; thence southerly and easterly along Ravena Drive to the intersection with Wheatland Road; thence northerly along Wheatland Road to the intersection with Brooklake Road; thence southeast along Brooklake Road to the intersection with 65th Avenue; thence south along 65th Avenue to the intersection with Labish Road; thence east along Labish Road to the intersection with the West Branch of the Little Pudding River; thence southerly along the West Branch of the Little Pudding River to the intersection with Sunnyview Road; thence east along Sunnyview Road to the intersection with 63rd Avenue; thence south along 63rd Avenue to the intersection with State Street; thence east along State Street to the intersection with 62nd Avenue; thence south along 62nd Avenue to the intersection with Deer Park Drive; thence southwest along Deer Park Drive to the intersection with Santiam Highway 22; thence southeast along Santiam Highway 22 to the point where it intersects the Salem Urban Growth Boundary (SUGB); thence following the southeast boundary of the SUGB generally southerly and westerly to the intersection with Wiltsey Road; thence west along Wiltsey Road to the intersection with I-5 (the point of beginning).

(29) "UGB" means Urban Growth Boundary.

(30) "Umpqua Basin" means the area bounded by the following line: Beginning at the SW corner of Section 2, T19S, R9W, on the Douglas-Lane County lines and extending due south to the SW corner of Section 14, T32S, R9W, on the Douglas-Curry County lines, thence easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine, and Jackson County lines; thence easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Section 32, T32S, R3W; thence northerly on the Umpqua National Forest boundary to the NE corner of Section 36, T25S, R2W; thence west to the NW corner of Section 36, T25S, R4W; thence north to the Douglas-Lane County line; thence westerly on the Douglas-Lane County line to the starting point.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0500; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 5-2010, f. & cert. ef. 5-21-10

**340-204-0030**

**Designation of Nonattainment Areas**



The following areas are designated as Particulate Matter Nonattainment Areas:

(1) The Oakridge Nonattainment Area for PM10 is the Oakridge UGB as defined in OAR 340-204-0010.

(2) The Klamath Falls Nonattainment Area for PM2.5 is as follows: Townships and ranges defined by T37S R9E Sections 31-32. T38S R8E Sections 1-5, 8-16, 22-26, 35-36. T38S R9E Sections 5-8, 14-15, 17-36. T39S R8E Sections 1-2, 11-13, 24. T39S R9E Sections 1-27. T39S R10E Sections 3-10, 15-20, 29-30.

(3) The Oakridge Nonattainment Area for PM2.5 is defined as a line from Township 21 South, Range 2 East, Section 11 (northwest corner), east to Township 21 South, Range 3 East, Section 11 (northeast corner), south to Township 21 South, Range 3 East, Section 23 (southeast corner), west to Township 21 South, Range 2 East, Section 23 (southwest corner) connecting back to Township 21 South, Range 2 East, Section 11 (northwest corner).

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0520; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 5-2010, f. & cert. ef. 5-21-10

### **340-204-0040**

#### **Designation of Maintenance Areas**

The following areas are designated as Maintenance Areas:

(1) Carbon Monoxide Maintenance Areas:

(a) The Eugene Maintenance Area for Carbon Monoxide is the Eugene-Springfield AQMA as defined in OAR 340-204-0010;

(b) The Portland Maintenance Area for Carbon Monoxide is the Portland Metropolitan Service District as referenced in OAR 340-204-0010;

(c) The Medford Carbon Monoxide Maintenance Area is the Medford UGB as defined in OAR 340-204-0010;

**NOTE:** EPA maintenance plan approval and redesignation pending.

(d) The Grants Pass Carbon Monoxide Maintenance Area is the Grants Pass CBD as defined in OAR 340-204-0010;

(e) The Klamath Falls Carbon Monoxide Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010;

(f) The Salem Carbon Monoxide Maintenance Area is the Salem-Keizer Area Transportation Study as defined in OAR 340-204-0010.

(2) Ozone Maintenance Areas:

(a) The Medford Maintenance Area for Ozone is the Medford-Ashland AQMA as defined in OAR 340-204-0010;

(b) The Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone is the Portland AQMA, as defined in OAR 340-204-0010;

(c) The Salem Maintenance Area for Ozone is the Salem-Keizer Area Transportation Study as defined in OAR 340-204-0010.

(3) PM10 Maintenance Areas:

(a) The Grants Pass PM10 Maintenance Area is the Grants Pass UGB as defined in OAR 340-204-0010;

(b) The Klamath Falls PM10 Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010;

(c) The Medford-Ashland PM10 Maintenance Area is the Medford-Ashland AQMA as defined in OAR 340-204-0010;

**NOTE:** EPA maintenance plan approval and redesignation pending.

(d) The La Grande PM10 Maintenance Area is the La Grande UGB as defined in OAR 340-204-0010;

**NOTE:** EPA maintenance plan approval and redesignation pending.

(e) The Lakeview PM10 Maintenance Area is the Lakeview UGB as defined in OAR 340-204-0010.

**NOTE:** EPA maintenance plan approval and redesignation pending.

(f) The Eugene-Springfield PM10 Maintenance Area is the Eugene-Springfield UGB as defined in OAR 340-204-0010.

**NOTE:** EPA maintenance plan approval and redesignation pending.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0530; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07

LANE REGIONAL AIR PROTECTION AGENCY

REQUEST FOR REDESIGNATION TO ATTAINMENT  
AND MAINTENANCE PLAN FOR  
EUGENE/SPRINGFIELD PM<sub>10</sub>

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## Introduction:

On August 7, 1987, the federal Environmental Protection Agency (EPA) categorized areas of the Nation into three groups based upon the likelihood that the area would violate the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS) and the existing State Implementation Plan (SIP) would require revision in order to protect the PM<sub>10</sub> NAAQS. Group I Areas were those having a 95% certainty of violating the PM<sub>10</sub> NAAQS. Group II Areas were those having a 20 % to 95% probability of violating the PM<sub>10</sub> NAAQS. The remaining areas below 20% probability were classed as Group III. Based upon the available ambient data, the area within the Eugene-Springfield Urban Growth Boundary (UGB) was classified by the EPA as a Group I Area. This area is defined in Oregon Administrative Rules 340-204-0010 (see Figure 1).

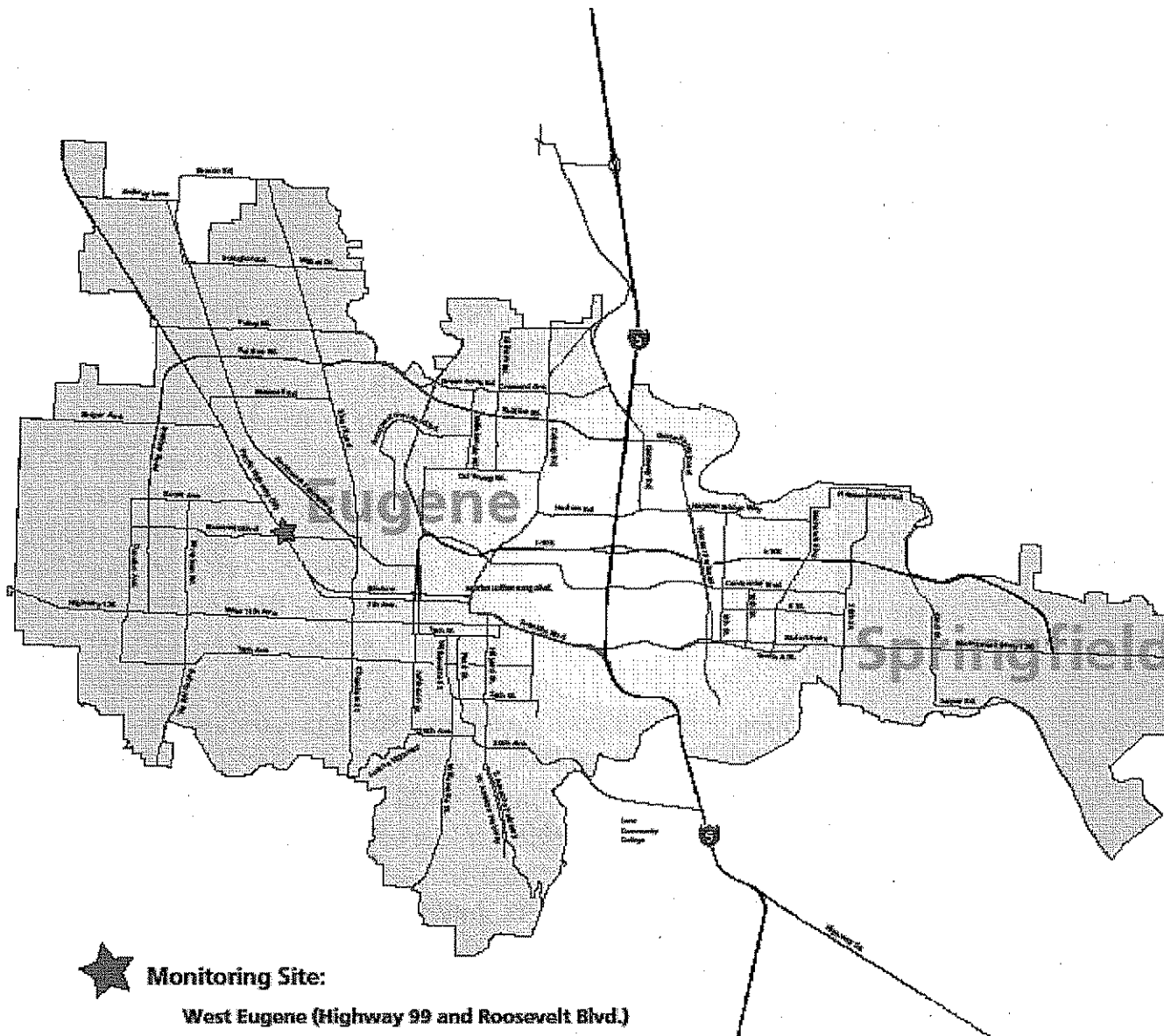
In response to this action, Lane Regional Air Protection Agency (LRAPA) adopted a SIP amendment in 1990 and an addendum in 1991 to address the new requirements of the federal Clean Air Act Amendments of 1990. These were subsequently adopted by the Oregon Environmental Quality Commission (EQC) and were submitted as an attainment plan to the EPA in November 1991 (see 59 FR 434870). This plan demonstrated attainment of the PM<sub>10</sub> NAAQS by December 31, 1992, and demonstrated maintenance of the PM<sub>10</sub> NAAQS through the year 2000. This plan was approved by the EPA in August 1994 (see 59 FR 434870 August 24, 1994). EPA also approved PM<sub>10</sub> control strategies in the SIP as Reasonably Available Control Technology and Reasonably Available Control Measures (RACT/RACM).

LRAPA has continued to implement the control strategies defined in the SIP and the UGB has not exceeded the 24 hour PM<sub>10</sub> NAAQS since 1987. The annual PM<sub>10</sub> NAAQS has never been exceeded. Based upon the monitoring data and the intent to maintain the current control strategies, it has been LRAPA=s intent to officially request redesignation of this area to attainment. For this to occur, the federal Clean Air Act requires LRAPA to develop a maintenance plan for which EPA requires dispersion modeling and projections of emissions 10 years into the future. This effort would place an excessive burden on LRAPA=s limited resources. In addition, the NAAQS have undergone significant changes over the years with new particulate standards being added and subsequent lawsuits. This process was

not finally resolved until 2006. As a result, LRAPA has delayed formally requesting redesignation.

Figure 1

Eugene/Springfield Urban Growth Boundary



The EPA has also issued guidance to streamline the process to redesignate an area from Non-attainment to Attainment for PM<sub>10</sub> NAAQS. This new option was termed a Limited Maintenance Plan (LMP). It will allow areas which clearly meet the standards to effectively redesignate without using dispersion modeling and without projecting future emissions. LRAPA has chosen to use this option to prepare a maintenance plan and request redesignation for the Eugene-Springfield UGB to attainment for PM<sub>10</sub>.

According to EPA guidance, to qualify for the LMP option an area should meet the following criteria:

1. The area should attain the NAAQS.
2. The average 24 hour PM<sub>10</sub> design value for the area based upon recent 5 years of data should not exceed 98 ug/m<sup>3</sup> (micrograms per cubic meter) and the annual design value should not exceed 40 ug/m<sup>3</sup>. (The annual PM<sub>10</sub> NAAQS was revoked by the EPA on December 18, 2006.)
3. The area should expect only limited growth in on-road motor vehicle PM<sub>10</sub> emissions.

As detailed in Appendix A, this area clearly attains the NAAQS, and the design values are well below the defined limits. In addition, although the existing SIP for this area (confirmed by October 3, 1994, correspondence from EPA Region 10 ) demonstrates that motor vehicles are not a significant contributor to PM<sub>10</sub> emissions in this area, a regional analysis of on-road motor vehicle PM<sub>10</sub> emission was performed (see Appendix A) and demonstrated only limited growth in emissions. As a result, this area qualifies for the LMP option.

LRAPA has prepared this LMP for PM<sub>10</sub> to demonstrate attainment with the PM<sub>10</sub> NAAQS, provide a maintenance plan to assure continued attainment, and formally request redesignation of the UGB to attainment for the PM<sub>10</sub> NAAQS.

### Demonstration of Attainment:

On July 1, 1987, the EPA revised Title 40, Part 50 of the Code of Federal Regulations (40 CFR 50), which changed the particulate matter NAAQS from total suspended particulate to particulate matter less than or equal to 10 microns in size (PM<sub>10</sub>). The primary and secondary NAAQS for PM<sub>10</sub> are as follows:

24 hour Standard: The NAAQS for PM<sub>10</sub> is 150 ug/m<sup>3</sup> for a 24 hour average concentration. The standard is not to be exceeded more than once per year on average over 3 years, as determined in accordance with 40 CFR 50.

Annual Standard: The annual NAAQS for PM<sub>10</sub> is 50 ug/m<sup>3</sup> for an annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration is less than or equal to 50 ug/m<sup>3</sup>, as determined in accordance with 40 CFR 50. (This standard was revoked on December 18, 2006)

Since PM<sub>10</sub> monitoring began in 1984, the UGB has exceeded the 24 hour NAAQS on 15 occasions, 12 of which occurred during an extensive period of cold temperatures and poor ventilation in December of 1985. The last exceedance of the 24 hour standard occurred in January of 1987. The 24 hour standard exceedances have all occurred during the Winter months. The annual standard has never been exceeded. Based upon the historical ambient monitoring data, the UGB was found to be in violation of only the 24 hour PM<sub>10</sub> standard.

The original PM<sub>10</sub> attainment plan was adopted by LRAPA in March 1990. Since adoption was prior to the CAA amendments of 1990, an addendum to the plan incorporating a contingency plan (as required by the 1990 CAA amendments) was adopted by LRAPA in October 1991. The amended plan was submitted to EPA in November, 1991. The EPA approved the plan in October 1994.



The analysis used to develop the plan indicated that on a worst case winter day (when exceedances were likely to occur) residential wood combustion emissions contributed 68% of the total local emissions into the airshed. The dispersion modeling analysis used to develop the plan demonstrated that on those poor air quality days, residential wood combustion emissions contributed over 90% of the ambient impact. As a result, it was determined that the mandatory curtailment of residential wood combustion emissions would be necessary and sufficient to achieve attainment.  $PM_{10}$  emission reductions from other sources were not needed. Preceded by a voluntary program that began in 1986, the mandatory curtailment plan began in November, 1991. Each of the jurisdictions within the UGB enacted ordinances prohibiting the use of solid - fuel space heating devices under certain conditions (see Appendix B). Enforcement of the ordinances has been delegated by Lane County, the City of Eugene, and the City of Springfield to LRAPA. The program consists of a multi-stage advisory issued daily each winter from November 1 through the end of February. The daily determination of which stage to initiate is based upon forecast meteorology and air quality. During good air quality conditions, a Agreen@ advisory which allows residential wood combustion is issued. If conditions are deteriorating, a yellow advisory which requests voluntary curtailment of the practice is issued. If  $PM_{10}$  levels are forecast to be near or exceed the standard, a red advisory prohibiting the practice (with an exemption for economic need) is issued. Since the mandatory program began, it has not been necessary to issue a red advisory and the  $PM_{10}$  standard has not been exceeded. The mandatory home wood heating curtailment program is considered to be RACM and is permanent and enforceable (see 59 FR 163 8/24/94).

LRAPA currently maintains a  $PM_{10}$  monitoring network which includes one site within the UGB (see Figure 1). This site meets the federal monitoring requirements contained in 40 CFR 58. As demonstrated by the historical monitoring data, and confirmed by a saturation monitoring study conducted by LRAPA in 1989, the HWY 99 site (# 410390058) measures the highest  $PM_{10}$  concentrations within the UGB. As depicted in the following table, the 24 hour concentrations at this site over a recent 9 year period remain well below the  $PM_{10}$  NAAQS of  $150\mu g/m^3$ .

Table 1

HWY 99 Site # 410390058  
 24 Hour PM<sub>10</sub> Concentration (ug/m<sup>3</sup>)

<u>Year</u>	annual high	annual 2 <sup>nd</sup> high	3 yr 2 <sup>nd</sup> high
2000	73	50	---
2001	65	61	---
2002	66	62	66
2003	45	44	65
2004	59	40	62
2005	50	43	50
2006	68	53	59
2007	78	69	69
2008	56	48	69

The annual levels are also well below the former PM<sub>10</sub> NAAQS of 50 ug/m<sup>3</sup>.

Table 2

Hwy 99 Site # 410390058  
Annual Mean ( $\mu\text{g}/\text{m}^3$ )

<u>Year</u>	<u>Annual Mean</u>
2000	19
2001	19
2002	19
2003	19
2004	17
2005	17
2006	19
2007	16
2008	17

The monitoring data clearly demonstrates attainment with the  $\text{PM}_{10}$  NAAQS in accordance with 40 CFR 50.

## Maintenance Plan:

EPA's Limited Maintenance Plan Option (LMP) permits states to submit streamlined maintenance plans for areas that meet qualifying criteria. This option is specifically designed to redesignate areas that are at little risk of violating the  $PM_{10}$  standard. Areas qualifying for the LMP must meet the following criteria:

1. The area should attain the NAAQS
2. The average 24 hour  $PM_{10}$  design value for the area based upon 5 years of data should not exceed  $98 \text{ ug/m}^3$ , and the annual design value should not exceed  $40 \text{ ug/m}^3$ .
3. The area should expect only limited growth in on-road motor vehicle  $PM_{10}$  emissions.

The detailed analysis of the LMP criteria is contained in Appendix A. This analysis clearly demonstrates attainment with the NAAQS. The 24 hour design value of  $66 \text{ ug/m}^3$  is well below the criteria level of  $98 \text{ ug/m}^3$  and the annual design value of  $17 \text{ ug/m}^3$  is well below the criteria level of  $40 \text{ ug/m}^3$ . In addition, the motor vehicle emission analysis demonstrates only a minimal increase in emissions. As a result, this area is qualified to submit an LMP.

Annual and 24 hour  $PM_{10}$  emission inventories of significant sources were developed for the 2008 attainment year. As required in the LMP option, 2008 is within the five most recent years of monitoring data used to determine whether or not the area meets LMP option qualifying criteria. The methodology used and the details of the calculations for each source category are found in Appendix C. In each case, EPA approved methods were used. As summarized in Table 3, residential wood combustion remains the primary source of  $PM_{10}$  on winter days, while point sources dominate the annual emissions.

Table 3

2008 Estimated PM<sub>10</sub> Emissions for the Eugene/Springfield UGB

<u>Source</u>	<u>Annual (tons/year)</u>	<u>Winter Day (tons/day)</u>
Point Sources	1,624.1	4.4
Residential wood combustion	728.2	8.5
Road Dust	281.2	0.8
Motor vehicle exhaust, brake and tire wear	120.3	0.4
Total	2,753.8	14.1

In the 1985 base year emission inventory developed for the 1990 SIP 7,051 tons of PM<sub>10</sub> were emitted while in the 2008 annual E.I. only 2,754 tons were emitted. There has been a 61% reduction in annual PM<sub>10</sub> emissions since 1985. In 1985 the 24 hour Winter day emissions were estimated at 31.4 tons, while in 2008 this estimate was only 14.1 tons, a 55% decrease in PM<sub>10</sub> emissions. Although a quantitative explanation for all of the decline is not available, it is readily apparent that the precipitous decline in the wood products industry has drastically reduced the point source emissions. The lack of logging activity has also reduced the availability of cord wood. In addition, some older uncertified woodstoves and inserts have been replaced with cleaner burning more efficient certified woodstoves and inserts. Public awareness of the daily woodburning advisories has also resulted in less wood burning. As a result, residential wood combustion has been drastically reduced. In 1985, 85,325 tons of cord wood were burned in the UGB while in 2008 the estimate is 50,609 tons, a 41% reduction.

LRAPA has relied upon a mandatory residential wood combustion curtailment program to attain and maintain compliance with the PM<sub>10</sub> NAAQS. This program has been successfully implemented within the UGB. It is the intent of LRAPA to continue to implement this program to ensure continued attainment with the ambient standards. Since this area qualifies for the LMP option, maintenance of the ambient standard is presumed to be satisfied.

LRAPA has recently implemented the following additional control measures to ensure that this area continues to meet the PM<sub>10</sub> NAAQS (see Appendix B for details of the local ordinances).

1. Solid fuel space heating devices shall be prohibited from burning plastics, petroleum by-products, petroleum treated materials, rubber products, animal remains, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food, or of any other material which normally emits dense smoke or noxious odors.
2. During a Green or Yellow advisory the discharge of emissions from a solid fuel space heating device shall be limited to a maximum opacity of 40%. There will be

a 10 minute exemption during every 4 hour period for the building of a new fire.

In addition, the State of Oregon has recently adopted the "Heat Smart" law. This law requires the removal and decommissioning of any uncertified woodstove or fireplace insert from a home when it is sold.

As depicted in the existing SIP for this area, and confirmed by October 3, 1994, correspondence from EPA Region 10 (see Appendix E), motor vehicles are not a significant contributor to PM<sub>10</sub> emissions in this area and therefore regional PM<sub>10</sub> conformity determinations are not required. Hot spot conformity analysis for projects meeting federal criteria will continue to be required. This current analysis reaffirms the status of motor vehicles as an insignificant contributor to PM<sub>10</sub> emissions in this area.

Although industrial sources are not the significant contributor to PM<sub>10</sub> exceedances, industrial emissions growth will be controlled through New Source Review regulations. The Lowest Achievable Emission Rate (LAER) requirement for non-attainment areas will be replaced by Best Available Control Technology (BACT) for maintenance areas. Offsets and net air quality benefit will also be required.

As described in Appendix D, the 24 hour PM<sub>2.5</sub> standard would be violated well before the PM<sub>10</sub> standard was reached. A violation of the PM<sub>2.5</sub> standard would trigger SIP action for that pollutant which would also provide additional controls for PM<sub>10</sub> emissions. Although monitoring for PM<sub>2.5</sub> would technically be adequate to demonstrate compliance with the PM<sub>10</sub> NAAQS, as resources allow, LRAPA will continue to monitor for PM<sub>10</sub>.

## Appendix A

### Eugene-Springfield PM<sub>10</sub> Non-Attainment Area Limited Maintenance Plan Qualification Analysis

According to EPA guidance, to qualify for the LMP option an area should meet the following applicable criteria:

1. The area should attain the NAAQS.
2. The average 24 hour PM<sub>10</sub> design value for the area based upon recent 5 years of data should not exceed 98 ug/m<sup>3</sup> and the annual design value should not exceed 40 ug/m<sup>3</sup>.
3. The area should expect only limited growth in on-road motor vehicle PM<sub>10</sub> emissions.

#### Attainment with NAAQS:

As demonstrated by the historical monitoring data and confirmed by a saturation monitoring study conducted by LRAPA in 1989, the Hwy 99 Site (# 410390058) measures the highest PM<sub>10</sub> concentrations within the non-attainment area. Recent data from this site demonstrates that this area clearly attains the NAAQS of 150 ug/m<sup>3</sup> for the 24 hour standard and the former 50 ug/m<sup>3</sup> annual standard.



Eugene-Springfield UGB  
PM<sub>10</sub> Concentrations (ug/m<sup>3</sup>)  
Hwy 99 Site # 410390058

Year	Annual Highest 24 hour Concentration (ug/m <sup>3</sup> )	Annual Mean (ug/m <sup>3</sup> )
2000	73	19
2001	65	19
2002	66	19
2003	45	19
2004	59	17
2005	50	17
2006	68	19
2007	78	16
2008	56	17

**24 Hour Design Value:**

As recommended in EPA guidance, the Upper 10% Tail Exponential Distribution Method was used to calculate the 24 hour design value. Data from the Hwy 99 Site was used for the calculation. As depicted in the following, this area's 24 hour design value is 66 ug/m<sup>3</sup> which is well below the guidance level of 98 ug/m<sup>3</sup>.

Calculate the average of the rolling 3 year design values for the 5 year period using the Upper 10% Tail Exponential Distribution:

equation:  $DV = X_{90} + 3.61 (U_{90} - X_{90})$

where: DV = design value  
 $X_{90}$  = 90<sup>th</sup> percentile concentration  
 $U_{90}$  = mean of the upper 10% of samples

For the period 2004 - 2006 there were 359 samples (no data was flagged):

$$X_{90} = 35 \text{ ug/m}^3$$

$$U_{90} = 42 \text{ ug/m}^3$$

$$DV = 35 \text{ ug/m}^3 + 3.61(42 \text{ ug/m}^3 - 35.0 \text{ ug/m}^3) = 60 \text{ ug/m}^3$$

For the period 2005 - 2007 there were 359 samples (no data was flagged):

$$X_{90} = 34 \text{ ug/m}^3$$

$$U_{90} = 43 \text{ ug/m}^3$$

$$DV = 34 \text{ ug/m}^3 + 3.61(43 \text{ ug/m}^3 - 34 \text{ ug/m}^3) = 66 \text{ ug/m}^3$$

For the period 2006 - 2008 there were 360 samples (no data was flagged):

$$X_{90} = 33 \text{ ug/m}^3$$

$$U_{90} = 44 \text{ ug/m}^3$$

$$DV = 33 \text{ ug/m}^3 + 3.61(44 \text{ ug/m}^3 - 33 \text{ ug/m}^3) = 73 \text{ ug/m}^3$$

Average 24 Hour Design Value:

$$(60 \text{ ug/m}^3 + 66 \text{ ug/m}^3 + 73 \text{ ug/m}^3)/3 = 66 \text{ ug/m}^3$$

### Annual Design Value:

The annual design value is 17 ug/m<sup>3</sup> which is well below the guidance level of 40 ug/m<sup>3</sup>.

Calculate the average of the rolling 3 year design value for the 5 year period using the annual means of the 4 quarters:

<u>Year</u>	<u>Quarterly Annual Mean (ug/m<sup>3</sup>)</u>
2008	17
2007	16
2006	19
2005	17
2004	17

For the period 2004 - 2006:

$$\text{Annual DV} = (17 \text{ ug/m}^3 + 17 \text{ ug/m}^3 + 19 \text{ ug/m}^3)/3 = 17.67 \text{ ug/m}^3$$

For the period 2005 - 2007:

$$\text{Annual DV} = (17 \text{ ug/m}^3 + 19 \text{ ug/m}^3 + 16 \text{ ug/m}^3)/3 = 17.33 \text{ ug/m}^3$$

For the period 2006 - 2008:

$$\text{Annual DV} = (19 \text{ ug/m}^3 + 16 \text{ ug/m}^3 + 17 \text{ ug/m}^3)/3 = 17.33 \text{ ug/m}^3$$

$$\text{Average Annual DV} = (17.67 \text{ ug/m}^3 + 17.33 \text{ ug/m}^3 + 17.33 \text{ ug/m}^3)/3 = 17 \text{ ug/m}^3$$

Motor Vehicle Regional Analysis:

Using the method recommended in EPA Guidance, an on-road motor vehicle regional analysis was performed. As depicted in the following, there will be only limited growth in on-road motor vehicle PM<sub>10</sub> emissions.

EPA Guidance Equation:

$$\text{DV} + (\text{VMTpi} * \text{DVmv}) \leq \text{MOS}$$

where: DV = area design value

VMTpi = projected % increase in vmt 10 years from base year  
(projected increase in VMT from 2008 - 2018 is 14.3% -  
from local MPO transportation modeling estimate)

DVmv = motor vehicle design value based upon on-road portion  
of base year EI

MOS = margin of safety for PM<sub>10</sub> standard: 98 ug/m<sup>3</sup> for 24 hour  
standard and 40 ug/m<sup>3</sup> for annual standard

24 hour analysis:

From 2008 attainment year winter day EI

total winter day emissions = 14.1 tons

total motor vehicle winter day emissions = 1.2 tons

% mv = 8.5

DV = 66 ug/m<sup>3</sup>

VMTPi = 0.143

DVmv = 5.61 ug/m<sup>3</sup>

$$66 \text{ ug/m}^3 + (0.143 * 5.61 \text{ ug/m}^3) = 67 \text{ ug/m}^3$$

annual analysis:

From 2008 base year EI

total annual emissions = 2,753.8 tons

total motor vehicle annual emissions = 401.5 tons

% mv = 14.58

DV = 17 ug/m<sup>3</sup>

VMTPi = 0.143

DVmv = 2.48 ug/m<sup>3</sup>

$$17 \text{ ug/m}^3 + (0.143 * 2.48 \text{ ug/m}^3) = 17 \text{ ug/m}^3$$

## Appendix B

### Local Home Wood Heating Ordinances

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#### **Solid Fuel Space Heating Devices**

**6.250 Solid Fuel Space Heating Devices - Definitions.** As used in sections 6.255 to 6.265, the following words and phrases mean:

**City manager.** City manager or designee, including, if the city manager so designates, LRAPA.

**Green advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be less than 100 micrograms per cubic meter and PM2.5 levels are forecast to be less than 25 micrograms per cubic meter.

**LRAPA.** Lane Regional Air Pollution Authority, a regional air quality control authority established under the provisions of, and with authority and powers derived from, Oregon Revised Statutes 468.500 et seq.

**Opacity.** The degree to which an emission reduces transmission of light or obscures the view of an object in the background.

**Pellet stove.** An enclosed solid fuel space heating device designed and operated to burn manufactured solid fuel and having an air-to-fuel ratio greater than 35-to-1 as determined by the federal test method described in 40 CFR Part 60.534.

**Person.** Any individual, partnership, corporation, association, governmental subdivision or public or private organization of any character.

**Person in charge of property.** An agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.

**PM2.5.** Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 2.5 micrometers.

**PM10.** Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 10 micrometers.

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**Sole source of heat.** A solid fuel space heating device which constitutes the only source of heating in a private residence. A solid fuel space heating

device shall not be considered to be the sole source of heat if the private residence is equipped with any permanently installed furnace or heating system utilizing oil, natural gas, electricity or propane.

**Solid fuel space heating device.** Any device designed or operated to burn solid fuel for the heating of the interior of a building, including, but not limited to, solid fuel burning stoves, fireplaces or wood stoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, and solid fuel burning cooking stoves. "Solid fuel space heating device" does not include natural gas fired artificial fireplaces.

**Stage I red advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 125 micrograms per cubic meter but less than 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 30 micrograms per cubic meter but less than 35 micrograms per cubic meter, within the Eugene-Springfield Metropolitan Area General Plan Urban Growth Boundary.

**Stage II red advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 35 micrograms per cubic meter, within the Eugene-Springfield Metropolitan Area General Plan Urban Growth Boundary.

**Visible emissions.** The reduction in transmission of light or the obscuring of the view of an object in the background caused by the air pollutants emitted by the heating device. This does not include the visual distortion caused by the heated air emitted by the heating device.

**Yellow advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 100 micrograms per cubic meter but less than 125 micrograms per cubic meter, or when PM2.5 levels are forecast to be greater than or equal to 25 micrograms per cubic meter but less than 30 micrograms per cubic meter.

*(Section 6.250 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991; amended by Ordinance No. 19815, enacted December 2, 1991; Ordinance No. 20261, enacted July 22, 2002, effective August 22, 2002; and Ordinance No. 20399, enacted November 26, 2007, effective December 28, 2007.)*

#### **6.255 Solid Fuel Space Heating Devices - Prohibitions.**

**(1)** No person in charge of property during a Stage I Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the

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device, unless the person has been granted an exemption to use the device by the city manager.

**(2)** No person in charge of property during a Stage II Red Advisory shall

operate or allow to be operated a solid fuel space heating device unless:

(a) The person has been granted an exemption to use the device by the city manager; or

(b) The person is operating a pellet stove which emits no visible emissions into the air outside of the building housing the device.

(3) No person in charge of property shall at any time allow to be initiated or maintained in a solid-fuel space-heating device the burning of any plastics, wire insulation, petroleum by-products (with the exception of natural-gas-fueled log lighters), petroleum-treated materials, rubber products, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food, or of any other material which normally emits dense smoke, noxious odors, or hazardous air contaminants.

(4) During a green or yellow advisory, no person in charge of property shall operate or allow to be operated a solid-fuel space-heating device which discharges emissions that are of an opacity greater than 40 percent. This provision does not apply to the emissions during the building of a new fire, for a period or periods aggregating no more than ten minutes in any four-hour period.

*(Section 6.255 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991; amended by Ordinance No. 19815, enacted December 2, 1991; and Ordinance No. 20261, enacted July 22, 2002, effective August 22, 2002.)*

**6.260 Solid Fuel Space Heating Devices - Exemptions.** Notwithstanding section 6.255 of this code, a person in charge of property may operate a solid fuel space heating device during a Stage I or Stage II Red Advisory if that person has previously obtained one of the following exemptions from the city manager:

(a) Sole source of heat exemption. A person in charge of property who signs a sworn statement that their solid fuel space heating device is the sole source of heat for their residence. This exemption shall expire on July 1 of each year and must be renewed annually. This exemption shall not be issued after June 30, 1996.

(b) Economic need exemption. Persons in charge of property who satisfy criteria established under the Low Income Energy Assistance Program as administered by the Lane County Housing Authority and as established by the United States Department of Energy. This exemption shall expire on July 1 of each year and must be renewed annually thereafter.

*(Section 6.260 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991.)*

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**6.265 Solid Fuel Space Heating Devices - Enforcement.** In addition to, and not in lieu of any other enforcement mechanism authorized by this code, upon a determination that a person has violated section 6.255 of this code, the city manager may impose upon the violator and any other person in charge of the property, an administrative penalty not greater than \$500, as provided by section 2.018 of this code. The city manager also is authorized to designate LRAPA to enforce and administer the provisions of sections 2.655 to 2.670 of this code, including LRAPA's use of administrative and hearing procedures adopted by LRAPA in its duly promulgated regulations.

*(Section 6.265 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991.)*

Lane Code

**RESTRICTION ON USE OF SOLID FUEL SPACE HEATING DEVICES**

9.120 Purpose and Findings.

9.125 Definitions.

9.130 Area of Applicability.

9.135 Prohibitions.

9.140 Exemption for Economic Need.

9.145 Enforcement.

9.150 Penalties.

**RESTRICTION ON USE OF SOLID FUEL SPACE HEATING DEVICES**

**9.120 Purpose and Findings.**

(1) The health, safety and welfare of the citizens of Lane County are adversely affected by the degradation of air quality. Violations of federal ambient air quality standards, as measured by the Lane Regional Air Pollution Authority (LRAPA), occur periodically in Lane County.

(2) Wood and other solid fuel combustion for space heating produces particulate matter and other emissions which are physically harmful and aesthetically unpleasant, and which contribute to the degradation of air quality and the violation of federal ambient air quality standards.

(3) Periodic restriction of the use of solid fuel space heating devices will improve air quality. LRAPA has the expertise to determine when such air quality is at such a level that such restriction is necessary to preserve the health, safety and welfare of the citizens of Lane County.

(4) It is the intent of Lane County that the penalty section of this ordinance not take effect until November 1, 1991. *(Revised by Ordinance No. 9-90, Effective 1.18.91)*

**9.125 Definitions.**

As used herein, the following words and phrases shall mean:

Green Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be less than 100 micrograms per cubic meter and PM2.5 levels are forecast to be less than 41 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

Lane Regional Air Pollution Authority. A regional air quality control authority established under the provisions of and with the authority and powers derived from ORS 468.500 et seq.

Opacity. The degree to which an emission reduces transmission of light or obscures the view of an object in the background.

Pellet Stove. An enclosed solid fuel space heating device designed and operated to burn manufactured solid fuel and having an air-to-fuel ratio greater than 35-to-1 as determined by the federal test method described in 40 CFR Part 60.534

Person. Any individual, partnership, corporation, association, governmental subdivision or public or private organization of any character.

Person in Charge of Property. An agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.

PM2.5. Solid or liquid particulate matter (excluding uncombined water) with an

aerodynamic diameter less than or equal to 2.5 micrometers.

PM10. Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 10 micrometers.

Sole Source of Heat. A solid fuel space heating device which constitutes the only source of heating in a private residence. A solid fuel space heating device shall not be considered to be the sole source of heat if the private residence is equipped with any permanently-installed furnace or heating system utilizing oil, natural gas, electricity or propane.

Solid Fuel Space Heating Device. Any device designed or operated to burn solid fuel for the heating of the interior of a building, including, but not limited to, solid fuel burning stoves, fireplaces or wood stoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, and solid fuel burning cooking stoves. "Solid fuel space heating device" does not include natural gas-fired artificial fireplaces.

Stage I Red Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 125 micrograms per cubic meter but less than 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 55 micrograms per cubic meter but less than 65 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

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meter but less than 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 55 micrograms per cubic meter but less than 65 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

Stage II Red Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 65 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

Visible Emissions. The reduction in transmission light or the obscuring of the view of an object in the background caused by the air pollutants emitted by the heating device. This does not include the visual distortion caused by the heated air emitted by the heating device.

Yellow Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 100 micrograms per cubic meter but less than 125 micrograms per cubic meter, or when PM2.5 levels are forecast to be greater than or equal to 41 micrograms per cubic meter but less than 55 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00; 13-03, 10.23.03)*

#### **9.130 Area of Applicability.**

The Metropolitan Area General Plan Urban Growth Boundary adopted in 1982 as amended through June 2003, excluding the area within the city limits of Eugene and Springfield. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 13-03, 10.23.03)*

#### **9.135 Prohibitions.**

(1) Stage I Red Advisory. No person in charge of property during a Stage I Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the device unless the person in charge of the property has been granted an exemption to use the device by LRAPA.

(2) Stage II Red Advisory. No person in charge of property during a Stage II Red Advisory shall operate or allow to be operated a solid fuel space heating device unless the person in charge of the property has been granted an exemption to use the device by LRAPA or unless the person is operating a pellet stove which emits no visible emissions into the air outside of the building housing the device.

(3) Green or Yellow Advisory. No person in charge of property during a green or yellow advisory shall operate or allow to be operated a solid fuel space heating device which discharges emissions that are of an opacity greater than forty (40) percent. This provision does not apply to the emissions during the building of a new fire, for a period or periods aggregating no more than ten (10) minutes in any four (4) hour period.

(4) Prohibited Materials. No person in charge of property shall at any time allow to be initiated or maintained in a solid fuel space heating device the burning of any plastics, wire insulation, petroleum by-products (with the exception of natural-gas-fueled log lighters), petroleum treated materials, rubber products, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food, or of any other material which normally emits dense smoke, noxious odors, or hazardous air contaminants. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00; 13-03, 10.23.03)*

**9.140 Exemption for Economic Need.**

Exemption from LC 9.135 above for Stage II and/or Stage I Red Advisories may be obtained from LRAPA for economic need. Persons in charge of property who satisfy criteria established under the Low Income Energy Assistance Program as administered by 9.145 Lane Code 9.215

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the Lane County Housing Authority and as established by the United States Department of Energy are exempt from LC 9.135 above for both Stage I and Stage II Red Advisories. Individual exemptions shall expire on July 1 of each year and must be renewed annually. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00)*

**9.145 Enforcement.**

The Board of County Commissioners designates LRAPA to enforce the prohibitions contained herein. The investigation, initiations of proceedings, adjudication of a failure to comply and appeal of such shall be regulated by the adopted administrative and hearing procedures of LRAPA set forth in its Rules and Regulations.

The County shall also retain the right to investigate and enforce the terms of this ordinance. Existing citation, complaint, violation, or failure to comply procedures applicable to the County may be utilized to prosecute such failures to comply. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00)*

**9.150 Penalties.**

Failure to comply with LC 9.135 above shall be subject to administrative enforcement pursuant to LC Chapter 5, including a monetary penalty of a minimum of \$50 to a maximum of \$500 for each day in which such failure to comply occurs. This remedy is cumulative and is in addition to any and all other remedies available to Lane County. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00)*

## Springfield Code

### AIR POLLUTION

#### 4.500 Lane Regional Air Protection Agency.

The Lane Regional Air Protection Agency (LRAPA) is the primary authority responsible for the control and/or abatement of air pollution in the city. As part of its duties LRAPA is responsible under its rules and regulations and Oregon Administrative Rules, for administering the most current Oregon Revised Statutes which concern air quality. [Section 4.500 amended by Ordinance No. 6216, enacted February 22, 2008.]

#### 4.502 City Responsibilities.

On any matters pertaining to air quality that are not administered by LRAPA, the city will comply with the most current Oregon Revised Statutes which concern air quality and the adopted state implementation plan for the Eugene-Springfield Area.

#### 4.504 Abatement.

Nothing in sections 4.500 to 4.512 shall restrict the right of the city to abate a nuisance in any matter otherwise.

### Solid Fuel Space Heating Devices.

#### 4.508 Prohibitions.

(1) Stage I Red Advisory. No person in charge of property during a Stage I Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the device unless the person in charge of the property

has been granted an exemption to use the device by LRAPA.

