

“To protect public health, community well-being and the environment as a leader and advocate for the improvement and maintenance of air quality in Lane County.”



# 2000 Annual Report





# 2000 Annual Report





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# Director's Message

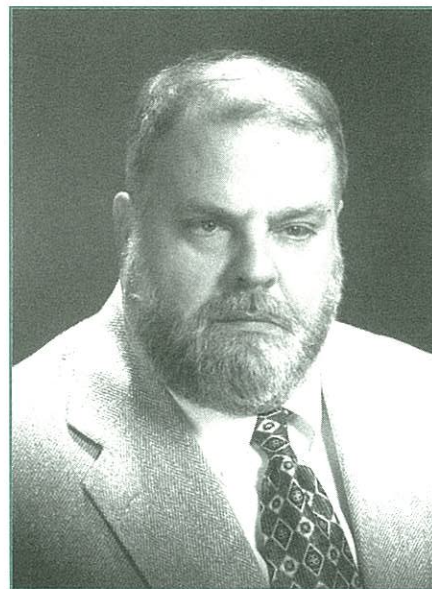
2000 was a dynamic year at LRAPA. I began my tenure as Director on January 10 and have been learning the nuances of Oregon air pollution control laws and LRAPA regulations ever since. Several members of our Board of Directors completed their terms at the end of the year, including Jim Chartier (Eugene at large), Sid Lieken (Springfield City Council) and Pat Patterson (Cottage Grove City Council). Gary Whitman (Lane County at large) resigned due to a job change and was replaced by Carol Tannebaum. I thank all of these elected officials and public-spirited citizens for their efforts on behalf of the people of Lane County, and I look forward to working closely with our several new Board members who began their terms in January 2001.

LRAPA came close to its goal of issuing all of the outstanding Title V federal operating permits in 2000; while several remain to be issued, most of the substantial work has been completed and it is expected that all will have been issued by the middle of 2001. I thank LRAPA's former Operations Manager, Grecia Castro, P.E., for her efforts in this area. She has since moved on to work in the Office of Air Quality Planning and Standards at the U.S. Environmental Protection Agency in Research Triangle Park, North Carolina. Our most experienced engineer, Robert Koster, P.E., has been promoted to Operations Manager in Grecia's place.

AirMetrics, the agency's enterprise that manufactures and markets portable air pollution samplers and services worldwide, had an excellent sales year in 2000. Sales of fine particulate ( $PM_{2.5}$ ) samplers were especially strong. Domestic sales included the U.S. Army, U.S. Department of Energy and the California Air Resources Board; foreign sales included Japan, South Korea, Malaysia, Russia and Mexico, among others. Although sales of new samplers were strong, parts and filter weighing also figured in AirMetrics' profit for the year. Work continued on the enhanced sampler prototype, which incorporates several improvements over the current product.

The agency began work on emissions inventories for all criteria pollutants, using 1999 data, and beginning with the Title V sources (Lane County's largest industrial sources). The statewide inventory of hazardous air pollutants, developed in cooperation with the Oregon Department of Environmental Quality, is nearly completed. LRAPA continues to serve on the statewide Air Toxics Advisory Group, which grew out of the Hazardous Air Pollutants Consensus Group.

In the interest of better protecting public health, the agency began using measurements of fine particulates ( $PM_{2.5}$ ) rather than coarse particulates ( $PM_{10}$ ) as the indicator pollutant for setting home wood heating advisories. The  $PM_{2.5}$  standard is more stringent than the  $PM_{10}$  standard, and represents a more accurate measure of wood smoke-derived pollution. In our continuing efforts to demonstrate leadership in mobile source emissions control, LRAPA purchased a hybrid vehicle and decorated it to call attention to its capabilities. Our public education staff continued to participate in a variety of community-wide events, reminding people that they as individuals do make a difference in lessening air pollution in Lane County.



Brian Jennison, Ph.D.  
Director



# Contents

LRAPA Organization .....5-7

Program Operations ..... 8

Funding/Budget .....9

Lane Co: Setting, Topography,  
Meteorology .... 10

National Ambient Air Quality Standards  
*Lane County & Criteria Pollutants* .....11-12  
*New Standards Review* .....13-14  
*Criteria Pollutants Chart* ..... 15