(2) Stage II Red Advisory. No person in charge of property during a Stage II Red Advisory shall operate or allow to be operated a solid fuel space heating device unless the person in charge of the property has been granted an exemption to use the device by LRAPA or unless the person is operating a pellet stove which emits no visible emissions into the air outside of the building housing the device.

(3) No person in charge of property shall at any time allow to be initiated or maintained in a solid-fuel space-heating device the burning of any plastics, wire insulation, petroleum by-products, petroleum-treated materials, rubber products, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking or service of food, or of any other material which normally emits dense smoke, noxious odors, or hazardous air contaminants. This section does not prohibit use of natural gas fuels to light solid fuels.

(4) During a green or yellow advisory, no person in charge of property shall operate or allow to be operated a solid-fuel space-heating device which discharges emissions that are of an opacity greater than 40 percent. This provision does not apply to the emissions during the building of a new fire, for a period or periods aggregating no more than 10 minutes in any four-hour period. [Section 4.508 amended by Ordinance No. 6026, enacted December 2, 2002.]

#### 4.510 Exemptions.

A person in charge of property may operate a solid fuel space heating device during a Stage I or Stage II Red Advisory if that person has previously obtained one of the following exemptions from LRAPA.

(1) Sole Source of Heat: A person in charge of property who signs a sworn statement that the solid fuel space

heating device is the sole source of heat for that persons residence is exempt from section 2 above. Individual exemptions shall expire on July 1 of each year and must be renewed annually. This exemption shall not be issued by LRAPA after June 30, 1996.

(2) Economic Need: Persons in charge of property who satisfy criteria established under

the Low Income Energy Assistance Program as administered by the Springfield Utility Board and as established by the United States Department of Energy are exempt from the prohibitions established herein. Individual exemptions shall expire on July 1 of each year and must be renewed annually.

#### 4.512 Enforcement.

(1) LRAPA is hereby authorized and designated to enforce and administer the process of sections 4.508 through 4.512 of the code in accordance with the adopted administrative and hearing procedures of LRAPA set forth in its rules and regulations adopted November 10, 1992.

(2) Violations. Penalties shall be in accordance with applicable state laws and LRAPA "Rules of Practice and Procedures" adopted February 13, 1990.

## Appendix C

### 2008 Attainment Year Emission Inventory for the Eugene-Springfield UGB

An annual and a Winter day emission inventory have been developed for the Eugene-Springfield UGB. The methodology used for developing the emission inventory for each source category is discussed. In each case, EPA approved methods were used.

The results of this analysis are summarized in Table C1. As the data depicts, residential wood combustion is the primary contributor of PM<sub>10</sub> to the airshed on Winter days when historically this area has exceeded the 24 hour standard.

Table C1

2008 estimated PM<sub>10</sub> emissions for the Eugene/Springfield UGB

Source	Annual (tons/year)	Winter Day (tons/day)
Point Sources	1,624.1	4.4
Residential wood combustion	728.2	8.5
Road Dust	281.2	0.8
Motor vehicle exhaust, brake and tire wear	120.3	0.4



Total	2,753.8	14.1
-------	---------	------

### Point Sources:

Although the EPA definition of a point source for PM<sub>10</sub> in moderate non-attainment areas is one having emissions  $\geq 100$  tons/year, for the purposes of this emissions inventory sources  $\geq 10$  tons/year will be included. This more complete listing of sources creates a more accurate estimate of the impact of point sources in this area. Within the UGB there are 10 sources which have Federal Title V Operating Permits, 3 sources with Synthetic Minor Operating Permits, and 9 sources with LRAPA Air Contaminant Discharge Permits (ACDP), which have annual PM<sub>10</sub> emissions  $\geq 10$  tons/year. The permitted Plant Site Emission Limits were used to estimate emissions for 2008, since actual emissions are not available. All of these sources operate with a fairly consistent production rate year-round. The estimate of daily emissions is a direct fraction of the annual emissions.

### Title V Sources:

Permit #	Name	Annual PM <sub>10</sub> (t/y)
203129	G.P. Resins	12.4
203102	Murphy	64.0
204402	Kingsford mfg.	194.0
207510	Mckenzie Forrest Products	219.8
207050	Rosboro	213.0
208866	Sierra Pine	214.9
208256	Trus Joist Eugene	61.4
208850	International Paper	305.0
200529	Flakeboard America MDF	70.0
208864	Pacific States Plywood	34.0

## Synthetic Minor Sources

Permit #	Name	Annual PM <sub>10</sub> (t/y)
202805	Forrest Paint	17.0
208557	University of Oregon Boiler	24.6
208894	Whittier Wood Products	23.7

## ACDP Sources

Permit #	Name	Annual PM <sub>10</sub> (t/y)
201270	Cafeto Custom Roasting	14.0
206122	Caffe Pacori	14.0
202528	Emerald Forest Products #1	49.0
203103	Georgia Pacific Irving	15.7
208250	Mckenzie Forest Products	10.6
202108	Northwest Hardwoods	11.0
207488	Ridgeline	15.0
207075	Rexius Forest Byproducts	14.0
207459	Seneca Sawmill	27.0

Total Point Source Annual Emissions = 1,624.1 tons/year

Point Source Daily Emission Estimate = 4.4 tons/day

**Area Sources:****Residential Wood Combustion:**

Emissions were developed from the estimated use of wood stoves, pellet stoves, and fireplaces within the UGB. Estimates of usage were made using the results of the most recent survey; a 2009 study performed by Advanced Marketing Research Inc. (see Appendix F). The emission factors used were from EPA AP42 tables 1.9-1 and 1.10-1. The daily usage was estimated using Heating Degree Days for the worst case winter day in 2008.

2008 Residential Wood Combustion PM<sub>10</sub> Emissions Estimates  
Eugene-Springfield UGB

Wood Burning Device	# of households using device <sup>1</sup>	2008 total fuel burned <sup>2</sup> (tons)	PM <sub>10</sub> emission factor <sup>3</sup> (lbs/ton)	2008 Emission <sup>4</sup> (tons)
fireplace	18,233	19,327	34.6	334.4
woodstove and fireplace insert uncertified	8,104	15,641	30.6	239.3
phase II certified catalytic Wood stove and insert	8,104	15,641	16.2	126.7
Pellet stove	7,091	6,311	8.8	27.8

Total Annual PM<sub>10</sub> Emissions from RWC = 728.2 tons

The Worst Case Winter Day PM<sub>10</sub> Emissions from RWC = 8.5 tons<sup>5</sup>

## 1. Household Calculations:

The Lane Council of Governments (the local Metropolitan Planning Organization) estimates a total of 101,296 households within the Eugene-Springfield UGB during 2008.

The 2009 survey provides estimates of the percentage of households using a particular type of wood burning device as follows:

fireplace w/o insert and other misc. devices = 18%  
conventional woodstoves and fireplace inserts = 8%  
phase II certified woodstoves = 8%  
pellet stoves = 7%

(total households) (fraction using device) = number of households using device

## 2. Total Fuel Burned Calculations:

Based upon discussions with local firewood retailers and with federal agencies that provide firewood cutting permits, the primary species used for firewood in this area is Douglas Fir.

the density of Douglas Fir is 32 lbs/ft<sup>3</sup> (EPA AP42 Appendix A)

the volume of a cord of wood is approximately 80 ft<sup>3</sup> (EPA vol III chapter 2 EIIP RWC Jan 2001)

therefore, one cord of Douglas Fir weighs 1.28 tons

Based upon previous local surveys, the heating season for the Eugene/Springfield UGB is defined as October through March.

The most recent formal survey was conducted in 2009 with fuel usage estimates for 2008.

The 2009 survey provides estimates of the amount of wood burned by each type of wood burning device as follows:

fireplace w/o insert - an average of 0.83 cords per device per year  
 $(0.83 \text{ cords}) (1.28 \text{ tons/cord}) = 1.06 \text{ tons per device per year}$

conventional woodstoves and fireplace inserts - an average of 1.51 cords per device per year  
 $(1.51 \text{ cords}) (1.28 \text{ tons/cord}) = 1.93 \text{ tons per device per year}$

phase II certified woodstoves - an average of 1.51 cords per device per year  
 $(1.51 \text{ cords}) (1.28 \text{ tons/cord}) = 1.93 \text{ tons per device per year}$

pellet stoves - burned an average of 0.89 tons of pellets per year

3. PM<sub>10</sub> emission factors:

EPA AP 42 tables 1.9-1 and 1.10-1

4. 2008 emissions calculation:

$(2008 \text{ total fuel burned (tons)}) (PM_{10} \text{ emission factor (lbs/ton)}) (1/2000 \text{ lbs/ton}) = 2008 PM_{10} \text{ emissions (tons)}$

5. Worst Case Day Emissions:

For the worst case day emissions estimate, it was assumed that the amount of wood burned is directly proportional to the Heating Degree Days (HDD). As defined by the National Weather Service, a HDD is calculated by averaging the daily maximum and minimum temperatures and for each degree that number is below 65 degrees, it is one degree day. Therefore, if the maximum and minimum temperatures average to 63 degrees, that is 2 degree

days.

The peak HDD date in 2008 was 12/16/08 with 46 HDD. To compute the daily emissions estimate multiply the ratio of the peak day HDD to the total season HDD with the season total emission estimate. The season total HDD for 2008 was 3,927.

$$(46/3,927) (728.2 \text{ tons}) = 8.5 \text{ tons}$$

### On Road Mobile Sources:

#### Road Dust:

Emissions estimates for Road Dust were developed using EPA AP42 emission factors and VMT estimates from the Lane Council of Governments (the local MPO) as follows:

equation 1 in AP42 section 13.2.1

$$E = k(sL/2)^{0.65} * (W/3)^{1.5} - C$$

where:

$E$  =  $PM_{10}$  emission factor (lbs/VMT)

$k$  = particle size multiplier = 0.016 lbs/VMT (AP42 table 13.2-1.1)

$sL$  = silt loading using AP42 table 13.2.1-3

5,000 - 10,000 ADT = 0.06 g/m<sup>2</sup>

> 10,000 ADT = 0.03 g/m<sup>2</sup>

from LCOG (personal communication) 76% of VMT in the UGB is on roads > 10,000 ADT

$sL = (0.76)(0.03) + (0.24)(0.06) = 0.037 \text{ g/m}^2$

$W$  = average weight of vehicles = 2.5 tons (ODOT personal communication)

$C$  = emission factor for fleet exhaust, brake wear, and tire wear  
= 0.00047 lbs/VMT (AP42 table 13.2.1-2)

$$E = 0.000439 \text{ lbs/VMT}$$

Annual Adjustment:

equation 2 in AP42 section 13.2.1

$$E_{\text{ann}} = E (1 - P/4N)$$

where:

P = number of wet days in 2008 = 143

N = number of days in the year = 366

$$E_{\text{ann}} = 0.000396 \text{ lbs/VMT}$$

VMT estimates:

LCOG (personal communication) provided VMT estimates

$$\text{average weekday VMT} = 4.19 \times 10^6$$

$$\text{annual VMT} = 1.42 \times 10^9$$

Annual emission estimate = 281.2 tons/year

Daily emission estimate = 0.83 tons/day

Motor Vehicle Exhaust, Brake Wear, and Tire Wear:

The emissions were estimated using emission factors from EPA Mobile 6.2.  
The VMT estimates were from the Lane Council of Governments (the local MPO).

Winter  $PM_{10}$  emission factor for exhaust, brake, and tire wear = 0.078 g/mi

Summer  $PM_{10}$  emission factor for exhaust, brake and tire wear = 0.0757g/mi

Composite annual emission factor = 0.0769 g/mi

Average weekday VMT =  $4.19 \times 10^6$

Annual VMT =  $1.42 \times 10^9$

Annual  $PM_{10}$  Emission Estimate = 120.3 tons/year

Winter Day  $PM_{10}$  Emission Estimate = 0.4 tons/day



## Appendix D

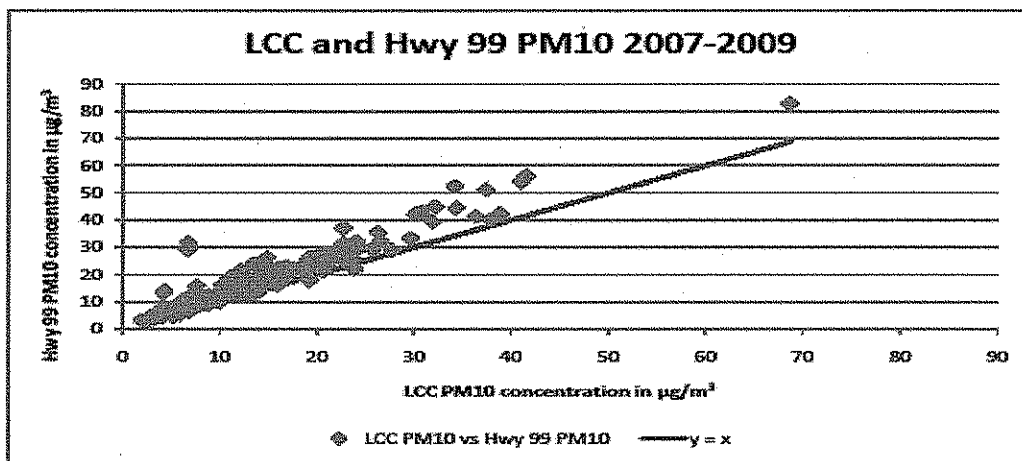
### PM<sub>10</sub> / PM<sub>2.5</sub> Relationship

In order to describe the relationship between PM<sub>10</sub> and PM<sub>2.5</sub> in the Eugene/Springfield area, a brief analysis is summarized here. It is LRAPA's assertion that PM<sub>10</sub> monitoring is unnecessary in this air shed because the ratio of PM<sub>2.5</sub> to PM<sub>10</sub> is high enough to ensure that the 24-hr PM<sub>2.5</sub> standard would be violated before the PM<sub>10</sub> standard was reached.

There are two existing PM<sub>10</sub> monitoring sites in this area that were established in 1985, AQS number 410390013 (LCC) and AQS number 410390058 (Hwy 99). The Hwy 99 site has also monitored PM<sub>2.5</sub> since 2007. A third site, AQS number 410390060 (AMZ), has previously monitored PM<sub>10</sub> and currently monitors PM<sub>10</sub> as a toxic metals method, funded through a temporary HAP project.

The most important fact regarding PM levels in Eugene/Springfield is that neither PM<sub>10</sub> nor PM<sub>10c</sub> (coarse) are pollutants of concern here. There has not been an exceedance of the 24-hr PM<sub>10</sub> standard since 1987. The 2007-2009 design values are 60 µg/m<sup>3</sup> and 50 µg/m<sup>3</sup> for Hwy 99 and LCC, respectively. Figure 1 shows that the Hwy 99 site is clearly the higher of the two sites. During the 2007-2009 period, the highest 24-hr PM<sub>10c</sub> value measured was 42 µg/m<sup>3</sup>. This is 57% of the 2006 proposed standard of 70 µg/m<sup>3</sup>.

Figure 1



The collocated  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  data for 2007-2009 from Hwy 99 was used to examine the  $\text{PM}_{2.5}/\text{PM}_{10}$  ratio. Figure 2 shows that as the  $\text{PM}_{2.5}$  concentration approaches  $25 \mu\text{g}/\text{m}^3$ , the ratio is equal to or greater than 50%. It follows that at or above  $25 \mu\text{g}/\text{m}^3$  of  $\text{PM}_{2.5}$ , the  $\text{PM}_{10}$  concentrations would be equal to, or less than, twice the  $\text{PM}_{2.5}$  concentration. Figure 3 displays

another way to view the PM ratio. The coarse fraction only rises (that is, the ratio decreases) as the  $PM_{10}$  concentration reduces to insignificant values.

Figure 2

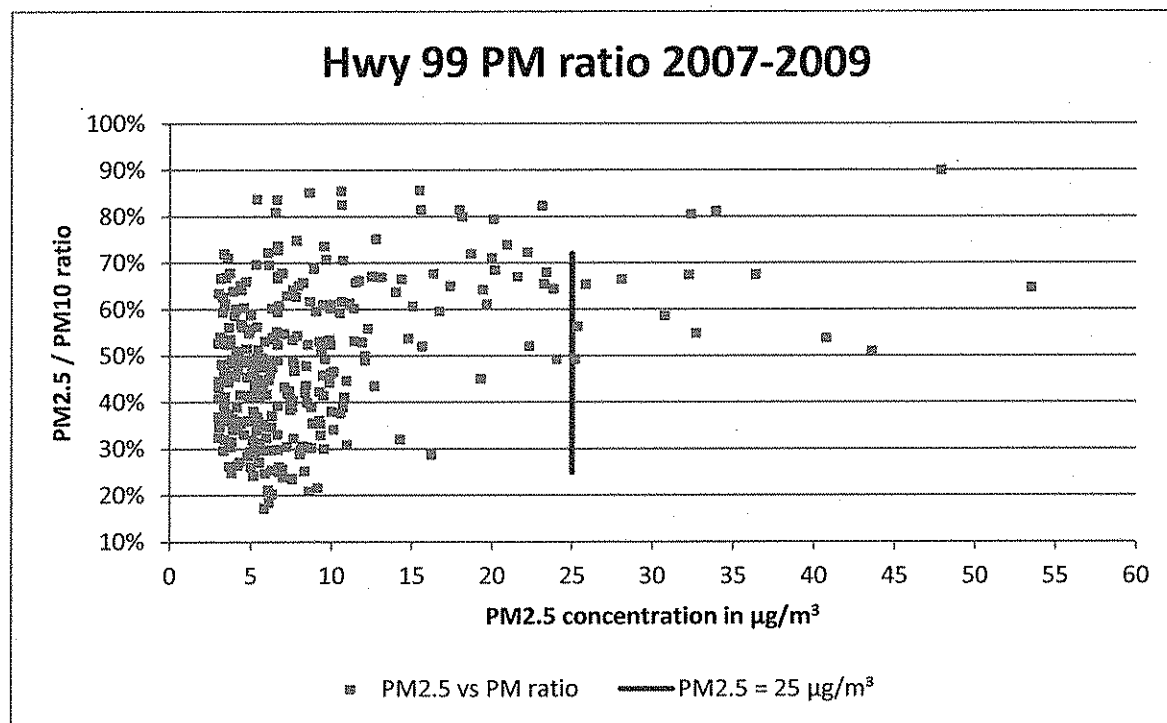
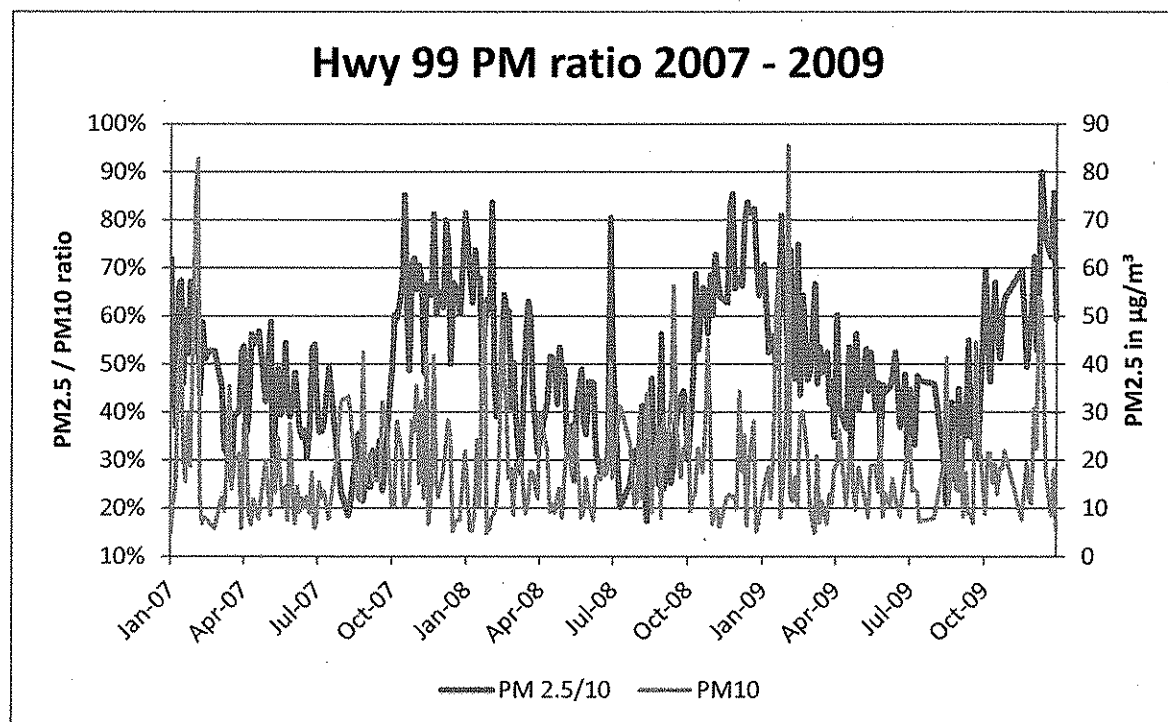
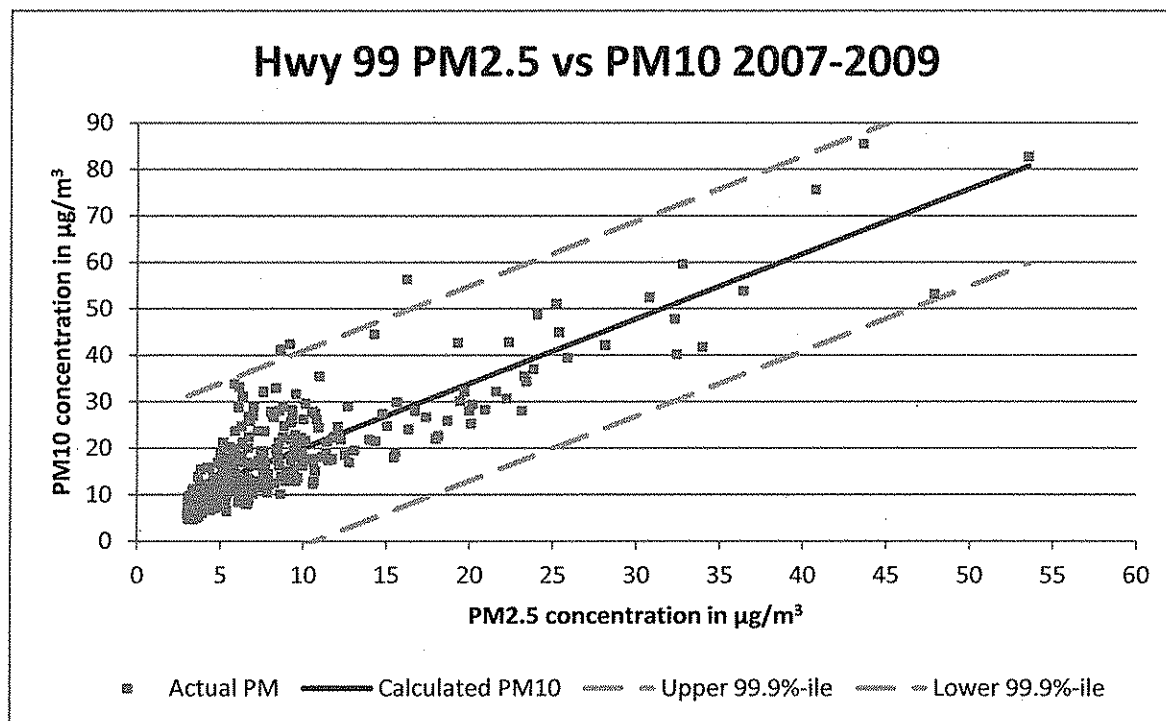


Figure 3



Finally, results of a regression analysis lead to the same conclusion. A simple linear regression was performed on 291 pairs of collocated observations ( $\geq 3 \mu\text{g}/\text{m}^3$ ) of  $\text{PM}_{2.5}$  and  $\text{PM}_{10}$ . This regression line predicts a  $\text{PM}_{10}$  concentration ( $\text{PM}_{10} = 1.397 * \text{PM}_{2.5} + 6.005$ ) from an observed  $\text{PM}_{2.5}$  concentration with a good deal of certainty ( $r^2 = 0.708$ ). Using a conservative limit of 99.9%, upper and lower confidence intervals are  $\pm 21 \mu\text{g}/\text{m}^3$ . Figure 4 shows that at the point of a 24-hr  $\text{PM}_{2.5}$  exceedance,  $\text{PM}_{10}$  levels remain at 50% of the 24 hr  $\text{PM}_{10}$  standard.

Figure 4



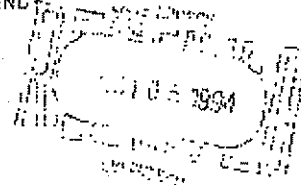
## Appendix E

### EPA determination of Transportation Conformity for PM10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1201 Sixth Avenue  
Seattle, Washington 98101

DET 03 1994



Reply To  
Attn Of: AT-082

Mr. Don Arkell, Director  
Lane Regional Air Pollution Authority  
225 North 5th, Suite 501  
Springfield, OR 97477-4671

Dear Mr. Arkell:

This is in response to your letter to Chuck Clarke regarding the "Memorandum of Understanding - Transportation Conformity Analysis for the Eugene-Springfield MPO", dated September 9, 1994. The letter was also signed by George Kloeppel, the ICOG Executive Director.

The final federal conformity rule does allow for exempting areas from the regional emissions analysis of the conformity rule if certain criteria are met. I believe your letter demonstrates that the Eugene-Springfield area meets the PM<sub>10</sub> conformity criteria and therefore, I concur with your conclusion that the conformity determination is not required to satisfy the PM<sub>10</sub> criteria for regional emissions analysis. The preamble for the federal rule, however, does not allow for relief from project level analysis. The projects within the PM<sub>10</sub> nonattainment area must comply with the project level conformity requirements as specified in the federal conformity regulation.

I also concur with your findings regarding analysis for conformity findings with regard to meeting the carbon monoxide criteria. Regional emission test will apply only in the Central Area Transportation Study (CATS) boundary, consistent with the approved redesignation. Regional emission analysis will not apply outside the CATS boundary. Again, project level conformity requirements are not affected by this finding and continue to apply throughout the nonattainment area, consistent with the federal regulation.

Thank you for requesting our concurrence with this conformity proposal. Questions regarding our concurrence can be directed to Mike Lidgard at (206)583-4237.

Sincerely,

*Jim McCormick*  
Jim McCormick, Director  
Air and Toxics Division

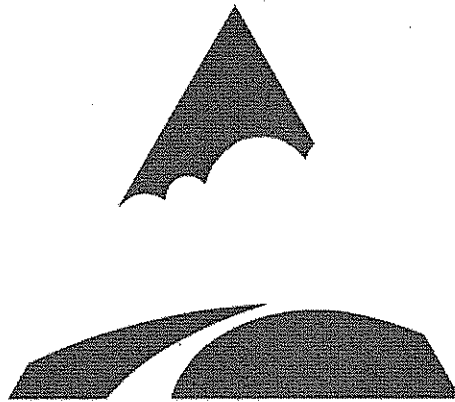
cc: George Kloeppel, ICOG

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Appendix F

**FUEL USE SURVEY  
CONDUCTED FOR  
LANE REGIONAL AIR PROTECTION AGENCY**

October, 2009



**ADVANCED MARKETING  
RESEARCH INC.**



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## **EXECUTIVE SUMMARY**

### **Primary Heat Source (Q3-4)**

Natural gas forced air heaters and electric heat pumps top the list as primary sources of heat for Eugene/Springfield area residents, with 25% each. Electric ceiling heat and electric wall heaters are each the primary source of heat for 13%, and electric forced air is the source of heat for 12%.

The electric heat pump has moved up from 8% in 2001 to 25% currently, while electric ceiling heat has gone from 33% and first place in 2001, down to 13% currently.

### **Secondary Heat Sources (Q5-6)**

43% of residents do not have a secondary source of heat, down from 56% in 2001. 16% use a wood fireplace as a secondary source of heat, 8% use a gas fireplace, 8% use electric wall heaters, and 8% use wood stoves.

### **Changes in Primary Heat Source (Q7-10)**

7% are considering a change in their primary heat source, consistent with 6% in 2001. Of those considering a change (n=29), 66% are planning to switch to an electric heat pump (up from 23% in 2001), 10% are planning to get electric forced air, and 3% are planning to get gas forced air (down from 27% in 2001).

For those considering a switch (n=29), cost is the reason for 38%, efficiency is the reason for 31%, and 24% don't like their current system. (See Table 10V for verbatim responses.)

### **Current Use of Wood Stoves (Q11-13)**

18% of residents currently have a wood stove, consistent with 15% in 2001. 44% of the wood stoves are over fifteen years old. 11% are eleven to fifteen years old, 25% are five to ten years old, and 11% are less than five years old. 8% of the wood stoves are of unknown age.

Of those with wood stoves (n=72), 10% do not use them at all. 42% burn less than one cord per year, 22% burn one to two cords per year, and 22% burn three or more cords each year. 4% are unsure how much wood they burn.

### **Current Use of Pellet Stoves (Q14-16)**

7% of residents currently have a pellet stove, consistent with 3% in 2001. 27% of the pellet stoves are under five years old, down from 55% in 2001. 43% are five to ten years old, 13% are eleven to fifteen years old, and 13% are over fifteen years old. 3% of the pellet stoves are of unknown age.

Of those with pellet stoves (n=30), 7% do not use them at all. 23% burn 1 to 25 bags of pellets per year. 37% burn 26 to 50 bags per year. 20% burn 51 to 75 bags per year. 14% burn over 75 bags each year.

**Current Use of Wood-Burning Fireplaces (Q17-18)**

31% of residents currently have a wood-burning fireplace, consistent with 37% in 2001.

Of those with wood-burning fireplaces (n=125), 42% do not use them at all, up from 29% in 2001. 47% burn less than one cord per year, 7% burn one to two cords per year, and 3% burn three or more cords each year. 1% are unsure how much wood they burn.

**Awareness of LRAPA (Q19)**

70% have heard of the Lane Regional Air Protection Agency, consistent with 70% in 2001 but up from 55% in 1997. 27% have not heard of the agency. 1% are unsure.

**FUEL USE SURVEY  
FOR LANE REGIONAL AIR PROTECTION AGENCY  
October, 2009**

**PURPOSE OF THE STUDY**

The purpose of this study is to assist LRAPA in determining patterns of fuel usage.

**METHODOLOGY**

Advanced Marketing Research was hired to conduct the research project in order to obtain unbiased and statistically valid results.

Using questions proposed by LRAPA, Advanced Marketing Research designed a questionnaire instrument to be administered by telephone. Using a random list of Eugene/Springfield area residents as a sampling frame, 404 interviews were completed. Telephone interviews were conducted between October 9 and October 18, 2009.

Proper data analysis techniques were employed by Advanced Marketing Research to avoid introducing unnecessary error and bias into the study.

**QUOTAS OBSERVED**

The residential population was sampled using the following quotas:

Males	45% to 55%
Females	45% to 55%
Age 65+	Not to exceed 25%

## RESPONSE RATE

Of the 492 qualified respondents reached by telephone, 404 interviews were completed, for a response rate of 82%. The overall breakdown of numbers dialed is as follows:

Refusals	88
Disconnects	46
Wrong Numbers	5
Language Barrier	4
Spanish Language Barrier	6
Business Numbers	16
Fax	17
No Answer	65
Answering Machine	498
Busy Signal	14
Call Backs	13
Respondent Not Available	6
Completed Interviews	<u>404</u>
Total Numbers Dialed	1,182

## TESTS FOR DIFFERENCES BETWEEN PROPORTIONS

When looking at the data tables, differences between percentage amounts can be misleading, and statistical tests must be conducted to determine if the differences are statistically significant. The computer makes these calculations for us, and the results are occasional plus or minus signs at the bottom of certain cells. These indicate that those answers are more different from everybody else's answers than could be expected due to chance, given the sample sizes involved. Plus signs are used if the group picks that answer *more* often than everyone else; minus signs if it is *less* than everyone else. The number of plus or minus signs indicates the level of statistical significance. One means the 90% level, two the 95% level, and three the 99% level. For example, two plus signs would mean that you can be 95% sure that the people represented by that group really would pick that answer more often than the people represented by the rest of the sample. It should be noted that this test can only be done for banner columns that contain at least 30 people. Because of this requirement, it is possible that the test will be done for some banner columns on a table and not for others.

## NOTES ON CHI SQUARE

The chi square value and its associated probability are printed beneath the first column in each banner heading. The probability ( $p=.xxx$ ) indicates the probability that the heading and row variables are *not* related is .xxx. For example, a .05 probability of not being related means a 95 percent chance of being related.

**DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE (Q20-24)**

<b>Gender</b>		<u><b>2009</b></u>	<u><b>2001</b></u>
Male		50%	47%
Female		50	53
<b>Age</b>			
18-24		3%	8%
25-34		7	16
35-44		21	20
45-54		20	16
55-64		27	20
65+		21	18
<b>Residence</b>			
Eugene		67%	78%
Springfield		33	22
<b>Own or Rent</b>			
Own		91%	76%
Rent		9	24

**BOUND ON ERROR**

SEX <u>Confidence Level</u>	SAMPLE SIZE		Bound on Error at <u>95%</u>
	<u>Frequency</u>	<u>Percent</u>	
Male	200	50%	6.4%
Female	204	50%	6.3%
AGE			
18-24	14	3%	--
25-34	27	7%	--
35-44	85	21%	9.7%
45-54	79	20%	10.1%
55-64	108	27%	8.6%
65+	86	21%	9.7%
RESIDENCE			
Eugene	272	67%	5.5%
Springfield	132	33%	7.8%
OWN/RENT			
Own	366	91%	4.7%
Rent	38	9%	14.6%
TOTAL	404	100%	4.5%*

\* What this means is that we are 95% certain that the mean response of the entire population of Eugene/Springfield area residents lies within (plus or minus) 4.5% of the survey response.



**MINIMUM DIFFERENCE IN PERCENTAGE POINTS REQUIRED FOR  
STATISTICAL SIGNIFICANCE IN COMPARISON OF REPORTED  
PERCENTAGES FOR SUBGROUPS WITH 95% CONFIDENCE**

<u>Subsample</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>	<u>250</u>	<u>300</u>	<u>350</u>	<u>400</u>	<u>450</u>	<u>500</u>	<u>600</u>
50	20%	17%	16%	15%	15%	15%	15%	15%	15%	15%	15%
100		14%	13%	12%	12%	11%	11%	11%	11%	11%	11%
150			11%	11%	10%	10%	10%	9%	9%	9%	9%
200				10%	9%	9%	9%	8%	8%	8%	8%
250					9%	8%	8%	8%	8%	8%	7%
300						8%	8%	7%	7%	7%	7%
350							7%	7%	7%	7%	6%
400								7%	7%	7%	6%
450									7%	6%	6%
500										6%	6%
600											6%

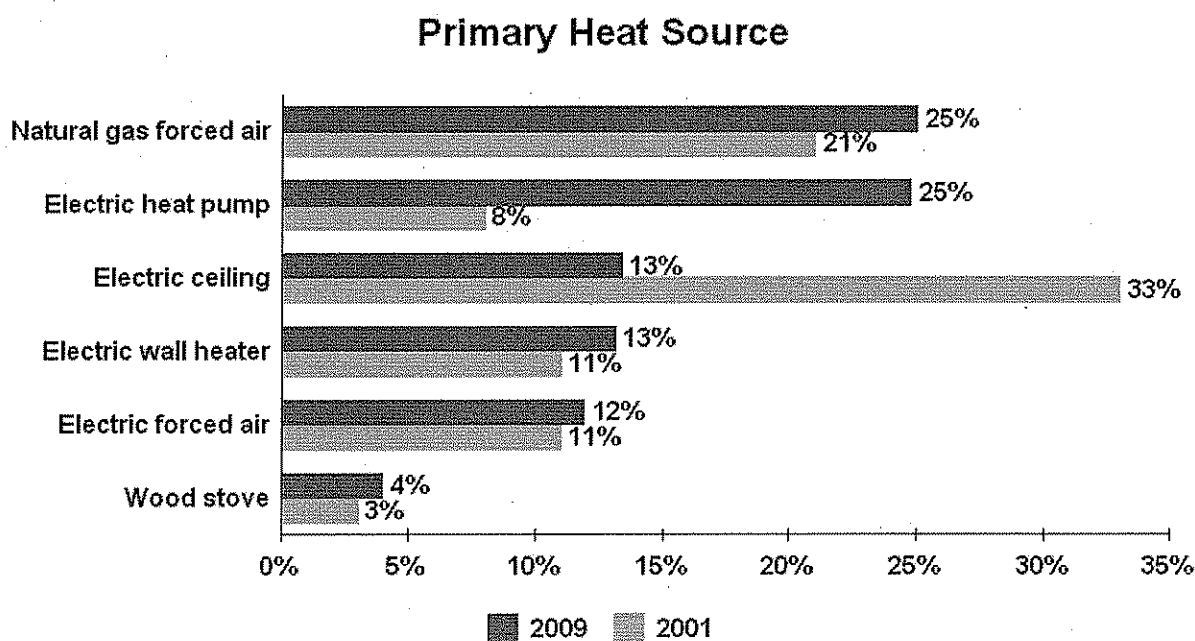
Minimums are for reported percentages near 50%. When much smaller or much larger percentages are reported, a slightly smaller minimum is required.

## **ANALYSIS OF DATA**

## PRIMARY HEAT SOURCE (Q3-4)

Natural gas forced air heaters and electric heat pumps top the list as primary sources of heat for Eugene/Springfield area residents, with 25% each. Electric ceiling heat and electric wall heaters are each the primary source of heat for 13%, and electric forced air is the source of heat for 12%.

The electric heat pump has moved up from 8% in 2001 to 25% currently, while electric ceiling heat has gone from 33% and first place in 2001, down to 13% currently.



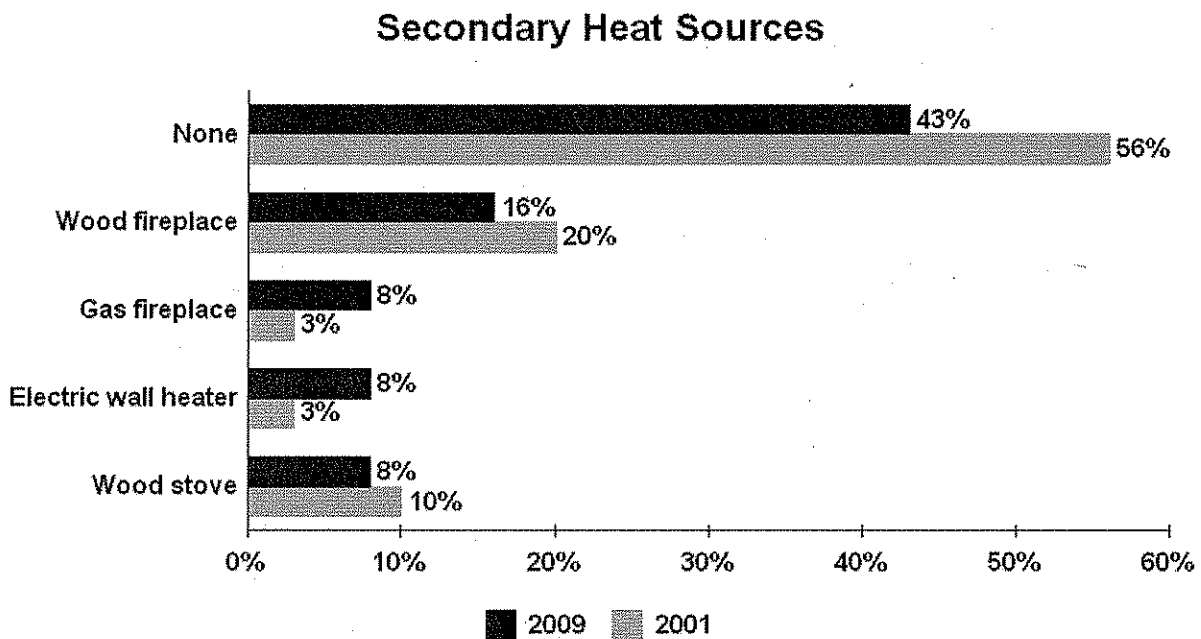
Prepared by Advanced Marketing Research, Inc.

### *Demographic Differences*

Homeowners and Eugene residents are more likely than others to have natural gas forced air as their primary source of heat. Homeowners are more likely than renters to have an electric heat pump. Renters are more likely than owners to have electric ceiling heat or electric wall heaters as their primary sources of heat.

## SECONDARY HEAT SOURCES (Q5-6)

43% of residents do not have a secondary source of heat, down from 56% in 2001. 16% use a wood fireplace as a secondary source of heat, 8% use a gas fireplace, 8% use electric wall heaters, and 8% use wood stoves.



Prepared by Advanced Marketing Research, Inc.

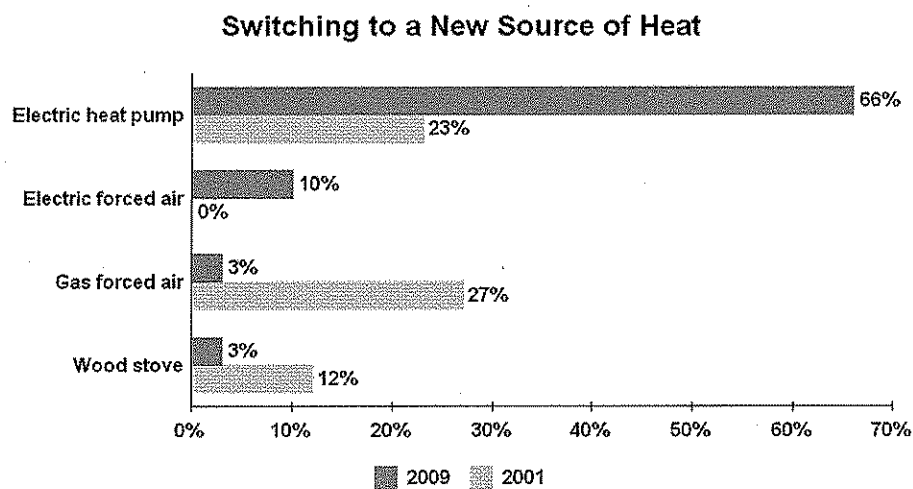
### *Demographic Differences*

35 to 44 year-olds and renters are more likely than others to not have a secondary source of heat in their household. 55 to 64 year-olds are more likely than others to use a wood fireplace as a secondary source of heat. Eugene residents are more likely than Springfield residents to use a gas fireplace or an electric wall heater as a secondary source of heat. Males are more likely than females to use a wood stove as a secondary source of heat.

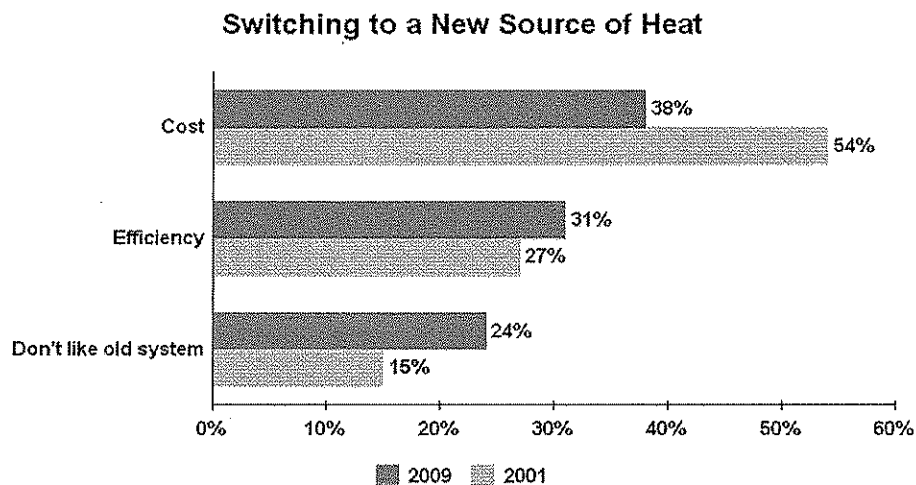
## CHANGES IN PRIMARY HEAT SOURCE (Q7-10)

7% are considering a change in their primary heat source, consistent with 6% in 2001. Of those considering a change (n=29), 66% are planning to switch to an electric heat pump (up from 23% in 2001), 10% are planning to get electric forced air, and 3% are planning to get gas forced air (down from 27% in 2001).

For those considering a switch (n=29), cost is the reason for 38%, efficiency is the reason for 31%, and 24% don't like their current system. (See Table 10V for verbatim responses.)



Based on those considering a change (n=30)



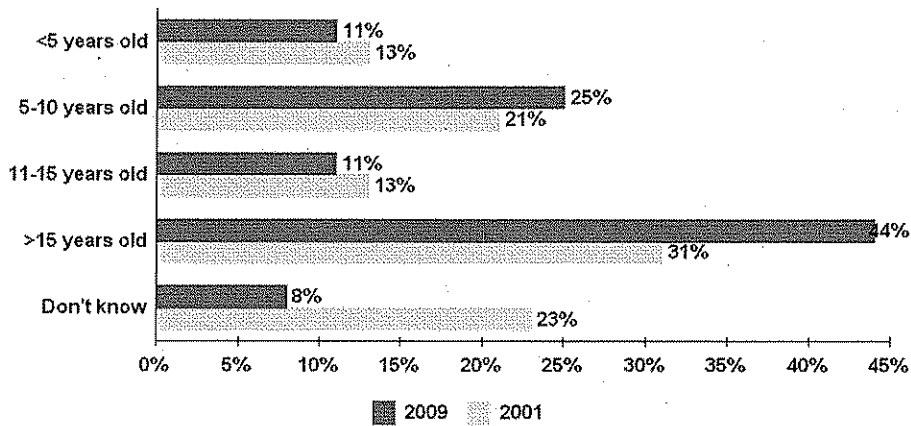
Based on those considering a change (n<30)

## CURRENT USE OF WOOD STOVES (Q11-13)

18% of residents currently have a wood stove, consistent with 15% in 2001. 44% of the wood stoves are over fifteen years old. 11% are eleven to fifteen years old, 25% are five to ten years old, and 11% are less than five years old. 8% of the wood stoves are of unknown age.

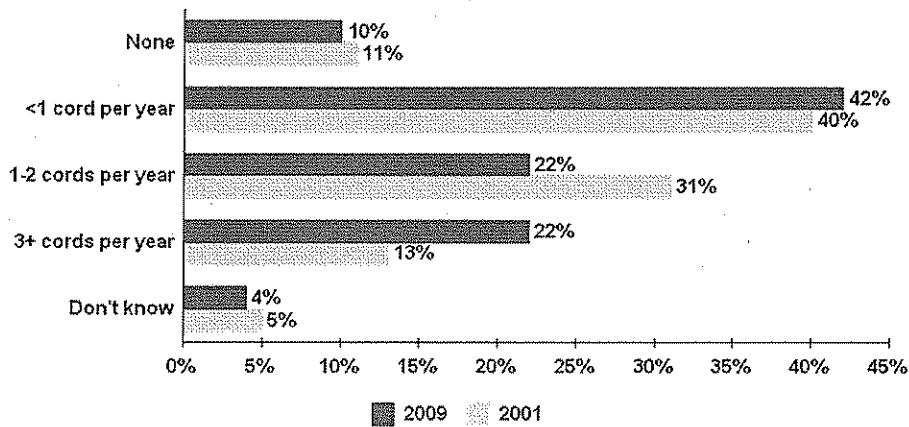
Of those with wood stoves (n=72), 10% do not use them at all. 42% burn less than one cord per year, 22% burn one to two cords per year, and 22% burn three or more cords each year. 4% are unsure how much wood they burn.

### Age of Wood Stoves



Based on those with wood stoves (n<75)

### Amount of Wood Burned



Based on those with wood stoves (n<75)

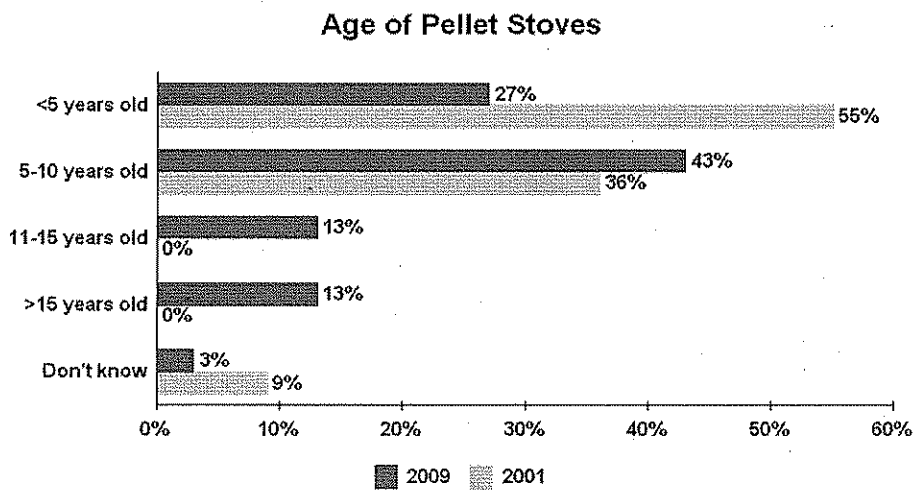
### *Demographic Differences*

55 to 64 year-olds are more likely than others to have a wood stove.

## CURRENT USE OF PELLET STOVES (Q14-16)

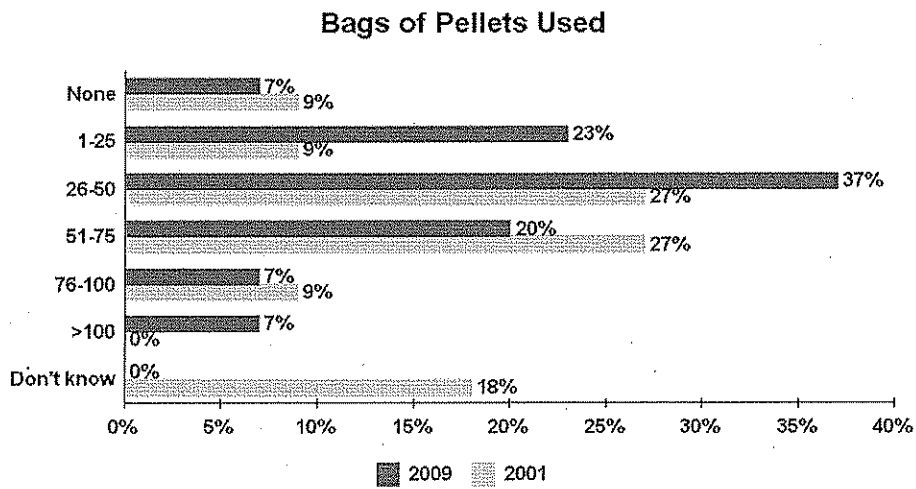
7% of residents currently have a pellet stove, consistent with 3% in 2001. 27% of the pellet stoves are under five years old, down from 55% in 2001. 43% are five to ten years old, 13% are eleven to fifteen years old, and 13% are over fifteen years old. 3% of the pellet stoves are of unknown age.

Of those with pellet stoves (n=30), 7% do not use them at all. 23% burn 1 to 25 bags of pellets per year. 37% burn 26 to 50 bags per year. 20% burn 51 to 75 bags per year. 14% burn over 75 bags each year.



Based on those with pellet stoves (n=35)



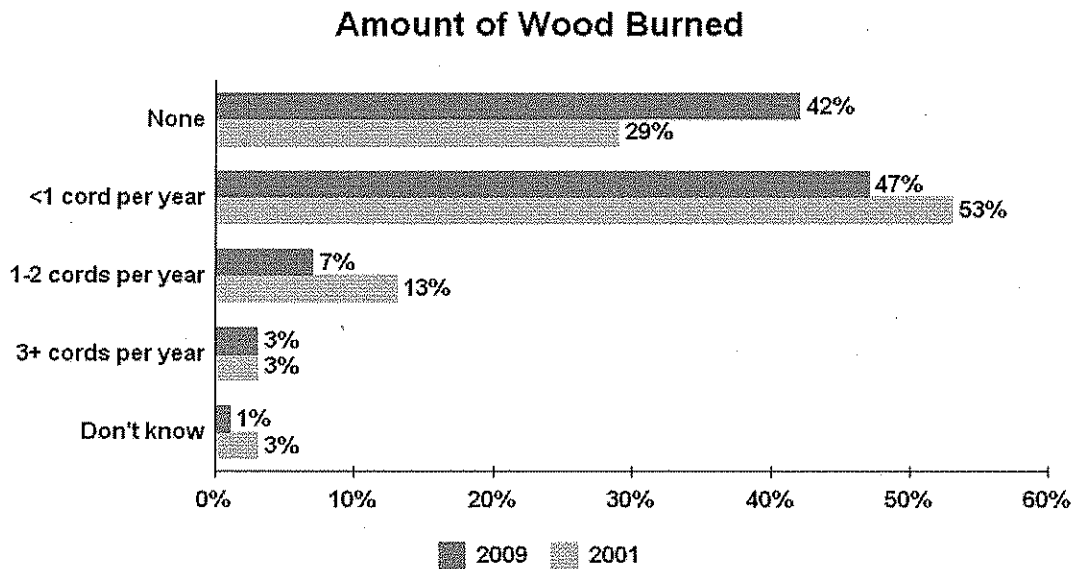


Based on those with pellet stoves (n=35)

## CURRENT USE OF WOOD-BURNING FIREPLACES (Q17-18)

31% of residents currently have a wood-burning fireplace, consistent with 37% in 2001.

Of those with wood-burning fireplaces (n=125), 42% do not use them at all, up from 29% in 2001. 47% burn less than one cord per year, 7% burn one to two cords per year, and 3% burn three or more cords each year. 1% are unsure how much wood they burn.



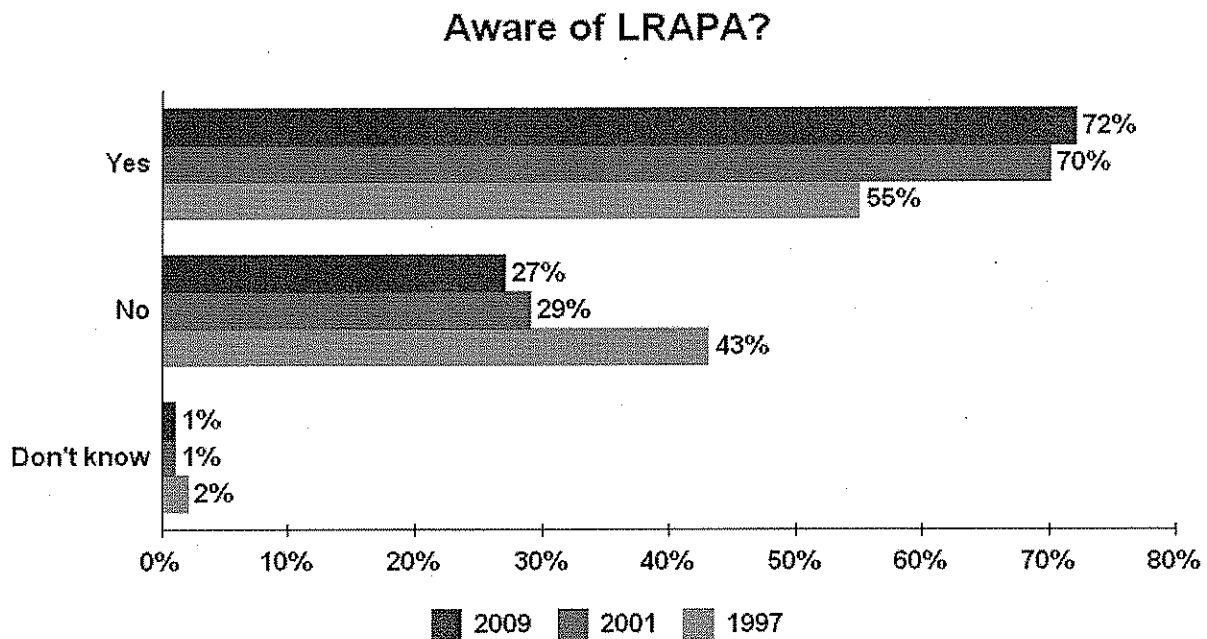
Based on those with wood-burning fireplaces (n<150)

### *Demographic Differences*

35 to 44 year-olds are less likely than others to have a wood-burning fireplace. Females are more likely than males to say they never use their wood-burning fireplace.

## AWARENESS OF LRAPA (Q19)

72% have heard of the Lane Regional Air Protection Agency, consistent with 70% in 2001 but up from 55% in 1997. 27% have not heard of the agency. 1% are unsure.



Prepared by Advanced Marketing Research, Inc.

### *Demographic Differences*

55 to 64 year-olds are more likely than others to say they have heard of LRAPA. 18 to 34 year-olds are less likely than others to say they are familiar with the agency.



## **LANE REGIONAL AIR PROTECTION AGENCY**

### **TITLE 29**

#### **DESIGNATION OF AIR QUALITY AREAS**

##### **Section 29-0010 Definitions**

The definitions in Title 12 and this rule apply to this division. If the same term is defined in this rule and Title 12, the definition in this rule applies to this division. Definitions of boundaries in this rule also apply to LRAPA Rules and Regulations.

- (1) "AQCR" means Air Quality Control Region.
- (2) "AQMA" means Air Quality Maintenance Area.
- (3) "CO" means Carbon Monoxide.
- (4) "CBD" means Central Business District.
- (5) "Criteria Pollutant" means any of the six pollutants set out by the Clean Air Act (sulfur oxides, particulate matter, ozone, carbon monoxide, nitrogen dioxide, and lead) for which the EPA has promulgated standards in 40 CFR 50.4 through 50.12 (July, 1993).
- (6) "Eugene-Springfield UGB" means the area within the bounds beginning at the Willamette River at a point due east from the intersection of East Beacon Road and River Loop No.1; thence southerly along the Willamette River to the intersection with Belt Line Road; thence easterly along Belt Line Road approximately one-half mile to the intersection with Delta Highway; thence northwesterly and then northerly along Delta Highway and on a line north from the Delta Highway to the intersection with the McKenzie River; thence generally southerly and easterly along the McKenzie River approximately eleven miles to the intersection with Marcola Road; thence southwesterly along Marcola Road to the intersection with 42nd Street; thence southerly along 42nd Street to the intersection with the northern branch of US Highway 126; thence easterly along US Highway 126 to the intersection with 52nd Street; thence north along 52nd Street to the intersection with High Banks Road; thence easterly along High Banks Road to the intersection with 58th Street; thence south along 58th Street to the intersection with Thurston Road; thence easterly along Thurston Road to the intersection with the western boundary of Section 36, T17S, R2W; thence south to the southwest corner of Section 36, T17S, R2W; thence west to the Springfield City Limits; thence following the Springfield City Limits southwesterly to the intersection with the western boundary of Section 2, T18S, R2W; thence on a line southwest to the Private Logging Road approximately one-half mile away; thence southeasterly along the Private Logging Road to the intersection with Wallace Creek; thence southwesterly along Wallace Creek to the confluence with

the Middle Fork of the Willamette River; thence generally northwesterly along the Middle Fork of the Willamette River approximately seven and one-half miles to the intersection with the northern boundary of Section 11, T18S, R3W; thence west to the northwest corner of Section 10, T18S, R3W; thence south to the intersection with 30th Avenue; thence westerly along 30th Avenue to the intersection with the Eugene City Limits; thence following the Eugene City Limits first southerly then westerly then northerly and finally westerly to the intersection with the northern boundary of Section 5, T18S, R4W; thence west to the intersection with Greenhill Road; thence north along Greenhill Road to the intersection with Barger Drive; thence east along Barger Drive to the intersection with the Eugene City Limits (Ohio Street); thence following the Eugene City Limits first north then east then north then east then south then east to the intersection with Jansen Drive; thence east along Jansen Drive to the intersection with Belt Line Road; thence northeasterly along Belt Line Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection with Clear Lake Road; thence west along Clear Lake Road to the intersection with the western boundary of Section 9, T17S, R4W; thence north to the intersection with Airport Road; thence east along Airport Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection East Enid Road; thence east along East Enid Road to the intersection with Prairie Road; thence southerly along Prairie Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with the Southern Pacific Railroad Line; thence southeasterly along the Southern Pacific Railroad Line to the intersection with Irving Road; thence east along Irving Road to the intersection with Kalmia Road; thence northerly along Kalmia Road to the intersection with Hyacinth Road; thence northerly along Hyacinth Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with Spring Creek; thence northerly along Spring Creek to the intersection with River Road; thence northerly along River Road to the intersection with East Beacon Drive; thence following East Beacon Drive first east then south then east to the intersection with River Loop No.1; thence on a line due east to the Willamette River and the point of beginning.

(7) "Maintenance Area" means any area that was formerly nonattainment for a criteria pollutant but has since met EPA promulgated standards and has had a maintenance plan to stay within the standards approved by the EPA pursuant to 40 CFR 51.110 (July, 1993).

(8) "Nonattainment Area" means any area that has been designated as not meeting the standards established by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR 51.52 (July, 1993) for any criteria pollutant.

(9) "O3" means Ozone.

(10) "Oakridge UGB" means the area enclosed by the following: Beginning at the northwest corner of Section 17, T21S, R3E and the city limits; thence south along the western boundary of Section 17, T21S, R3E along the city limits approximately 800 feet; thence southwesterly following the city limits approximately 750 feet; thence west along the city limits approximately 450 feet; thence northwesterly along the city limits approximately 450 feet; thence on a line south along the city limits approximately 250

feet; thence on a line east along the city limits approximately 100 feet; thence southwesterly along the city limits approximately 200 feet; thence on a line east along the city limits approximately 400 feet; thence on a line south along the city limits to the channel of the Willamette River Middle Fork; thence south-easterly up the Willamette River Middle Fork along the city limits approximately 7200 feet; thence exiting the Willamette River Middle Fork with the city limits in a northerly manner and forming a rough semicircle with a diameter of approximately one-half mile before rejoining the Willamette River Middle Fork; thence diverging from the city limits upon rejoining the Willamette River Middle Fork and moving southeasterly approximately 5600 feet up the Willamette River Middle Fork to a point on the river even with the point where Salmon Creek Road intersects with U.S. Highway 58; thence on a line east from the channel of the Willamette River Middle Fork across the intersection of Salmon Creek Road and U.S. Highway 58 to the intersection with the Southern Pacific Railroad Line; thence northerly along the Southern Pacific Railroad Line to the intersection with the northern boundary of Section 22, T21S, R3E; thence west along the northern boundary of Section 22, T21S, R3E to the intersection with Salmon Creek Road; thence on a line north to the intersection with the Southern Pacific Railroad Line; thence east along the Southern Pacific Railroad Line approximately 600 feet; thence on a line north to the intersection with High Prairie Road; thence on a line west approximately 400 feet; thence on a line north to the intersection with the northern boundary of Section 15, T21S, R3E; thence west along the northern boundary of Section 15, T21S, R3E to the intersection with the southeastern corner of Section 9, T21S, R3E; thence north along the eastern boundary of Section 9, T21S, R3E approximately 1300 feet; thence on a line west approximately 1100 feet; thence on a line south to the intersection with West Oak Road; thence northwesterly along West Oak Road approximately 2000 feet; thence on a line south to the intersection with the northern boundary line of the city limits; thence westerly and northwesterly approximately 8000 feet along the city limits to the point of beginning.

(11) "Particulate Matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method with the Department's *Source Sampling Manual*, (January, 1992).

(12) PM10:

(a) When used in the context of emissions, means finely divided solid or liquid material, including condensable water, other than combined water, with an aerodynamic diameter less than or equal to a nominal 10 microns, emitted to the ambient air as measured by as applicable reference method in accordance with the Department's *Source Sampling Manual* (January, 1992);

(b) When used in the context of ambient concentration, means airborne finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 microns as measured in accordance with 40 CFR Part 50, Appendix J (July, 1993).

(13) "UGA" means Urban Growth Area. (synonymous with "UGB")

(14) "UGB" means Urban Growth Boundary.

**Section 29-0020 Designation of Air Quality Control Regions**

Oregon's thirty-six counties are divided into five AQCRs. The AQCR boundaries follow county lines, and there are no counties that belong to more than one AQCR. The five AQCRs are as follows:

(1) **Portland Interstate AQCR**, containing ten counties:

- (a) Benton County;
- (b) Clackamas County;
- (c) Columbia County;
- (d) Lane County;
- (e) Linn County;
- (f) Marion County;
- (g) Multnomah County;
- (h) Polk County;
- (i) Washington County;
- (j) Yamhill County.

(2) **Northwest Oregon AQCR**, containing three counties:

- (a) Clatsop County;
- (b) Lincoln County;
- (c) Tillamook County.

(3) **Southwest Oregon AQCR**, containing five counties:

- (a) Coos County;
- (b) Curry County;
- (c) Douglas County;



(d) Jackson County;

(e) Josephine County.

(4) **Central Oregon AQCR**, containing eight counties:

(a) Crook County;

(b) Deschutes County;

(c) Hood River County;

(d) Jefferson County;

(e) Klamath County;

(f) Lake County;

(g) Sherman County;

(h) Wasco County.

(5) **Eastern Oregon AQCR**, containing ten counties:

(a) Baker County;

(b) Gilliam County;

(c) Grant County;

(d) Harney County;

(e) Malheur County;

(f) Morrow County;

(g) Umatilla County;

(h) Union County;

(i) Wallowa County;

(j) Wheel County.

**Section 29-0030 Designation of Nonattainment Areas**

The following areas are designated as Nonattainment Areas:

(1) PM10 Nonattainment Areas:

(a) The Oakridge Nonattainment Area for PM10 is the Oakridge UGB as defined in Section 29-0010.

**Section 29-0040 Designation of Maintenance Areas**

The following areas are designated as Maintenance Areas:

(1) Carbon Monoxide Maintenance Areas:

(a) The Eugene Maintenance Area for Carbon Monoxide is the Eugene-Springfield UGB as defined in Section 29-0010.

(2) PM10 Maintenance Areas:

(a) The Eugene-Springfield Maintenance Area for PM10 is the Eugene-Springfield UGB as defined in Section 29-0010.

**Section 29-0050 Designation of Prevention of Significant Deterioration Areas**

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I Areas and may not be redesignated:

(a) Mt. Hood Wilderness, as established by Public Law 88-577;

(b) Eagle Cap Wilderness, as established by Public Law 88-577;

(c) Hells Canyon Wilderness, as established by Public Law 94-199;

(d) Mt. Jefferson Wilderness, as established by Public Law 90-548;

(e) Mt. Washington Wilderness, as established by Public Law 88-577;

(f) Three Sisters Wilderness, as established by Public Law 88-577;

(g) Strawberry Mountain Wilderness, as established by Public Law 88-577;

(h) Diamond Peak Wilderness, as established by Public Law 88-577;

(i) Crater Lake National Park, as established by Public Law 88-577 and expanded in the 1990 Clean Air Act Amendments;

(j) Kalmiopsis Wilderness, as established by Public Law 88-577;

- (k) Mountain Lake Wilderness, as established by Public Law 88-577;
- (l) Gearhart Mountain Wilderness, as established by Public Law 88-577.
- (2) All other areas, in Oregon are initially designated Class II, but may be redesignated as provided in Section 29-0060.
- (3) The following areas may be redesignated only as Class I or II:
  - (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
  - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- (4) The extent of the areas referred to in section (1) and (3) of this rule shall conform to any changes in the boundaries of such areas which occurred between August 7, 1977, and November 15, 1990.

**Section 29-0060 Redesignation of Prevention of Significant Deterioration Areas**

- (1)(a) All areas in Oregon, except as otherwise provided under Section 29-0050, are designated Class II as of December 5, 1974;
- (b) Redesignation, except as otherwise precluded by Section 29-0050, may be proposed by LRAPA, as provided below, subject to approval by the EPA Administrator as a revision to the State Implementation Plan.
- (2) LRAPA may submit to the EPA Administrator a proposal to redesignate areas of the state Class I or II provided that:
  - (a) At least one public hearing has been held in accordance with procedures established in the Plan;
  - (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;
  - (c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(d) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, LRAPA has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity, not in excess of 60 days to confer with LRAPA respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, LRAPA shall have published a list of any inconsistency between such redesignation and such comments and recommendations together with the reasons for making such redesignation against the recommendation of the Federal Land Manager; and

(e) LRAPA has proposed the redesignation after consultation with the elected leadership of local general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which Section 29-0050 refers may be redesignated as Class III if:

(a) The redesignation would meet the requirements of section (2) of this rule;

(b) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session, unless state law provides that the redesignation must be specifically approved by state legislation, and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(c) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(d) Any permit application for any major stationary source or major modification, subject to review under section (1) of this rule, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the EPA Administrator a proposal to redesignate areas Class I, II, or III; provided that:

(a) The Indian Governing Body has followed procedures equivalent to those required of LRAPA under section (2) and subsections (3)(c) and (d) of this rule; and

(b) Such redesignation is proposed after consultation with the state(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The EPA Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with Section 29-0050. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the EPA Administrator disapproves any proposed redesignation, LRAPA or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the EPA Administrator.

#### **Section 29-0070 Special Control Areas**

The following areas are designated as Special Control Areas:

(1) Lane County;

(2) Within incorporated cities having a population of 4,000 or more, and within three miles of the corporate limits of any such city.

#### **Section 29-0080 Motor Vehicle Inspection Boundary Designations**

In addition to the area specified in ORS 815.300, pursuant to ORS 468A.390, the following geographical areas are designated as areas within which motor vehicles are subject to the requirement under ORS 815.300 to have a Certificate of Compliance issued pursuant to ORS 468A.380 to be registered or have the registration of the vehicle renewed.

(1) There are currently no geographic areas in Lane County subject to motor vehicle inspection programs.

#### **Section 29-0090 Oxygenated Gasoline Control Areas**

There currently are no oxygenated gasoline control areas in Lane County.



## **LANE REGIONAL AIR PROTECTION AGENCY**

### **TITLE 32**

### **EMISSION STANDARDS**

#### **Section 32-001 Definitions**

See Title 12, Definitions.

#### **Section 32-005 Highest and Best Practicable Treatment and Control Required**

1. As specified in 32-006 through 32-009 and subsections 2 through 6 of this section, the highest and best practicable treatment and control of air contaminant emissions shall in every case be provided so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling and other deleterious factors at the lowest possible levels. In the case of new sources of air contamination, particularly those located in areas with existing high-level air quality, the degree of treatment and control provided shall be such that degradation of existing air quality is minimized to the greatest extent possible.
2. A source shall be deemed to be in compliance with subsection 1 of this section if the source is in compliance with all other applicable emission standards and requirements contained in LRAPA Titles 32 through 51 and OAR Division 218, including but not limited to requirements applicable to:
  - A. specific pollutants in Title 32;
  - B. specific existing and new source categories in Title 33;
  - C. hazardous air pollutants in Title 44
  - D. control requirements and operational and maintenance requirements in sections 32-007 through 32-009; and
  - E. review of new major sources and major modifications in Title 38.
3. LRAPA may adopt additional rules as necessary to ensure that the highest and best practicable treatment and control is provided as specified in subsection 1 of this section. Such rules may include, but are not limited to, the following requirements:
  - A. Applicable to a source category, pollutant or geographic area of Lane County;

- B. Necessary to protect public health and welfare for air contaminants that are not otherwise regulated by LRAPA; or
  - C. Necessary to address the cumulative impact of sources on air quality.
- 4. LRAPA encourages the owner or operator of a source to further reduce emissions from the source beyond applicable control requirements where feasible.
  - 5. Nothing in sections 32-005 through 32-009 revokes or modifies any existing permit term or condition unless or until LRAPA revokes or modifies the term or condition by a permit revision. Adoption of 32-005 is not intended to withdraw authority for application of any existing policy for new sources of toxic and hazardous air pollutants to a federal operating permit program source until the effective date of the program.
  - 6. Compliance with a specific emission standard in these rules does not preclude the required compliance with any other applicable emission standard.

#### Section 32-006 Pollution Prevention

The owner or operator of a source is encouraged to take into account the overall impact of the control methods selected, considering risks to all environmental media and risks from all affected products and processes. The owner or operator of a source is encouraged, but not required, to utilize the following hierarchy in controlling air contaminant emissions:

- 1. Modify the process, raw materials or product to reduce the toxicity and/or quantity of air contaminants generated;
- 2. Capture and reuse air contaminants;
- 3. Treat to reduce the toxicity and/or quantity of air contaminants released; or
- 4. Otherwise control emissions of air contaminants.

#### Section 32-007 Operating and Maintenance Requirements

- 1. Operational, Maintenance and Work Practice Requirements:
  - A. Where LRAPA has determined that specific operational, maintenance, or work practice requirements are appropriate to ensure that the owner or operator of a source is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions, LRAPA shall establish such requirements by permit condition or Notice of Construction (NOC) approval.
  - B. Operational, maintenance and work practice requirements include, but are not limited to:
    - (1) Flow rates, temperatures and other physical or chemical parameters related to the operation of air pollution control equipment and emission reduction processes;



- (2) Monitoring, record-keeping, testing and sampling requirements and schedules;
- (3) Maintenance requirements and schedules; or
- (4) Requirements that components of air pollution control equipment be functioning properly.

## 2. Emission Action Levels

- A. Where LRAPA has determined that specific operational, maintenance, or work practice requirements considered or required under subsection 1 of this section are not sufficient to ensure that the owner or operator of a source is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness, LRAPA may establish, by permit or Notice of Construction (NOC) approval, specific emission action levels in addition to applicable emission standards. An emission action level shall be established at a level which ensures that air pollution control equipment or an emission reduction process is operated at the highest reasonable efficiency and effectiveness to minimize emissions.
  - B. If emissions from a source equal or exceed the applicable emission action level, the owner or operator of the source shall:
    - (1) Take corrective action as expeditiously as practical to reduce emissions to below the emission action level;
    - (2) Maintain records at the plant site for two (2) years which document the exceedance, the cause of the exceedance, and the corrective action taken;
    - (3) Make such records available for inspection by LRAPA during normal business hours; and
    - (4) Submit such records to LRAPA upon request.
  - C. LRAPA shall revise an emission action level if it finds that such level does not reflect the highest reasonable efficiency and effectiveness of air pollution control equipment and emission reduction processes.
  - D. An exceedance of an emission action level which is more stringent than an applicable emission standard shall not be a violation of such emission standard.
- ## 3. In determining the highest reasonable efficiency and effectiveness for purposes of this rule, LRAPA shall take into consideration operational variability and the capability of air pollution control equipment and emission reduction processes. If the performance of air pollution control equipment and emission reduction processes during start-up or shut-down differs from the performance under normal operating conditions, LRAPA shall determine the highest reasonable efficiency and effectiveness separately for these start-up and shut-down operating modes.

Section 32-008 Typically Achievable Control Technology (TACT)

1. Existing Sources. An existing emissions unit must meet TACT for existing sources if:
  - A. The emissions unit, for the pollutants emitted, is not subject to emissions standards under Title 30, Title 32, Title 33, Title 38, Title 39 or Title 46 at the time TACT is required;
  - B. The source is required to have a permit;
  - C. The emissions unit has emissions of criteria pollutants equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant; and
  - D. LRAPA determines that air pollution control equipment and emission reduction processes in use for the emissions unit do not represent TACT and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or to protect public health or welfare or the environment.
2. New and Modified Sources. A new or modified emissions unit must meet TACT for new or modified sources if:
  - A. The new or modified emissions unit, for the pollutants to be emitted, is not subject to New Source Review requirements in Title 38, an applicable Standard of Performance for New Stationary Sources in Title 46, or any other standard applicable only to new or modified sources in Title 32, Title 33, or Title 39 at the time TACT is required;
  - B. The source is required to have a permit.
  - C. The emissions unit:
    - (1) If new, would have emissions of any criteria pollutant equal to or greater than 1 ton per year, or of PM<sub>10</sub> equal to or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area; or
    - (2) If modified, would have an increase in emissions from the permitted level for the emissions unit of any criteria pollutant equal to or greater than 1 ton per year, or of PM<sub>10</sub> equal to or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area; and
  - D. LRAPA determines that the proposed air pollution control equipment and emission reduction processes do not represent TACT.
3. Prior to making a TACT determination, LRAPA shall notify the owner or operator of a source of its intent to make such determination utilizing information known to LRAPA. The owner or operator of the source may supply LRAPA with additional information by a reasonable date set by LRAPA for use in making the TACT determination.

4. The owner or operator of a source subject to TACT shall submit compliance plans and specifications by a reasonable date established by LRAPA for approval by LRAPA. The owner or operator of the source shall demonstrate compliance in accordance with a method and compliance schedule approved by LRAPA.

#### Section 32-009 Additional Control Requirements for Stationary Sources of Air Contaminants

LRAPA shall establish control requirements in addition to otherwise applicable requirements by permit, if necessary, as specified in section 1 through 5 of this section.

1. Requirements shall be established to prevent violation of an Ambient Air Quality Standard caused or projected to be caused substantially by emissions from the source as determined by modeling, monitoring or a combination thereof. For existing sources, the violation of an Ambient Air Quality Standard shall be confirmed by monitoring conducted by LRAPA.
2. Requirements shall be established to prevent significant impairment of visibility in Class I areas caused or projected to be caused substantially by a source as determined by modeling, monitoring or a combination thereof. For existing sources, the visibility impairment shall be confirmed by monitoring conducted by LRAPA.
3. A requirement applicable to major source shall be established if it has been adopted by EPA but has not otherwise been adopted by the EQC or the LRAPA Board.
4. An additional control requirement shall be established if requested by the owner or operator of a source.
5. Additional controls may be required to achieve air contaminant reduction as part of a State Implementation Plan.

#### Section 32-010 Visible Air Contaminant Limitations

1. Except as provided in Subsection 2, air contaminant emissions from any air contaminant source must not equal or exceed 20% opacity for a period or periods aggregating more than three minutes in any one hour.
2. Existing Fuel Burning Equipment Utilizing Wood Wastes (any source installed, constructed or modified before June 1, 1970). Air contaminant emissions from any single source must not equal or exceed 40% opacity for a period or periods aggregating more than three minutes in any one hour.
3. Exception--Visible Air Contaminant Standards. Uncombined Water. Where the presence of uncombined water is the only reason for failure of any emission to meet the requirements of Section 32-010-1 or 2, such section shall not apply.
4. Veneer Dryers (moved to Title 33, section 33.060-2.A)
5. Opacity is determined in accordance with the procedures specified in the definition of "opacity" in LRAPA Title 12.

#### Section 32-015 Particulate Matter Weight Standards

Notwithstanding emission limits of Sections 32-020 and 32-030, particulate emissions shall not exceed:

1. 0.2 grain per standard dry cubic foot for any air contaminant source constructed or modified prior to June 1, 1970; or
2. 0.1 grain per standard dry cubic foot for any air contaminant source installed, constructed or modified after June 1, 1970.

#### Section 32-020 Particulate Matter Weight Standards - Existing Combustion Sources

The maximum allowable emission of particulate matter from any existing combustion source (sources installed, constructed or modified prior to June 1, 1970) shall not exceed 0.2 grain per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide.

#### Section 32-030 Particulate Matter Weight Standards - New Combustion Sources

The maximum allowable emission of particulate matter from any new combustion source (sources installed, constructed or modified after June 1, 1970) shall not exceed 0.1 grain per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide.

#### Section 32-045 Process Weight Emission Limitations

- A. The maximum allowable emissions of particulate matter for specific processes shall be a function of process weight and shall be determined from Table 1 of Title 32.
- B. The maximum allowable emissions of particulate matter from hot mix asphalt plants shall be determined from Table 1 of Title 32 except that the maximum allowable particulate emissions from processes greater than 60,000 pounds per hour shall be limited to 40 pounds per hour.

#### Section 32-055 Particulate Matter Size Standard

No person shall cause or permit the emissions of any particulate matter which is greater than 250 microns in size if such particulate matter does or will deposit upon the real property of another person when notified by LRAPA that the deposition exists and must be controlled.

#### Section 32-060 Air Conveying Systems

##### 1. Affected Sources

Dry material air conveying systems located within PM<sub>10</sub> Nonattainment or Maintenance Areas which use a cyclone or other mechanical separating device and which have a baseline year emission rate of three (3) Metric Tons or more of particulate matter are affected sources.

## 2. Emission Limits for Affected Sources

Notwithstanding the general and specific emission standards and regulations contained in these rules, affected sources shall not emit particulate matter to the atmosphere in excess of the following amounts:

- A. One (1) Metric Ton/year (1.10 Tons/year)
- B. 2.88 kg/day (6.24 lbs./day)

## GASEOUS EMISSION LIMITATIONS

### Section 32-065 Sulfur Content of Fuels

#### 1. Residual Fuel Oils

No person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.

#### 2. Distillate Fuel Oils

No person shall sell, distribute, use or make available for use, any distillate fuel oil or on-specification used oil containing more than the following percentages of sulfur:

- A. ASTM Grade 1 fuel oil - 0.3 percent by weight
- B. ASTM Grade 2 fuel oil - 0.5 percent by weight
- C. ASTM Grade 4 fuel oil- 1.5 percent by weight

#### 3. Coal

- A. Except as provided in sub-section B of this section, no person shall sell, distribute, use or make available for use, any coal containing greater than 1.0 percent sulfur by weight.
- B. Except as provided for sub-subsections D and E of this subsection, no person shall sell, distribute, use or make available for use any coal or coal-containing fuel with greater than 0.3% sulfur and 5% volatile matter as defined in ASTM Method D3175 for direct space heating within PM10 nonattainment or maintenance areas. For coals subjected to a devolatilization process, compliance with the sulfur limit may be demonstrated on the sulfur content of coal prior to the devolatilization process.
- C. Distributors of coal or coal-containing fuel destined for direct residential space heating use shall keep records for a five-year period which shall be available for LRAPA inspection and which:

- (1) specify quantities of coal or coal-containing fuels sold;
  - (2) contain name and address of customers who are sold coal or coal-containing fuels;
  - (3) specify the sulfur and volatile content of coal or the coal-containing fuel sold to residences in PM10 nonattainment or maintenance areas.
- D. Users of coal for direct residential space heating in 1980 who apply in writing by July 1, 1983 and receive written approval from LRAPA shall be exempted from the requirement of sub-subsection B of this subsection provided they certify that they used more than one-half (1/2) ton of coal in 1980.
- E. Distributors may sell coal not meeting specification in sub-subsection B of this subsection to those users who have applied for and received the exemption provided for in subsection D of this section.
4. Exemptions. Exempted from the requirements of 32-065.1-3, above, are:
- A. Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives and diesel motor vehicles.
  - B. With prior approval of LRAPA, fuels used in such a manner or control provided such that sulfur dioxide emissions can be demonstrated to be equal to or less than those resulting from the combustion of fuels complying with the limitations of 32-065.

#### Section 32-070 Sulfur Dioxide Emission Limitations

Fuel Burning Equipment: The following emissions standards are applicable to new sources (any air contaminant source installed, constructed or modified after January 1, 1972) only:

1. For fuel burning equipment having more than 150 million BTU per hour heat input, but not more than 250 million BTU per hour input, no person shall cause, suffer, allow or permit the emission into the atmosphere of sulfur dioxide in excess of:
  - A. 1.4 lb. per million BTU heat input, maximum 3-hour average, when liquid fuel is burned.
  - B. 1.6 lb. per million BTU heat input, maximum 3-hour average, when solid fuel is burned.
2. For fuel burning equipment having more than 250 million BTU per hour heat input, no person shall cause, suffer, allow or permit the emission into the atmosphere of sulfur dioxide in excess of:
  - A. 0.8 lb. per million BTU heat input, maximum 3-hour average, when liquid fuel is burned.
  - B. 1.2 lb. per million BTU heat input, maximum 3-hour average, when solid fuel is burned.