Lane Co. Pollution Concentrations.....16-20

Lane Co. Home Wood Heating Programs....21-23

Operating Permit Program Summary ... .....24

AirMetrics .. .....25

Complaint Summary .. .....26

Enforcement Summary .. .....27

Field Burning Summary..... 28

Community Outreach ... .....29

Special Projects..... 30

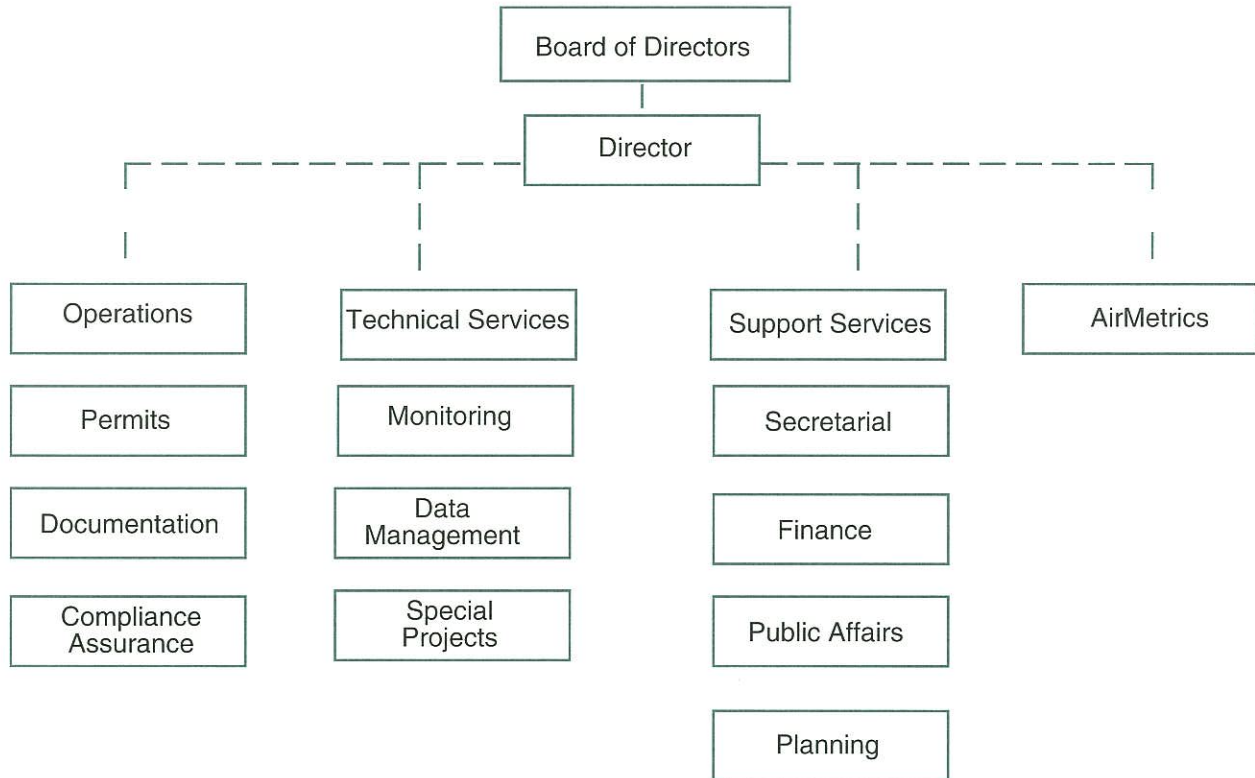
LRAPA Phone Numbers.....31





# LRAPA Organization

## Staff Organizational Chart



### LRAPA Phone Numbers

Business Office.....	736-1056
Home Wood Heating Advisory Line.....	746-HEAT
Backyard Burning Advisory Line.....	726-3976
24-Hour Complaint Line.....	726-1930
Toll-Free Line.....	1-877-285-7272
LRAPA Air Line.....	485-2000, ext. 4273
Internet Home Page.....	www.lrapa.org



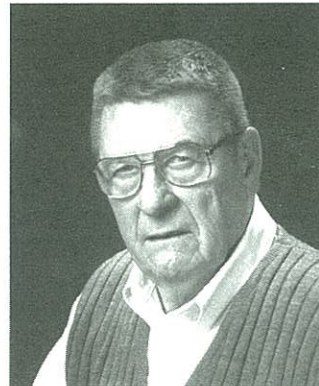
# LRAPA Organization

## 2000 LRAPA Board of Directors

The LRAPA Board of Directors is a seven-member board which meets monthly to establish policy and adopt agency regulations. Board members are appointed by their respective city councils and the Lane County Board of Commissioners. Membership includes three representatives from the city of Eugene, one each from Lane County and the city of Springfield, one from either the city of Cottage Grove or city of Oakridge, and one at-large representative appointed by the board. Cities with more than one member may appoint the second or third member from the public within their jurisdictions.



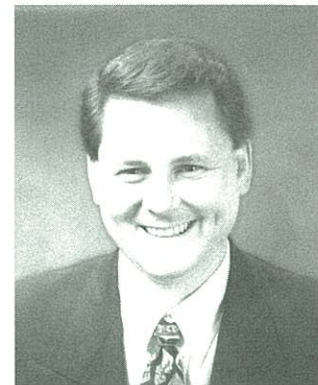
Betty Taylor - Chair  
4 yrs. service  
Eugene City Council



Pat Patterson - Vice Chair  
3 yrs. service  
Cottage Grove City Council



Al Johnson  
6 yrs. service  
Eugene City Council Appointment



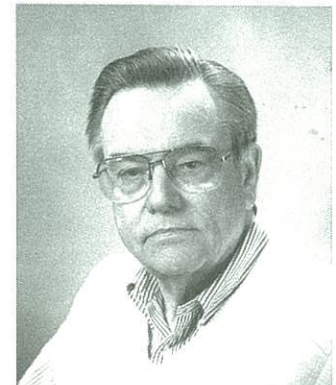
Sid Leiken  
2 yrs. service  
Springfield City Council



Pete Sorenson  
2 yrs. service  
Lane County Board of Commissioners



Carol Tannenbaum  
1 yr. service  
LRAPA Board Appointment



Jim Chartier  
2 yrs. service  
Eugene City Council Appointment



### **2000 LRAPA Citizens Advisory Committee**

*The LRAPA Citizens Advisory Committee includes local interested citizens representing specific areas of interest, including agriculture, community planning, fire suppression, industry, public health, the environment and the general public. The committee is called upon to advise the board and staff on a variety of air quality issues, rules and policies. Up to 15 members may comprise the committee at any one time.*

Lorena Young - 8 yrs. service — Chair  
*Representing General Public*  
John Fischer - 10 yrs. service — Vice Chair  
*Representing General Public*  
Russ Ayers - 1 yr. service  
*Representing Major Industry*  
Dave Breitenstein- 3 yr. service  
*Representing General Public*  
Doug Brooke - 1 yr. service  
*Representing Industry*  
Larry Dunlap - 2 yrs. service  
*Representing Public Health*  
Paul Engleking - 3 yrs. service  
*Representing Environment*  
Sharon Fahrion - 4 yrs. service  
*Representing Health*  
Jennifer Juden - 1 yr. service  
*Representing Public Health*  
Rick Rogers - 2 yrs. service  
*Representing Fire Suppression*  
John Tamulonis - 3 yrs. service  
*Representing Planning*  
Ben Thompson - 4 yrs. service  
*Representing Agriculture*  
Fred Walter - 9 yrs. service  
*Representing General Public*

### **2000 LRAPA Budget Committee**

*The LRAPA Budget Committee consists of the LRAPA Board of Directors plus seven board-appointed citizens. The committee meets yearly to review and approve LRAPA's budget request. 2000 appointed committee members include:*

Dave Balthrop  
Trish Binder  
Eric DeFreest  
Tom Gentle  
Steve Pauls  
Carol Tannenbaum  
Hilda Young



# Program Operations

The board of directors appoints the director of the agency, who has overall authority to appoint and direct the LRAPA staff. The director makes policy recommendations to the board and is responsible for implementing board decisions.

The LRAPA staff consists of 23.6 professional and technical full-time employees (equivalencies) who perform permitting, enforcement, planning, clerical, financial, enterprise, and public information and outreach programs.

## Operations — Permitting, Compliance Assurance and Enforcement

*Permitting* establishes conditions under which regulated industrial sources may operate to minimize their contribution to air pollution in the area. *Compliance* is assured through inspections of permitted sources. *Enforcement* acts to correct violations by industrial sources; enforces regulations related to open burning and asbestos abatement; enforces emission limit regulations; and responds to and resolves public complaints about air quality. Enforcement includes administering contested case hearings and negotiating settlements.

## Technical Services — Monitoring and Data Management

*Ambient monitoring* provides measured air quality data through a network of sampling and continuous monitoring equipment. *Source monitoring* provides a quality assurance program for continuous monitoring at air emission sources.

*Data Management*, using a variety of techniques, determines whether ambient air quality standards are met, and provides technical assistance in the development of program priorities and program planning.

## AirMetrics

*AirMetrics* is an enterprise that manufactures and markets the agency's MiniVol portable air pollution sampling device, and provides filter analysis and training on the operation of air monitoring networks that use these portable samplers.

## Administrative

*Public education and information* promotes public understanding of air pollution and methods of prevention through public presentations, media relations, intergovernmental relations, and audio/visual and written materials; designs public education campaigns and programs; produces a quarterly newsletter and annual report; issues daily air pollution advisories to the media and public; and responds to public complaints and inquiries about air quality. LRAPA speakers are available to address community groups upon request.

*Air quality planning* identifies present and future air quality problems and develops appropriate emission control strategies designed to achieve and maintain healthy air quality. One of LRAPA's goals is to forestall or prevent the occurrence of future problems as population growth occurs. LRAPA works together with other local planning, transportation and community development agencies to ensure adequate attention is given to air quality concerns.

*Finance* provides the agency with full financial management services, including accounting, budgeting, grant writing and reporting, facilities and fleet, and human resource support services.



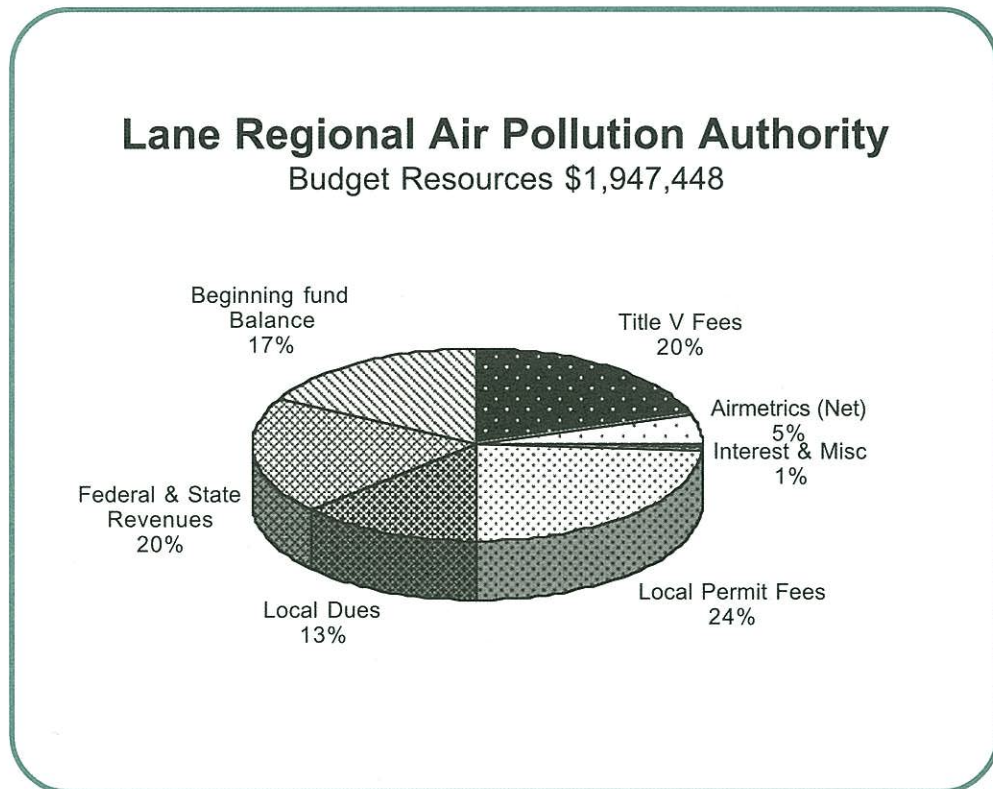
LRAPA's Lance Giles inspects the agency's new portable hazardous air pollution analyzing equipment.