### Section 32-075 Federal Acid Rain Regulations Adopted by Reference

1. **40 CFR Part 72, 75, and 76 (July 2, 2010)** is by this reference adopted and incorporated herein, for purposes of implementing an acid rain program that meets the requirements of Title IV of the Clean Air Act. The term "permitting authority" shall mean the LRAPA, and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.
2. If the provisions or requirements of **40 CFR Part 72** conflict with or are not included in OAR Divisions 218 and 220, the **Part 72** provisions and requirements shall apply and take precedence.

### Section 32-080 Control of Ozone-Depleting Chemicals

1. The purpose of Section 32-080 is to reduce the use of stratospheric ozone-depleting chemicals, to recycle those chemicals already in use, and to encourage the use of less dangerous chemicals. The LRAPA Board of Directors, having determined that equipment for the recovery and recycling of chlorofluorocarbons (CFC) from automobile air conditioners is affordable and available, intends that Section 32-080 apply to persons handling automobile air conditioners.
2. Requirement for recycling automobile air conditioning coolant are as follows:
  - A. Except as provided in sub-subsection B of this subsection, no person shall engage in the business of installing, servicing, repairing, disposing of, or otherwise treating automobile air conditioners without recovering and recycling CFC.
  - B. Any automobile repair shop that has:
    - (1) fewer than four employees; or
    - (2) fewer than three covered bays shall comply with the provisions of sub-subsection A of this subsection after August 10, 1992.
  - C. Only recovery and recycling equipment that is certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of **UL1963** and the **Society of Automotive Engineers (SAE) Standards, J1990 and J1991**, or other requirements and specifications determined by LRAPA as being equivalent, shall be used.
  - D. All recovery and recycling equipment shall be operated and maintained at full efficiency and effectiveness according to the manufacturer's directions and guidelines contained in **SAE Standard J1989**.
3. Except as provided in subsection 4 of this section, **40 CFR Part 82 (July 1, 1994)** is by this reference adopted and incorporated herein for major sources only, for purposes of implementing a stratospheric ozone protection program that meets the requirements of Title VI of the Clean Air Act.

4. Where "Administrator" or "EPA" appears in **40 CFR Part 82**, "LRAPA" shall be substituted, except in any section of **40 CFR Part 82** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state/local agency.
5. Where a discrepancy is determined to exist between LRAPA Section 32-080 and **40 CFR Part 82**, **40 CFR Part 82** will apply.

Section 32-090 Other Emissions

1. No person shall discharge from any source whatsoever such quantities of air contaminants which cause injury or damage to any persons, the public, business or property. Such determination is to be made by LRAPA.
2. No person shall cause or permit emission of water vapor if the water vapor causes or tends to cause detriment to the health, safety or welfare of any person or causes, or tends to cause damage to property or business.

Section 32-095 Fugitive Emissions

See LRAPA Title 48 for rules pertaining to fugitive emissions.

Section 32-100 Alternative Emission Controls (Bubble) [moved from 34-060(8)]

1. Alternative emission controls for VOC and NO<sub>x</sub> emissions may be approved in a Standard ACDP or LRAPA Title V Operating Permit for use within a single source such that a specific emission limit is exceeded, provided that:
  - A. Such alternatives are not specifically prohibited by a rule or permit condition.
  - B. Net emissions for each pollutant are not increased above the PSEL.
  - C. The net air quality impact is not increased as demonstrated by procedures required by Section 38-0090, Requirements for Net Air Quality Benefit.
  - D. No other pollutants including malodorous, toxic or hazardous pollutants are substituted.
  - E. BACT and LAER, where required by a previously issued permit pursuant to LRAPA Title 38, NSPS (LRAPA Title 46), and NESHAP (LRAPA Title 44), where required, are not relaxed.
  - F. Specific emission limits are established for each emission unit involved such that compliance with the PSEL can be readily determined.
  - G. Application is made for a permit modification and such modification is approved by LRAPA.
  - H. The reducing emission source reduces its allowable emission rate. Merely reducing production, throughput, or hours of operation is insufficient.



2. Total emissions from the emission sources under the bubble will be established in the permit.
3. Alternative emission controls, in addition to those allowed in 1. above, may be approved by LRAPA and EPA as a source specific SIP amendment.

TABLE 1

Table of Allowable Rate of Particulate Emissions - Based on Process Weight

<u>Process</u> <u>Lbs/Hr.</u>	<u>Emission</u> <u>Lbs/Hr.</u>	<u>Process</u> <u>Lbs/Hr.</u>	<u>Emission</u> <u>Lbs/Hr.</u>	<u>Process</u> <u>Lbs/hr.</u>	<u>Emission</u> <u>Lbs/Hr.</u>
50	0.24	2300	4.44	7500	8.39
100	0.46	2400	4.55	8000	8.71
150	0.66	2500	4.64	8500	9.03
200	0.85	2600	4.74	9000	9.36
250	1.03	2700	4.84	9500	9.67
300	1.20	2800	4.92	10000	10.00
350	1.35	2900	5.02	11000	10.63
400	1.50	3000	5.10	12000	11.28
450	1.63	3100	5.18	13000	11.89
500	1.77	3200	5.27	14000	12.50
550	1.85	3300	5.36	15000	13.13
600	2.01	3400	5.44	16000	13.74
650	2.12	3500	5.52	17000	14.36
700	2.24	3600	5.61	18000	14.97
750	2.34	3700	5.69	19000	15.58
800	2.43	3800	5.77	20000	16.19
850	2.53	3900	5.85	30000	22.22
900	2.62	4000	5.93	40000	28.30
950	2.72	4100	6.01	50000	34.30
1000	2.80	4200	6.08	60000	40.00
1100	2.97	4300	6.15	70000	41.30
1200	3.12	4400	6.22	80000	42.50
1300	3.26	4500	6.30	90000	43.60
1400	3.40	4600	6.37	100000	44.60
1500	3.54	4700	6.45	120000	47.30
1600	3.66	4800	6.52	140000	47.80
1700	3.79	4900	6.60	160000	49.00
1800	3.91	5000	6.67	200000	51.20
1900	4.03	5500	7.03	1000000	69.00
2000	4.14	6000	7.37	2000000	77.60
2100	4.24	6500	7.71	6000000	92.70
2200	4.34	7000	8.05		

Interpolation and extrapolation of emissions above a process weight of 60,000 pounds per hour shall be accomplished by use of this equation:

$E = (55.0 \times P^{0.11}) - 40$ , where  $P$  = process weight in tons per hour and  
 $E$  = emission rate in pounds per hour.



**DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION 200  
GENERAL AIR POLLUTION  
PROCEDURES AND DEFINITIONS**

**General**

**340-200-0040**

**State of Oregon Clean Air Act Implementation Plan**

- (1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by the Department of Environmental Quality and is adopted as the state implementation plan (SIP) of the State of Oregon pursuant to the federal Clean Air Act, **42 U.S.C.A 7401 to 7671q**.
- (2) Except as provided in section (3), revisions to the SIP will be made pursuant to the Commission's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval. The State Implementation Plan was last modified by the Commission on ~~April 21~~December 15, 2011.
- (3) Notwithstanding any other requirement contained in the SIP, the Department may:
- (a) Submit to the Environmental Protection Agency any permit condition implementing a rule that is part of the federally-approved SIP as a source-specific SIP revision after the Department has complied with the public hearings provisions of 40 CFR 51.102 (July 1, 2002); and
- (b) Approve the standards submitted by a regional authority if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

**NOTE:** Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the United States Environmental Protection Agency. If any provision of the federally approved Implementation Plan conflicts with any provision adopted by the Commission, the Department shall enforce the more stringent provision.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 35, f. 2-3-72, ef. 2-15-72; DEQ 54, f. 6-21-73, ef. 7-1-73; DEQ 19-1979, f. & ef. 6-25-79; DEQ 21-1979, f. & ef. 7-2-79; DEQ 22-1980, f. & ef. 9-26-80; DEQ 11-1981, f. & ef. 3-26-81; DEQ 14-1982, f. & ef. 7-21-82; DEQ 21-1982, f. & ef. 10-27-82; DEQ 1-1983, f. & ef. 1-21-83; DEQ 6-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 25-1984, f. & ef. 11-27-84; DEQ 3-1985, f. & ef. 2-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 10-1986, f. & ef. 5-9-86; DEQ 20-1986, f. & ef. 11-7-86; DEQ 21-1986, f. & ef. 11-7-86; DEQ 4-1987, f. & ef. 3-2-87; DEQ 5-1987, f. & ef. 3-2-87; DEQ 8-1987, f. & ef. 4-23-87; DEQ 21-1987, f. & ef. 12-16-87; DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88; DEQ 2-1991, f. & cert. ef. 2-14-91; DEQ 19-1991, f. & cert. ef. 11-13-91; DEQ 20-1991, f. & cert. ef. 11-13-91; DEQ 21-1991, f. & cert. ef. 11-13-91; DEQ 22-1991, f. & cert. ef. 11-13-91; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 24-1991, f. & cert. ef. 11-13-91; DEQ 25-1991, f. & cert. ef. 11-13-91; DEQ 1-1992, f. & cert. ef. 2-4-92; DEQ 3-1992, f. & cert. ef. 2-4-92; DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 19-1992, f. & cert. ef. 8-11-92; DEQ 20-1992, f. & cert. ef. 8-11-92; DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 26-1992, f. & cert. ef. 11-2-92; DEQ 27-

1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 8-1993, f. & cert. ef. 5-11-93; DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, f. & cert. ef. 11-4-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 1-1994, f. & cert. ef. 1-3-94; DEQ 5-1994, f. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996(Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef. 10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03; DEQ 14-2003, f. & cert. ef. 10-24-03; DEQ 19-2003, f. & cert. ef. 12-12-03; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 10-2004, f. & cert. ef. 12-15-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 7-2005, f. & cert. ef. 7-12-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 5-2008, f. & cert. ef. 3-20-08; DEQ 11-2008, f. & cert. ef. 8-29-08; DEQ 12-2008, f. & cert. ef. 9-17-08; DEQ 14-2008, f. & cert. ef. 11-10-08; DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 3-2009, f. & cert. ef. 6-30-09; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 2-2010, f. & cert. ef. 3-5-10; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 14-2010, f. & cert. ef. 12-10-10; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION 204  
DESIGNATION OF AIR QUALITY AREAS**

**340-204-0010**

**Definitions**

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and 340-200-0020, the definition in this rule applies to this division. Definitions of boundaries in this rule also apply to OAR 340 division 200 through 268 and throughout the State of Oregon Clean Air Act Implementation Plan adopted under 340-200-0040.

- (1) "AQCR" means Air Quality Control Region.
- (2) "AQMA" means Air Quality Maintenance Area.
- (3) "CO" means Carbon Monoxide.
- (4) "CBD" means Central Business District.
- (5) "Criteria Pollutant" means any of the six pollutants set out by the Clean Air Act (sulfur oxides, particulate matter, ozone, carbon monoxide, nitrogen dioxide, and lead) for which the EPA has promulgated standards in 40 CFR 50.4 through 50.12 (July, 1993).
- (6) "Eugene-Springfield UGBA" means the area within the bounds beginning at the Willamette River at a point due east from the intersection of East Beacon Road and River Loop No.1; thence southerly along the Willamette River to the intersection with Belt Line Road; thence easterly along Belt Line Road approximately one-half mile to the intersection with Delta Highway; thence northwesterly and then northerly along Delta Highway and on a line north from the Delta Highway to the intersection with the McKenzie River; thence generally southerly and easterly along the McKenzie River approximately eleven miles to the intersection with Marcola Road; thence southwesterly along Marcola Road to the intersection with 42nd Street; thence southerly along 42nd Street to the intersection with the northern branch of US Highway 126; thence easterly along US Highway 126 to the intersection with 52nd Street; thence north along 52nd Street to the intersection with High Banks Road; thence easterly along High Banks Road to the intersection with 58th Street; thence south along 58th Street to the intersection with Thurston Road; thence easterly along Thurston Road to the intersection with the western boundary of Section 36, T17S, R2W; thence south to the southwest corner of Section 36, T17S, R2W; thence west to the Springfield City Limits; thence following the Springfield City Limits southwesterly to the intersection with the western boundary of Section 2, T18S, R2W; thence on a line southwest to the Private Logging Road approximately one-half mile away; thence southeasterly along the Private Logging Road to the intersection with Wallace Creek; thence southwesterly along Wallace Creek to the confluence with the Middle Fork of the Willamette River; thence generally northwesterly along the Middle Fork of the Willamette River approximately seven and one-half miles to the intersection with the northern boundary of Section 11, T18S, R3W; thence west to the northwest corner of Section 10, T18S, R3W; thence south to the intersection with 30th Avenue; thence westerly along 30th Avenue to the intersection with the Eugene City Limits; thence following the Eugene City Limits first southerly then westerly then northerly and finally westerly to the intersection with the northern boundary of Section 5, T18S, R4W; thence west to the intersection with Greenhill Road; thence north along Greenhill Road to the intersection with Barger Drive; thence east along Barger Drive to the intersection with the Eugene City Limits (Ohio Street); thence following the Eugene City Limits first north then east then north then east then south then east to the intersection with Jansen Drive; thence east along Jansen

Drive to the intersection with Belt Line Road; thence northeasterly along Belt Line Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection with Clear Lake Road; thence west along Clear Lake Road to the intersection with the western boundary of Section 9, T17S, R4W; thence north to the intersection with Airport Road; thence east along Airport Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection East Enid Road; thence east along East Enid Road to the intersection with Prairie Road; thence southerly along Prairie Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with the Southern Pacific Railroad Line; thence southeasterly along the Southern Pacific Railroad Line to the intersection with Irving Road; thence east along Irving Road to the intersection with Kalmia Road; thence northerly along Kalmia Road to the intersection with Hyacinth Road; thence northerly along Hyacinth Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with Spring Creek; thence northerly along Spring Creek to the intersection with River Road; thence northerly along River Road to the intersection with East Beacon Drive; thence following East Beacon Drive first east then south then east to the intersection with River Loop No.1; thence on a line due east to the Willamette River and the point of beginning.

(7) "Grants Pass CBD" means the area within the City of Grants Pass enclosed by "B" Street on the north, 8th Street to the east, "M" Street on the south, and 5th Street to the west.

(8) Grants Pass Control Area means the area of the state beginning at the northeast corner of Section 35, T35S, R5W; thence south to the southeast corner of Section 11, T37S, R5W; thence west to the southwest corner of Section 9, T37S, R6W; thence north to the northwest corner of Section 33, T35S, R6W; thence east to the point of beginning.

(9) "Grants Pass UGB" as shown on the Plan and Zoning maps for the City of Grants Pass as of Feb. 1, 1988 is the area within the bounds beginning at the NW corner of Sec. 7, T36S, R5W; thence south to the SW corner of Sec. 7; thence west along the southern boundary of Sec. 12, T36S, R5W approx. 2000 feet; thence south approx. 100 feet to the northern right of way of the Southern Pacific Railroad Line (SPRR Line); thence southeasterly along said right of way approx. 800 feet; thence south approx. 400 feet; thence west approx. 1100 feet; thence south approx. 700 feet to the intersection with the Hillside Canal; thence west approx. 100 feet; thence south approx. 550 feet to the intersection with Upper River Road; thence southeasterly along Upper River Road and continuing east along Old Upper River Road approx. 700 feet; thence south approx. 1550 feet; thence west approx. 350 feet; thence south approx. 250 feet; thence west approx. 1000 feet; thence south approx. 600 feet to the north end of Roguella Lane; thence east approx. 400 feet; thence south approx. 1400 feet to the intersection with Lower River Road; thence west along Lower River Road approx. 1400 feet; thence south approx. 1350 feet; thence west approx. 25 feet; thence south approx. 1200 feet to the south bank of the Rogue River; thence northwesterly along said bank approx. 2800 feet; thence on a line southwesterly and parallel to Parkhill Place approx. 600 feet; thence northwesterly at a 90 degree angle approximately 300 feet to the intersection with Parkhill Place; thence southwesterly along Parkhill Place approx. 250 feet; thence on a line southeasterly forming a 90 degree angle approximately 300 feet to a point even with Leonard Road; thence west approx. 1500 feet along Leonard Road; thence north approx. 200 feet; thence west to the west side of Schroeder Lane; thence north approx. 150 feet; thence west approx. 200 feet; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 450 feet; thence north approx. 300 feet; thence east approx. 150 feet; thence north approx. 400 feet; thence west approx. 500 feet; thence south approx. 300 feet; thence west to the intersection with Coutant Lane; thence south along Coutant Lane to the intersection with Leonard Road; thence west along Leonard Road to the intersection with Buena Vista Lane; thence north along the west side of Buena Vista Lane approx. 200 feet; thence west approx. 150 feet; thence north approx. 150 feet; thence west approx. 200 feet; thence north approx. 400 feet; thence west approx. 600 feet to the intersection with the western boundary of Sec. 23, T36S, R6W; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 300 feet; thence north approx. 600 feet to the intersection with Darneille Lane; thence northwesterly along Darneille Lane approx. 200 feet; thence west approx. 300 feet; thence south approx. 600 feet to the intersection with Leonard Road; thence west along Leonard Road approx. 700 feet; thence south approx. 1350 feet; thence east approx. 1400 feet to the intersection with Darneille Lane; thence south along Darneille Lane approx. 600 feet; thence west approx. 300 feet; thence south to the intersection with Redwood



Avenue; thence east along Redwood Avenue to the intersection with Hubbard Lane and the western boundary of Sec. 23, T36S, R6W; thence south along Hubbard Lane approx. 1850 feet; thence west approx. 1350 feet; thence south to the south side of U.S. Highway 199; thence westerly along U.S. 199 approx. 1600 feet to the intersection with the north-south midpoint of Sec. 27, T36S, R6W; thence south approx. 2200 feet; thence east approx. 1400 feet; thence north approx. 1000 feet; thence east approx. 300 feet; thence north approx. 250 feet to the intersection with the Highline Canal; thence northerly along the Highline Canal approx. 900 feet; thence east to the intersection with Hubbard Lane; thence north along Hubbard Lane approximately 600 feet; thence east approx. 200 feet; thence north approx. 400 feet to a point even with Canal Avenue; thence east approx. 550 feet; thence north to the south side of U.S. 199; thence easterly along the southern edge of U.S. 199 to the intersection with Willow Lane; thence south along Willow Lane to the intersection with Demaray Drive; thence easterly along Demaray Drive and continuing along the southern edge of U.S. 199 to the intersection with Dowell Road; thence south along Dowell Road approx. 550 feet; thence easterly approx. 750 feet; thence north to the intersection with the South Canal; thence easterly along the South Canal to the intersection with Schutzwahl Lane; thence south approx. 1300 feet to a point even with West Harbeck Road; thence east approx. 2000 feet to the intersection with Allen Creek; thence southerly along Allen Creek approx. 1400 feet to a point even with Denton Trail to the west; thence west to the intersection with Highline Canal; thence southerly along Highline Canal to the intersection with the southern boundary of Sec. 25, T36S, R6W; thence east to the intersection with Allen Creek; thence southerly along Allen Creek to the intersection with the western boundary of Sec. 31, T36S, R5W; thence south to the SW corner of Sec. 31; thence east to the intersection with Williams Highway; thence southeasterly along Williams Highway approx. 1300 feet; thence east approx. 200 feet; thence north approx. 400 feet; thence east approx. 700 feet; thence north to the intersection with Espey Road; thence west along Espey Road approx. 150 feet; thence north approx. 600 feet; thence east approx. 300 feet; thence north approx. 2000 feet; thence west approx. 2100 feet; thence north approx. 1350 feet; thence east approx. 800 feet; thence north approx. 2800 feet to the east-west midline of Sec. 30, T36S, R5W; thence on a line due NE approx. 600 feet; thence north approx. 100 feet; thence east approx. 600 feet; thence north approx. 100 feet to the intersection with Highline Canal; thence easterly along Highline Canal approx. 1300 feet; thence south approx. 100 feet; thence east to the intersection with Harbeck Road; thence north along Harbeck Road to the intersection with Highline Canal; thence easterly along Highline Canal to a point approx. 250 feet beyond Skyway Road; thence south to the intersection with Skyway Road; thence east to the intersection with Highline Canal; thence southeasterly along Highline Canal approx. 1200 feet; thence on a line due SW to the intersection with Bluebell Lane; thence southerly along Bluebell Lane approx. 150 feet; thence east to the intersection with Sky Crest Drive; thence southerly along Sky Crest Drive to the intersection with Harper Loop; thence southeasterly along Harper Loop to the intersection with the east-west midline of Sec. 29, T36S, R5W; thence east approx. 400 feet; thence south approx. 1300 feet to a point even with Troll View Road to the east; thence east to the intersection with Hamilton Lane; thence north along Hamilton Lane to the intersection with the Highline Canal; thence northeasterly along the Highline Canal to the northern boundary of Sec. 28, T36S, R5W; thence east approx. 1350 feet to the transmission line; thence north to the intersection with Fruitdale Drive; thence southwesterly along Fruitdale Drive approx. 700 feet; thence north to the northern edge of U.S. 199; thence easterly along the northern edge of U.S. 199 approx. 50 feet; thence north to the north bank of the Rogue River; thence northeasterly along the north bank of the Rogue River approx. 2100 feet to a point even with Ament Road; thence north to Ament Road and following Ament Road to U.S. Interstate Highway 5 (U.S. I-5); thence continuing north to the 1200 foot contour line; thence following the 1200 foot contour line northwesterly approx. 7100 feet to the city limits and a point even with Savage Street to the west; thence north following the city limits approx. 400 feet; thence west to the intersection with Beacon Street; thence north along Beacon Street and the city limits approx. 250 feet; thence east along the city limits approx. 700 feet; thence north along the city limits approx. 2200 feet; thence southwesterly along the city limits approximately 800 feet to the intersection with the 1400 foot contour line; thence northerly and northwesterly along the 1400 foot contour line approx. 900 feet to the intersection with the northern boundary of Sec. 9, T36S, R5W; thence west along said boundary approx. 100 feet to the NW corner of Sec. 9; thence south along the western boundary of Sec. 9 approx. 700 feet; thence west approx. 1400 feet; thence north approx. 2400 feet; thence west approx. 1350 feet; thence north approx. 1100 feet to the city limits; thence following the city limits first west approx. 1550 feet, then south approx. 800 feet, then west approx. 200 feet, then south approx. 200 feet, then east approx. 200 feet, then south approx. 300 feet, and finally westerly approx. 1200 feet to the intersection with the western boundary of Sec. 5,

T36S, R5W; thence south along said boundary to the northern side of Vine Avenue; thence northwesterly along the northern side of Vine Avenue approx. 3150 feet to the intersection with the west fork of Gilbert Creek; thence north to the intersection with the southern right of way of U.S. I-5; thence northwesterly along said right of way approx. 1600 feet; thence south to the intersection with Old Highland Avenue; thence northwesterly along Highland Avenue approx. 650 feet; thence west approx. 350 feet; thence south approx. 1400 feet; thence east approx. 700 feet; thence south approx. 1000 feet; thence on a line SW approx. 800 feet; thence south approx. 1400 feet to the intersection with the northern boundary of Sec. 7, T36S, R5W; thence west to the NW corner of Sec. 7, the point of beginning.

(10) Klamath Falls Control Area means the area of the state beginning at the northeast corner of Section 8, T38S, R10E, thence south to the southeast corner of Section 5, T40S, R10E; thence west to the southwest corner of Section 3, T40S, R8E; thence north to the northwest corner of Section 10, T38S, R8E; thence east to the point of beginning.

(11) "Klamath Falls UGB" means the area within the bounds beginning at the southeast corner of Section 36, Township 38 South, Range 9 East; thence northerly approximately 4500 feet; thence westerly approximately 1/4 mile; thence northerly approximately 3/4 mile into Section 25, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 24, T38S, R9E; thence westerly approximately 1/2 mile to the southeast corner of Section 23, T38S, R9E; thence northerly approximately 1/2 mile; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 14, T38S, R9E; thence generally northwesterly along the 5000 foot elevation contour line approximately 3/4 mile; thence westerly 1 mile; thence north to the intersection with the northern boundary of Section 15, T38S, R9E; thence west 1/4 mile along the northern boundary of Section 15, T38S, R9E; thence generally southeasterly following the 4800 foot elevation contour line around the old Oregon Institute of Technology Campus to meet with the westerly line of Old Fort Road in Section 22, T38S, R9E; thence southwesterly along the westerly line of Old Fort Road approximately 1 and 1/4 miles to Section 27, T38S, R9E; thence west approximately 1/4 mile; thence southwesterly approximately 1/2 mile to the intersection with Section 27, T38S, R9E; thence westerly approximately 1/2 mile to intersect with the Klamath Falls City Limits at the northerly line of Loma Linda Drive in Section 28, T38S, R9E; thence northwesterly along Loma Linda Drive approximately 1/4 mile; thence southwesterly approximately 1/8 mile to the Klamath Falls City Limits; thence northerly along the Klamath Falls City Limits approximately 1 mile into Section 21, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1 mile into Section 17, T38S, R9E; thence westerly approximately 3/4 mile into Section 17, T38S, R9E; thence northerly approximately 1/4 mile; thence westerly approximately 1 mile to the west boundary of Highway 97 in Section 18, T38S, R9E; thence southeasterly along the western boundary of Highway 97 approximately 1/2 mile; thence southwesterly away from Highway 97; thence southeasterly to the intersection with Klamath Falls City Limits at Front Street; thence westerly approximately 1/4 mile to the western boundary of Section 19, T38S, R9E; thence southerly approximately 1 and 1/4 miles along the western boundary of Section 19, T38S, R9E and the Klamath Falls City Limits to the south shore line of Klamath Lake; thence northwesterly along the south shore line of Klamath Lake approximately 1 and 1/4 miles across Section 25, T38S, R9E and Section 26, T38S, R9E; thence westerly approximately 1/2 mile along Section 26, T38S, R9E; thence southerly approximately 1/2 mile to Section 27, T38S, R9E to the intersection with eastern boundary of Orindale Draw, thence southerly along the eastern boundary of Orindale Draw approximately 1 and 1/4 miles into Section 35, T38S, R9E; thence southerly approximately 1/2 mile into Section 2, T39S, R8E; thence easterly approximately 1/4 mile; thence northerly approximately 1/4 mile to the southeast corner of Section 35, T38S, R8E and the Klamath Falls City Limits; thence easterly approximately 1/2 mile to the northern boundary of Section 1, T38S, R8E; thence southeasterly approximately 1/2 mile to Orindale Road; thence north 500 feet along the west side of an easement; thence easterly approximately 1 and 1/4 miles through Section 1, T38S, R8E to the western boundary of Section 6, T39S, R9E; thence southerly approximately 3/4 mile to the southwest corner of Section 6, T39S, R9E; thence easterly approximately 1/8 mile to the western boundary of Highway 97; thence southwesterly along the Highway 97 right-of-way approximately 1/4 mile; thence westerly approximately 1/2 mile to Agate Street in Section 7, T39S, R8E; thence northerly approximately 1/4 mile; thence westerly approximately 3/4 mile to Orindale Road in Section 12, T39S, R8E; thence northerly approximately 1/4 mile into Section 1, T39S, R8E;

thence westerly approximately 3/4 mile to the Section 2, T39S, R8E boundary line; thence southerly approximately 3/4 mile along the Section 2, T39S, R8E boundary line to the northwest corner of Section 12, T39S, R8E; thence westerly approximately 1/8 mile into Section 11, T39S, R8E; thence southerly approximately 1/8 mile; thence northeasterly approximately 3/4 mile to the southern boundary of Section 12, T39S, R8E at Balsam Drive; thence southerly approximately 1/4 mile into Section 12, T39S, R8E; thence easterly approximately 1/4 mile to Orindale Road; thence southeasterly approximately 500 feet to Highway 66; thence southwesterly approximately 1/2 mile along the boundary of Highway 66 to Holiday Road; thence southerly approximately 1/2 mile into Section 13, T39S, R8E; thence northeasterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/4 mile along the eastern boundary of Section 13, T39S, R8E; thence westerly approximately 1/4 mile to Weyerhaeuser Road; thence northerly approximately 1/8 mile; thence easterly approximately 1/8 mile; thence northerly approximately 1/8 mile; thence westerly approximately 1/8 mile to Farrier Avenue; thence northerly approximately 1/4 mile; thence easterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/8 mile along the eastern boundary of Section 13, T39S, R8E; thence easterly approximately 1/4 mile along the northern section line of Section 18, T39S, R8E; thence southerly approximately 1/4 mile; thence easterly approximately 1/2 mile to the boundary of Highway 97; thence southerly approximately 1/3 mile to the Burlington Northern Right-of-Way; thence northeasterly approximately 1 and 1/3 miles along the high water line of the Klamath River to the Southside Bypass in Section 8, T39S, R9E; thence southeasterly along the Southside Bypass to the Southern Pacific Right-of-Way in Section 9, T39S, R9E; thence southerly approximately 1/2 mile along the Southern Pacific Right-of-Way; thence southwesterly approximately 1/4 mile along the Midland Highway; thence southeasterly approximately 1/4 mile to the old railroad spur; thence easterly 1/4 mile along the old railroad spur; thence southerly approximately 1/4 mile in Section 16, T39S, R9E; thence westerly approximately 1/3 mile; thence southerly approximately 1/4 mile; thence easterly approximately 1/16 mile in Section 21, T39S, R9E; thence southerly approximately 1/8 mile to the Lost River Diversion Channel; thence southeasterly approximately 1/4 mile along the northern boundary of the Lost River Diversion Channel; thence easterly approximately 3/4 mile along Joe Wright Road into Section 22, T39S, R9E; thence southeasterly approximately 1/8 mile on the eastern boundary of the Southern Pacific Right-of-Way; thence southeasterly approximately 1 mile along the western boundary of the Southern Pacific Right-of-Way across Section 22, T39S, R9E and Section 27, T39S, R9E to a point 440 yards south of the northern boundary of Section 27, T39S, R9E; thence easterly to Kingsley Field; thence southeasterly approximately 3/4 mile to the southern boundary of Section 26, T39S, R9E; thence east approximately 1/2 mile along the southern boundary of Section 26, T39S, R9E to a pond; thence north-northwesterly for 1/2 mile following the Klamath Falls City Limits; thence north 840 feet; thence east 1155 feet to Homedale Road; thence north along Homedale Road to a point 1/4 mile north of the southern boundary of Section 23, T39S, R9E; thence west 1/4 mile; thence north 1 mile to the Southside Bypass in Section 14, T39S, R9E; thence east 1/2 mile along the Southside Bypass to the eastern boundary of Section 14, T39S, R9E; thence north 1/2 mile; thence east 900 feet into Section 13, T39S, R9E; thence north 1320 feet along the USBR 1-C 1-A to the southern boundary of Section 12, T39S, R9E; thence north 500 feet to the USBR A Canal; thence southeasterly 700 feet along the southern border of the USBR A Canal back into Section 13, T39S, R9E; thence southeast 1600 feet to the northwest parcel corner of an easement for the Enterprise Irrigation District; thence east-northeast 2200 feet to the eastern boundary of Section 13, T39S, R9E; thence north to the southeast corner of Section 12, T39S, R9E; thence along the Enterprise Irrigation Canal approximately 1/2 mile to Booth Road; thence east 1/2 mile to Vale Road; thence north 1 mile to a point in Section 6, T39S, R10E that is approximately 1700 feet north of the southern boundary of Section 6, T39S, R10E; thence west approximately 500 feet; thence south approximately 850 feet; thence west approximately 200 feet; thence north approximately 900 feet; thence west approximately 1600 feet to the western boundary of Section 6, T39S, R10E; thence north approximately 1/2 mile to the southeast corner of Section 36, T38S, R9E, the point of beginning.

(12) "LaGrande UGB" means the area within the bounds beginning at the point where U.S. Interstate 84 (I-84) intersects Section 31, Township 2 South, Range 38 East; thence east along I-84 to the Union County Fairgrounds; thence north and then east on a line encompassing the Union County Fairgrounds to the intersection with Cedar Street; thence further east approximately 500 feet, encompassing two (2) residential properties; thence on a line south to the intersection with the northern bank of the Grande Ronde River; thence

westerly along the northern bank of the Grande Ronde River to the intersection with the western edge of Mount Glenn Road and Riverside Park; thence north along the western edge of Mount Glenn Road and Riverside Park to the intersection with Fruitdale Road; thence east along Fruitdale Road and the northern boundary of Riverside Park to the eastern boundary of Riverside Park; thence south along the eastern boundary of Riverside Park to the north bank of the Grande Ronde River; thence on a line southeast to the intersection with the northern edge of I-84; thence easterly along the northern edge of I-84 to May Street; thence easterly along May Street to the intersection with State Highway 82; thence northeasterly along State Highway 82 to a point approximately 1/4 mile from the eastern edge of Section 4, T3S, R38E; thence south to the intersection with Section 9, T3S, R38E, and the southern edge of Buchanan Avenue; thence west along the southern edge of Buchanan Avenue to the intersection with the northern edge of I-84; thence on a line south to the southern edge of I-84; thence southeasterly along the southern edge of I-84 approximately 2500 feet; thence on a line due west approximately 1400 feet; thence on a line due south to the intersection with the Union Pacific Railroad Line; thence southeasterly along the Union Pacific Railroad Line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with U.S. Highway 30; thence southeast along U.S. Highway 30 to the intersection with the western boundary of Section 15, T3S, R38E; thence on a line west following existing property boundaries approximately 2900 feet; thence on a line north following existing property boundaries approximately 250 feet; thence on a line east following existing property boundaries approximately 650 feet; thence north on a line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with 20th Avenue; thence south along 20th Avenue to the intersection with Foothill Road; thence southeasterly along Foothill Road approximately 2900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line south following existing property boundaries approximately 1250 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north following existing property boundaries approximately 450 feet to the intersection with the southernmost part of the La Grande City Limits; thence westerly and northwesterly along the southernmost part of the La Grande City Limits approximately 1100 feet to the intersection with the 3000 foot elevation contour line; thence westerly following the 3000 foot elevation contour line and existing property boundaries approximately 2200 feet; thence on a line north following existing property boundaries approximately 1900 feet; thence on a line west following existing property boundaries approximately 500 feet; thence on a line north to the La Grande City Limits; thence west along the La Grande City Limits and following existing property boundaries approximately 650 feet; thence on a line south following existing property boundaries approximately 900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north to the intersection with the La Grande City Limits; thence west along the southern boundary of the La Grande City Limits to the intersection with the western boundary of the La Grande City Limits; thence north along the western boundary of the La Grande City Limits and following existing property lines approximately 500 feet; thence on a line west following existing property boundaries approximately 200 feet; thence on a line north following existing property boundaries approximately 700 feet; thence east to the first 3000 foot elevation contour line west of the La Grande City Limits; thence northerly following that 3000 foot elevation contour line to the intersection with Deal Canyon Road; thence easterly along Deal Canyon Road to the intersection with the western boundary of the La Grande City Limits; thence northerly along the western boundary of the La Grande City Limits to the intersection with U.S. Highway 30; thence northwesterly along U.S. Highway 30 and following existing property boundaries approximately 1400 feet; thence on a line west to the intersection with the western boundary of Section 6, T3S, R38E; thence north along the western boundaries of Section 6, T3S, R38E and Section 31, T2S, R38E to the point of beginning.

(13) "Lakeview UGB" means the area beginning at the corner common to sections 21, 22, 27, and 28, T39S, R20E; thence north on the section line between section 21 and 22 to the section corner common to section 15, 16, 21, and 22; thence west along the section line between section 21 and 16 to the section corner common to sections 16, 17, 20, and 21; thence north along the section line between section 16 and 17 approximately 3550 feet to the east branch of Thomas Creek; thence northwesterly along the east branch of Thomas Creek to the center line of Highway 140; thence east along the center line of Highway 140 to the section corner common to sections 8, 9, 16, and 17, T39S, R20E; thence north along the section line between sections 8 and 9 to the section corner common to sections 4, 5, 8, and 9, T39S, R20E; thence north along the section line between section 4 and 5 to the section corner common to section 4 and 5, T39S, R20E and sections 32 and 33, T38S,

R20E; thence east along the section line between sections 4 and 33 to the section corner common to sections 3 and 4, T39S, R20E and sections 33 and 34, T38S, R20E; thence south along the eastern boundary of section 4 approximately 4,1318.6 feet; thence S 89 degrees, 11 minutes W 288.28 feet to the east right of way line of the old Paisley/Lakeview Highway; thence S 21 degrees, 53 minutes E along the eastern right of way of the old Paisley/Lakeview Highway 288.4 feet; thence S 78 degrees, 45 minutes W 1375 feet; thence S 3 degrees, 6 minutes, and 30 seconds W 200 feet; thence S 77 degrees, 45 minutes W 136 feet to the east right of way line of U.S. Highway 395; thence southeasterly along the east right of way line of U.S. Highway 395 53.5 feet; thence N 77 degrees, 45 minutes E 195.6 feet; thence S 38 degrees, 45 minutes E 56.8 feet; thence S 51 degrees, 15 minutes W 186.1 feet to the east right of way of U.S. Highway 395; thence southeast along the eastern right of way line of U.S. Highway 395 2310 feet; thence N 76 degrees, 19 minutes 544.7 feet; thence S 13 degrees, 23 minutes, 21 seconds E 400 feet; thence N 63 degrees, 13 minutes E 243.6 feet to the western line of the old American Forest Products Logging Road; thence southeast along the old American Forest Products Logging Road to the western line of the northeast quadrant of the northwest quadrant of section 10, T39S, R20E; thence southeast to a point on the south line of the northeast quadrant of the northwest quadrant of Section 10, T39S, R20E (this point also bears N 89 degrees, 33 minutes E 230 feet from the center line of U.S. Highway 395); thence south on a line parallel to the east right of way line of U.S. Highway 395 to the south line of the northwest quadrant of section 10, T39S, R20E; thence south 491 feet to the east right of way of U.S. Highway 395; thence southeasterly following the east right of way of U.S. Highway 395 255 feet to the south line of the northeast quadrant of the northeast quadrant of the southwest quadrant of section 10, T39S, R20E; thence east along that south line to the center line of section 10, T39S, R20E; thence continuing east along the same south line to the eastern boundary of section 10, T39S, R20E; thence south along the eastern boundary of section 10 to the section corner common to sections 10, 11, 14, and 15, T39S, R20E; thence south along the section line between section 14 and 15 to the section corner common to sections 14, 15, 22, and 23, T39S, R20E; thence west along the section line between sections 15 and 22 to the northwest corner of the northeast quadrant of the northeast quadrant of section 22, T39S, R20E; thence south along the eastern line of the western half of the eastern half of section 22 to the southern boundary of section 22, T39S, R20E; thence west along the southern boundary of section 22 to the point of beginning.

(14) "Maintenance Area" means any area that was formerly nonattainment for a criteria pollutant but has since met EPA promulgated standards and has had a maintenance plan to stay within the standards approved by the EPA pursuant to 40 CFR 51.110 (July, 1993).

(15) "Medford-Ashland Air Quality Maintenance Area" (AQMA) means the area defined as beginning at a point approximately two and quarter miles northeast of the town of Eagle Point, Jackson County, Oregon at the northeast corner of Section 36, Township 35 South, Range 1 West (T35S, R1W); thence South along the Willamette Meridian to the southeast corner of Section 25, T37S, R1W; thence southeast along a line to the southeast corner of Section 9, T39S, R2E; thence south-southeast along line to the southeast corner of Section 22, T39S, R2E; thence South to the southeast corner of Section 27, T39S, R2E; thence southwest along a line to the southeast corner of Section 33, T39S, R2E; thence West to the southwest corner of Section 31, T39S, R2E; thence northwest along a line to the northwest corner of Section 36, T39S, R1E; thence West to the southwest corner of Section 26, T39S, R1E; thence northwest along a line to the southeast corner of Section 7, T39S, R1E; thence West to the southwest corner of Section 12, T39S, R1W, T39S, R1W; thence northwest along a line to southwest corner of Section 20, T38S, R1W; thence West to the southwest corner of Section 24, T38S, R2W; thence northwest along a line to the southwest corner of Section 4, T38S, R2W; thence West to the southwest corner of Section 6, T38S, R2W; thence northwest along a line to the southwest corner of Section 31, T37S, R2W; thence North and East along the Rogue River to the north boundary of Section 32, T35S, R1W; thence East along a line to the point of beginning.

(16) "Medford-Ashland CBD" means the area beginning at the intersection of Crater Lake Highway (Highway 62) south on Biddle Road to the intersection of Fourth Street, west on Fourth Street to the intersection with Riverside Avenue (Highway 99), south on Riverside Avenue to the intersection with Tenth Street, west on Tenth Street to the intersection with Oakdale Avenue, north on Oakdale Avenue to the intersection with Fourth Street, east on Fourth Street to the intersection with Central Avenue, north on Central Avenue to the intersection with

Court Street, north on Court Street to the intersection with Crater Lake Highway (Highway 62) and east on Crater Lake Highway to the point of beginning, with extensions along McAndrews Road east from Biddle Road to Crater Lake Avenue, and along Jackson Street east from Biddle Road to Crater Lake Avenue.

**NOTE:** This definition also marks the area where indirect sources are required to have indirect source construction permits in the Medford area. See OAR 340-254-0040.

(17) "Medford UGB" means the area beginning at the line separating Range 1 West and Range 2 West at a point approximately 1/4 mile south of the northwest corner of Section 31, T36S, R1W; thence west approximately 1/2 mile; thence south to the north bank of Bear Creek; thence west to the south bank of Bear Creek; thence south to the intersection with the Medford Corporate Boundary; thence following the Medford Corporate Boundary west and southwesterly to the intersection with Merriman Road; thence northwesterly along Merriman Road to the intersection with the eastern boundary of Section 10, T36S, R2W; thence south along said boundary line approximately 3/4 mile; thence west approximately 1/3 mile; thence south to the intersection with the Hopkins Canal; thence east along the Hopkins Canal approximately 200 feet; thence south to Rossanley Drive; thence east along Rossanley Drive approximately 200 feet; thence south approximately 1200 feet; thence west approximately 700 feet; thence south approximately 1400 feet; thence east approximately 1400 feet; thence north approximately 100 feet; thence east approximately 700 feet; thence south to Finley Lane; thence west to the end of Finley Lane; thence approximately 1200 feet; thence west approximately 1300 feet; thence north approximately 150 feet; thence west approximately 500 feet; thence south to Highway 238; thence west along Highway 238 approximately 250 feet; thence south approximately 1250 feet to a point even with the end of Renault Avenue to the east; thence east approximately 2200 feet; thence south approximately 1100 feet to a point even with Sunset Court to the east; thence east to and along Sunset Court to the first (nameless) road to the south; thence approximately 850 feet; thence west approximately 600 feet; thence south to Stewart Avenue; thence west along Stewart Avenue approximately 750 feet; thence south approximately 1100 feet; thence west approximately 100 feet; thence south approximately 800 feet; thence east approximately 800 feet; thence south approximately 1000 feet; thence west approximately 350 feet to a point even with the north-south connector street between Sunset Drive and South Stage Road; thence south to and along said connecting road and continuing along South Stage Road to Fairlane Road; thence south to the end of Fairlane Road and extending beyond it approximately 250 feet; thence east approximately 250 feet; thence south approximately 250 feet to the intersection with Judy Way; thence east on Judy Way to Griffin Creek Road; thence north on Griffin Creek Road to South Stage Road; thence east on South Stage Road to Orchard Home Drive; thence north on Orchard Home Drive approximately 800 feet; thence east to Columbus Avenue; thence south along Columbus Avenue to South Stage Road; thence east along South Stage Road to the first road to the north after Sunnyview Lane; thence north approximately 300 feet; thence east approximately 300 feet; thence north approximately 700 feet; thence east to King's Highway; thence north along King's Highway to Experiment Station Road; thence east along Experiment Station Road to Marsh Lane; thence east along Marsh Lane to the northern boundary of Section 6, T38S, R1W; thence east along said boundary approximately 1100 feet; thence north approximately 1200 feet; thence east approximately 1/3 mile; thence north approximately 400 feet; thence east approximately 1000 feet to a drainage ditch; thence following the drainage ditch southeasterly approximately 500 feet; thence east to the eastern boundary of Section 31, T37S, R1W; thence south along said boundary approximately 1900 feet; thence east to and along the loop off of Rogue Valley Boulevard, following that loop to the Southern Pacific Railroad Line (SPRR); thence following SPRR approximately 500 feet; thence south to South Stage Road; thence east along South Stage Road to SPRR; thence southeasterly along SPRR to the intersection with the west fork of Bear Creek; thence northeasterly along the west fork of Bear Creek to the intersection with U.S. Highway 99; thence southeasterly along U.S. Highway 99 approximately 250 feet; thence east approximately 1600 feet; thence south to East Glenwood Road; thence east along East Glenwood Road approximately 1250 feet; thence north approximately 1/2 mile; thence west approximately 250 feet; thence north approximately 1/2 mile to the Medford City Limits; thence east along the city limits to Phoenix Road; thence south along Phoenix Road to Coal Mine Road; thence east along Coal Mine Road approximately 9/10 mile to the western boundary of Section 35, T37S, R1W; thence north to the midpoint of the western boundary of Section 35, T37S, R1W; thence west approximately 800 feet; thence north approximately 1700 feet to the intersection with Barnett Road; thence easterly along Barnett Road to the southeast corner of Section 27, T37S, R1W; thence north along the



eastern boundary line of said section approximately 1/2 mile to the intersection with the 1800 foot contour line; thence east to the intersection with Cherry Lane; thence following Cherry Lane southeasterly and then northerly to the intersection with Hillcrest Road; thence east along Hillcrest Road to the southeast corner of Section 23, T37S, R1W; thence north to the northeast corner of Section 23, T37S, R1W; thence west to the midpoint of the northern boundary of Section 22; T37S, R1W; thence north to the midpoint of Section 15, T37S, R1W; thence west to the midpoint of the western boundary of Section 15, T37S, R1W; thence south along said boundary approximately 600 feet; thence west approximately 1200 feet; thence north approximately 600 feet; thence west to Foothill Road; thence north along Foothill Road to a point approximately 500 feet north of Butte Road; thence west approximately 300 feet; thence south approximately 250 feet; thence west on a line parallel to and approximately 250 feet north of Butte Road to the eastern boundary of Section 8, T37S, R1W; thence north approximately 2200 feet; thence west approximately 1800 feet; thence north approximately 2000 feet; thence west approximately 500 feet; thence north to Coker Butte Road; thence east along Coker Butte Road approximately 550 feet; thence north approximately 1250 feet; thence west to U.S. Highway 62; thence north approximately 3000 feet; thence east approximately 400 feet to the 1340 foot contour line; thence north approximately 800 feet; thence west approximately 200 feet; thence north approximately 250 feet to East Vilas Road; thence east along East Vilas Road approximately 450 feet; thence north approximately 2000 feet to a point approximately 150 feet north of Swanson Creek; thence east approximately 600 feet; thence north approximately 850 feet; thence west approximately 750 feet; thence north approximately 650 feet; thence west approximately 2100 feet; thence on a line southeast approximately 600 feet; thence east approximately 450 feet; thence south approximately 1600 feet; thence west approximately 2000 feet to the continuance of the private logging road north of East Vilas Road; thence south along said logging road approximately 850 feet; thence west approximately 750 feet; thence south approximately 150 feet; thence west approximately 550 feet to Peace Lane; thence north along Peace Lane approximately 100 feet; thence west approximately 350 feet; thence north approximately 950 feet; thence west approximately 1000 feet to the western boundary of Section 31, T36S, R1W; thence north approximately 1300 feet along said boundary to the point of beginning.

(18) "Nonattainment Area" means any area that has been designated as not meeting the standards established by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR 51.52 (July, 1993) for any criteria pollutant.

(19) "O3" means Ozone.

(20) "Oakridge UGB" means the area enclosed by the following: Beginning at the northwest corner of Section 17, T21S, R3E and the city limits; thence south along the western boundary of Section 17, T21S, R3E along the city limits approximately 800 feet; thence southwesterly following the city limits approximately 750 feet; thence west along the city limits approximately 450 feet; thence northwesterly along the city limits approximately 450 feet; thence on a line south along the city limits approximately 250 feet; thence on a line east along the city limits approximately 100 feet; thence southwesterly along the city limits approximately 200 feet; thence on a line east along the city limits approximately 400 feet; thence on a line south along the city limits to the channel of the Willamette River Middle Fork; thence south-easterly up the Willamette River Middle Fork along the city limits approximately 7200 feet; thence exiting the Willamette River Middle Fork with the city limits in a northerly manner and forming a rough semicircle with a diameter of approximately one-half mile before rejoining the Willamette River Middle Fork; thence diverging from the city limits upon rejoining the Willamette River Middle Fork and moving southeasterly approximately 5600 feet up the Willamette River Middle Fork to a point on the river even with the point where Salmon Creek Road intersects with U.S. Highway 58; thence on a line east from the channel of the Willamette River Middle Fork across the intersection of Salmon Creek Road and U.S. Highway 58 to the intersection with the Southern Pacific Railroad Line; thence northerly along the Southern Pacific Railroad Line to the intersection with the northern boundary of Section 22, T21S, R3E; thence west along the northern boundary of Section 22, T21S, R3E to the intersection with Salmon Creek Road; thence on a line north to the intersection with the Southern Pacific Railroad Line; thence east along the Southern Pacific Railroad Line approximately 600 feet; thence on a line north to the intersection with High Prairie Road; thence on a line west approximately 400 feet; thence on a line north to the intersection with the northern boundary of Section 15, T21S, R3E; thence west along the northern boundary of Section 15, T21S, R3E to the intersection

with the southeastern corner of Section 9, T21S, R3E; thence north along the eastern boundary of Section 9, T21S, R3E approximately 1300 feet; thence on a line west approximately 1100 feet; thence on a line south to the intersection with West Oak Road; thence northwesterly along West Oak Road approximately 2000 feet; thence on a line south to the intersection with the northern boundary line of the city limits; thence westerly and northwesterly approximately 8000 feet along the city limits to the point of beginning.

(21) "Particulate Matter" has the meaning given that term in OAR 340-200-0020(82).

(22) PM10: has the meaning given that term in OAR 340-200-0020(90).

(23) "PM2.5" has the meaning given that term in OAR 340-200-0020(91). (24) "Portland AQMA" means the area within the bounds beginning at the point starting on the Oregon-Washington state line in the Columbia River at the confluence with the Willamette River, thence east up the Columbia River to the confluence with the Sandy River, thence southerly and easterly up the Sandy River to the point where the Sandy River intersects the Clackamas County-Multnomah County line, thence west along the Clackamas County-Multnomah County line to the point where the Clackamas County-Multnomah County line is intersected by H. Johnson Road (242nd), thence south along H. Johnson Road to the intersection with Kelso Road (Boring Highway), thence west along Kelso Road to the intersection with Deep Creek Road (232nd), thence south along Deep Creek Road to the point of intersection with Deep Creek, thence southeasterly along Deep Creek to the confluence with Clackamas River, thence easterly along the Clackamas River to the confluence with Clear Creek, thence southerly along Clear Creek to the point where Clear Creek intersects Springwater Road then to Forsythe Road, thence easterly along Forsythe Road to the intersection with Bradley Road, thence south along Bradley Road to the intersection with Redland Road, thence west along Redland Road to the intersection with Ferguson Road, thence south along Ferguson Road to the intersection with Thayler Road, thence west along Thayler Road to the intersection with Beaver Creek Road, thence southeast along Beaver Creek Road to the intersection with Henrici Road, thence west along Henrici Road to the intersection with State Highway 213 (Mollala Avenue), thence southeast along State Highway 213 to the point of intersection with Beaver Creek, thence westerly down Beaver Creek to the confluence with the Willamette River, thence southerly and westerly up the Willamette River to the point where the Willamette River intersects the Clackamas County-Yamhill County line, thence north along the Clackamas County-Yamhill County line to the point where it intersects the Washington County-Yamhill County line, thence west and north along the Washington County-Yamhill County line to the point where it is intersected by Mount Richmond Road, thence northeast along Mount Richmond Road to the intersection with Patton Valley Road, thence easterly and northerly along Patton Valley Road to the intersection with Tualatin Valley State Highway, thence northerly along Tualatin Valley State Highway to the intersection with State Highway 47, thence northerly along State Highway 47 to the intersection with Dilley Road, thence northwesterly and northerly along Dilley Road to the intersection with Stringtown Road, thence westerly and northwesterly along Stringtown Road to the intersection with Gales Creek Road, thence northwesterly along Gales Creek Road to the intersection with Timmerman Road, thence northerly along Timmerman Road to the intersection with Wilson River Highway, thence west and southwest along Wilson River Highway to the intersection with Narup Road, thence north along Narup Road to the intersection with Cedar Canyon Road, thence westerly and northerly along Cedar Canyon Road to the intersection with Banks Road, thence west along Banks Road to the intersection with Hahn Road, thence northerly and westerly along Hahn Road to the intersection with Mountindale Road, thence southeasterly along Mountindale Road to the intersection with Glencoe Road, thence east-southeasterly along Glencoe Road to the intersection with Jackson Quarry Road, thence north-northeasterly along Jackson Quarry Road to the intersection with Helvetia Road, thence easterly and southerly along Helvetia Road to the intersection with Bishop Road, thence southerly along Bishop Road to the intersection with Phillips Road, thence easterly along Phillips Road to the intersection with the Burlington Northern Railroad Track, thence northeasterly along the Burlington Northern Railroad Line to the intersection with Rock Creek Road, thence east-southeasterly along Rock Creek Road to the intersection with Old Cornelius Pass Road, thence northeasterly along Old Cornelius Pass Road to the intersection with Skyline Boulevard, thence easterly and southerly along Skyline Boulevard to the intersection with Newberry Road, thence northeasterly along Newberry Road to the intersection with State Highway 30 (St. Helens Road), thence northeast on a line over land across State Highway 30 to the Multnomah Channel, thence east-southeasterly up



the Multnomah Channel to the diffluence with the Willamette River, thence north-northeasterly down the Willamette River to the confluence with the Columbia River and the Oregon-Washington state line (the point of beginning).

(25) "Portland Metropolitan Service District Boundary" or "Portland Metro" means the boundary surrounding the urban growth boundaries of the cities within the Greater Portland Metropolitan Area. It is defined in the Oregon Revised Statutes (ORS) 268.125 (1989).

(26) "Portland Vehicle Inspection Area" means the area of the state included within the following census tracts, block groups, and blocks as used in the 1990 Federal Census. In Multnomah County, the following tracts, block groups, and blocks are included: Tracts 1, 2, 3.01, 3.02, 4.01, 4.02, 5.01, 5.02, 6.01, 6.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10, 11.01, 11.02, 12.01, 12.02, 13.01, 13.02, 14, 15, 16.01, 16.02, 17.01, 17.02, 18.01, 18.02, 19, 20, 21, 22.01, 22.02, 23.01, 23.02, 24.01, 24.02, 25.01, 25.02, 26, 27.01, 27.02, 28.01, 28.02, 29.01, 29.02, 29.03, 30, 31, 32, 33.01, 33.02, 34.01, 34.02, 35.01, 35.02, 36.01, 36.02, 36.03, 37.01, 37.02, 38.01, 38.02, 38.03, 39.01, 39.02, 40.01, 40.02, 41.01, 41.02, 42, 43, 44, 45, 46.01, 46.02, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.01, 60.02, 61, 62, 63, 64.01, 64.02, 65.01, 65.02, 66.01, 66.02, 67.01, 67.02, 68.01, 68.02, 69, 70, 71, 72.01, 72.02, 73, 74, 75, 76, 77, 78, 79, 80.01, 80.02, 81, 82.01, 82.02, 83.01, 83.02, 84, 85, 86, 87, 88, 89, 90, 91, 92.01, 92.02, 93, 94, 95, 96.01, 96.02, 97.01, 97.02, 98.01, 98.02, 99.01, 99.02, 99.03, 100, 101, 102, 103.01, 103.02, 104.02, 104.04, 104.05, 104.06, 104.07; Block Groups 1, 2 of Tract 105; Blocks 360, 361, 362 of Tract 105; that portion of Blocks 357, 399 of Tract 105 beginning at the intersection of the Oregon-Washington State Line ("State Line") and the northeast corner of Block Group 1 of Tract 105, thence east along the State Line to the intersection of the State Line and the eastern edge of Section 26, Township 1 North, Range 4 East, thence south along the section line to the centerline of State Highway 100 to the intersection of State Highway 100 and the western edge of Block Group 2 of Tract 105. In Clackamas County, the following tracts, block groups, and blocks are included: Tracts 201, 202, 203.01, 203.02, 204.01, 204.02, 205.01, 205.02, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216.01, 216.02, 217, 218, 219, 220, 221.01, 221.02, 222.02, 223, 224, 225, 226, 227.01, 227.02, 228, 229, 230, 231, 232, 233, 234.01, 234.02, 235, 236, 237; Block Groups 1, 2 of Tract 241; Block Groups 1, 2, 3, 4 of Tract 242; Block Groups 1, 2 of Tract 243.02. In Yamhill County, the following tract is included: Tract 301, except those areas in Tract 301 that lie within the Newberg City Limits defined as of July 12, 1996, and the following blocks within Tract 301: 102B, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121D, 122B, 122C, 123, 126, and 127B. In Washington County the following tracts, block groups, and blocks are included: Tracts 301, 302, 303, 304.01, 304.02, 305.01, 305.02, 306, 307, 308.01, 308.02, 309, 310.03, 310.04, 310.05, 310.06, 311, 312, 313, 314.01, 314.02, 315.01, 315.04, 315.05, 315.06, 315.07, 315.08, 316.03, 316.04, 316.05, 316.06, 316.07, 317.02, 317.03, 317.04, 318.01, 318.02, 318.03, 319.01, 319.03, 319.04, 320, 321.01, 321.02, 322, 323, 324.02, 324.03, 324.04, 325, 326.01, 326.02, 328, 329, 330, 331, 332, 333; Block Groups 1, 2 of Tract 327; Block Group 1 of Tract 334; Block Group 2 of Tract 335; Block Group 1 of Tract 336. In Columbia County the following tracts, block groups, and blocks are included: Tract 9710.98; Block Groups 2, 3 of Tract 9709.98; Blocks 146B, 148, 152 of Tract 9709.98.

(27) "Rogue Basin" means the area bounded by the following line: Beginning at the NE corner of T32S, R2E, W.M., thence south along range line 2E to the SE corner of T39S; thence west along township line 39S to the NE corner of T40S, R7W; thence south to the SE corner of T40S, R7W; thence west to the SE corner of T40S, R9W; thence north on range line 9W to the NE corner of T39S, R9W; thence east to the NE corner of T39S, R8W; thence north on range line 8W to the SE corner of Section 1, T33S, R8W on the Josephine-Douglas County line; thence east on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1W; thence east along township line 32S to the NE corner of T32S, R2E to the point of beginning.

(28) "Salem-Keizer Area Transportation Study" or "SKATS" means the area within the bounds beginning at the intersection of U.S. Interstate Highway 5 (I-5) with Battle Creek Road SE and Wiltsey Road, south along I-5 to the intersection with the western boundary of Section 24, T8S, R3W; thence due south on a line to the intersection with Delaney Road; thence easterly along Delaney Road to the intersection with Sunnyside Road; thence north along Sunnyside Road to the intersection with Hylo Road SE; thence west along Hylo Road SE to the intersection with Liberty Road; thence north along Liberty Road to the intersection with Cole Road; thence

west along Cole Road to the intersection with Bates Road; thence northerly and easterly along Bates Road to the intersection with Jory Hill Road; thence west along Jory Hill Road to the intersection with Stone Hill Avenue; thence north along Stone Hill Avenue to the intersection with Vita Springs Road; thence westerly along Vita Springs Road to the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where the western boundary of Section 30, T7S, R3W intersects the Southern Pacific Railroad Line; thence westerly along the Southern Pacific Railroad Line to the intersection with State Highway 51; thence northeasterly along State Highway 51 to the intersection with Oak Grove Road; thence northerly along Oak Grove Road to the intersection with State Highway 22; thence west on State Highway 22 to the intersection with Oak Grove Road; thence north along Oak Grove Road to the intersection with Orchard Heights Road; thence east and north along Orchard Heights Road to the intersection with Eagle Crest Drive; thence northerly along Eagle Crest Drive to the intersection with Hunt Road; thence north along Hunt Road to the intersection with Fourth Road; thence east along Fourth Road to the intersection with Spring Valley Road; thence north along Spring Valley to the intersection with Oak Knoll Road; thence east along Oak Knoll Road to the intersection with Wallace Road; thence south along Wallace Road to the intersection with Lincoln Road; thence east along Lincoln Road on a line to the intersection with the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where Simon Street starts on the East Bank; thence east and south along Simon Street to the intersection with Salmon; thence east along Salmon to the intersection with Ravena Drive; thence southerly and easterly along Ravena Drive to the intersection with Wheatland Road; thence northerly along Wheatland Road to the intersection with Brooklake Road; thence southeast along Brooklake Road to the intersection with 65th Avenue; thence south along 65th Avenue to the intersection with Labish Road; thence east along Labish Road to the intersection with the West Branch of the Little Pudding River; thence southerly along the West Branch of the Little Pudding River to the intersection with Sunnyview Road; thence east along Sunnyview Road to the intersection with 63rd Avenue; thence south along 63rd Avenue to the intersection with State Street; thence east along State Street to the intersection with 62nd Avenue; thence south along 62nd Avenue to the intersection with Deer Park Drive; thence southwest along Deer Park Drive to the intersection with Santiam Highway 22; thence southeast along Santiam Highway 22 to the point where it intersects the Salem Urban Growth Boundary (SUGB); thence following the southeast boundary of the SUGB generally southerly and westerly to the intersection with Wiltsey Road; thence west along Wiltsey Road to the intersection with I-5 (the point of beginning).

~~(29) "UGA" means Urban Growth Area.~~

(3029) "UGB" means Urban Growth Boundary.

(3430) "Umpqua Basin" means the area bounded by the following line: Beginning at the SW corner of Section 2, T19S, R9W, on the Douglas-Lane County lines and extending due south to the SW corner of Section 14, T32S, R9W, on the Douglas-Curry County lines, thence easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine, and Jackson County lines; thence easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Section 32, T32S, R3W; thence northerly on the Umpqua National Forest boundary to the NE corner of Section 36, T25S, R2W; thence west to the NW corner of Section 36, T25S, R4W; thence north to the Douglas-Lane County line; thence westerly on the Douglas-Lane County line to the starting point.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0500; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 5-2010, f. & cert. ef. 5-21-10

**340-204-0030****Designation of Nonattainment Areas**

The following areas are designated as Particulate Matter Nonattainment Areas:

~~(1) The Eugene Nonattainment Area for PM10 is the Eugene-Springfield UGB as defined in OAR 340-204-0010.~~

~~(2) The Oakridge Nonattainment Area for PM10 is the Oakridge UGB as defined in OAR 340-204-0010.~~

~~(3) The Klamath Falls Nonattainment Area for PM2.5 is as follows: Townships and ranges defined by T37S R9E Sections 31-32. T38S R8E Sections 1-5, 8-16, 22-26, 35-36. T38S R9E Sections 5-8, 14-15, 17-36. T39S R8E Sections 1-2, 11-13, 24. T39S R9E Sections 1-27. T39S R10E Sections 3-10, 15-20, 29-30.~~

~~(4) The Oakridge Nonattainment Area for PM2.5 is defined as a line from Township 21 South, Range 2 East, Section 11 (northwest corner), east to Township 21 South, Range 3 East, Section 11 (northeast corner), south to Township 21 South, Range 3 East, Section 23 (southeast corner), west to Township 21 South, Range 2 East, Section 23 (southwest corner) connecting back to Township 21 South, Range 2 East, Section 11 (northwest corner).~~

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0520; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 5-2010, f. & cert. ef. 5-21-10

**340-204-0040****Designation of Maintenance Areas**

The following areas are designated as Maintenance Areas:

(1) Carbon Monoxide Maintenance Areas:

(a) The Eugene Maintenance Area for Carbon Monoxide is the Eugene-Springfield AQMA as defined in OAR 340-204-0010;

(b) The Portland Maintenance Area for Carbon Monoxide is the Portland Metropolitan Service District as referenced in OAR 340-204-0010;

(c) The Medford Carbon Monoxide Maintenance Area is the Medford UGB as defined in OAR 340-204-0010;

**NOTE:** EPA maintenance plan approval and redesignation pending.

(d) The Grants Pass Carbon Monoxide Maintenance Area is the Grants Pass CBD as defined in OAR 340-204-0010;

(e) The Klamath Falls Carbon Monoxide Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010;

(f) The Salem Carbon Monoxide Maintenance Area is the Salem-Keizer Area Transportation Study as defined in OAR 340-204-0010.

(2) Ozone Maintenance Areas:

(a) The Medford Maintenance Area for Ozone is the Medford-Ashland AQMA as defined in OAR 340-204-0010;

(b) The Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone is the Portland AQMA, as defined in OAR 340-204-0010;

(c) The Salem Maintenance Area for Ozone is the Salem-Keizer Area Transportation Study as defined in OAR 340-204-0010.

(3) PM10 Maintenance Areas:

(a) The Grants Pass PM10 Maintenance Area is the Grants Pass UGB as defined in OAR 340-204-0010;

(b) The Klamath Falls PM10 Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010;

(c) The Medford-Ashland PM10 Maintenance Area is the Medford-Ashland AQMA as defined in OAR 340-204-0010;

**NOTE:** EPA maintenance plan approval and redesignation pending.

(d) The La Grande PM10 Maintenance Area is the La Grande UGB as defined in OAR 340-204-0010;

**NOTE:** EPA maintenance plan approval and redesignation pending.

(e) The Lakeview PM10 Maintenance Area is the Lakeview UGB as defined in OAR 340-204-0010.

**NOTE:** EPA maintenance plan approval and redesignation pending.

(f) The Eugene-Springfield PM10 Maintenance Area is the Eugene-Springfield UGB as defined in OAR 340-204-0010.

**NOTE:** EPA maintenance plan approval and redesignation pending.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0530; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07



LANE REGIONAL AIR PROTECTION AGENCY

REQUEST FOR REDESIGNATION TO ATTAINMENT  
AND MAINTENANCE PLAN FOR  
EUGENE/SPRINGFIELD PM<sub>10</sub>

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Introduction:



On August 7, 1987, the federal Environmental Protection Agency (EPA) categorized areas of the Nation into three groups based upon the likelihood that the area would violate the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS) and the existing State Implementation Plan (SIP) would require revision in order to protect the PM<sub>10</sub> NAAQS. Group I Areas were those having a 95% certainty of violating the PM<sub>10</sub> NAAQS. Group II Areas were those having a 20 % to 95% probability of violating the PM<sub>10</sub> NAAQS. The remaining areas below 20% probability were classed as Group III. Based upon the available ambient data, the area within the Eugene-Springfield Urban Growth Boundary (UGB) was classified by the EPA as a Group I Area. This area is defined in Oregon Administrative Rules 340-204-0010 (see Figure 1).

In response to this action, Lane Regional Air Protection Agency (LRAPA) adopted a SIP amendment in 1990 and an addendum in 1991 to address the new requirements of the federal Clean Air Act Amendments of 1990. These were subsequently adopted by the Oregon Environmental Quality Commission (EQC) and were submitted as an attainment plan to the EPA in November 1991 (see 59 FR 434870). This plan demonstrated attainment of the PM<sub>10</sub> NAAQS by December 31, 1992, and demonstrated maintenance of the PM<sub>10</sub> NAAQS through the year 2000. This plan was approved by the EPA in August 1994 (see 59 FR 434870 August 24, 1994). EPA also approved PM<sub>10</sub> control strategies in the SIP as Reasonably Available Control Technology and Reasonably Available Control Measures (RACT/RACM).

LRAPA has continued to implement the control strategies defined in the SIP and the UGB has not exceeded the 24 hour PM<sub>10</sub> NAAQS since 1987. The annual PM<sub>10</sub> NAAQS has never been exceeded. Based upon the monitoring data and the intent to maintain the current control strategies, it has been LRAPA=s intent to officially request redesignation of this area to attainment. For this to occur, the federal Clean Air Act requires LRAPA to develop a maintenance plan for which EPA requires dispersion modeling and projections of emissions 10 years into the future. This effort would place an excessive burden on LRAPA=s limited resources. In addition, the NAAQS have undergone significant changes over the years with new particulate standards being added and subsequent lawsuits. This process was not finally resolved until 2006. As a result, LRAPA has delayed formally requesting redesignation.



According to EPA guidance, to qualify for the LMP option an area should meet the following criteria:

1. The area should attain the NAAQS.
2. The average 24 hour  $PM_{10}$  design value for the area based upon recent 5 years of data should not exceed  $98 \text{ ug/m}^3$  (micrograms per cubic meter) and the annual design value should not exceed  $40 \text{ ug/m}^3$ . (The annual  $PM_{10}$  NAAQS was revoked by the EPA on December 18, 2006.)
3. The area should expect only limited growth in on-road motor vehicle  $PM_{10}$  emissions.

As detailed in Appendix A, this area clearly attains the NAAQS, and the design values are well below the defined limits. In addition, although the existing SIP for this area (confirmed by October 3, 1994, correspondence from EPA Region 10 ) demonstrates that motor vehicles are not a significant contributor to  $PM_{10}$  emissions in this area, a regional analysis of on-road motor vehicle  $PM_{10}$  emission was performed (see Appendix A) and demonstrated only limited growth in emissions. As a result, this area qualifies for the LMP option.

LRAPA has prepared this LMP for  $PM_{10}$  to demonstrate attainment with the  $PM_{10}$  NAAQS, provide a maintenance plan to assure continued attainment, and formally request redesignation of the UGB to attainment for the  $PM_{10}$  NAAQS.

### Demonstration of Attainment:

On July 1, 1987, the EPA revised Title 40, Part 50 of the Code of Federal Regulations (40 CFR 50), which changed the particulate matter NAAQS from total suspended particulate to particulate matter less than or equal to 10 microns in size ( $PM_{10}$ ). The primary and secondary NAAQS for  $PM_{10}$  are as follows:

24 hour Standard: The NAAQS for  $PM_{10}$  is  $150 \text{ ug/m}^3$  for a 24 hour average concentration. The standard is not to be exceeded more than once per year on average over 3 years, as determined in accordance with 40 CFR 50.

Annual Standard: The annual NAAQS for  $PM_{10}$  is  $50 \text{ ug/m}^3$  for an annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration is less than or equal to  $50 \text{ ug/m}^3$ , as determined in accordance with 40 CFR 50. (This standard was revoked on December 18, 2006)

Since  $PM_{10}$  monitoring began in 1984, the UGB has exceeded the 24 hour NAAQS on 15 occasions, 12 of which occurred during an extensive period of cold temperatures and poor ventilation in December of 1985. The last exceedance of the 24 hour standard occurred in January of 1987. The 24 hour standard exceedances have all occurred during the winter months. The annual standard has never been exceeded. Based upon the historical ambient monitoring data, the UGB was found to be in violation of only the 24 hour  $PM_{10}$  standard.

The original  $PM_{10}$  attainment plan was adopted by LRAPA in March 1990. Since adoption was prior to the CAA amendments of 1990, an addendum to the plan incorporating a contingency plan (as required by the 1990 CAA amendments) was adopted by LRAPA in October 1991. The amended plan was submitted to EPA in November, 1991. The EPA approved the plan in October 1994.

The analysis used to develop the plan indicated that on a worst case winter day (when exceedances were likely to occur) residential wood combustion emissions

contributed 68% of the total local emissions into the airshed . The dispersion modeling analysis used to develop the plan demonstrated that on those poor air quality days, residential wood combustion emissions contributed over 90% of the ambient impact. As a result, it was determined that the mandatory curtailment of residential wood combustion emissions would be necessary and sufficient to achieve attainment.  $PM_{10}$  emission reductions from other sources were not needed. Preceded by a voluntary program that began in 1986, the mandatory curtailment plan began in November, 1991. Each of the jurisdictions within the UGB enacted ordinances prohibiting the use of solid - fuel space heating devices under certain conditions (see Appendix B). Enforcement of the ordinances has been delegated by Lane County, the City of Eugene, and the City of Springfield to LRAPA. The program consists of a multi-stage advisory issued daily each winter from November 1 through the end of February. The daily determination of which stage to initiate is based upon forecast meteorology and air quality. During good air quality conditions, a Green@ advisory which allows residential wood combustion is issued. If conditions are deteriorating, a yellow advisory which requests voluntary curtailment of the practice is issued. If  $PM_{10}$  levels are forecast to be near or exceed the standard, a red advisory prohibiting the practice (with an exemption for economic need) is issued. Since the mandatory program began, it has not been necessary to issue a red advisory and the  $PM_{10}$  standard has not been exceeded. The mandatory home wood heating curtailment program is considered to be RACM and is permanent and enforceable (see 59 FR 163 8/24/94).

LRAPA currently maintains a  $PM_{10}$  monitoring network which includes one site within the UGB (see Figure 1). This site meets the federal monitoring requirements contained in 40 CFR 58. As demonstrated by the historical monitoring data, and confirmed by a saturation monitoring study conducted by LRAPA in 1989, the HWY 99 site (# 410390058) measures the highest  $PM_{10}$  concentrations within the UGB. As depicted in the following table, the 24 hour concentrations at this site over a recent 9 year period remain well below the  $PM_{10}$  NAAQS of  $150\mu g/m^3$ .

Table 1

HWY 99 Site # 410390058  
24 Hour PM<sub>10</sub> Concentration (ug/m<sup>3</sup>)

<u>Year</u>	annual high	annual 2 <sup>nd</sup> high	3 yr 2 <sup>nd</sup> high
2000	73	50	---
2001	65	61	---
2002	66	62	66
2003	45	44	65
2004	59	40	62
2005	50	43	50
2006	68	53	59
2007	78	69	69
2008	56	48	69

The annual levels are also well below the former PM<sub>10</sub> NAAQS of 50 ug/m<sup>3</sup>.

Table 2

Hwy 99 Site # 410390058

Annual Mean ( $\mu\text{g}/\text{m}^3$ )

<u>Year</u>	<u>Annual Mean</u>
2000	19
2001	19
2002	19
2003	19
2004	17
2005	17
2006	19
2007	16
2008	17

The monitoring data clearly demonstrates attainment with the  $\text{PM}_{10}$  NAAQS in accordance with 40 CFR 50.

#### Maintenance Plan:

EPA's Limited Maintenance Plan Option (LMP) permits states to submit streamlined maintenance plans for areas that meet qualifying criteria. This option is specifically designed to redesignate areas that are at little risk of violating the  $\text{PM}_{10}$  standard. Areas qualifying for the LMP must meet the following criteria:

1. The area should attain the NAAQS
2. The average 24 hour PM<sub>10</sub> design value for the area based upon 5 years of data should not exceed 98 ug/m<sup>3</sup>, and the annual design value should not exceed 40 ug/m<sup>3</sup>.
3. The area should expect only limited growth in on-road motor vehicle PM<sub>10</sub> emissions.

The detailed analysis of the LMP criteria is contained in Appendix A. This analysis clearly demonstrates attainment with the NAAQS. The 24 hour design value of 66 ug/m<sup>3</sup> is well below the criteria level of 98 ug/m<sup>3</sup> and the annual design value of 17ug/m<sup>3</sup> is well below the criteria level of 40 ug/m<sup>3</sup>. In addition, the motor vehicle emission analysis demonstrates only a minimal increase in emissions. As a result, this area is qualified to submit an LMP.

Annual and 24 hour PM<sub>10</sub> emission inventories of significant sources were developed for the 2008 attainment year. As required in the LMP option, 2008 is within the five most recent years of monitoring data used to determine whether or not the area meets LMP option qualifying criteria. The methodology used and the details of the calculations for each source category are found in Appendix C. In each case, EPA approved methods were used. As summarized in Table 3, residential wood combustion remains the primary source of PM<sub>10</sub> on winter days, while point sources dominate the annual emissions.

Table 3

2008 Estimated PM<sub>10</sub> Emissions for the Eugene/Springfield UGB

<u>Source</u>	<u>Annual (tons/year)</u>	<u>Winter Day (tons/day)</u>
Point Sources	1,624.1	4.4



Residential wood combustion	728.2	8.5
Road Dust	281.2	0.8
Motor vehicle exhaust, brake and tire wear	120.3	0.4
Total	2,753.8	14.1

In the 1985 base year emission inventory developed for the 1990 SIP 7,051 tons of PM<sub>10</sub> were emitted while in the 2008 annual E.I. only 2,754 tons were emitted. There has been a 61% reduction in annual PM<sub>10</sub> emissions since 1985. In 1985 the 24 hour winter day emissions were estimated at 31.4 tons, while in 2008 this estimate was only 14.1 tons, a 55% decrease in PM<sub>10</sub> emissions. Although a quantitative explanation for all of the decline is not available, it is readily apparent that the precipitous decline in the wood products industry has drastically reduced the point source emissions. The lack of logging activity has also reduced the availability of cord wood. In addition, some older uncertified woodstoves and inserts have been replaced with cleaner burning more efficient certified woodstoves and inserts. Public awareness of the daily woodburning advisories has also resulted

in less wood burning. As a result, residential wood combustion has been drastically reduced. In 1985, 85,325 tons of cord wood were burned in the UGB while in 2008 the estimate is 50,609 tons, a 41% reduction.

LRAPA has relied upon a mandatory residential wood combustion curtailment program to attain and maintain compliance with the PM<sub>10</sub> NAAQS. This program has been successfully implemented within the UGB. It is the intent of LRAPA to continue to implement this program to ensure continued attainment with the ambient standards. Since this area qualifies for the LMP option, maintenance of the ambient standard is presumed to be satisfied.

LRAPA has recently implemented the following additional control measures to ensure that this area continues to meet the PM<sub>10</sub> NAAQS (see Appendix B for details of the local ordinances).

1. Solid fuel space heating devices shall be prohibited from burning plastics, petroleum by-products, petroleum treated materials, rubber products, animal remains, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food, or of any other material which normally emits dense smoke or noxious odors.
2. During a Green or Yellow advisory the discharge of emissions from a solid fuel space heating device shall be limited to a maximum opacity of 40%. There will be a 10 minute exemption during every 4 hour period for the building of a new fire.

In addition, the State of Oregon has recently adopted the "Heat Smart" law. This law requires the removal and decommissioning of any uncertified woodstove or fireplace insert from a home when it is sold.

As depicted in the existing SIP for this area, and confirmed by October 3, 1994, correspondence from EPA Region 10 (see Appendix E), motor vehicles are not a significant contributor to PM<sub>10</sub> emissions in this area and therefore transportation projects are not subject to regional PM<sub>10</sub> conformity determinations are not required. Hot spot conformity analysis for projects meeting federal criteria will continue to be required. This current analysis reaffirms the status of motor vehicles as an insignificant contributor to PM<sub>10</sub> emissions in this area.

Although industrial sources are not the significant contributor to PM<sub>10</sub> exceedances, industrial emissions growth will be controlled through New Source Review regulations. The Lowest Achievable Emission Rate (LAER) requirement for non-attainment areas will be replaced by Best Available Control Technology (BACT) for maintenance areas. Offsets and net air quality benefit will also be required.

As described in Appendix D, the 24 hour PM<sub>2.5</sub> standard would be violated well before the PM<sub>10</sub> standard was reached. A violation of the PM<sub>2.5</sub> standard would trigger SIP action for that pollutant which would also provide additional controls for PM<sub>10</sub> emissions. Although monitoring for PM<sub>2.5</sub> would technically be adequate to demonstrate compliance with the PM<sub>10</sub> NAAQS, as resources allow, LRAPA will continue to monitor for PM<sub>10</sub>.

## Appendix A

### Eugene-Springfield PM<sub>10</sub> Non-Attainment Area Limited Maintenance Plan Qualification Analysis

According to EPA guidance, to qualify for the LMP option an area should meet the following applicable criteria:

1. The area should attain the NAAQS.
2. The average 24 hour PM<sub>10</sub> design value for the area based upon recent 5 years of data should not exceed 98 ug/m<sup>3</sup> and the annual design value should not exceed 40 ug/m<sup>3</sup>.
3. The area should expect only limited growth in on-road motor vehicle PM<sub>10</sub> emissions.

#### Attainment with NAAQS:

As demonstrated by the historical monitoring data and confirmed by a saturation monitoring study conducted by LRAPA in 1989, the Hwy 99 Site (# 410390058) measures the highest PM<sub>10</sub> concentrations within the non-attainment area. Recent data from this site demonstrates that this area clearly attains the NAAQS of 150 ug/m<sup>3</sup> for the 24 hour standard and the former 50 ug/m<sup>3</sup> annual standard.

Eugene-Springfield UGB  
PM<sub>10</sub> Concentrations (ug/m<sup>3</sup>)  
Hwy 99 Site # 410390058

Year	Annual Highest 24 hour Concentration (ug/m <sup>3</sup> )	Annual Mean (ug/m <sup>3</sup> )
2000	73	19
2001	65	19
2002	66	19
2003	45	19
2004	59	17
2005	50	17
2006	68	19
2007	78	16
2008	56	17

**24 Hour Design Value:**

As recommended in EPA guidance, the Upper 10% Tail Exponential Distribution

Method was used to calculate the 24 hour design value. Data from the Hwy 99 Site was used for the calculation. As depicted in the following, this area's 24 hour design value is  $66 \text{ ug/m}^3$  which is well below the guidance level of  $98 \text{ ug/m}^3$ .

Calculate the average of the rolling 3 year design values for the 5 year period using the Upper 10% Tail Exponential Distribution:

equation:  $DV = X_{90} + 3.61 (U_{90} - X_{90})$

where:  $DV$  = design value  
 $X_{90}$  = 90<sup>th</sup> percentile concentration  
 $U_{90}$  = mean of the upper 10% of samples

For the period 2004 - 2006 there were 359 samples (no data was flagged):

$$X_{90} = 35 \text{ ug/m}^3$$

$$U_{90} = 42 \text{ ug/m}^3$$

$$DV = 35 \text{ ug/m}^3 + 3.61(42 \text{ ug/m}^3 - 35.0 \text{ ug/m}^3) = 60 \text{ ug/m}^3$$

For the period 2005 - 2007 there were 359 samples (no data was flagged):

$$X_{90} = 34 \text{ ug/m}^3$$

$$U_{90} = 43 \text{ ug/m}^3$$

$$DV = 34 \text{ ug/m}^3 + 3.61(43 \text{ ug/m}^3 - 34 \text{ ug/m}^3) = 66 \text{ ug/m}^3$$

For the period 2006 - 2008 there were 360 samples (no data was flagged):

$$X_{90} = 33 \text{ ug/m}^3$$

$$U_{90} = 44 \text{ ug/m}^3$$

$$DV = 33 \text{ ug/m}^3 + 3.61(44 \text{ ug/m}^3 - 33 \text{ ug/m}^3) = 73 \text{ ug/m}^3$$

Average 24 Hour Design Value:

$$(60 \text{ ug/m}^3 + 66 \text{ ug/m}^3 + 73 \text{ ug/m}^3)/3 = 66 \text{ ug/m}^3$$

**Annual Design Value:**

The annual design value is 17 ug/m<sup>3</sup> which is well below the guidance level of 40 ug/m<sup>3</sup>.