# Funding/Budget

LRAPA's funding comes from many sources, including local contributions (Lane County and the cities of Eugene, Springfield, Oakridge and Cottage Grove), state and federal grants, industrial and open burning permit fees, asbestos fees, AirMetrics sales and services, and miscellaneous contracts.

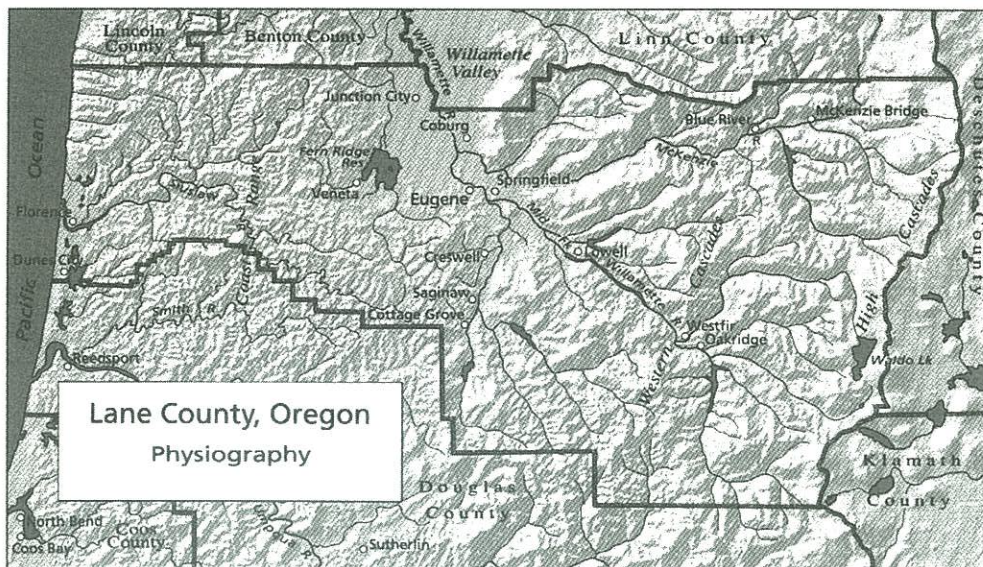
In FY '99/00, local member annual dues were increased by 5 percent. In addition, the agency increased fees for Air Contaminant Discharge Permits to help cover increased operating costs. Permit fees charged by LRAPA continue to average below comparable permit fees charged at the state level. The proposed fee change took effect in June of 2000.





# Lane County

## *The Setting, Topography and Meteorology*



### *The setting: The 'Willamette Valley'*

Lane County is located at the southern end of the Willamette Valley and stretches from the Cascade Mountains to the Pacific Ocean. The county's population is around 322,959 or about 10 percent of the state's total population. The incorporated cities of Eugene and Springfield comprise the second largest urban area in Oregon with an estimated 190,757 residents.

The Eugene/Springfield metropolitan area is the most populated portion of Lane County, both in terms of people and industry. Because of this, the area has the greatest potential for air quality degradation as the population continues to grow. However, several other areas of Lane County experience seasonal air quality problems due to residential wood burning, forest slash burning and agricultural field burning. Many smaller cities within Lane County are surrounded by large tracts of agricultural and forest land. The city of Oakridge, for example, located about 40 miles southeast of Eugene/Springfield in the Willamette National Forest, experiences high concentrations of particulates in the wintertime months from home wood

heating. The areas of Cottage Grove, Marcola, Veneta, Elmira, and Junction City experience seasonal air quality problems resulting from slash and agricultural field burning.

During the summer months, ozone pollution is becoming a growing concern throughout the Willamette Valley.

### *Topography and meteorology influence air quality*

Many of the inland areas of Lane County experience periods of air stagnation. When this happens during winter months, cold air often becomes trapped near the valley floor with slightly warmer air aloft, creating temperature inversion conditions. The combination of cold, stagnant air and restricted ventilation causes air pollutants to become trapped near the ground. Although temperature inversions can occur anytime, they are most frequent and pose most harm to air quality in the winter when many residents are using wood to heat their homes. During these episodes, smoke and gas concentrations climb, causing the local air quality to deteriorate.



# NAAQS and Local Air Quality

The Environmental Protection Agency (EPA) has established health-based standards for six air pollutants (criteria pollutants): particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), ozone (O<sub>3</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>) and lead (Pb). These National Ambient Air Quality Standards (NAAQS) are set to protect against adverse health and environmental effects. In areas where studies have shown these pollutants to be potential problems, concentrations of the pollutants must be continually measured to ensure the standards are met. Areas that fail to meet the NAAQS are designated as "non-attainment" areas by EPA and are required, by law, to develop strategic plans to bring the areas back into compliance with the standards and maintain compliance.

## Lane County — Criteria Pollutants

In Lane County, three criteria pollutants are measured: particulate matter, carbon monoxide and ozone. The Eugene/Springfield area is monitored for all three pollutants, while the city of Oakridge is monitored for particulate matter only.

LRAPA measures pollutants at five locations in Eugene, two locations in Springfield, one location in Oakridge (southeast of Eugene/Springfield), one location in Saginaw (south of Eugene/Springfield) and one location in Cottage Grove (south of Saginaw).