Calculate the average of the rolling 3 year design value for the 5 year period using the annual means of the 4 quarters:

<u>Year</u>	<u>Quarterly Annual Mean (ug/m<sup>3</sup>)</u>
2008	17
2007	16
2006	19
2005	17
2004	17

For the period 2004 - 2006:

$$\text{Annual DV} = (17 \text{ ug/m}^3 + 17 \text{ ug/m}^3 + 19 \text{ ug/m}^3)/3 = 17.67 \text{ ug/m}^3$$

For the period 2005 - 2007:

$$\text{Annual DV} = (17 \text{ ug/m}^3 + 19 \text{ ug/m}^3 + 16 \text{ ug/m}^3)/3 = 17.33 \text{ ug/m}^3$$

For the period 2006 - 2008:

$$\text{Annual DV} = (19 \text{ ug/m}^3 + 16 \text{ ug/m}^3 + 17 \text{ ug/m}^3)/3 = 17.33 \text{ ug/m}^3$$

$$\text{Average Annual DV} = (17.67 \text{ ug/m}^3 + 17.33 \text{ ug/m}^3 + 17.33 \text{ ug/m}^3)/3 = 17 \text{ ug/m}^3$$

### Motor Vehicle Regional Analysis:

Using the method recommended in EPA Guidance, an on-road motor vehicle regional analysis was performed. As depicted in the following, there will be only limited growth in on-road motor vehicle PM<sub>10</sub> emissions.

### EPA Guidance Equation:

$$\text{DV} + (\text{VMTpi} * \text{DVmv}) \leq \text{MOS}$$

where: DV = area design value

VMTpi = projected % increase in vmt 10 years from base year  
(projected increase in VMT from 2008 - 2018 is 14.3% -  
from local MPO transportation modeling estimate)

DVmv = motor vehicle design value based upon on-road portion  
of base year EI

MOS = margin of safety for PM<sub>10</sub> standard: 98 ug/m<sup>3</sup> for 24 hour  
standard and 40 ug/m<sup>3</sup> for annual standard

### 24 hour analysis:

From 2008 attainment year winter day EI

total winter day emissions = 14.1 tons

total motor vehicle winter day emissions = 1.2 tons

% mv = 8.5

DV = 66 ug/m<sup>3</sup>



$$\text{VMTpi} = 0.143$$

$$\text{DVmv} = 5.61 \text{ ug/m}^3$$

$$66 \text{ ug/m}^3 + (0.143 * 5.61 \text{ ug/m}^3) = 67 \text{ ug/m}^3$$

annual analysis:

From 2008 base year EI

total annual emissions = 2,753.8 tons

total motor vehicle annual emissions = 401.5 tons

$$\% \text{ mv} = 14.58$$

$$\text{DV} = 17 \text{ ug/m}^3$$

$$\text{VMTpi} = 0.143$$

$$\text{DVmv} = 2.48 \text{ ug/m}^3$$

$$17 \text{ ug/m}^3 + (0.143 * 2.48 \text{ ug/m}^3) = 17 \text{ ug/m}^3$$

## Appendix B

### Local Home Wood Heating Ordinances

Eugene Code  
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#### **Solid Fuel Space Heating Devices**

**6.250 Solid Fuel Space Heating Devices - Definitions.** As used in sections

6.255 to 6.265, the following words and phrases mean:

**City manager.** City manager or designee, including, if the city manager so designates, LRAPA.

**Green advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be less than 100 micrograms per cubic meter and PM2.5 levels are forecast to be less than 25 micrograms per cubic meter.

**LRAPA.** Lane Regional Air Pollution Authority, a regional air quality control authority established under the provisions of, and with authority and powers derived from, Oregon Revised Statutes 468.500 et seq.

**Opacity.** The degree to which an emission reduces transmission of light or obscures the view of an object in the background.

**Pellet stove.** An enclosed solid fuel space heating device designed and operated to burn manufactured solid fuel and having an air-to-fuel ratio greater than 35-to-1 as determined by the federal test method described in 40 CFR Part 60.534.

**Person.** Any individual, partnership, corporation, association, governmental subdivision or public or private organization of any character.

**Person in charge of property.** An agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.

**PM2.5.** Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 2.5 micrometers.

**PM10.** Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 10 micrometers.

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**Sole source of heat.** A solid fuel space heating device which constitutes the only source of heating in a private residence. A solid fuel space heating device shall not be considered to be the sole source of heat if the private residence is equipped with any permanently installed furnace or heating system utilizing oil, natural gas, electricity or propane.

**Solid fuel space heating device.** Any device designed or operated to burn solid fuel for the heating of the interior of a building, including, but not limited to, solid fuel burning stoves, fireplaces or wood stoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, and solid fuel burning cooking stoves. "Solid fuel space heating device" does not include natural gas fired artificial fireplaces.

**Stage I red advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 125 micrograms per cubic meter but less than 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 30 micrograms per cubic meter but less than 35 micrograms per cubic meter, within the Eugene-Springfield Metropolitan Area General Plan Urban Growth Boundary.

**Stage II red advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 35 micrograms per cubic meter, within the Eugene-Springfield Metropolitan Area General Plan Urban Growth Boundary.

**Visible emissions.** The reduction in transmission of light or the obscuring of the view of an object in the background caused by the air pollutants emitted by the heating device. This does not include the visual distortion caused by the heated air emitted by the heating device.

**Yellow advisory.** A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 100 micrograms per cubic meter but less than 125 micrograms per cubic meter, or when PM2.5 levels are forecast to be greater than or equal to 25 micrograms per cubic meter but less than 30 micrograms per cubic meter.

*(Section 6.250 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991; amended by Ordinance No. 19815, enacted December 2, 1991; Ordinance No. 20261, enacted July 22, 2002, effective August 22, 2002; and Ordinance No. 20399, enacted November 26, 2007, effective December 28, 2007.)*

#### **6.255 Solid Fuel Space Heating Devices - Prohibitions.**

**(1)** No person in charge of property during a Stage I Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the Eugene Code

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device, unless the person has been granted an exemption to use the device by the city manager.

**(2)** No person in charge of property during a Stage II Red Advisory shall operate or allow to be operated a solid fuel space heating device unless:

(a) The person has been granted an exemption to use the device by the city manager; or

(b) The person is operating a pellet stove which emits no visible emissions into the air outside of the building housing the device.

**(3)** No person in charge of property shall at any time allow to be initiated or maintained in a solid-fuel space-heating device the burning of any plastics, wire insulation, petroleum by-products (with the exception of natural-gas-fueled log lighters), petroleum-treated materials, rubber products, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food, or of any other material which normally emits dense smoke, noxious odors, or hazardous air contaminants.

**(4)** During a green or yellow advisory, no person in charge of property shall operate or allow to be operated a solid-fuel space-heating device which

discharges emissions that are of an opacity greater than 40 percent. This provision does not apply to the emissions during the building of a new fire, for a period or periods aggregating no more than ten minutes in any four-hour period.

*(Section 6.255 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991; amended by Ordinance No. 19815, enacted December 2, 1991; and Ordinance No. 20261, enacted July 22, 2002, effective August 22, 2002.)*

**6.260 Solid Fuel Space Heating Devices - Exemptions.** Notwithstanding section 6.255 of this code, a person in charge of property may operate a solid fuel space heating device during a Stage I or Stage II Red Advisory if that person has previously obtained one of the following exemptions from the city manager:

**(a) Sole source of heat exemption.** A person in charge of property who signs a sworn statement that their solid fuel space heating device is the sole source of heat for their residence. This exemption shall expire on July 1 of each year and must be renewed annually. This exemption shall not be issued after June 30, 1996.

**(b) Economic need exemption.** Persons in charge of property who satisfy criteria established under the Low Income Energy Assistance Program as administered by the Lane County Housing Authority and as established by the United States Department of Energy. This exemption shall expire on July 1 of each year and must be renewed annually thereafter.

*(Section 6.260 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991.)*

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**6.265 Solid Fuel Space Heating Devices - Enforcement.** In addition to, and not in lieu of any other enforcement mechanism authorized by this code, upon a determination that a person has violated section 6.255 of this code, the city manager may impose upon the violator and any other person in charge of the property, an administrative penalty not greater than \$500, as provided by section 2.018 of this code. The city manager also is authorized to designate LRAPA to enforce and administer the provisions of sections 2.655 to 2.670 of this code, including LRAPA's use of administrative and hearing procedures adopted by LRAPA in its duly promulgated regulations.

*(Section 6.265 added by Ordinance No. 19731, enacted November 5, 1990, effective January 1, 1991.)*

Lane Code

**RESTRICTION ON USE OF SOLID FUEL SPACE HEATING DEVICES**

9.120 Purpose and Findings.

9.125 Definitions.

9.130 Area of Applicability.

9.135 Prohibitions.

9.140 Exemption for Economic Need.

9.145 Enforcement.

9.150 Penalties.

**RESTRICTION ON USE OF SOLID FUEL SPACE HEATING DEVICES**

**9.120 Purpose and Findings.**

(1) The health, safety and welfare of the citizens of Lane County are adversely affected by the degradation of air quality. Violations of federal ambient air quality standards, as measured by the Lane Regional Air Pollution Authority (LRAPA), occur periodically in Lane County.

(2) Wood and other solid fuel combustion for space heating produces particulate matter and other emissions which are physically harmful and aesthetically unpleasant, and which contribute to the degradation of air quality and the violation of federal ambient air quality standards.

(3) Periodic restriction of the use of solid fuel space heating devices will improve air quality. LRAPA has the expertise to determine when such air quality is at such a level that such restriction is necessary to preserve the health, safety and welfare of the citizens of Lane County.

(4) It is the intent of Lane County that the penalty section of this ordinance not take effect until November 1, 1991. *(Revised by Ordinance No. 9-90, Effective 1.18.91)*

**9.125 Definitions.**

As used herein, the following words and phrases shall mean:

Green Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be less than 100 micrograms per cubic meter and PM2.5 levels are forecast to be less than 41 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

Lane Regional Air Pollution Authority. A regional air quality control authority established under the provisions of and with the authority and powers derived from ORS 468.500 et seq.

Opacity. The degree to which an emission reduces transmission of light or obscures the view of an object in the background.

Pellet Stove. An enclosed solid fuel space heating device designed and operated to burn manufactured solid fuel and having an air-to-fuel ratio greater than 35-to-1 as determined by the federal test method described in 40 CFR Part 60.534

Person. Any individual, partnership, corporation, association, governmental subdivision or public or private organization of any character.

Person in Charge of Property. An agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.

PM2.5. Solid or liquid particulate matter (excluding uncombined water) with an

aerodynamic diameter less than or equal to 2.5 micrometers.

PM10. Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 10 micrometers.

Sole Source of Heat. A solid fuel space heating device which constitutes the only source of heating in a private residence. A solid fuel space heating device shall not be considered to be the sole source of heat if the private residence is equipped with any permanently-installed furnace or heating system utilizing oil, natural gas, electricity or propane.

Solid Fuel Space Heating Device. Any device designed or operated to burn solid fuel for the heating of the interior of a building, including, but not limited to, solid fuel burning stoves, fireplaces or wood stoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, and solid fuel burning cooking stoves. "Solid fuel space heating device" does not include natural gas-fired artificial fireplaces.

Stage I Red Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 125 micrograms per cubic meter but less than 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 55 micrograms per cubic meter but less than 65 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

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meter but less than 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 55 micrograms per cubic meter but less than 65 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

Stage II Red Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 150 micrograms per cubic meter, or when PM2.5 levels are forecast by LRAPA to be greater than or equal to 65 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary.

Visible Emissions. The reduction in transmission light or the obscuring of the view of an object in the background caused by the air pollutants emitted by the heating device. This does not include the visual distortion caused by the heated air emitted by the heating device.

Yellow Advisory. A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 100 micrograms per cubic meter but less than 125 micrograms per cubic meter, or when PM2.5 levels are forecast to be greater than or equal to 41 micrograms per cubic meter but less than 55 micrograms per cubic meter, within the Eugene/Springfield Metropolitan Area General Plan Urban Growth Boundary. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00; 13-03, 10.23.03)*

#### **9.130 Area of Applicability.**

The Metropolitan Area General Plan Urban Growth Boundary adopted in 1982 as amended through June 2003, excluding the area within the city limits of Eugene and Springfield. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 13-03, 10.23.03)*

#### **9.135 Prohibitions.**

(1) Stage I Red Advisory. No person in charge of property during a Stage I Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the device unless the person in charge of the property has been granted an exemption to use the device by LRAPA.

(2) Stage II Red Advisory. No person in charge of property during a Stage II Red Advisory shall operate or allow to be operated a solid fuel space heating device unless the person in charge of the property has been granted an exemption to use the device by LRAPA or unless the person is operating a pellet stove which emits no visible emissions into the air outside of the building housing the device.

(3) Green or Yellow Advisory. No person in charge of property during a green or yellow advisory shall operate or allow to be operated a solid fuel space heating device which discharges emissions that are of an opacity greater than forty (40) percent. This provision does not apply to the emissions during the building of a new fire, for a period or periods aggregating no more than ten (10) minutes in any four (4) hour period.

(4) Prohibited Materials. No person in charge of property shall at any time allow to be initiated or maintained in a solid fuel space heating device the burning of any plastics, wire insulation, petroleum by-products (with the exception of natural-gas-fueled log lighters), petroleum treated materials, rubber products, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food, or of any other material which normally emits dense smoke, noxious odors, or hazardous air contaminants. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00; 13-03, 10.23.03)*

#### **9.140 Exemption for Economic Need.**

Exemption from LC 9.135 above for Stage II and/or Stage I Red Advisories may be obtained from LRAPA for economic need. Persons in charge of property who satisfy criteria established under the Low Income Energy Assistance Program as administered by 9.145 Lane Code 9.215

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the Lane County Housing Authority and as established by the United States Department of Energy are exempt from LC 9.135 above for both Stage I and Stage II Red Advisories. Individual exemptions shall expire on July 1 of each year and must be renewed annually. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00)*

#### **9.145 Enforcement.**

The Board of County Commissioners designates LRAPA to enforce the prohibitions contained herein. The investigation, initiations of proceedings, adjudication of a failure to comply and appeal of such shall be regulated by the adopted administrative and hearing procedures of LRAPA set forth in its Rules and Regulations.

The County shall also retain the right to investigate and enforce the terms of this ordinance. Existing citation, complaint, violation, or failure to comply procedures applicable to the County may be utilized to prosecute such failures to comply. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00)*

#### **9.150 Penalties.**

Failure to comply with LC 9.135 above shall be subject to administrative enforcement pursuant to LC Chapter 5, including a monetary penalty of a minimum of \$50 to a maximum of \$500 for each day in which such failure to comply occurs. This remedy is cumulative and is in addition to any and all other remedies available to Lane County. *(Revised by Ordinance No. 9-90, Effective 1.18.91; 1-00, 4.12.00)*

### **Springfield Code**

## **AIR POLLUTION**

4.500 Lane Regional Air Protection Agency.

The Lane Regional Air Protection Agency (LRAPA) is the primary authority responsible for the control and/or abatement of air pollution in the city. As part of its duties LRAPA is responsible under its rules and regulations and Oregon Administrative Rules, for administering the most current Oregon Revised Statutes which concern air quality. [Section 4.500 amended by Ordinance No. 6216, enacted February 22, 2008.]

#### 4.502 City Responsibilities.

On any matters pertaining to air quality that are not administered by LRAPA, the city will comply with the most current Oregon Revised Statutes which concern air quality and the adopted state implementation plan for the Eugene-Springfield Area.

#### 4.504 Abatement.

Nothing in sections 4.500 to 4.512 shall restrict the right of the city to abate a nuisance in any matter otherwise.

#### Solid Fuel Space Heating Devices.

##### 4.508 Prohibitions.

(1) Stage I Red Advisory. No person in charge of property during a Stage I Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the device unless the person in charge of the property has been granted an exemption to use the device by LRAPA.

(2) Stage II Red Advisory. No person in charge of property during a Stage II Red Advisory shall operate or allow to be operated a solid fuel space heating device unless the person in charge of the property has been granted an exemption to use the device by LRAPA or unless the person is



operating a pellet stove which emits no visible emissions into the air outside of the building housing the device.

(3) No person in charge of property shall at any time allow to be initiated or maintained in a solid-fuel space-heating device the burning of any plastics, wire insulation, petroleum by-products, petroleum-treated materials, rubber products, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking or service of food, or of any other material which normally emits dense smoke, noxious odors, or hazardous air contaminants. This section does not prohibit use of natural gas fuels to light solid fuels.

(4) During a green or yellow advisory, no person in charge of property shall operate or allow to be operated a solid-fuel space-heating device which discharges emissions that are of an opacity greater than 40 percent. This provision does not apply to the emissions during the building of a new fire, for a period or periods aggregating no more than 10 minutes in any four-hour period. [Section 4.508 amended by Ordinance No. 6026, enacted December 2, 2002.]

#### 4.510 Exemptions.

A person in charge of property may operate a solid fuel space heating device during a Stage I or Stage II Red Advisory if that person has previously obtained one of the following exemptions from LRAPA.

(1) Sole Source of Heat: A person in charge of property who signs a sworn statement that the solid fuel space heating device is the sole source of heat for that persons residence is exempt from section 2 above. Individual exemptions shall expire on July 1 of each year and must be renewed annually. This exemption shall not be issued by LRAPA after June 30, 1996.

(2) Economic Need: Persons in charge of property who satisfy criteria established under

the Low Income Energy Assistance Program as administered by the Springfield Utility Board and as established by the United States Department of Energy are exempt from the prohibitions established herein. Individual exemptions shall expire on July 1 of each year and must be renewed annually.

#### 4.512 Enforcement.

(1) LRAPA is hereby authorized and designated to enforce and administer the process of sections 4.508 through 4.512 of the code in accordance with the adopted administrative and hearing procedures of LRAPA set forth in its rules and regulations adopted November 10, 1992.

(2) Violations. Penalties shall be in accordance with applicable state laws and LRAPA "Rules of Practice and Procedures" adopted February 13, 1990.

### Appendix C

#### 2008 Attainment Year Emission Inventory for the Eugene-Springfield UGB

An annual and a Winter day emission inventory have been developed for the Eugene-Springfield UGB. The methodology used for developing the emission inventory for each source category is discussed. In each case, EPA approved

methods were used.

The results of this analysis are summarized in Table C1. As the data depicts, residential wood combustion is the primary contributor of PM<sub>10</sub> to the airshed on Winter days when historically this area has exceeded the 24 hour standard.

Table C1

2008 estimated PM<sub>10</sub> emissions for the Eugene/Springfield UGB

Source	Annual (tons/year)	Winter Day (tons/day)
Point Sources	1,624.1	4.4
Residential wood combustion	728.2	8.5
Road Dust	281.2	0.8
Motor vehicle exhaust, brake and tire wear	120.3	0.4
Total	2,753.8	14.1

#### Point Sources:

Although the EPA definition of a point source for PM<sub>10</sub> in moderate non-attainment areas is one having emissions  $\geq 100$  tons/year, for the purposes of this emissions inventory sources  $\geq 10$  tons/year will be included. This more complete listing of sources creates a more accurate estimate of the impact of point sources in this area. Within the UGB there are 10 sources which have Federal Title V Operating Permits, 3 sources with Synthetic Minor Operating Permits, and 9 sources with LRAPA Air Contaminant Discharge Permits (ACDP), which have annual PM<sub>10</sub> emissions  $\geq 10$

tons/year. The permitted Plant Site Emission Limits were used to estimate emissions for 2008, since actual emissions are not available. All of these sources operate with a fairly consistent production rate year-round. The estimate of daily emissions is a direct fraction of the annual emissions.

#### Title V Sources:

Permit #	Name	Annual PM <sub>10</sub> (t/y)
203129	G.P. Resins	12.4
203102	Murphy	64.0
204402	Kingsford mfg.	194.0
207510	Mckenzie Forrest Products	219.8
207050	Rosboro	213.0
208866	Sierra Pine	214.9
208256	Trus Joist Eugene	61.4
208850	International Paper	305.0
200529	Flakeboard America MDF	70.0
208864	Pacific States Plywood	34.0

#### Synthetic Minor Sources

Permit #	Name	Annual PM <sub>10</sub> (t/y)
202805	Forrest Paint	17.0
208557	University of Oregon Boiler	24.6
208894	Whittier Wood Products	23.7

#### ACDP Sources

Permit #	Name	Annual PM <sub>10</sub> (t/y)
201270	Cafeto Custom Roasting	14.0
206122	Caffe Pacori	14.0
202528	Emerald Forest Products #1	49.0
203103	Georgia Pacific Irving	15.7
208250	Mckenzie Forest Products	10.6
202108	Northwest Hardwoods	11.0
207488	Ridgeline	15.0
207075	Rexius Forest Byproducts	14.0
207459	Seneca Sawmill	27.0

Total Point Source Annual Emissions = 1,624.1 tons/year

Point Source Daily Emission Estimate = 4.4 tons/day

**Area Sources:****Residential Wood Combustion:**

Emissions were developed from the estimated use of wood stoves, pellet stoves, and fireplaces within the UGB. Estimates of usage were made using the results of the most recent survey; a 2009 study performed by Advanced Marketing Research Inc. (see Appendix F). The emission factors used were from EPA AP42 tables 1.9-1 and 1.10-1. The daily usage was estimated using Heating Degree Days for the worst case winter day in 2008.

2008 Residential Wood Combustion PM<sub>10</sub> Emissions Estimates  
Eugene-Springfield UGB

Wood Burning Device	# of households using device <sup>1</sup>	2008 total fuel burned <sup>2</sup> (tons)	PM <sub>10</sub> emission factor <sup>3</sup> (lbs/ton)	2008 Emission <sup>4</sup> (tons)
fireplace	18,233	19,327	34.6	334.4
woodstove and fireplace insert uncertified	8,104	15,641	30.6	239.3
phase II certified catalytic Wood stove and insert	8,104	15,641	16.2	126.7
Pellet stove	7,091	6,311	8.8	27.8

Total Annual PM<sub>10</sub> Emissions from RWC = 728.2 tons

The Worst Case Winter Day PM<sub>10</sub> Emissions from RWC = 8.5 tons<sup>5</sup>

## 1. Household Calculations:

The Lane Council of Governments (the local Metropolitan Planning Organization) estimates a total of 101,296 households within the Eugene-Springfield UGB during 2008.

The 2009 survey provides estimates of the percentage of households using a particular type of wood burning device as follows:

fireplace w/o insert and other misc. devices = 18%  
conventional woodstoves and fireplace inserts = 8%  
phase II certified woodstoves = 8%  
pellet stoves = 7%

$(\text{total households}) (\text{fraction using device}) = \text{number of households using device}$

## 2. Total Fuel Burned Calculations:

Based upon discussions with local firewood retailers and with federal agencies that provide firewood cutting permits, the primary species used for firewood in this area is Douglas Fir.

the density of Douglas Fir is 32 lbs/ft<sup>3</sup> (EPA AP42 Appendix A)

the volume of a cord of wood is approximately 80 ft<sup>3</sup> (EPA vol III chapter 2 EIIP RWC Jan 2001)

therefore, one cord of Douglas Fir weighs 1.28 tons

Based upon previous local surveys, the heating season for the Eugene/Springfield UGB is defined as October through March.

The most recent formal survey was conducted in 2009 with fuel usage estimates for 2008.

The 2009 survey provides estimates of the amount of wood burned by each type of wood burning device as follows:

fireplace w/o insert - an average of 0.83 cords per device per year  
(0.83 cords) (1.28 tons/cord) = 1.06 tons per device per year

conventional woodstoves and fireplace inserts - an average of 1.51 cords per device per year  
(1.51 cords) (1.28 tons/cord) = 1.93 tons per device per year

phase II certified woodstoves - an average of 1.51 cords per device per year  
(1.51 cords)(1.28 tons/cord) = 1.93 tons per device per year

pellet stoves - burned an average of 0.89 tons of pellets per year

### 3. PM10 emission factors:

EPA AP 42 tables 1.9-1 and 1.10-1

### 4. 2008 emissions calculation:

$$(2008 \text{ total fuel burned (tons)}) (PM_{10} \text{ emission factor (lbs/ton)}) (1/2000 \text{ lbs/ton}) = 2008 PM_{10} \text{ emissions (tons)}$$

### 5. Worst Case Day Emissions:

For the worst case day emissions estimate, it was assumed that the amount of wood burned is directly proportional to the Heating Degree Days (HDD). As defined by the National Weather Service, a HDD is calculated by averaging the daily maximum and minimum temperatures and for each degree that number is below 65 degrees, it is one degree day. Therefore, if the maximum and minimum temperatures average to 63 degrees, that is 2 degree



days.

The peak HDD date in 2008 was 12/16/08 with 46 HDD. To compute the daily emissions estimate multiply the ratio of the peak day HDD to the total season HDD with the season total emission estimate. The season total HDD for 2008 was 3,927.

$$(46/3,927) (728.2 \text{ tons}) = 8.5 \text{ tons}$$

### On Road Mobile Sources:

#### Road Dust:

Emissions estimates for Road Dust were developed using EPA AP42 emission factors and VMT estimates from the Lane Council of Governments (the local MPO) as follows:

equation 1 in AP42 section 13.2.1

$$E = k(sL/2)^{0.65} * (W/3)^{1.5} - C$$

where:

$E$  =  $PM_{10}$  emission factor (lbs/VMT)

$k$  = particle size multiplier = 0.016 lbs/VMT (AP42 table 13.2-1.1)

$sL$  = silt loading using AP42 table 13.2.1-3

5,000 - 10,000 ADT = 0.06 g/m<sup>2</sup>

> 10,000 ADT = 0.03 g/m<sup>2</sup>

from LCOG (personal communication) 76% of VMT in the UGB is on roads > 10,000 ADT

$sL = (0.76)(0.03) + (0.24)(0.06) = 0.037 \text{ g/m}^2$

$W$  = average weight of vehicles = 2.5 tons (ODOT personal communication)

$C$  = emission factor for fleet exhaust, brake wear, and tire wear  
= 0.00047 lbs/VMT (AP42 table 13.2.1-2)

$$E = 0.000439 \text{ lbs/VMT}$$

Annual Adjustment:

equation 2 in AP42 section 13.2.1

$$E_{ann} = E (1 - P/4N)$$

where:

P = number of wet days in 2008 = 143

N = number of days in the year = 366

$$E_{ann} = 0.000396 \text{ lbs/VMT}$$

VMT estimates:

LCOG (personal communication) provided VMT estimates

$$\text{average weekday VMT} = 4.19 \times 10^6$$

$$\text{annual VMT} = 1.42 \times 10^9$$

$$\text{Annual emission estimate} = 281.2 \text{ tons/year}$$

$$\text{Daily emission estimate} = 0.83 \text{ tons/day}$$

Motor Vehicle Exhaust, Brake Wear, and Tire Wear:

The emissions were estimated using emission factors from EPA Mobile 6.2.

The VMT estimates were from the Lane Council of Governments (the local MPO).

$$\text{Winter PM}_{10} \text{ emission factor for exhaust, brake, and tire wear} = 0.078 \text{ g/mi}$$

$$\text{Summer PM}_{10} \text{ emission factor for exhaust, brake and tire wear} = 0.0757 \text{ g/mi}$$

Composite annual emission factor = 0.0769 g/mi

Average weekday VMT =  $4.19 \times 10^6$

Annual VMT =  $1.42 \times 10^9$

Annual PM<sub>10</sub> Emission Estimate = 120.3 tons/year

Winter Day PM<sub>10</sub> Emission Estimate = 0.4 tons/day

## Appendix D

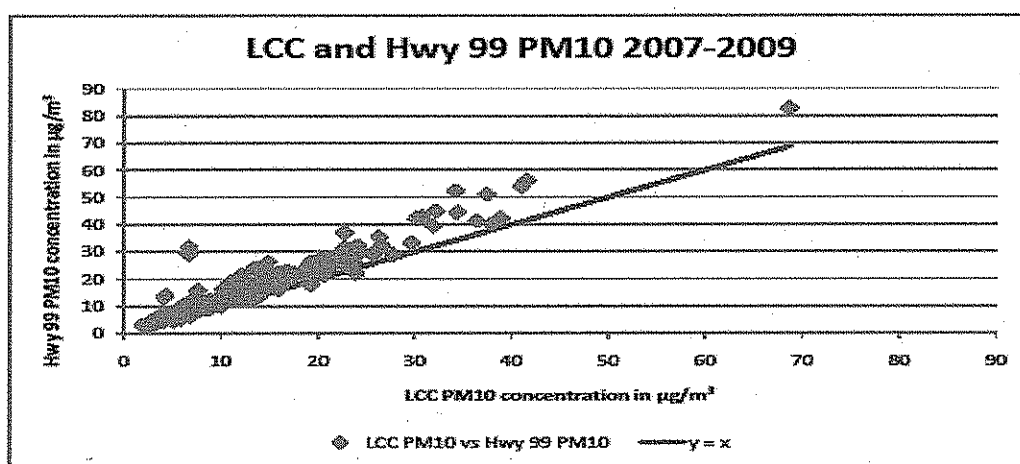
### PM<sub>10</sub> / PM<sub>2.5</sub> Relationship

In order to describe the relationship between PM<sub>10</sub> and PM<sub>2.5</sub> in the Eugene/Springfield area, a brief analysis is summarized here. It is LRAPA's assertion that PM<sub>10</sub> monitoring is unnecessary in this air shed because the ratio of PM<sub>2.5</sub> to PM<sub>10</sub> is high enough to ensure that the 24-hr PM<sub>2.5</sub> standard would be violated before the PM<sub>10</sub> standard was reached.

There are two existing PM<sub>10</sub> monitoring sites in this area that were established in 1985, AQS number 410390013 (LCC) and AQS number 410390058 (Hwy 99). The Hwy 99 site has also monitored PM<sub>2.5</sub> since 2007. A third site, AQS number 410390060 (AMZ), has previously monitored PM<sub>10</sub> and currently monitors PM<sub>10</sub> as a toxic metals method, funded through a temporary HAP project.

The most important fact regarding PM levels in Eugene/Springfield is that neither PM<sub>10</sub> nor PM<sub>10c</sub> (coarse) are pollutants of concern here. There has not been an exceedance of the 24-hr PM<sub>10</sub> standard since 1987. The 2007-2009 design values are 60 µg/m<sup>3</sup> and 50 µg/m<sup>3</sup> for Hwy 99 and LCC, respectively. Figure 1 shows that the Hwy 99 site is clearly the higher of the two sites. During the 2007-2009 period, the highest 24-hr PM<sub>10c</sub> value measured was 42 µg/m<sup>3</sup>. This is 57% of the 2006 proposed standard of 70 µg/m<sup>3</sup>.

Figure 1



The collocated  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  data for 2007-2009 from Hwy 99 was used to examine the  $\text{PM}_{2.5}/\text{PM}_{10}$  ratio. Figure 2 shows that as the  $\text{PM}_{2.5}$  concentration approaches  $25 \mu\text{g}/\text{m}^3$ , the ratio is equal to or greater than 50%. It follows that at or above  $25 \mu\text{g}/\text{m}^3$  of  $\text{PM}_{2.5}$ , the  $\text{PM}_{10}$  concentrations would be equal to, or less than, twice the  $\text{PM}_{2.5}$  concentration. Figure 3 displays another way to view the PM ratio. The coarse fraction only rises (that is, the ratio decreases) as the  $\text{PM}_{10}$  concentration reduces to insignificant values.

Figure 2

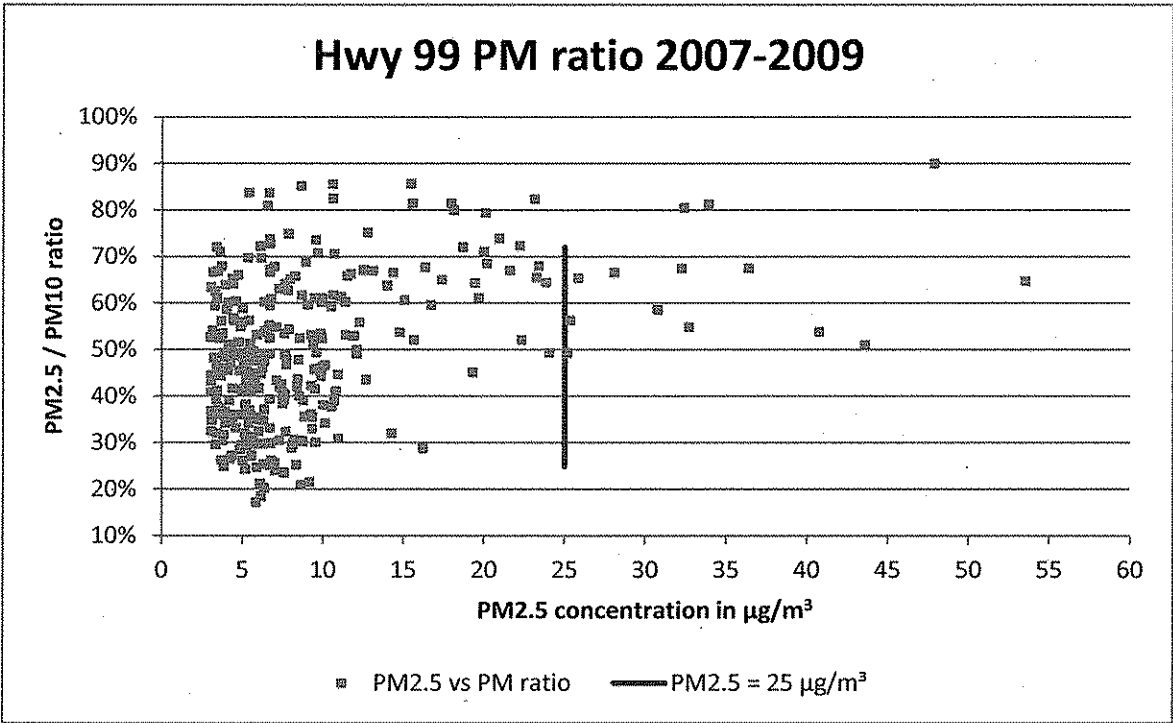
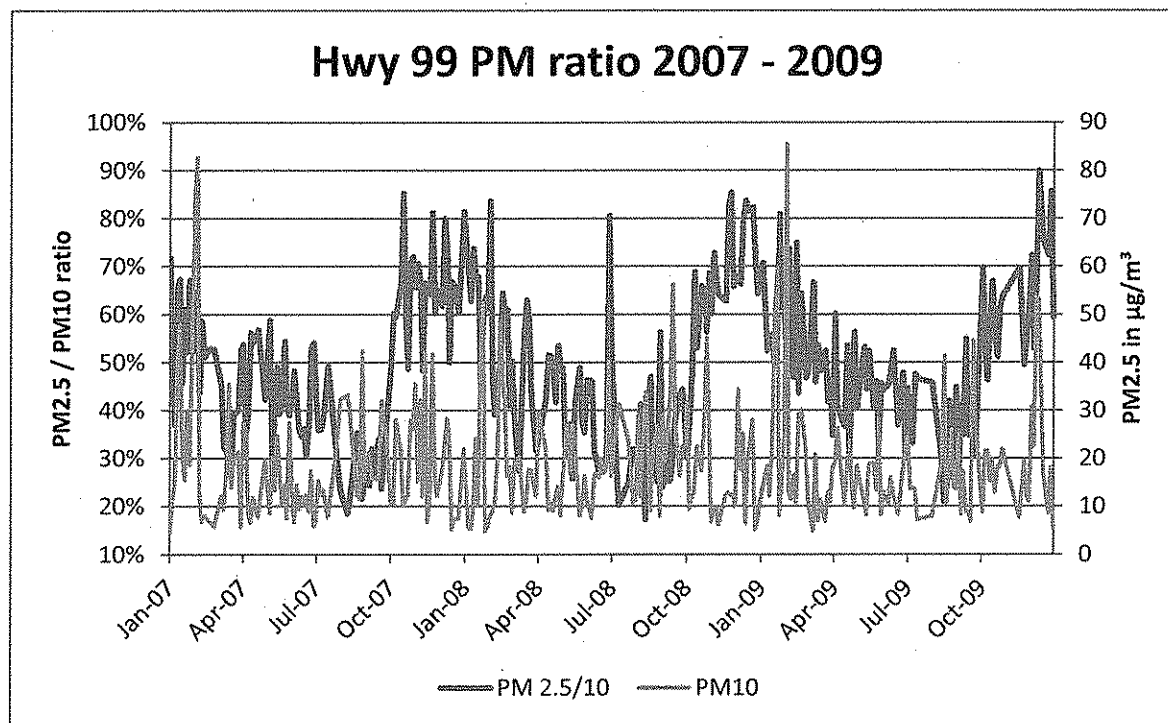
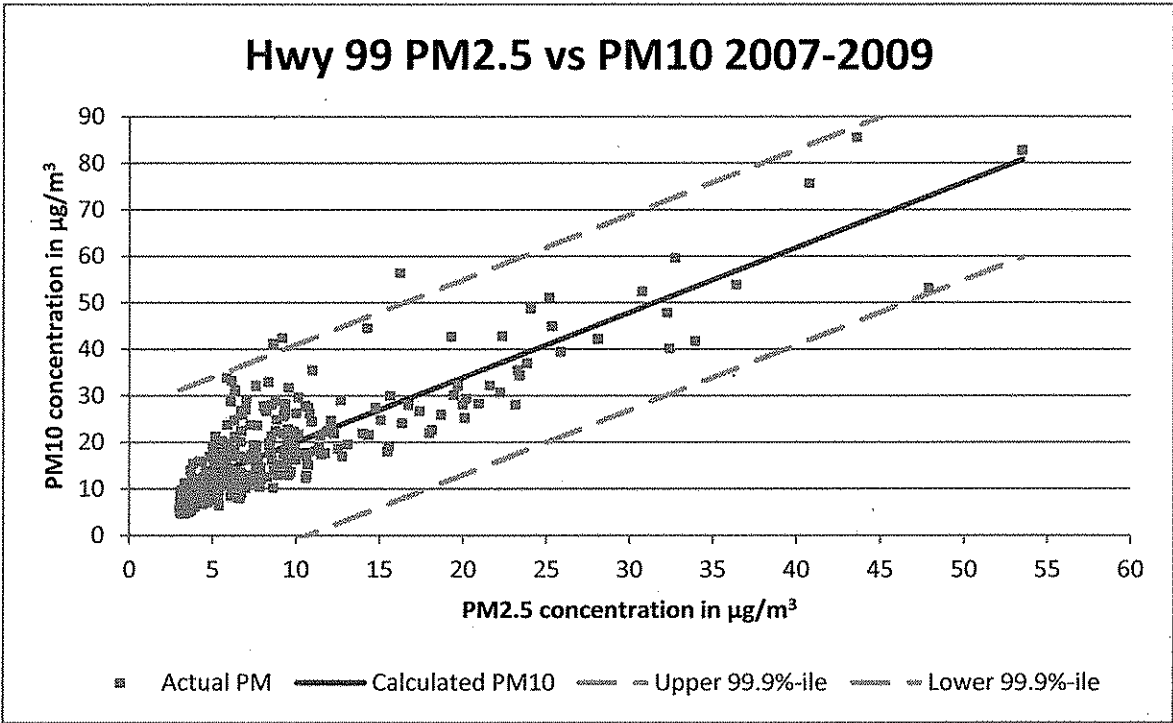


Figure 3



Finally, results of a regression analysis lead to the same conclusion. A simple linear regression was performed on 291 pairs of collocated observations ( $\geq 3 \mu\text{g}/\text{m}^3$ ) of  $\text{PM}_{2.5}$  and  $\text{PM}_{10}$ . This regression line predicts a  $\text{PM}_{10}$  concentration ( $\text{PM}_{10} = 1.397 * \text{PM}_{2.5} + 6.005$ ) from an observed  $\text{PM}_{2.5}$  concentration with a good deal of certainty ( $r^2 = 0.708$ ). Using a conservative limit of 99.9%, upper and lower confidence intervals are  $\pm 21 \mu\text{g}/\text{m}^3$ . Figure 4 shows that at the point of a 24-hr  $\text{PM}_{2.5}$  exceedance,  $\text{PM}_{10}$  levels remain at 50% of the 24 hr  $\text{PM}_{10}$  standard.

Figure 4





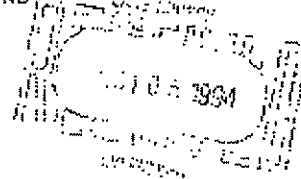
## Appendix E

### EPA determination of Transportation Conformity for PM10



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10  
1209 Sixth Avenue  
Seattle, Washington 98101



Reply To  
Attn Of: AT-082

OCT 8 1994

Mr. Don Arkell, Director  
Lane Regional Air Pollution Authority  
225 North 5th, Suite 501  
Springfield, OR 97477-4671

Dear Mr. Arkell:

This is in response to your letter to Chuck Clarke regarding the "Memorandum of Understanding - Transportation Conformity Analysis for the Eugene-Springfield MTC", dated September 9, 1994. The letter was also signed by George Kloeppel, the ICOS Executive Director.

The final federal conformity rule does allow for exempting areas from the regional emissions analysis of the conformity rule if certain criteria are met. I believe your letter demonstrates that the Eugene-Springfield area meets the  $PM_{10}$  conformity criteria and therefore, I concur with your conclusion that the conformity determination is not required to satisfy the  $PM_{10}$  criteria for regional emissions analysis. The preamble for the federal rule, however, does not allow for relief from project level analysis. The projects within the  $PM_{10}$  nonattainment area must comply with the project level conformity requirements as specified in the federal conformity regulation.