### Particulate Matter

Although there are a variety of sources of particulate matter, such as industry, dust, construction, and wood burning, studies have indicated that Lane County typically experiences its highest particulate levels from wintertime residential wood burning, when the temperatures are very cold, with little or no precipitation, and winds are

calm.

Both the Eugene/Springfield area and Oakridge have been designated PM<sub>10</sub> "non-attainment" areas.

The Eugene/Springfield area was first designated a "non-attainment" area January 10, 1980, for exceeding the 24-hour secondary "total suspended particulate" (TSP) standard. The TSP standard was changed to the PM<sub>10</sub> standard in 1987, which resulted in a PM<sub>10</sub> "non-attainment" designation on August 7, 1987. In 1997, EPA established a PM<sub>2.5</sub> standard, LRAPA currently collects both PM<sub>2.5</sub> and PM<sub>10</sub> data.

Oakridge was proposed a PM<sub>10</sub> "non-attainment" area in September 1992, and designated on January 20, 1994.

PM<sub>10</sub> standards were last exceeded in the Eugene/Springfield area in 1987. Oakridge last exceeded the federal PM<sub>10</sub> standard in 1993. Close evaluation of monitoring data indicates Oakridge may have difficulty meeting new PM<sub>2.5</sub>

## Federal Ambient Air Quality Standards

Pollutant	Federal Standard	Monitoring Status in Lane County
<b>Particulate (PM<sub>2.5</sub>)</b>	24-hour standard	Required
	Annual standard	Required
<b>Particulate (PM<sub>10</sub>)</b>	24-hour standard	Required
	Annual standard	Required
<b>Carbon Monoxide (CO)</b>	8-hour average	Required
	1-hour average	Required
<b>Ozone (O<sub>3</sub>)</b>	8-hour average	Required
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	24-hour average	Not required
	1-hour average	Not required
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	Annual average	Not required
<b>Lead (Pb)</b>	1.5 ug/m <sup>3</sup>	Not required

ug/m<sup>3</sup> — micrograms per cubic meter  
ppm — parts per million



standards in the future. In 2000, all of Lane County met both the annual and 24-hour PM<sub>10</sub> standards, as well as the annual PM<sub>2.5</sub> standard. The city of Oakridge, however, exceeded the 24-hour PM<sub>2.5</sub> standard on one occasion, January 29, when concentrations were measured at 74 micrograms per cubic meter of air (the standard is 65). The standard allows for several yearly excursions over the threshold, without an area being designated "non-attainment." As expected, weather during that period was very cold and dry, with little wind.

**Ozone (O<sub>3</sub>)**

Ozone, a by-product of nitrogen oxides and volatile organic compounds reacting in the presence of sunlight in warm temperatures, is also formed naturally as a by-product of the photosynthesis process of plants, as well as by many human activities, such as industrial operations, and use of the automobile. Naturally occurring background levels of ozone in Lane County are greatly influenced by the area's heavy forests. During hot, calm weather, the combination of human and natural sources of the pollutants contributing to ozone has the potential to cause ozone levels to rise near or above the standard on occasion. Similar to the particulate standard, the ozone health-based standard has been designed to allow for the occasional excursion over the standard, without triggering an exceedance

of the actual standard.

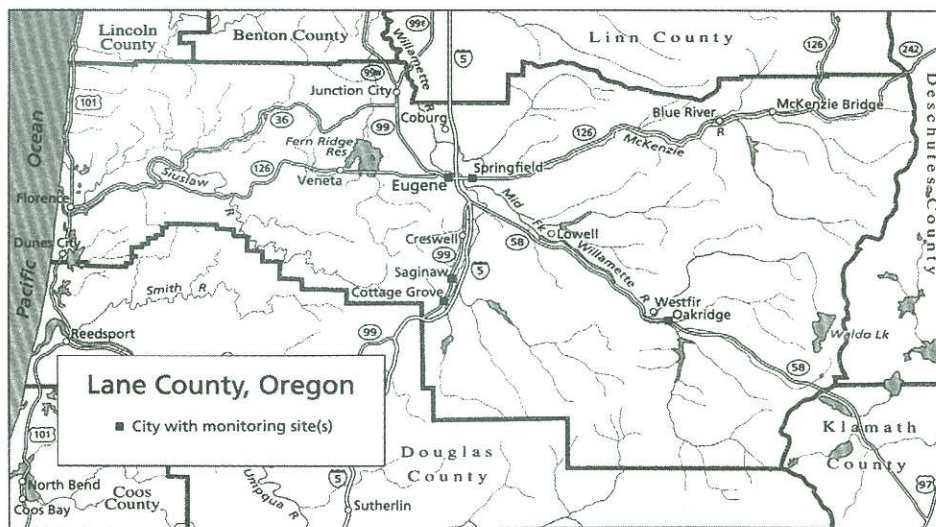
Ozone concentrations have been monitored in the Eugene/Springfield area since May 1974. The area has remained in attainment with federal standards since that time.

During the 2000 season, a mild summer kept Lane County's ozone levels below the thresholds of both the one-hour standard and eight-hour standard (see page 14).

**Carbon Monoxide (CO)**

Carbon monoxide (CO) is an odorless, colorless gas associated with any form of combustion. LRAPA began monitoring CO in 1971, and has continued to monitor it in downtown Eugene. The Eugene/Springfield area was designated a "non-attainment" area for CO March 3, 1978, after monitoring data confirmed levels exceeded the federal standards on numerous occasions. The area was redesignated an "attainment" area February 4, 1994. The CO standard was last exceeded in 1986 in the Eugene/Springfield area. The standard allows for one eight-hour exceedance per calendar year.

Federal efforts to reduce automobile emissions has accounted for the majority reduction of CO in the air.