I also concur with your findings regarding analysis for conformity findings with regard to meeting the carbon monoxide criteria. Regional emission test will apply only in the Central Area Transportation Study (CATS) boundary, consistent with the approved redesignation. Regional emission analysis will not apply outside the CATS boundary. Again, project level conformity requirements are not affected by this finding and continue to apply throughout the nonattainment area, consistent with the federal regulation.

Thank you for requesting our concurrence with this conformity proposal. Questions regarding our concurrence can be directed to Mike Lidgard at (206)882-4237.

Sincerely,

Jim McCormick, Director  
Air and Toxics Division

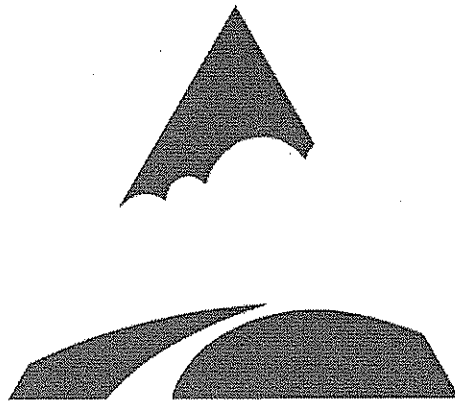
cc: George Kloeppel, LOOC

Printed on Recycled Paper

Appendix F

**FUEL USE SURVEY  
CONDUCTED FOR  
LANE REGIONAL AIR PROTECTION AGENCY**

**October, 2009**



**ADVANCED MARKETING  
RESEARCH INC.**

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## **EXECUTIVE SUMMARY**

### **Primary Heat Source (Q3-4)**

Natural gas forced air heaters and electric heat pumps top the list as primary sources of heat for Eugene/Springfield area residents, with 25% each. Electric ceiling heat and electric wall heaters are each the primary source of heat for 13%, and electric forced air is the source of heat for 12%.

The electric heat pump has moved up from 8% in 2001 to 25% currently, while electric ceiling heat has gone from 33% and first place in 2001, down to 13% currently.

### **Secondary Heat Sources (Q5-6)**

43% of residents do not have a secondary source of heat, down from 56% in 2001. 16% use a wood fireplace as a secondary source of heat, 8% use a gas fireplace, 8% use electric wall heaters, and 8% use wood stoves.

### **Changes in Primary Heat Source (Q7-10)**

7% are considering a change in their primary heat source, consistent with 6% in 2001. Of those considering a change (n=29), 66% are planning to switch to an electric heat pump (up from 23% in 2001), 10% are planning to get electric forced air, and 3% are planning to get gas forced air (down from 27% in 2001).

For those considering a switch (n=29), cost is the reason for 38%, efficiency is the reason for 31%, and 24% don't like their current system. (See Table 10V for verbatim responses.)

### **Current Use of Wood Stoves (Q11-13)**

18% of residents currently have a wood stove, consistent with 15% in 2001. 44% of the wood stoves are over fifteen years old. 11% are eleven to fifteen years old, 25% are five to ten years old, and 11% are less than five years old. 8% of the wood stoves are of unknown age.

Of those with wood stoves (n=72), 10% do not use them at all. 42% burn less than one cord per year, 22% burn one to two cords per year, and 22% burn three or more cords each year. 4% are unsure how much wood they burn.

### **Current Use of Pellet Stoves (Q14-16)**

7% of residents currently have a pellet stove, consistent with 3% in 2001. 27% of the pellet stoves are under five years old, down from 55% in 2001. 43% are five to ten years old, 13% are eleven to fifteen years old, and 13% are over fifteen years old. 3% of the pellet stoves are of unknown age.

Of those with pellet stoves (n=30), 7% do not use them at all. 23% burn 1 to 25 bags of pellets per year. 37% burn 26 to 50 bags per year. 20% burn 51 to 75 bags per year. 14% burn over 75 bags each year.

**Current Use of Wood-Burning Fireplaces (Q17-18)**

31% of residents currently have a wood-burning fireplace, consistent with 37% in 2001.

Of those with wood-burning fireplaces (n=125), 42% do not use them at all, up from 29% in 2001. 47% burn less than one cord per year, 7% burn one to two cords per year, and 3% burn three or more cords each year. 1% are unsure how much wood they burn.

**Awareness of LRAPA (Q19)**

70% have heard of the Lane Regional Air Protection Agency, consistent with 70% in 2001 but up from 55% in 1997. 27% have not heard of the agency. 1% are unsure.

**FUEL USE SURVEY  
FOR LANE REGIONAL AIR PROTECTION AGENCY  
October, 2009**

**PURPOSE OF THE STUDY**

The purpose of this study is to assist LRAPA in determining patterns of fuel usage.

**METHODOLOGY**

Advanced Marketing Research was hired to conduct the research project in order to obtain unbiased and statistically valid results.

Using questions proposed by LRAPA, Advanced Marketing Research designed a questionnaire instrument to be administered by telephone. Using a random list of Eugene/Springfield area residents as a sampling frame, 404 interviews were completed. Telephone interviews were conducted between October 9 and October 18, 2009.

Proper data analysis techniques were employed by Advanced Marketing Research to avoid introducing unnecessary error and bias into the study.

**QUOTAS OBSERVED**

The residential population was sampled using the following quotas:

Males	45% to 55%
Females	45% to 55%
Age 65+	Not to exceed 25%

## RESPONSE RATE

Of the 492 qualified respondents reached by telephone, 404 interviews were completed, for a response rate of 82%. The overall breakdown of numbers dialed is as follows:

Refusals	88
Disconnects	46
Wrong Numbers	5
Language Barrier	4
Spanish Language Barrier	6
Business Numbers	16
Fax	17
No Answer	65
Answering Machine	498
Busy Signal	14
Call Backs	13
Respondent Not Available	6
Completed Interviews	<u>404</u>
Total Numbers Dialed	1,182

## TESTS FOR DIFFERENCES BETWEEN PROPORTIONS

When looking at the data tables, differences between percentage amounts can be misleading, and statistical tests must be conducted to determine if the differences are statistically significant. The computer makes these calculations for us, and the results are occasional plus or minus signs at the bottom of certain cells. These indicate that those answers are more different from everybody else's answers than could be expected due to chance, given the sample sizes involved. Plus signs are used if the group picks that answer *more* often than everyone else; minus signs if it is *less* than everyone else. The number of plus or minus signs indicates the level of statistical significance. One means the 90% level, two the 95% level, and three the 99% level. For example, two plus signs would mean that you can be 95% sure that the people represented by that group really would pick that answer more often than the people represented by the rest of the sample. It should be noted that this test can only be done for banner columns that contain at least 30 people. Because of this requirement, it is possible that the test will be done for some banner columns on a table and not for others.

## NOTES ON CHI SQUARE



The chi square value and its associated probability are printed beneath the first column in each banner heading. The probability ( $p=.xxx$ ) indicates the probability that the heading and row variables are *not* related is .xxx. For example, a .05 probability of not being related means a 95 percent chance of being related.

**DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE (Q20-24)**

<b>Gender</b>	<b><u>2009</u></b>	<b><u>2001</u></b>
Male	50%	47%
Female	50	53
<b>Age</b>		
18-24	3%	8%
25-34	7	16
35-44	21	20
45-54	20	16
55-64	27	20
65+	21	18
<b>Residence</b>		
Eugene	67%	78%
Springfield	33	22
<b>Own or Rent</b>		
Own	91%	76%
Rent	9	24

**BOUND ON ERROR**

SEX <u>Confidence Level</u>	SAMPLE SIZE		Bound on Error at <u>95%</u>
	<u>Frequency</u>	<u>Percent</u>	
Male	200	50%	6.4%
Female	204	50%	6.3%
AGE			
18-24	14	3%	--
25-34	27	7%	--
35-44	85	21%	9.7%
45-54	79	20%	10.1%
55-64	108	27%	8.6%
65+	86	21%	9.7%
RESIDENCE			
Eugene	272	67%	5.5%
Springfield	132	33%	7.8%
OWN/RENT			
Own	366	91%	4.7%
Rent	38	9%	14.6%
TOTAL	404	100%	4.5%*

\* What this means is that we are 95% certain that the mean response of the entire population of Eugene/Springfield area residents lies within (plus or minus) 4.5% of the survey response.

**MINIMUM DIFFERENCE IN PERCENTAGE POINTS REQUIRED FOR  
STATISTICAL SIGNIFICANCE IN COMPARISON OF REPORTED  
PERCENTAGES FOR SUBGROUPS WITH 95% CONFIDENCE**

<u>Subsample</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>	<u>250</u>	<u>300</u>	<u>350</u>	<u>400</u>	<u>450</u>	<u>500</u>	<u>600</u>
50	20%	17%	16%	15%	15%	15%	15%	15%	15%	15%	15%
100		14%	13%	12%	12%	11%	11%	11%	11%	11%	11%
150			11%	11%	10%	10%	10%	9%	9%	9%	9%
200				10%	9%	9%	9%	8%	8%	8%	8%
250					9%	8%	8%	8%	8%	8%	7%
300						8%	8%	7%	7%	7%	7%
350							7%	7%	7%	7%	6%
400								7%	7%	7%	6%
450									7%	6%	6%
500										6%	6%
600											6%

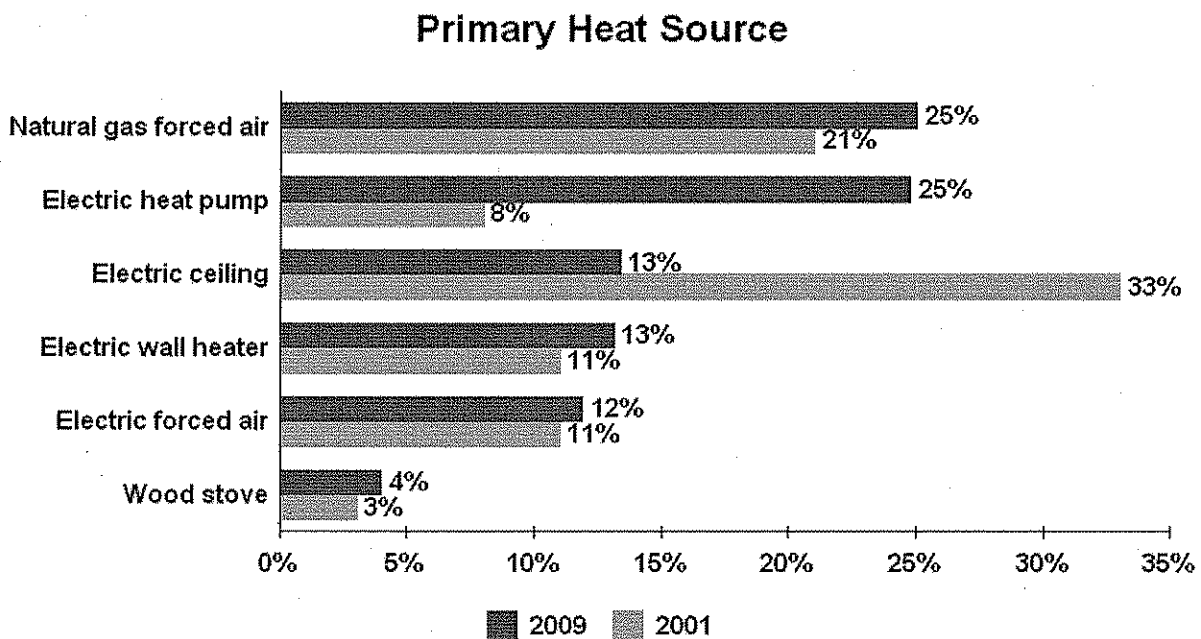
Minimums are for reported percentages near 50%. When much smaller or much larger percentages are reported, a slightly smaller minimum is required.

## **ANALYSIS OF DATA**

## PRIMARY HEAT SOURCE (Q3-4)

Natural gas forced air heaters and electric heat pumps top the list as primary sources of heat for Eugene/Springfield area residents, with 25% each. Electric ceiling heat and electric wall heaters are each the primary source of heat for 13%, and electric forced air is the source of heat for 12%.

The electric heat pump has moved up from 8% in 2001 to 25% currently, while electric ceiling heat has gone from 33% and first place in 2001, down to 13% currently.



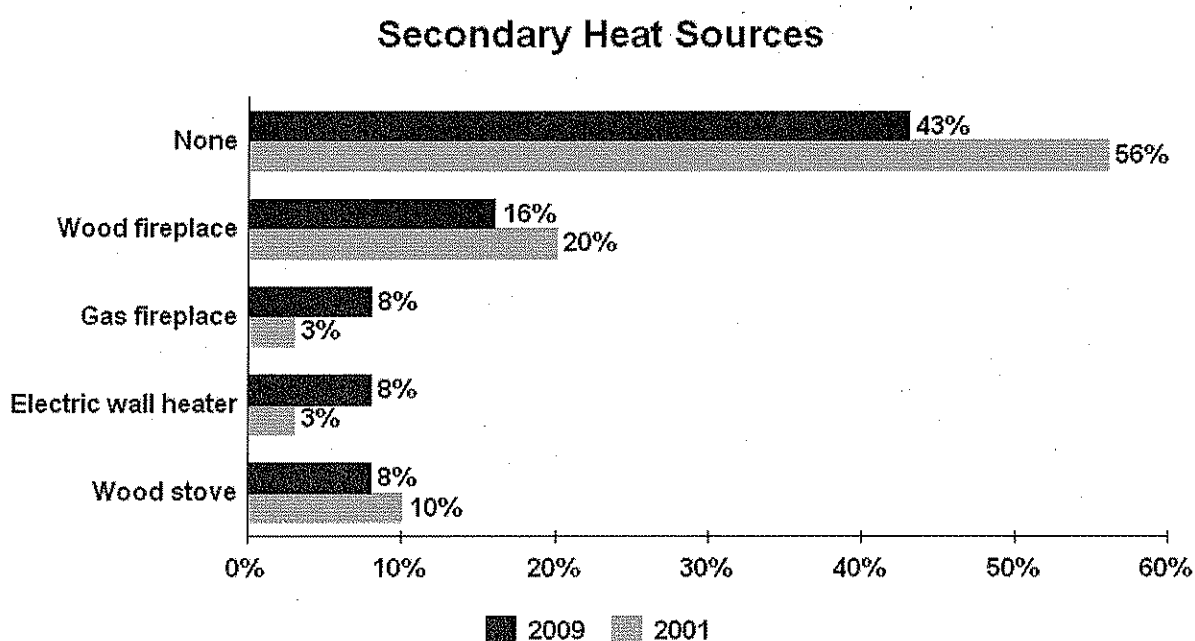
Prepared by Advanced Marketing Research, Inc.

### *Demographic Differences*

Homeowners and Eugene residents are more likely than others to have natural gas forced air as their primary source of heat. Homeowners are more likely than renters to have an electric heat pump. Renters are more likely than owners to have electric ceiling heat or electric wall heaters as their primary sources of heat.

## SECONDARY HEAT SOURCES (Q5-6)

43% of residents do not have a secondary source of heat, down from 56% in 2001. 16% use a wood fireplace as a secondary source of heat, 8% use a gas fireplace, 8% use electric wall heaters, and 8% use wood stoves.



Prepared by Advanced Marketing Research, Inc.

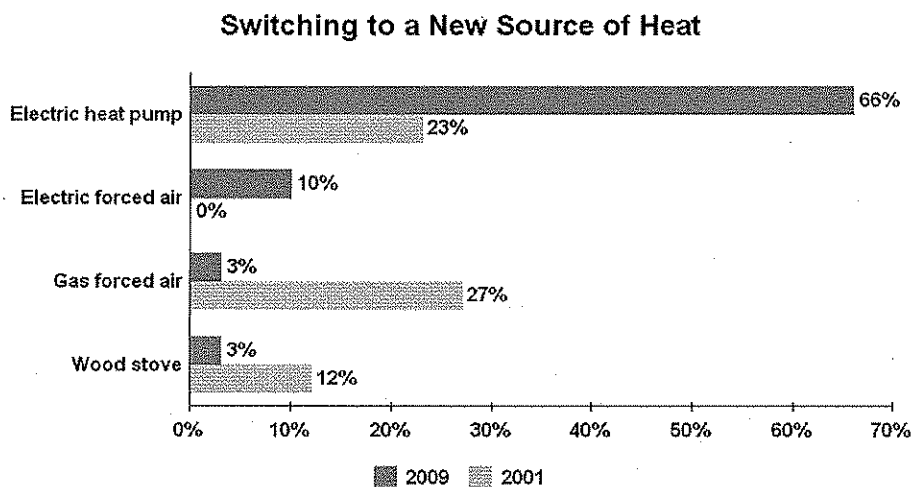
### *Demographic Differences*

35 to 44 year-olds and renters are more likely than others to not have a secondary source of heat in their household. 55 to 64 year-olds are more likely than others to use a wood fireplace as a secondary source of heat. Eugene residents are more likely than Springfield residents to use a gas fireplace or an electric wall heater as a secondary source of heat. Males are more likely than females to use a wood stove as a secondary source of heat.

## CHANGES IN PRIMARY HEAT SOURCE (Q7-10)

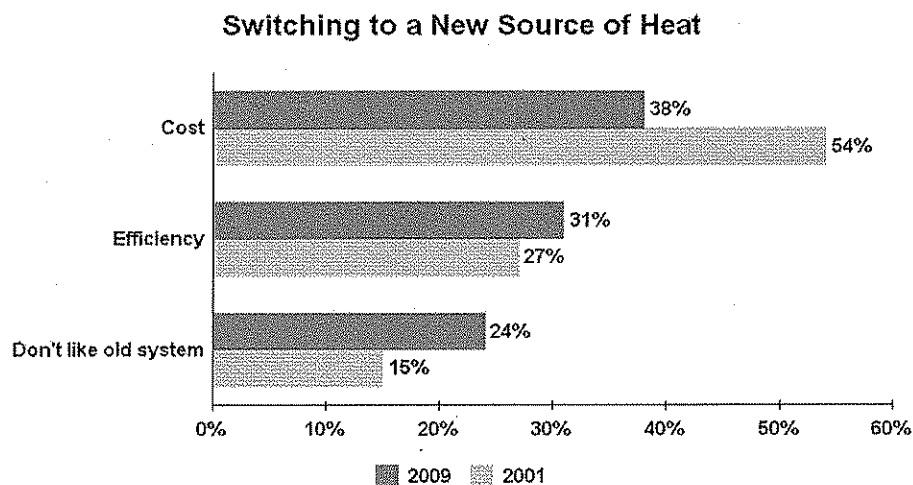
7% are considering a change in their primary heat source, consistent with 6% in 2001. Of those considering a change (n=29), 66% are planning to switch to an electric heat pump (up from 23% in 2001), 10% are planning to get electric forced air, and 3% are planning to get gas forced air (down from 27% in 2001).

For those considering a switch (n=29), cost is the reason for 38%, efficiency is the reason for 31%, and 24% don't like their current system. (See Table 10V for verbatim responses.)



Based on those considering a change (n=30)





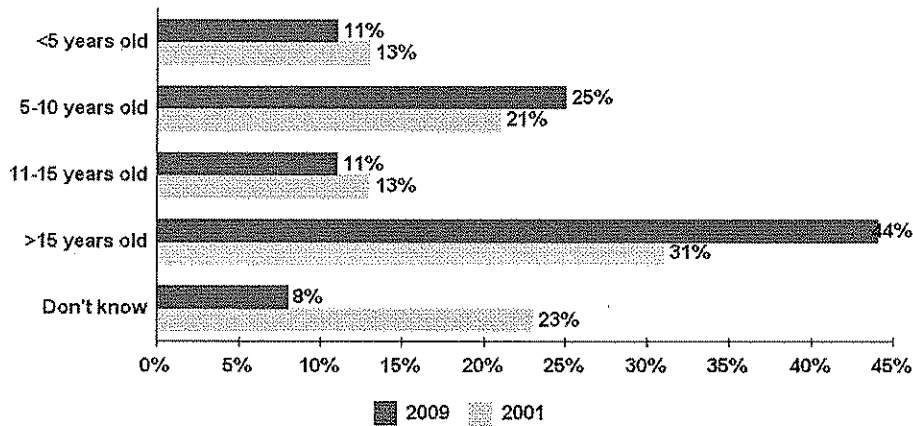
Based on those considering a change (n<30)

## CURRENT USE OF WOOD STOVES (Q11-13)

18% of residents currently have a wood stove, consistent with 15% in 2001. 44% of the wood stoves are over fifteen years old. 11% are eleven to fifteen years old, 25% are five to ten years old, and 11% are less than five years old. 8% of the wood stoves are of unknown age.

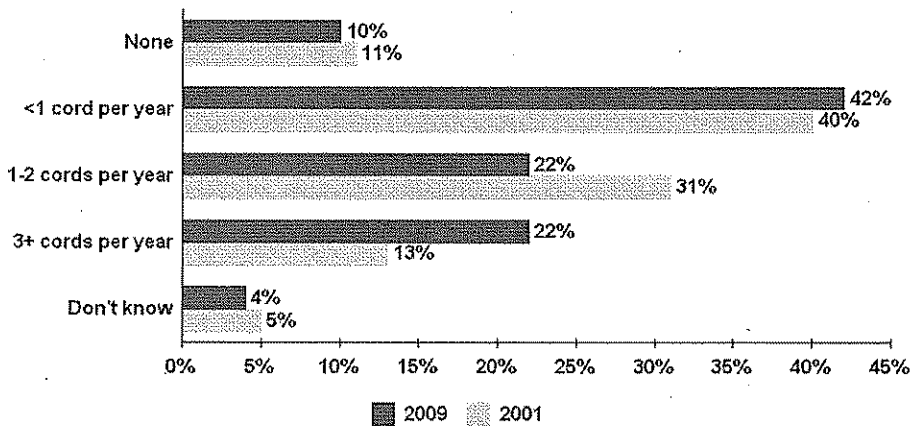
Of those with wood stoves (n=72), 10% do not use them at all. 42% burn less than one cord per year, 22% burn one to two cords per year, and 22% burn three or more cords each year. 4% are unsure how much wood they burn.

### Age of Wood Stoves



Based on those with wood stoves (n<75)

### Amount of Wood Burned



Based on those with wood stoves (n<75)

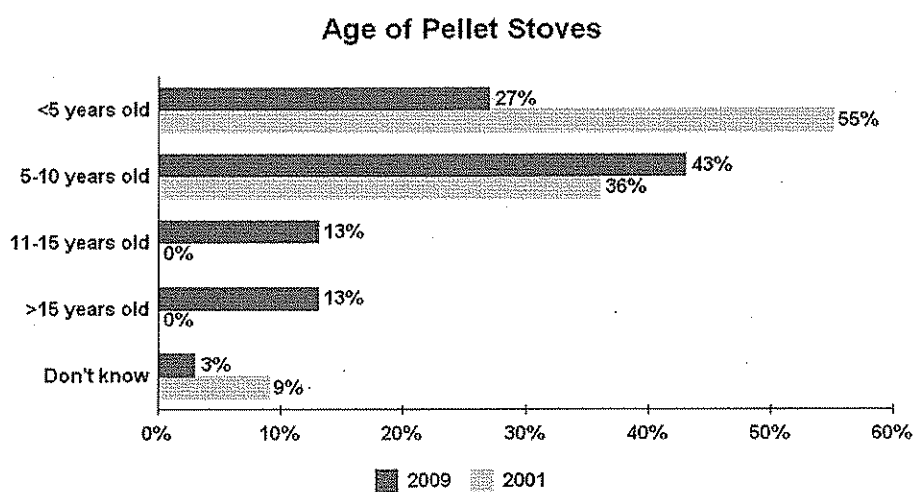
### *Demographic Differences*

55 to 64 year-olds are more likely than others to have a wood stove.

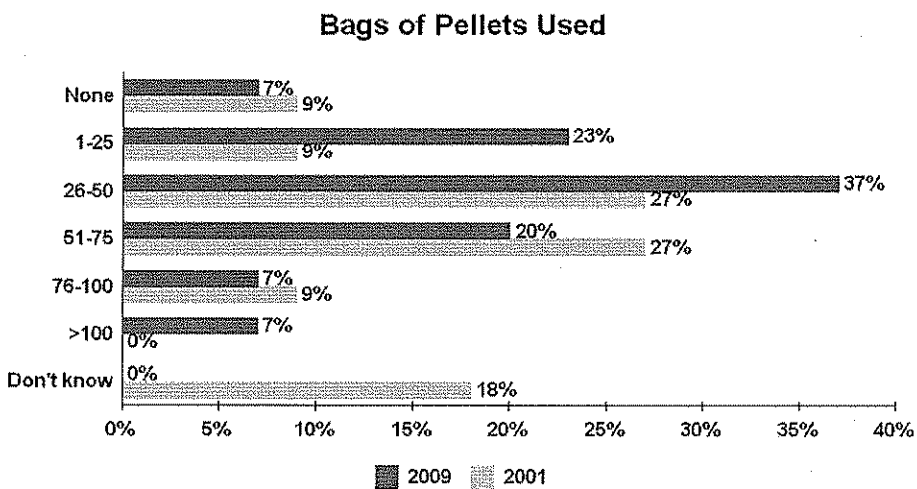
## CURRENT USE OF PELLET STOVES (Q14-16)

7% of residents currently have a pellet stove, consistent with 3% in 2001. 27% of the pellet stoves are under five years old, down from 55% in 2001. 43% are five to ten years old, 13% are eleven to fifteen years old, and 13% are over fifteen years old. 3% of the pellet stoves are of unknown age.

Of those with pellet stoves (n=30), 7% do not use them at all. 23% burn 1 to 25 bags of pellets per year. 37% burn 26 to 50 bags per year. 20% burn 51 to 75 bags per year. 14% burn over 75 bags each year.



Based on those with pellet stoves (n=35)

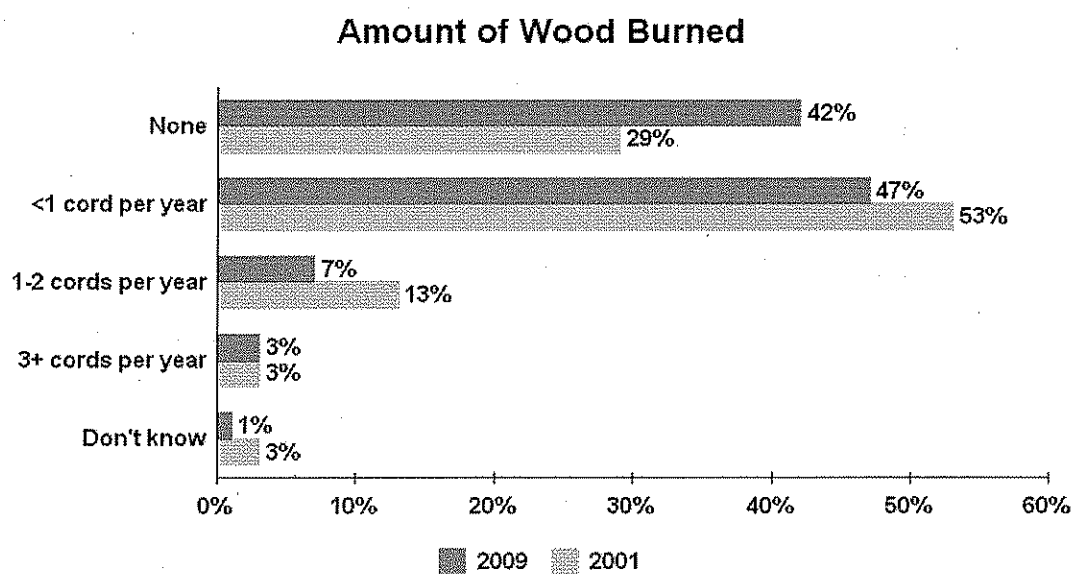


Based on those with pellet stoves (n=35)

## CURRENT USE OF WOOD-BURNING FIREPLACES (Q17-18)

31% of residents currently have a wood-burning fireplace, consistent with 37% in 2001.

Of those with wood-burning fireplaces (n=125), 42% do not use them at all, up from 29% in 2001. 47% burn less than one cord per year, 7% burn one to two cords per year, and 3% burn three or more cords each year. 1% are unsure how much wood they burn.



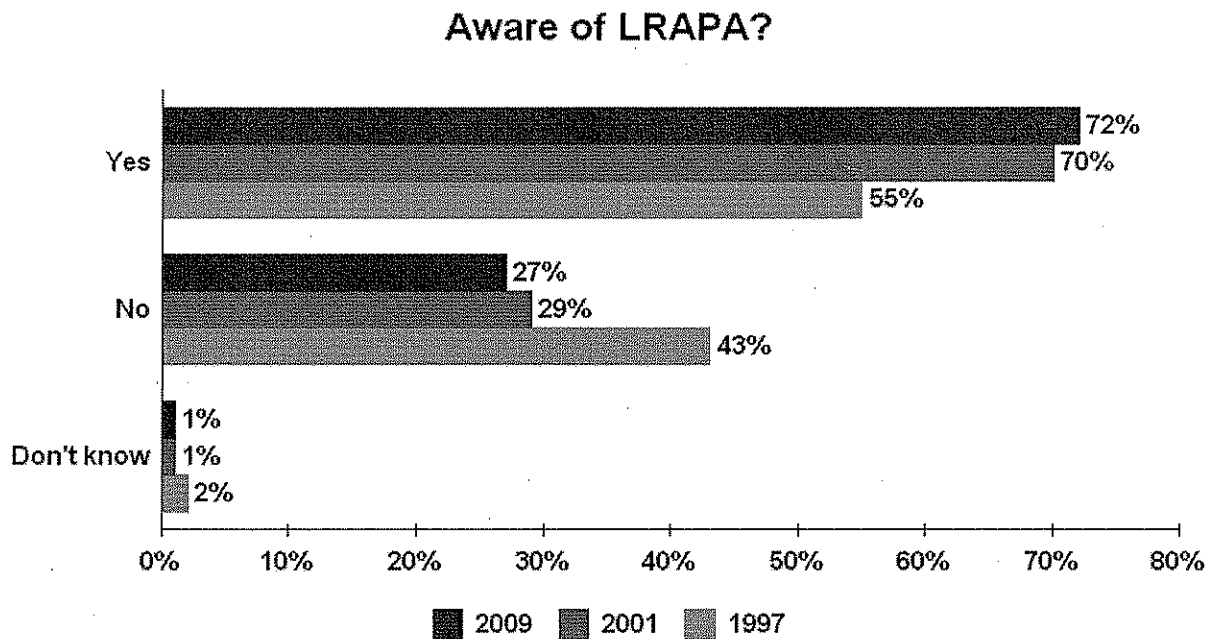
Based on those with wood-burning fireplaces (n<150)

### *Demographic Differences*

35 to 44 year-olds are less likely than others to have a wood-burning fireplace. Females are more likely than males to say they never use their wood-burning fireplace.

## AWARENESS OF LRAPA (Q19)

72% have heard of the Lane Regional Air Protection Agency, consistent with 70% in 2001 but up from 55% in 1997. 27% have not heard of the agency. 1% are unsure.



Prepared by Advanced Marketing Research, Inc.

### *Demographic Differences*

55 to 64 year-olds are more likely than others to say they have heard of LRAPA. 18 to 34 year-olds are less likely than others to say they are familiar with the agency.

## LANE REGIONAL AIR PROTECTION AGENCY

### TITLE 29

### DESIGNATION OF AIR QUALITY AREAS

#### Section 29-0010 Definitions

The definitions in Title 12 and this rule apply to this division. If the same term is defined in this rule and Title 12, the definition in this rule applies to this division. Definitions of boundaries in this rule also apply to LRAPA Rules and Regulations.

- (1) "AQCR" means Air Quality Control Region.
- (2) "AQMA" means Air Quality Maintenance Area.
- (3) "CO" means Carbon Monoxide.
- (4) "CBD" means Central Business District.
- (5) "Criteria Pollutant" means any of the six pollutants set out by the Clean Air Act (sulfur oxides, particulate matter, ozone, carbon monoxide, nitrogen dioxide, and lead) for which the EPA has promulgated standards in 40 CFR 50.4 through 50.12 (July, 1993).
- (6) "Eugene-Springfield UGBA" means the area within the bounds beginning at the Willamette River at a point due east from the intersection of East Beacon Road and River Loop No.1; thence southerly along the Willamette River to the intersection with Belt Line Road; thence easterly along Belt Line Road approximately one-half mile to the intersection with Delta Highway; thence northwesterly and then northerly along Delta Highway and on a line north from the Delta Highway to the intersection with the McKenzie River; thence generally southerly and easterly along the McKenzie River approximately eleven miles to the intersection with Marcola Road; thence southwesterly along Marcola Road to the intersection with 42nd Street; thence southerly along 42nd Street to the intersection with the northern branch of US Highway 126; thence easterly along US Highway 126 to the intersection with 52nd Street; thence north along 52nd Street to the intersection with High Banks Road; thence easterly along High Banks Road to the intersection with 58th Street; thence south along 58th Street to the intersection with Thurston Road; thence easterly along Thurston Road to the intersection with the western boundary of Section 36, T17S, R2W; thence south to the southwest corner of Section 36, T17S, R2W; thence west to the Springfield City Limits; thence following the Springfield City Limits southwesterly to the intersection with the western boundary of Section 2, T18S, R2W; thence on a line southwest to the Private Logging Road approximately one-half mile away; thence southeasterly along the Private Logging Road to the intersection with Wallace Creek; thence southwesterly along Wallace Creek to the confluence with

the Middle Fork of the Willamette River; thence generally northwesterly along the Middle Fork of the Willamette River approximately seven and one-half miles to the intersection with the northern boundary of Section 11, T18S, R3W; thence west to the northwest corner of Section 10, T18S, R3W; thence south to the intersection with 30th Avenue; thence westerly along 30th Avenue to the intersection with the Eugene City Limits; thence following the Eugene City Limits first southerly then westerly then northerly and finally westerly to the intersection with the northern boundary of Section 5, T18S, R4W; thence west to the intersection with Greenhill Road; thence north along Greenhill Road to the intersection with Barger Drive; thence east along Barger Drive to the intersection with the Eugene City Limits (Ohio Street); thence following the Eugene City Limits first north then east then north then east then south then east to the intersection with Jansen Drive; thence east along Jansen Drive to the intersection with Belt Line Road; thence northeasterly along Belt Line Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection with Clear Lake Road; thence west along Clear Lake Road to the intersection with the western boundary of Section 9, T17S, R4W; thence north to the intersection with Airport Road; thence east along Airport Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection East Enid Road; thence east along East Enid Road to the intersection with Prairie Road; thence southerly along Prairie Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with the Southern Pacific Railroad Line; thence southeasterly along the Southern Pacific Railroad Line to the intersection with Irving Road; thence east along Irving Road to the intersection with Kalmia Road; thence northerly along Kalmia Road to the intersection with Hyacinth Road; thence northerly along Hyacinth Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with Spring Creek; thence northerly along Spring Creek to the intersection with River Road; thence northerly along River Road to the intersection with East Beacon Drive; thence following East Beacon Drive first east then south then east to the intersection with River Loop No.1; thence on a line due east to the Willamette River and the point of beginning.

(7) "Maintenance Area" means any area that was formerly nonattainment for a criteria pollutant but has since met EPA promulgated standards and has had a maintenance plan to stay within the standards approved by the EPA pursuant to 40 CFR 51.110 (July, 1993).

(8) "Nonattainment Area" means any area that has been designated as not meeting the standards established by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR 51.52 (July, 1993) for any criteria pollutant.

(9) "O3" means Ozone.

(10) "Oakridge UGB" means the area enclosed by the following: Beginning at the northwest corner of Section 17, T21S, R3E and the city limits; thence south along the western boundary of Section 17, T21S, R3E along the city limits approximately 800 feet; thence southwesterly following the city limits approximately 750 feet; thence west along the city limits approximately 450 feet; thence northwesterly along the city limits

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approximately 450 feet; thence on a line south along the city limits approximately 250 feet; thence on a line east along the city limits approximately 100 feet; thence southwesterly along the city limits approximately 200 feet; thence on a line east along the city limits approximately 400 feet; thence on a line south along the city limits to the channel of the Willamette River Middle Fork; thence south-easterly up the Willamette River Middle Fork along the city limits approximately 7200 feet; thence exiting the Willamette River Middle Fork with the city limits in a northerly manner and forming a rough semicircle with a diameter of approximately one-half mile before rejoining the Willamette River Middle Fork; thence diverging from the city limits upon rejoining the Willamette River Middle Fork and moving southeasterly approximately 5600 feet up the Willamette River Middle Fork to a point on the river even with the point where Salmon Creek Road intersects with U.S. Highway 58; thence on a line east from the channel of the Willamette River Middle Fork across the intersection of Salmon Creek Road and U.S. Highway 58 to the intersection with the Southern Pacific Railroad Line; thence northerly along the Southern Pacific Railroad Line to the intersection with the northern boundary of Section 22, T21S, R3E; thence west along the northern boundary of Section 22, T21S, R3E to the intersection with Salmon Creek Road; thence on a line north to the intersection with the Southern Pacific Railroad Line; thence east along the Southern Pacific Railroad Line approximately 600 feet; thence on a line north to the intersection with High Prairie Road; thence on a line west approximately 400 feet; thence on a line north to the intersection with the northern boundary of Section 15, T21S, R3E; thence west along the northern boundary of Section 15, T21S, R3E to the intersection with the southeastern corner of Section 9, T21S, R3E; thence north along the eastern boundary of Section 9, T21S, R3E approximately 1300 feet; thence on a line west approximately 1100 feet; thence on a line south to the intersection with West Oak Road; thence northwesterly along West Oak Road approximately 2000 feet; thence on a line south to the intersection with the northern boundary line of the city limits; thence westerly and northwesterly approximately 8000 feet along the city limits to the point of beginning.

(4411) "Particulate Matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method with the Department's *Source Sampling Manual*, (January, 1992).

(4212) PM10:

(a) When used in the context of emissions, means finely divided solid or liquid material, including condensable water, other than combined water, with an aerodynamic diameter less than or equal to a nominal 10 microns, emitted to the ambient air as measured by as applicable reference method in accordance with the Department's *Source Sampling Manual* (January, 1992);

(b) When used in the context of ambient concentration, means airborne finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 microns as measured in accordance with 40 CFR Part 50, Appendix J (July, 1993).

(4313) "UGA" means Urban Growth Area. (synonymous with "UGB")

(4414) "UGB" means Urban Growth Boundary.

**Section 29-0020 Designation of Air Quality Control Regions**

Oregon's thirty-six counties are divided into five AQCRs. The AQCR boundaries follow county lines, and there are no counties that belong to more than one AQCR. The five AQCRs are as follows:

**(1) Portland Interstate AQCR, containing ten counties:**

- (a) Benton County;
- (b) Clackamas County;
- (c) Columbia County;
- (d) Lane County;
- (e) Linn County;
- (f) Marion County;
- (g) Multnomah County;
- (h) Polk County;
- (i) Washington County;
- (j) Yamhill County.

**(2) Northwest Oregon AQCR, containing three counties:**

- (a) Clatsop County;
- (b) Lincoln County;
- (c) Tillamook County.

**(3) Southwest Oregon AQCR, containing five counties:**

- (a) Coos County;
- (b) Curry County;
- (c) Douglas County;

(d) Jackson County;

(e) Josephine County.

(4) **Central Oregon AQCR**, containing eight counties:

(a) Crook County;

(b) Deschutes County;

(c) Hood River County;

(d) Jefferson County;

(e) Klamath County;

(f) Lake County;

(g) Sherman County;

(h) Wasco County.

(5) **Eastern Oregon AQCR**, containing ten counties:

(a) Baker County;

(b) Gilliam County;

(c) Grant County;

(d) Harney County;

(e) Malheur County;

(f) Morrow County;

(g) Umatilla County;

(h) Union County;

(i) Wallowa County;

(j) Wheel County.

**Section 29-0030 Designation of Nonattainment Areas**

The following areas are designated as Nonattainment Areas:

(1) PM10 Nonattainment Areas:

~~(a) The Eugene Nonattainment Area for PM10 is the Eugene-Springfield UGB as defined in Section 29-0010.~~

(b) The Oakridge Nonattainment Area for PM10 is the Oakridge UGB as defined in OAR-Section 29-0010.

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**Section 29-0040 Designation of Maintenance Areas**

The following areas are designated as Maintenance Areas:

(1) Carbon Monoxide Maintenance Areas:

(a) The Eugene Maintenance Area for Carbon Monoxide is the Eugene-Springfield UGA UGB as defined in Section 29-0010.

(2) PM10 Maintenance Areas:

(a) The Eugene-Springfield Maintenance Area for PM10 is the Eugene-Springfield UGB as defined in Section 29-0010.

**Section 29-0050 Designation of Prevention of Significant Deterioration Areas**

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I Areas and may not be redesignated:

(a) Mt. Hood Wilderness, as established by Public Law 88-577;

(b) Eagle Cap Wilderness, as established by Public Law 88-577;

(c) Hells Canyon Wilderness, as established by Public Law 94-199;

(d) Mt. Jefferson Wilderness, as established by Public Law 90-548;

(e) Mt. Washington Wilderness, as established by Public Law 88-577;

(f) Three Sisters Wilderness, as established by Public Law 88-577;

(g) Strawberry Mountain Wilderness, as established by Public Law 88-577;

(h) Diamond Peak Wilderness, as established by Public Law 88-577;

- (i) Crater Lake National Park, as established by Public Law 88-577 and expanded in the 1990 Clean Air Act Amendments;
  - (j) Kalmiopsis Wilderness, as established by Public Law 88-577;
  - (k) Mountain Lake Wilderness, as established by Public Law 88-577;
  - (l) Gearhart Mountain Wilderness, as established by Public Law 88-577.
- (2) All other areas, in Oregon are initially designated Class II, but may be redesignated as provided in Section 29-0060.
- (3) The following areas may be redesignated only as Class I or II:
- (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
  - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- (4) The extent of the areas referred to in section (1) and (3) of this rule shall conform to any changes in the boundaries of such areas which occurred between August 7, 1977, and November 15, 1990.