Lane County map highlighting locations of cities with air monitoring sites.



## Particulate Matter/Ozone Air Quality Health Standards Reviewed

In 1996, new health-based standards were proposed by the U.S. Environmental Protection Agency (EPA) for ambient ozone and particulate matter. The standards became effective September 16, 1997. The changes were published in the Federal Register, Volume 62, No. 138, on Friday, July 18, and promulgated concurrently, effective September 16, 1997.

However, in October 1999, the U.S. Court of Appeals reaffirmed an earlier controversial decision by a three-judge panel to block EPA from enforcing the new standards, citing that EPA had used “unconstitutional delegation of legislative authority” in establishing the regulations. The Court also revoked the revised form of the PM<sub>10</sub> standard, leaving the traditional PM<sub>10</sub> standard in effect.

The U.S. Supreme Court ruled on February 27, 2000, that EPA’s methods for determining standards were constitutional: that standards may be set based solely on safety and health requirements. This ruling protected the new regulations.

### Particulate Matter (PM)

Currently, there are four particulate standards: two for particulates 10 microns and smaller in size — PM<sub>10</sub> annual and PM<sub>10</sub> 24-hour, and two for fine particulates measuring no larger than 2.5 microns in size — PM<sub>2.5</sub> annual and PM<sub>2.5</sub> 24-hour.

- ◆ Annual PM<sub>10</sub> Standard — The annual PM<sub>10</sub> standard is met when the three-year average of the annual mean PM<sub>10</sub> concentration at each monitoring site is less than or equal to 50 micrograms per cubic meter.



*LRAPA monitoring site: one of three sites equipped to collect and log both pollution and meteorological data.*

- ◆ 24-hour PM<sub>10</sub> Standard — The 24-hour PM<sub>10</sub> standard is met when the three-year average of the annual 99th percentile values at each monitoring site is less than or equal to 150 micrograms per cubic meter.
- ◆ Annual PM<sub>2.5</sub> Standard — The annual PM<sub>2.5</sub> standard is met when the three-year spatially-averaged annual mean at each monitoring site is less than or equal to 15 micrograms per cubic meter.
- ◆ 24-hour PM<sub>2.5</sub> Standard — The 24-hour PM<sub>2.5</sub> standard is met when the three-year average of the 98<sup>th</sup> percentile value at each monitoring site is less than or equal to 65 micrograms per cubic meter.



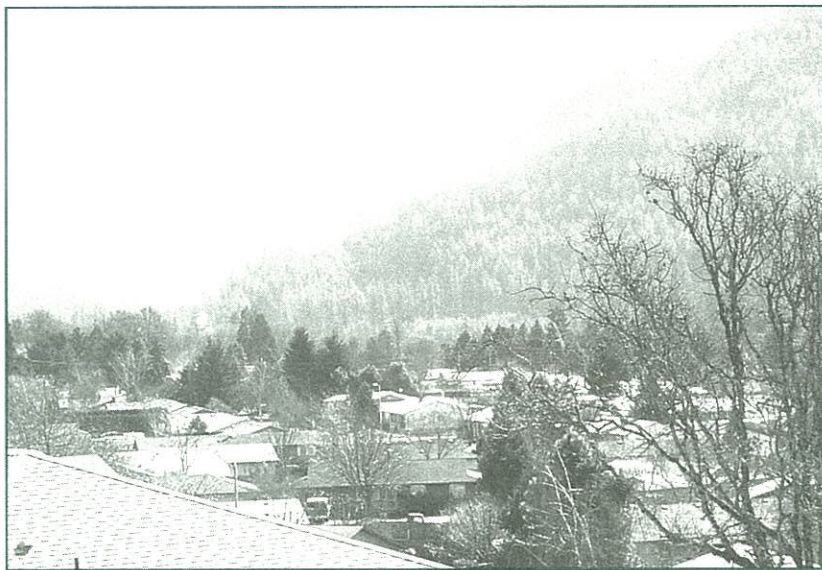
Areas were required to begin collecting PM<sub>2.5</sub> data in January 1999, EPA is scheduled to determine attainment/non-attainment areas in 2002. LRAPA began measuring PM<sub>2.5</sub> levels in Eugene in March of 1998, and began measuring levels in the city of Oakridge later that year, in November.

Ozone

Currently, there are two ozone standards: a one-hour standard and an eight-hour standard.

◆ One-hour Ozone Standard — The one-hour ozone standard is attained when the daily maximum one-hour concentration does not exceed 0.12 parts per million more than once per year, averaged over three consecutive years.

◆ Eight-hour Ozone Standard — The eight-hour ozone standard is attained when the consecutive three-year average of the annual fourth highest daily maximum eight-hour average concentration does not exceed 0.08 parts per million.



*Oakridge on a clear winter day.*



*Oakridge on a smoky winter day. PM 2.5 levels exceeded 24-hr. standard on this day.*



# Criteria Pollutants

Pollutant	Description	Sources	Health Effects	Environmental Effects
<b>Particulate Matter PM</b>	PM <sub>10</sub> : Respirable particles less than 10 microns in size  PM <sub>2.5</sub> : Respirable particles less than 2.5 microns in size	Wood burning; Industry; Fugitive dust; Construction activities; Street sand application; Combustion sources; Transportation; Open burning; NO <sub>x</sub> , SO <sub>2</sub> , VOC gases	Aggravates ailments such as bronchitis and emphysema; Especially bad for those with chronic heart and lung disease, as well as the very young and old, and pregnant women	Causes reduced visibility and haze
<b>Carbon Monoxide CO</b>	An odorless, colorless gas which is emitted primarily from any form of incomplete combustion	Gasoline and diesel-powered mobile sources, such as autos, trucks, buses and locomotives; Wood burning; Open burning; Industrial combustion sources	Deprives the body of oxygen by reducing the blood's capacity to carry oxygen; Harmful to unborn children; Causes headaches, dizziness, nausea; In high doses, may cause death	
<b>Ozone O<sub>3</sub></b>	A toxic gas associated with smog; formed when nitrogen oxides (NO <sub>x</sub> ) and volatile organic compounds (VOC) react with one another in the presence of sunlight and warm temperatures	VOCs and NO <sub>x</sub> from gasoline-powered mobile sources; Industry; Power plants; Gasoline transfer and storage; Paints and solvents; Consumer products	Irritates eyes, nose, throat and respiratory system; Especially bad for those with chronic heart and lung disease, as well as the very young and old, and pregnant women	Can cause damage to plants and trees; smog can cause reduced visibility
<b>Nitrogen Dioxide NO<sub>2</sub></b>	A poisonous gas produced as a by-product of high burning temperatures	Combustion processes — fossil fuel power, motor vehicles, industry; Home heating; Fertilizer manufacturing	Harmful to lungs, irritates bronchial and respiratory systems; Increases adverse symptoms in asthmatic patients	Contributes to acid fog and rain, which can damage plant and aquatic life; Can cause reduced visibility; Precursor to smog
<b>Sulfur Dioxide SO<sub>2</sub></b>	A pungent, colorless gas that combines with water vapor to become sulfurous acid (H <sub>2</sub> SO <sub>3</sub> ), which, when combined with oxygen, produces sulfuric acid (H <sub>2</sub> SO <sub>4</sub> ), a very corrosive and irritating chemical	Fossil fuel power plants; Nonferrous smelters; Kraft pulp production	Irritates respiratory system; Increases the risk of adverse symptoms in asthmatic patients	Contributes to acid fog and rain, which can damage plant and aquatic life; Dissolves stone and corrodes iron and steel; Can contribute to reduced visibility
<b>Lead Pb</b>	A widely used metal, which may accumulate in the body	Leaded gasoline; Battery manufacturing; Battery recycling; Smelting	Causes intestinal distress, anemia and damage to the central nervous system, kidneys and brain; Children more adversely affected than adults	Harmful to wildlife



# Particulate Matter Data

Yearly PM <sub>10</sub> Levels — 1990 - 2000 (ug/m <sup>3</sup> )													
Site #	Site Name	Notes	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
2018056	Lane Community College (downtwn)	a	23	27	25	25	21	21	18	21	17	19	19
		b	50	95	61	68	66	52	60	52	63	47	51
		c	48	73	54	59	42	49	46	49	56	45	50
		d	0	0	0	0	0	0	0	0	0	0	0
2018058	Key Bank— Hwy 99N	a	31	38	31	33	31	27	22	23	20	20	21
		b	118	126	123	103	125	84	66	50	68	53	78
		c	102	121	98	92	62	70	60	49	67	41	54
		d	0	0	0	0	0	0	0	0	0	0	0
2018060	Amazon Park	a	24	34	25	24	20	19	17	19	15	18	18
		b	49	73	101	70	71	63	61	54	59	60	58
		c	46	62	55	64	46	57	45	53	49	46	55
		d	0	0	0	0	0	0	0	0	0	0	0
2030003	Willamette Acti. Center— Oakridge	a	33	37	32	32	26	23	22	21	19	20	23
		b	149	187	178	166	144	142	84	96	80	99	89
		c	142	184	161	151	143	135	78	90	79	73	73
		d	0	9	2	1	0	0	0	0	0	0	0
2033060	Springfield City Hall	a	25	30	27	28	24	22	19	21	19	16	20
		b	57	97	56	66	74	48	58	57	62	57	56
		c	56	89	55	61	51	44	55	49	59	56	46
		d	0	0	0	0	0	0	0	0	0	0	0
2033061	Springfield High School	a	---	29	31	25	---	---	---	---	---	---	---
		b	---	99	53	66	---	---	---	---	---	---	---
		c	---	85	53	60	---	---	---	---	---	---	---
		d	---	0	0	0	---	---	---	---	---	---	---
2009002	Harrison Elem. Sch. — Cottage Grove	a	24	29	27	26	23	22	19	20	17	19	18
		b	77	132	69	68	109	93	52	75	50	49	38
		c	59	71	60	67	57	46	49	54	48	41	35
		d	0	0	0	0	0	0	0	0	0	0	0
2018063	Santa Clara	a	---	---	---	---	20	18	17	---	---	---	---
		b	---	---	---	---	107	68	59	56	---	---	---
		c	---	---	---	---	100	63	56	32	---	---	---
		d	---	---	---	---	0	0	0	0	---	---	---

Standards:

24-hour average — 150 micrograms/cubic meter (ug/m<sup>3</sup>)

Annual arithmetic mean — 50 micrograms/cubic meter

Notes:

- a Annual arithmetic mean
- b Highest 24-hour concentration
- c 2nd highest 24-hour concentration
- d Number of days over 24-hour standard
- No data collected at site during year



## Yearly PM<sub>2.5</sub> Levels — 1998 - 2000

Site #	Site Name	Notes	1998	1999	2000
2033061	Springfield High School	a	---	---	8.8
		b	---	36.5	37.3
		c	---	26.5	35.4
		d	---	0	0
2018060	Amazon Park	a	---	8.6	9.4
		b	35.7	52.6	58.8
		c	21.1	36.3	52.5
		d	0	0	0
2030003	Willamette Acti. Center - Oakridge	a	---	13.0	13.1
		b	73.8	72.0	74.2
		c	46.2	57.0	63.4
		d	1	1	1
2000036	Delight Valley School - Saginaw	a	---	6.7	6.7
		b	---	24.7	20.9
		c	---	20.8	18.8
		d	---	0	0