**Section 29-0060 Redesignation of Prevention of Significant Deterioration Areas**

- (1)(a) All areas in Oregon, except as otherwise provided under Section 29-0050, are designated Class II as of December 5, 1974;
- (b) Redesignation, except as otherwise precluded by Section 29-0050, may be proposed by LRAPA, as provided below, subject to approval by the EPA Administrator as a revision to the State Implementation Plan.
- (2) LRAPA may submit to the EPA Administrator a proposal to redesignate areas of the state Class I or II provided that:
- (a) At least one public hearing has been held in accordance with procedures established in the Plan;
  - (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(d) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, LRAPA has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity, not in excess of 60 days to confer with LRAPA respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, LRAPA shall have published a list of any inconsistency between such redesignation and such comments and recommendations together with the reasons for making such redesignation against the recommendation of the Federal Land Manager; and

(e) LRAPA has proposed the redesignation after consultation with the elected leadership of local general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which Section 29-0050 refers may be redesignated as Class III if:

(a) The redesignation would meet the requirements of section (2) of this rule;

(b) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session, unless state law provides that the redesignation must be specifically approved by state legislation, and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(c) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(d) Any permit application for any major stationary source or major modification, subject to review under section (1) of this rule, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the EPA Administrator a proposal to redesignate areas Class I, II, or III; provided that:

- (a) The Indian Governing Body has followed procedures equivalent to those required of LRAPA under section (2) and subsections (3)(c) and (d) of this rule; and
- (b) Such redesignation is proposed after consultation with the state(s) in which the Indian Reservation is located and which border the Indian Reservation.
- (5) The EPA Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with Section 29-0050. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.
- (6) If the EPA Administrator disapproves any proposed redesignation, LRAPA or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the EPA Administrator.

#### **Section 29-0070 Special Control Areas**

The following areas are designated as Special Control Areas:

- (1) Lane County;
- (2) Within incorporated cities having a population of 4,000 or more, and within three miles of the corporate limits of any such city.

#### **Section 29-0080 Motor Vehicle Inspection Boundary Designations**

In addition to the area specified in ORS 815.300, pursuant to ORS 468A.390, the following geographical areas are designated as areas within which motor vehicles are subject to the requirement under ORS 815.300 to have a Certificate of Compliance issued pursuant to ORS 468A.380 to be registered or have the registration of the vehicle renewed.

- (1) There are currently no geographic areas in Lane County subject to motor vehicle inspection programs.

#### **Section 29-0090 Oxygenated Gasoline Control Areas**

There currently are no oxygenated gasoline control areas in Lane County.





**LANE REGIONAL AIR PROTECTION AGENCY**

**TITLE 32**

**EMISSION STANDARDS**

**Section 32-001 Definitions**

See Title 12, Definitions.

**Section 32-005 Highest and Best Practicable Treatment and Control Required**

1. As specified in 32-006 through 32-009 and subsections 2 through 6 of this section, the highest and best practicable treatment and control of air contaminant emissions shall in every case be provided so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling and other deleterious factors at the lowest possible levels. In the case of new sources of air contamination, particularly those located in areas with existing high-level air quality, the degree of treatment and control provided shall be such that degradation of existing air quality is minimized to the greatest extent possible.
2. A source shall be deemed to be in compliance with subsection 1 of this section if the source is in compliance with all other applicable emission standards and requirements contained in LRAPA Titles 32 through 51 and OAR Division 218, including but not limited to requirements applicable to:
  - A. specific pollutants in Title 32;
  - B. specific existing and new source categories in Title 33;
  - C. hazardous air pollutants in Title 44
  - D. control requirements and operational and maintenance requirements in sections 32-007 through 32-009; and
  - E. review of new major sources and major modifications in Title 38.
3. LRAPA may adopt additional rules as necessary to ensure that the highest and best practicable treatment and control is provided as specified in subsection 1 of this section. Such rules may include, but are not limited to, the following requirements:
  - A. Applicable to a source category, pollutant or geographic area of Lane County;

- B. Necessary to protect public health and welfare for air contaminants that are not otherwise regulated by LRAPA; or
  - C. Necessary to address the cumulative impact of sources on air quality.
4. LRAPA encourages the owner or operator of a source to further reduce emissions from the source beyond applicable control requirements where feasible.
  5. Nothing in sections 32-005 through 32-009 revokes or modifies any existing permit term or condition unless or until LRAPA revokes or modifies the term or condition by a permit revision. Adoption of 32-005 is not intended to withdraw authority for application of any existing policy for new sources of toxic and hazardous air pollutants to a federal operating permit program source until the effective date of the program.
  6. Compliance with a specific emission standard in these rules does not preclude the required compliance with any other applicable emission standard.

#### Section 32-006 Pollution Prevention

The owner or operator of a source is encouraged to take into account the overall impact of the control methods selected, considering risks to all environmental media and risks from all affected products and processes. The owner or operator of a source is encouraged, but not required, to utilize the following hierarchy in controlling air contaminant emissions:

1. Modify the process, raw materials or product to reduce the toxicity and/or quantity of air contaminants generated;
2. Capture and reuse air contaminants;
3. Treat to reduce the toxicity and/or quantity of air contaminants released; or
4. Otherwise control emissions of air contaminants.

#### Section 32-007 Operating and Maintenance Requirements

1. Operational, Maintenance and Work Practice Requirements:
  - A. Where LRAPA has determined that specific operational, maintenance, or work practice requirements are appropriate to ensure that the owner or operator of a source is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions, LRAPA shall establish such requirements by permit condition or Notice of Construction (NOC) approval.
  - B. Operational, maintenance and work practice requirements include, but are not limited to:
    - (1) Flow rates, temperatures and other physical or chemical parameters related to the operation of air pollution control equipment and emission reduction processes;

- (2) Monitoring, record-keeping, testing and sampling requirements and schedules;
- (3) Maintenance requirements and schedules; or
- (4) Requirements that components of air pollution control equipment be functioning properly.

## 2. Emission Action Levels

- A. Where LRAPA has determined that specific operational, maintenance, or work practice requirements considered or required under subsection 1 of this section are not sufficient to ensure that the owner or operator of a source is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness, LRAPA may establish, by permit or Notice of Construction (NOC) approval, specific emission action levels in addition to applicable emission standards. An emission action level shall be established at a level which ensures that air pollution control equipment or an emission reduction process is operated at the highest reasonable efficiency and effectiveness to minimize emissions.
  - B. If emissions from a source equal or exceed the applicable emission action level, the owner or operator of the source shall:
    - (1) Take corrective action as expeditiously as practical to reduce emissions to below the emission action level;
    - (2) Maintain records at the plant site for two (2) years which document the exceedance, the cause of the exceedance, and the corrective action taken;
    - (3) Make such records available for inspection by LRAPA during normal business hours; and
    - (4) Submit such records to LRAPA upon request.
  - C. LRAPA shall revise an emission action level if it finds that such level does not reflect the highest reasonable efficiency and effectiveness of air pollution control equipment and emission reduction processes.
  - D. An exceedance of an emission action level which is more stringent than an applicable emission standard shall not be a violation of such emission standard.
3. In determining the highest reasonable efficiency and effectiveness for purposes of this rule, LRAPA shall take into consideration operational variability and the capability of air pollution control equipment and emission reduction processes. If the performance of air pollution control equipment and emission reduction processes during start-up or shut-down differs from the performance under normal operating conditions, LRAPA shall determine the highest reasonable efficiency and effectiveness separately for these start-up and shut-down operating modes.

Section 32-008 Typically Achievable Control Technology (TACT)

1. Existing Sources. An existing emissions unit must meet TACT for existing sources if:
  - A. The emissions unit, for the pollutants emitted, is not subject to emissions standards under Title 30, Title 32, Title 33, Title 38, Title 39 or Title 46 at the time TACT is required;
  - B. The source is required to have a permit;
  - C. The emissions unit has emissions of criteria pollutants equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant; and
  - D. LRAPA determines that air pollution control equipment and emission reduction processes in use for the emissions unit do not represent TACT and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or to protect public health or welfare or the environment.
2. New and Modified Sources. A new or modified emissions unit must meet TACT for new or modified sources if:
  - A. The new or modified emissions unit, for the pollutants to be emitted, is not subject to New Source Review requirements in Title 38, an applicable Standard of Performance for New Stationary Sources in Title 46, or any other standard applicable only to new or modified sources in Title 32, Title 33, or Title 39 at the time TACT is required;
  - B. The source is required to have a permit.
  - C. The emissions unit:
    - (1) If new, would have emissions of any criteria pollutant equal to or greater than 1 ton per year, or of PM<sub>10</sub> equal to or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area; or
    - (2) If modified, would have an increase in emissions from the permitted level for the emissions unit of any criteria pollutant equal to or greater than 1 ton per year, or of PM<sub>10</sub> equal to or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area; and
  - D. LRAPA determines that the proposed air pollution control equipment and emission reduction processes do not represent TACT.
3. Prior to making a TACT determination, LRAPA shall notify the owner or operator of a source of its intent to make such determination utilizing information known to LRAPA. The owner or operator of the source may supply LRAPA with additional information by a reasonable date set by LRAPA for use in making the TACT determination.

4. The owner or operator of a source subject to TACT shall submit compliance plans and specifications by a reasonable date established by LRAPA for approval by LRAPA. The owner or operator of the source shall demonstrate compliance in accordance with a method and compliance schedule approved by LRAPA.

#### Section 32-009 Additional Control Requirements for Stationary Sources of Air Contaminants

LRAPA shall establish control requirements in addition to otherwise applicable requirements by permit, if necessary, as specified in section 1 through 5 of this section.

1. Requirements shall be established to prevent violation of an Ambient Air Quality Standard caused or projected to be caused substantially by emissions from the source as determined by modeling, monitoring or a combination thereof. For existing sources, the violation of an Ambient Air Quality Standard shall be confirmed by monitoring conducted by LRAPA.
2. Requirements shall be established to prevent significant impairment of visibility in Class I areas caused or projected to be caused substantially by a source as determined by modeling, monitoring or a combination thereof. For existing sources, the visibility impairment shall be confirmed by monitoring conducted by LRAPA.
3. A requirement applicable to major source shall be established if it has been adopted by EPA but has not otherwise been adopted by the EQC or the LRAPA Board.
4. An additional control requirement shall be established if requested by the owner or operator of a source.
5. Additional controls may be required to achieve air contaminant reduction as part of a State Implementation Plan.

#### Section 32-010 Visible Air Contaminant Limitations

1. Except as provided in Subsection 2, air contaminant emissions from any air contaminant source must not equal or exceed 20% opacity for a period or periods aggregating more than three minutes in any one hour.
2. Existing Fuel Burning Equipment Utilizing Wood Wastes (any source installed, constructed or modified before June 1, 1970). Air contaminant emissions from any single source must not equal or exceed 40% opacity for a period or periods aggregating more than three minutes in any one hour.
3. Exception--Visible Air Contaminant Standards. Uncombined Water. Where the presence of uncombined water is the only reason for failure of any emission to meet the requirements of Section 32-010-1 or 2, such section shall not apply.
4. Veneer Dryers (moved to Title 33, section 33.060-2.A)
5. Opacity is determined in accordance with the procedures specified in the definition of "opacity" in LRAPA Title 12.

### Section 32-015 Particulate Matter Weight Standards

Notwithstanding emission limits of Sections 32-020 and 32-030, particulate emissions shall not exceed:

1. 0.2 grain per standard dry cubic foot for any air contaminant source constructed or modified prior to June 1, 1970; or
2. 0.1 grain per standard dry cubic foot for any air contaminant source installed, constructed or modified after June 1, 1970.

### Section 32-020 Particulate Matter Weight Standards - Existing Combustion Sources

The maximum allowable emission of particulate matter from any existing combustion source (sources installed, constructed or modified prior to June 1, 1970) shall not exceed 0.2 grain per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide.

### Section 32-030 Particulate Matter Weight Standards - New Combustion Sources

The maximum allowable emission of particulate matter from any new combustion source (sources installed, constructed or modified after June 1, 1970) shall not exceed 0.1 grain per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide.

### Section 32-045 Process Weight Emission Limitations

- A. The maximum allowable emissions of particulate matter for specific processes shall be a function of process weight and shall be determined from Table 1 of Title 32.
- B. The maximum allowable emissions of particulate matter from hot mix asphalt plants shall be determined from Table 1 of Title 32 except that the maximum allowable particulate emissions from processes greater than 60,000 pounds per hour shall be limited to 40 pounds per hour.

### Section 32-055 Particulate Matter Size Standard

No person shall cause or permit the emissions of any particulate matter which is greater than 250 microns in size if such particulate matter does or will deposit upon the real property of another person when notified by LRAPA that the deposition exists and must be controlled.

### Section 32-060 Air Conveying Systems

#### 1. Affected Sources

Dry material air conveying systems located within the ~~Eugene-Springfield~~ PM<sub>10</sub> Nonattainment or Maintenance Areas which use a cyclone or other mechanical separating device and which have a baseline year emission rate of three (3) Metric Tons or more of particulate matter are affected sources.

## 2. Emission Limits for Affected Sources

Notwithstanding the general and specific emission standards and regulations contained in these rules, affected sources shall not emit particulate matter to the atmosphere in excess of the following amounts:

- A. One (1) Metric Ton/year (1.10 Tons/year)
- B. 2.88 kg/day (6.24 lbs./day)

## GASEOUS EMISSION LIMITATIONS

### Section 32-065 Sulfur Content of Fuels

#### 1. Residual Fuel Oils

No person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.

#### 2. Distillate Fuel Oils

No person shall sell, distribute, use or make available for use, any distillate fuel oil or on-specification used oil containing more than the following percentages of sulfur:

- A. ASTM Grade 1 fuel oil - 0.3 percent by weight
- B. ASTM Grade 2 fuel oil - 0.5 percent by weight
- C. ASTM Grade 4 fuel oil - 1.5 percent by weight

#### 3. Coal

- A. Except as provided in sub-section B of this section, no person shall sell, distribute, use or make available for use, any coal containing greater than 1.0 percent sulfur by weight.
- B. Except as provided for sub-subsections D and E of this subsection, no person shall sell, distribute, use or make available for use any coal or coal-containing fuel with greater than 0.3% sulfur and 5% volatile matter as defined in ASTM Method D3175 for direct space heating within the ~~Eugene-Springfield or Oakridge~~ PM10 Air Quality Maintenance Areas ~~nonattainment or maintenance areas~~. For coals subjected to a devolatilization process, compliance with the sulfur limit may be demonstrated on the sulfur content of coal prior to the devolatilization process.
- C. Distributors of coal or coal-containing fuel destined for direct residential space heating use shall keep records for a five-year period which shall be available for LRAPA inspection and which:

- (1) specify quantities of coal or coal-containing fuels sold;
  - (2) contain name and address of customers who are sold coal or coal-containing fuels;
  - (3) specify the sulfur and volatile content of coal or the coal-containing fuel sold to residences in the ~~Eugene-Springfield or Oakridge~~ PM10 Air Quality Maintenance PM10 nonattainment or maintenance Areas.
- D. Users of coal for direct residential space heating in 1980 who apply in writing by July 1, 1983 and receive written approval from LRAPA shall be exempted from the requirement of sub-subsection B of this subsection provided they certify that they used more than one-half (1/2) ton of coal in 1980.
  - E. Distributors may sell coal not meeting specification in sub-subsection B of this subsection to those users who have applied for and received the exemption provided for in subsection D of this section.
4. Exemptions. Exempted from the requirements of 32-065.1-3, above, are:
- A. Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives and diesel motor vehicles.
  - B. With prior approval of LRAPA, fuels used in such a manner or control provided such that sulfur dioxide emissions can be demonstrated to be equal to or less than those resulting from the combustion of fuels complying with the limitations of 32-065.

#### Section 32-070 Sulfur Dioxide Emission Limitations

Fuel Burning Equipment: The following emissions standards are applicable to new sources (any air contaminant source installed, constructed or modified after January 1, 1972) only:

- 1. For fuel burning equipment having more than 150 million BTU per hour heat input, but not more than 250 million BTU per hour input, no person shall cause, suffer, allow or permit the emission into the atmosphere of sulfur dioxide in excess of:
  - A. 1.4 lb. per million BTU heat input, maximum 3-hour average, when liquid fuel is burned.
  - B. 1.6 lb. per million BTU heat input, maximum 3-hour average, when solid fuel is burned.
- 2. For fuel burning equipment having more than 250 million BTU per hour heat input, no person shall cause, suffer, allow or permit the emission into the atmosphere of sulfur dioxide in excess of:
  - A. 0.8 lb. per million BTU heat input, maximum 3-hour average, when liquid fuel is burned.



- B. 1.2 lb. per million BTU heat input, maximum 3-hour average, when solid fuel is burned.

Section 32-075 Federal Acid Rain Regulations Adopted by Reference

1. **40 CFR Part 72, 75, and 76 (July 2, 2010)** is by this reference adopted and incorporated herein, for purposes of implementing an acid rain program that meets the requirements of Title IV of the Clean Air Act. The term "permitting authority" shall mean the LRAPA, and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.
2. If the provisions or requirements of **40 CFR Part 72** conflict with or are not included in OAR Divisions 218 and 220, the **Part 72** provisions and requirements shall apply and take precedence.

Section 32-080 Control of Ozone-Depleting Chemicals

1. The purpose of Section 32-080 is to reduce the use of stratospheric ozone-depleting chemicals, to recycle those chemicals already in use, and to encourage the use of less dangerous chemicals. The LRAPA Board of Directors, having determined that equipment for the recovery and recycling of chlorofluorocarbons (CFC) from automobile air conditioners is affordable and available, intends that Section 32-080 apply to persons handling automobile air conditioners.
2. Requirement for recycling automobile air conditioning coolant are as follows:
  - A. Except as provided in sub-subsection B of this subsection, no person shall engage in the business of installing, servicing, repairing, disposing of, or otherwise treating automobile air conditioners without recovering and recycling CFC.
  - B. Any automobile repair shop that has:
    - (1) fewer than four employees; or
    - (2) fewer than three covered bays shall comply with the provisions of sub-subsection A of this subsection after August 10, 1992.
  - C. Only recovery and recycling equipment that is certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of **UL1963** and the **Society of Automotive Engineers (SAE) Standards, J1990 and J1991**, or other requirements and specifications determined by LRAPA as being equivalent, shall be used.
  - D. All recovery and recycling equipment shall be operated and maintained at full efficiency and effectiveness according to the manufacturer's directions and guidelines contained in **SAE Standard J1989**.
3. Except as provided in subsection 4 of this section, **40 CFR Part 82 (July 1, 1994)** is by this reference adopted and incorporated herein for major sources only, for purposes of

implementing a stratospheric ozone protection program that meets the requirements of Title VI of the Clean Air Act.

4. Where "Administrator" or "EPA" appears in **40 CFR Part 82**, "LRAPA" shall be substituted, except in any section of **40 CFR Part 82** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state/local agency.
5. Where a discrepancy is determined to exist between LRAPA Section 32-080 and **40 CFR Part 82**, **40 CFR Part 82** will apply.

#### Section 32-090 Other Emissions

1. No person shall discharge from any source whatsoever such quantities of air contaminants which cause injury or damage to any persons, the public, business or property. Such determination is to be made by LRAPA.
2. No person shall cause or permit emission of water vapor if the water vapor causes or tends to cause detriment to the health, safety or welfare of any person or causes, or tends to cause damage to property or business.

#### Section 32-095 Fugitive Emissions

See LRAPA Title 48 for rules pertaining to fugitive emissions.

#### Section 32-100 Alternative Emission Controls (Bubble) [moved from 34-060(8)]

1. Alternative emission controls for VOC and NO<sub>x</sub> emissions may be approved in a Standard ACDP or LRAPA Title V Operating Permit for use within a single source such that a specific emission limit is exceeded, provided that:
  - A. Such alternatives are not specifically prohibited by a rule or permit condition.
  - B. Net emissions for each pollutant are not increased above the PSEL.
  - C. The net air quality impact is not increased as demonstrated by procedures required by Section 38-0090, Requirements for Net Air Quality Benefit.
  - D. No other pollutants including malodorous, toxic or hazardous pollutants are substituted.
  - E. BACT and LAER, where required by a previously issued permit pursuant to LRAPA Title 38, NSPS (LRAPA Title 46), and NESHAP (LRAPA Title 44), where required, are not relaxed.
  - F. Specific emission limits are established for each emission unit involved such that compliance with the PSEL can be readily determined.
  - G. Application is made for a permit modification and such modification is approved by LRAPA.

- H. The reducing emission source reduces its allowable emission rate. Merely reducing production, throughput, or hours of operation is insufficient.
- 2. Total emissions from the emission sources under the bubble will be established in the permit.
- 3. Alternative emission controls, in addition to those allowed in 1. above, may be approved by LRAPA and EPA as a source specific SIP amendment.

TABLE 1

Table of Allowable Rate of Particulate Emissions - Based on Process Weight

Process <u>Lbs/Hr.</u>	Emission Process <u>Lbs/Hr.</u> <u>Lbs/Hr.</u>		Emission Process <u>Lbs/Hr.</u> <u>Lbs/hr.</u>		Emission <u>Lbs/Hr.</u>
50	0.24	2300	4.44	7500	8.39
100	0.46	2400	4.55	8000	8.71
150	0.66	2500	4.64	8500	9.03
200	0.85	2600	4.74	9000	9.36
250	1.03	2700	4.84	9500	9.67
300	1.20	2800	4.92	10000	10.00
350	1.35	2900	5.02	11000	10.63
400	1.50	3000	5.10	12000	11.28
450	1.63	3100	5.18	13000	11.89
500	1.77	3200	5.27	14000	12.50
550	1.85	3300	5.36	15000	13.13
600	2.01	3400	5.44	16000	13.74
650	2.12	3500	5.52	17000	14.36
700	2.24	3600	5.61	18000	14.97
750	2.34	3700	5.69	19000	15.58
800	2.43	3800	5.77	20000	16.19
850	2.53	3900	5.85	30000	22.22
900	2.62	4000	5.93	40000	28.30
950	2.72	4100	6.01	50000	34.30
1000	2.80	4200	6.08	60000	40.00
1100	2.97	4300	6.15	70000	41.30
1200	3.12	4400	6.22	80000	42.50
1300	3.26	4500	6.30	90000	43.60
1400	3.40	4600	6.37	100000	44.60
1500	3.54	4700	6.45	120000	47.30
1600	3.66	4800	6.52	140000	47.80
1700	3.79	4900	6.60	160000	49.00
1800	3.91	5000	6.67	200000	51.20
1900	4.03	5500	7.03	1000000	69.00
2000	4.14	6000	7.37	2000000	77.60
2100	4.24	6500	7.71	6000000	92.70
2200	4.34	7000	8.05		

Interpolation and extrapolation of emissions above a process weight of 60,000 pounds per hour shall be accomplished by use of this equation:

$E = (55.0 \times P^{0.11}) - 40$ , where  $P$  = process weight in tons per hour and  
 $E$  = emission rate in pounds per hour.



## **Attachment 4**

### **Evidence that the state followed the Administrative Procedures Act**

- 4.1 Public notice in the Secretary of State's Oregon Bulletin September 1, 2011 publication
- 4.2 Certificate and Order for Filing Permanent Administrative Rules, filed and effective December 21, 2011
- 4.3 DEQ Authorization for LRAPA to conduct a hearing on EQC's behalf, dated August 30, 2011





# OREGON BULLETIN

Supplements the 2011 *Oregon Administrative Rules Compilation*

Volume 50, No. 9  
September 1, 2011

For July 18, 2011–August 15, 2011



Published by  
**KATE BROWN**  
Secretary of State  
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## NOTICES OF PROPOSED RULEMAKING

**Summary:** This modification is a housekeeping item and necessary to update the rule since counties provide financial reports electronically rather than hard copy.

**Rules Coordinator:** Janet R. Worley

**Address:** Department of Corrections, 2575 Center St. NE, Salem, OR 97301-4667

**Telephone:** (503) 945-0933

### Department of Energy Chapter 330

**Rule Caption:** Business Energy Tax Credit program rules.

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
9-21-11	9 a.m.	625 Marion St. Salem, OR 97301

**Hearing Officer:** Staff

**Stat. Auth.:** ORS 469.040, 469.165, 469.185-469.225 & 2011 OL Ch. 693

**Stats. Implemented:** 469.040, 469.165, 469.185-469.225 & 2011 OL Ch. 693

**Proposed Amendments:** 330-090-0110, 330-090-0130, 330-090-0133, 330-090-0140

**Proposed Repeals:** 330-090-0110(T), 330-090-0130(T), 330-090-0133(T), 330-090-0140(T)

**Last Date for Comment:** 9-21-11, Close of Business

**Summary:** These permanent rule amendments repeal the existing temporary rule amendments made April 18, 2011, and implement changes made by House Bill 3606 (2011) to the Business Energy Tax Credit program. These amendments implement statutory changes that specify that federal grants received in connection with a facility reduce the final total cost of a facility, and confirm applicability of these changes. The rules provide new definitions of "certified cost" and "federal grant".

**Rules Coordinator:** Kathy Stuttaford

**Address:** Department of Energy, 625 Marion St. NE, Salem, OR 97301

**Telephone:** (503) 373-2127

### Department of Environmental Quality Chapter 340

**Rule Caption:** Adoption of the Eugene-Springfield PM10 Maintenance Plan.

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
9-26-11	12:15 p.m.	LRAPA, 1010 Main St. Springfield, OR 97477

**Hearing Officer:** Merlyn Hough

**Stat. Auth.:** ORS 468.020 & 468A.025

**Stats. Implemented:** ORS 468A.025 & 468A.035

**Proposed Amendments:** 340-200-0040, 340-204-0010, 340-204-0030, 340-204-0040

**Last Date for Comment:** 9-26-11, 12:15 p.m.

**Summary:** The Eugene-Springfield PM10 Nonattainment Area has not exceeded the federal public health standards for particulate matter ten microns and less (PM10) since 1987. The proposed rulemaking would officially change the status of this area from a PM10 nonattainment area to a PM10 maintenance area, and adopt a PM10 maintenance plan that will ensure continued attainment with the standard. In addition, this rulemaking action will include a request by DEQ to the Environmental Protection Agency for the Eugene-Springfield area to be redesignated as in attainment with the standard.

A mandatory residential wood combustion curtailment program implemented by the Lane Regional Air Protection Agency (LRAPA) has been the primary mechanism for the Eugene-Springfield area being able to attain the PM10 health standard. This program will continue to be implemented without changes under the PM10 maintenance plan to ensure continued attainment with the standard. Under this plan, industrial emissions growth will be controlled through existing New Source Review regulations, which for maintenance areas reduces the stringency and costs of emission control require-

ments for new sources, from the Lowest Achievable Emission Rate (LAER) to the Best Available Control Technology (BACT). All other requirements on sources will remain the same.

LRAPA will hold a public hearing on this proposed rulemaking, and if approved by the LRAPA Board of Directors, DEQ will submit to the Environmental Quality Commission for approval. The Clean Air Act requires DEQ to submit all rule and plan changes to the Environmental Protection Agency as a revision to the State Implementation Plan under OAR 340-200-0040.

For further information on this proposed rulemaking, please contact Merlyn Hough, Lane Regional Air Protection Agency, 1010 Main St., Springfield, OR 97477, toll free at 877-285-7272 or (541) 736-1056.

Public comments can be sent directly to Robbye Lanier, LRAPA Rules Coordinator, at [robbye@lrapa.org](mailto:robbye@lrapa.org), or faxed at (541) 726-1205, or visit LRAPA's website at [www.lrapa.org](http://www.lrapa.org)

Additional information can also be found by visiting DEQ's rulemaking website at [www.deq.state.or.us/regulations/proposed\\_rules.htm](http://www.deq.state.or.us/regulations/proposed_rules.htm)

Oral and written testimony can be provided at the public hearing listed above.

**Rules Coordinator:** Maggie Vandehey

**Address:** Department of Environmental Quality, 811 SW Sixth Ave., Portland, OR 97204-1390

**Telephone:** (503) 229-6878

### Department of Fish and Wildlife Chapter 635

**Rule Caption:** Amend Rules for Commercial Fishing License Fees.

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
10-7-11	8 a.m.	Red Lion Hotel 304 SE Nye Ave. Pendleton, OR 97801

**Hearing Officer:** Fish & Wildlife Commission

**Stat. Auth.:** ORS ORS 508.235, 508.285, 508.760, 508.765, 508.790, 508.816, 508.858, 508.901, 508.941 & HB 3657 (2011).

**Stats. Implemented:** ORS ORS 508.235, 508.285, 508.760, 508.765, 508.790, 508.816, 508.858, 508.901, 508.941 & HB 3657 (2011).

**Proposed Adoptions:** Rules in 635-006

**Proposed Amendments:** Rules in 635-006

**Proposed Repeals:** Rules in 635-006

**Last Date for Comment:** 10-7-11

**Summary:** Amended rules relate to commercial fishing license fees. Modifications to the regulations implement HB 3657 (2011), enacted by the 2011 Legislative Assembly. This bill changed miscellaneous commercial fishing and occupational fees for the Oregon Department of Fish & Wildlife. Housekeeping and technical corrections to the regulations may occur to ensure rule consistency.

**Rules Coordinator:** Therese Kucera

**Address:** Department of Fish and Wildlife, 3406 Cherry Ave. NE, Salem, OR 97303

**Telephone:** (503) 947-6033

**Rule Caption:** Establish 2012 Seasons and regulations for Game Mammals.

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
10-7-11	8 a.m.	304 SE Nye Ave. Pendleton, OR 97801

**Hearing Officer:** Fish & Wildlife Commission

**Stat. Auth.:** ORS 496.012, 496.138, 496.146 & 496.162

**Stats. Implemented:** ORS 496.012, 496.138, 496.146 & 496.162

**Proposed Amendments:** Rules in 635-008, 635-010, 635-043, 635-045, 635-060, 635-065, 635-066, 635-067, 635-068, 635-069, 635-070, 635-071, 635-072, 635-073, 635-075, 635-078, 635-080

**Last Date for Comment:** 10-7-11

**Summary:** Establish 2012 hunting regulations for game mammals, including season dates, open areas, location of cooperative travel

Secretary of State  
Certificate and Order for Filing  
**PERMANENT ADMINISTRATIVE RULES**

I certify that the attached copies\* are true, full and correct copies of the PERMANENT Rule(s) adopted on December 15, 2011  
by the \_\_\_\_\_ Date prior to or same as filing date  
Environmental Quality Commission, to be administered by DEQ OAR Chapter 340  
Agency and Division \_\_\_\_\_ Administrative Rules Chapter Number

Maggie Vandehey 811 SW Sixth Avenue, Portland, OR 97204-1390 (503) 229-6878  
Rules Coordinator Address Telephone

to become effective upon filing. Rulemaking Notice was published in the September 2011 Oregon Bulletin.\*\*  
Date upon filing or later Month and Year

**RULE CAPTION**

Adoption of the Eugene-Springfield PM<sub>10</sub> Maintenance Plan

**RULEMAKING ACTION**

**ADOPT:**

**AMEND:** OAR 340-200-0040, 340-204-0010, 340-204-0030, 340-204-0040

**REPEAL:**

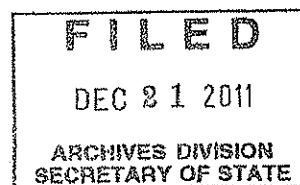
**RENUMBER:**

**AMEND & RENUMBER:**

Stat. Auth.: ORS 468.020

Other Auth.: N/A

Stats. Implemented: ORS 468A.025, 468A.035



**RULE SUMMARY**

The Eugene-Springfield PM<sub>10</sub> Nonattainment Area has not exceeded the federal public health standards for particulate matter ten microns and less (PM<sub>10</sub>) since 1987. This rulemaking action will officially change the status of this area from a PM<sub>10</sub> nonattainment area to a PM<sub>10</sub> maintenance area, and adopt a PM<sub>10</sub> maintenance plan that will ensure continued attainment with the standard. In addition, DEQ will submit a request to the Environmental Protection Agency that the Eugene-Springfield area be redesignated as in attainment with the standard.

A mandatory residential wood combustion curtailment program implemented by the Lane Regional Air Protection Agency (LRAPA) has been the primary mechanism for the Eugene-Springfield area being able to attain the PM<sub>10</sub> health standard. This program will continue to be implemented without changes under the PM<sub>10</sub> maintenance plan to ensure continued attainment with the standard. Under this plan, industrial emissions growth will be controlled through existing New Source Review regulations, which for maintenance areas reduces the stringency and costs of emission control requirements for new sources, from the Lowest Achievable Emission Rate (LAER) to the Best Available Control Technology (BACT). All other requirements on sources will remain the same.

DEQ will submit these rules to the EPA as a revision to the State Implementation Plan, which is a requirement of the Clean Air Act.

\_\_\_\_\_  
Authorized Signer Printed name Date  
Maggie Vandehey 12/19/11

\*With this original, file one photocopy of certificate, one paper copy of rules listed in Rulemaking Actions, and electronic copy of rules. \*\*The Oregon Bulletin is published the 1st of each month and updates rules found in the OAR Compilation. For publication in Bulletin, rule and notice filings must be submitted by 5:00 pm on the 15th day of the preceding month unless this deadline falls on a weekend or legal holiday, when filings are accepted until 5:00 pm on the preceding workday. ARC 930-2005





# Oregon

John A. Kitzhaber, MD, Governor

## Department of Environmental Quality

Headquarters  
811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
FAX (503) 229-6124  
TTY: 711

August 30, 2011

Merlyn Hough, Director  
Lane Regional Air Protection Agency  
1010 Main St.  
Springfield, OR 97477

RE: Proposed Rulemaking: Adoption of the Eugene-Springfield PM<sub>10</sub> Maintenance Plan

Dear Mr. Hough:

We have reviewed the proposed amendments to the Lane Regional Air Protection Agency "Designation of Air Quality Areas" and "Emission Standards" and proposed maintenance plan for particulate matter ten microns and less (PM<sub>10</sub>) for the Eugene-Springfield area, dated August 9, 2011 and April 19, 2011, respectively. We find the proposed rule amendments and maintenance plan to be at least as stringent as the comparable rules and PM<sub>10</sub> maintenance plans previously developed and adopted by the Department of Environmental Quality (DEQ).

We hereby authorize you, on behalf of the Environmental Quality Commission under OAR 137-001-0030, Conduct of Rulemaking Hearings, to act as Hearing Officer for the public comment process of adopting this proposal and plan as a revision to the State of Oregon Clean Air Act Implementation Plan. If you have any questions, please contact Brian Finneran at (503) 229-6278.

Sincerely,

Andrew Ginsburg  
DEQ Air Quality Administrator



## **Attachment 5**

### **Evidence of adequate public notice**

5.1 Affidavit of Publication: The Register Guard, August 26, 2011, publication





**GUARD PUBLISHING COMPANY**P.O. BOX 10188  
EUGENE, OREGON 97440

PHONE (541) 485-1234

Legal 5069947  
Notice**Legal Notice Advertising**LANE REGIONAL AIR  
ATTN ROBBYE LANIER  
1010 MAIN ST.  
SPRINGFIELD, OR 97477

#

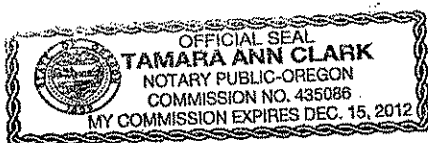
**RECEIVED**

AUG 30 2011

50551

LANE REGIONAL AIR  
PROTECTION AGENCY**AFFIDAVIT OF PUBLICATION**STATE OF OREGON, }  
COUNTY OF LANE, } ss.

I, **Wendy Raz**, being first duly affirmed, depose and say that I am the Advertising Manager, or his principal clerk, of The Register-Guard, a newspaper of general circulation as defined in ORS 193.010 and 193.020; published at Eugene in the aforesaid county and state; that the **Notice of Public Meeting/Hearing** printed copy of which is hereto annexed, was published in the entire issue of said newspaper for **one** successive and consecutive **Day(s)** in the following issues:

**August 26, 2011**

*Wendy Raz*

Subscribed and affirmed to before me this **August 26, 2011**

*Tamara Ann Clark*  
Notary Public of Oregon

My commission expires: **December 15, 2012**Account #: **1000294**INVOICE **5069947**Case: **PM10 Maintenance Plan**Ad Price: **\$137.50**

Public Encouraged to Attend September 26 Hearing on Proposed Adoption of Eugene-Springfield Air Quality PM10 Maintenance Plan

The Oregon Department of Environmental Quality (DEQ) and the Lane Regional Air Protection Agency (LRAPA) rely upon local air quality stakeholders in developing key aspects of air quality plans to assure that community needs are met. Feedback from the public is a crucial part of plan development.

DEQ and LRAPA are proposing to adopt an air quality maintenance plan and associated rule amendments for Eugene-Springfield and its Urban Growth Boundary designed to maintain compliance with the federal public health standards for particulate matter (PM10). High concentrations of PM10 inhaled by an individual can cause unwanted health effects, especially in children, the elderly, or those with lung or heart disease.

The Eugene-Springfield area has not exceeded the PM10 national health standards since 1987, and continues to measure PM10 levels well below the national health standards. The adoption and rule-making action will change the status of Eugene-Springfield from "nonattainment" to "maintenance" and includes a request to EPA to change the federal designation of Eugene-Springfield as "in attainment" with the PM10 standards.

A hearing on the proposed adoption and rulemaking will be held at 12:15 p.m. September 26, 2011, in the LRAPA Conference Room. Public comment is due by 12:15 p.m. September 26, 2011, or can be provided at the hearing. As a requirement of the Clean Air Act, this rulemaking, if adopted, will be submitted to the U.S. Environmental Protection Agency as a revision to the State Implementation Plan under OAR 340-200-0040.

To submit comments or request additional information, please contact Robbye Lanier at LRAPA, 1010 Main Street, Springfield, OR 97477, toll-free in Oregon at 877-285-7272 or 541-736-1056; extension 214; email at [robbye@lrapa.org](mailto:robbye@lrapa.org); Fax 541-726-1205. To view the plan online, visit <http://www.lrapa.org>.

No. 5069947 August 26, 2011



## **Attachment 6**

### **Certification of public hearing**

See paragraph #3 of cover letter and Attachment 7.1



## **Attachment 7**

### **Compilation of public comment and department's response**

- 7.1 Hearings Officer report for rulemaking hearing on September 26, 2011, dated November 3, 2011
- 7.2 Summary of public comment and agency response, dated November 1, 2011



## MEMORANDUM

TO: Oregon Environmental Quality Commission

FROM: Merlyn Hough, Hearings Officer, Lane Regional Air Protection Agency

DATE: November 3, 2011

SUBJECT: Public Hearing, September 26, 2011,  
Regarding Eugene – Springfield Area PM<sub>10</sub> Redesignation and Maintenance Plan

### SUMMARY OF PROCEDURE

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Protection Agency on September 26, 2011 in the Lane Regional Air Protection Agency Conference Room, 1010 Main Street, Springfield, Oregon. The purpose of the hearing was to perform the following actions: **AMEND:** Existing LRAPA Title: 29 and 32; **ADOPT:** Eugene-Springfield PM<sub>10</sub> Maintenance Plan as a revision to the State Implementation Plan.

Prior to the public hearing:

- The draft rules were reviewed and recommended by the LRAPA Advisory Committee at the March 29, 2011 Committee Meeting.
- The proposed rule amendments were presented at the July 25, 2011 Board Meeting to Request a Public Hearing.
- LRAPA submitted the original draft amendments to both ODEQ and EPA Region 10 for their review and comment.
- Notice of the September 26, 2011 public hearing was published in the *Oregon Bulletin*, Volume 50, No. 9. Notice was also published in the *Eugene Register-Guard* and posted on the LRAPA Website.

### Summary of Testimony:

No formal testimony was provided at the September 26, 2011 hearing. All formal comments that have been received are attached including a summary of the comments and responses to those comments.

### ACTION OF THE LRAPA BOARD OF DIRECTORS:

At the September 26, 2011 meeting, the board voted to amend the rules with the changes attached.

Based on the information presented, the board voted unanimously to amend the aforementioned Eugene-Springfield PM<sub>10</sub> maintenance plan rule changes.

RCL-MLH





## Summary of Public Comment and Agency Response

**Title of Rulemaking:** Eugene – Springfield Air Quality Limited Maintenance Plan PM<sub>10</sub>

**Prepared by:** Merlyn Hough

**Date:** November 1, 2011

***Comment period***

The public comment period opened on Friday, August 26, 2011 and closed on Monday, September 26, 2011.

***Organization of comments and responses***

Summaries of individual comments and the Agency's responses are provided below.

<i>Summary of Comments and Agency Responses</i>		
<b>From</b>	<b>Comment</b>	<b>LRAPA Response</b>
Randy Hledik – Wildish	Asked how this action would affect PM <sub>10</sub> PSELs at their facilities.	No, this action will not affect PM <sub>10</sub> PSELs at their facilities.
Dan Hermann – Fred Meyer GDF	Asked if this action would affect the permitting process for their new gas station.	No, this action will not affect the permitting process for their new gas station.
Lindsay Haase – Citizen	Asked if PM <sub>10</sub> monitoring would include transportation and industrial sources.	Yes, the PM <sub>10</sub> monitoring is located on a major transportation route and is near industrial sources.
Marina Orlando – ODOT	Commented that the plan did not accurately depict if Hot Spot conformity would be required in the future.	The plan was corrected to accurately depict the continued need for Hot Spot conformity requirements.