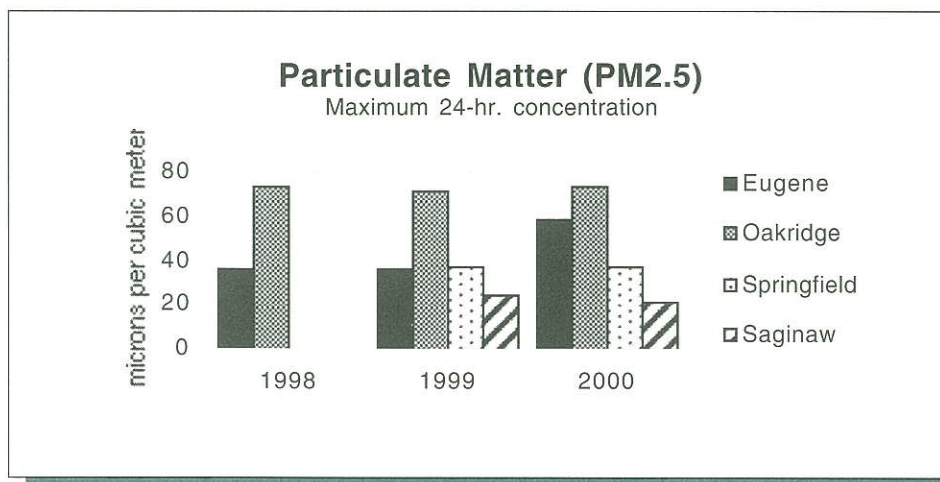
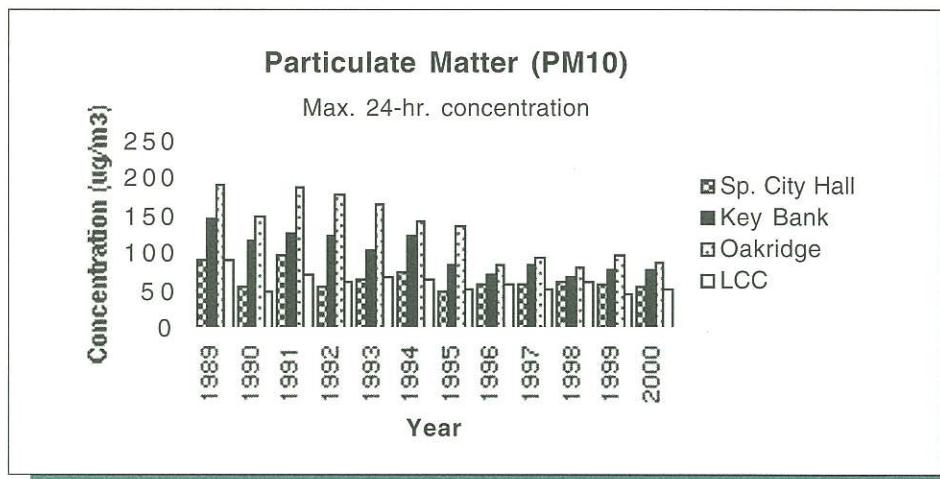
### Standards:

*Annual arithmetic mean* — 15 micrograms/cubic meter

*24-hour average* — 65 micrograms/cubic meter of the 98th percentile of measured concentrations

### Notes:

- a Annual arithmetic mean
- b Highest 24-hour concentration
- c 98th percentile concentration
- d Number of days over 24-hour standard
- No data collected at site during year





# zone Data

## Yearly Eight-Hour Ozone Levels — 1990 - 2000

Site #	Site Name	Notes	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
2000036	Delight Valley School — Saginaw	a	.078	.070	.086	.068	.081	.077	.095	.070	.095	.072	.073
		b	.075	.063	.077	.054	.070	.064	.089	.059	.078	.069	.065
		c	0	0	3	0	1*	0	6*	0	2	0	0
2018060	Amazon Park	a	---	.073	.082	.067	.076	.074	.098	.063	.082	.063	.050
		b	---	.063	.071	.056	.068	.060	.084	.057	.073	.057	.047
		c	---	0	2	0	0	0	3*	0	0	0	0

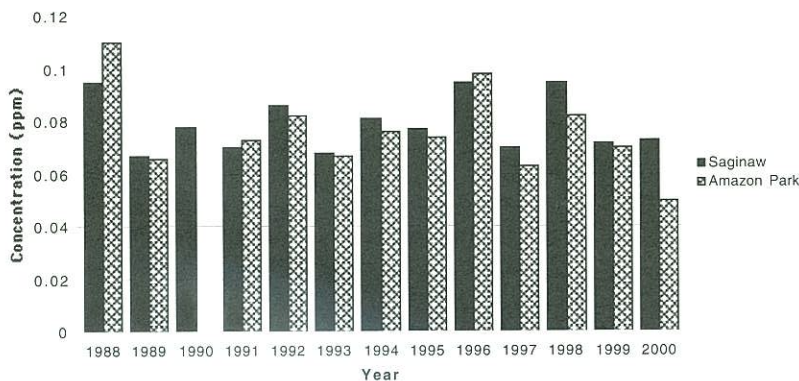
### Standard:

Fourth highest 8-hour average: 0.08 parts per million (technically must be  $\geq 0.085$  ppm for an exceedance)

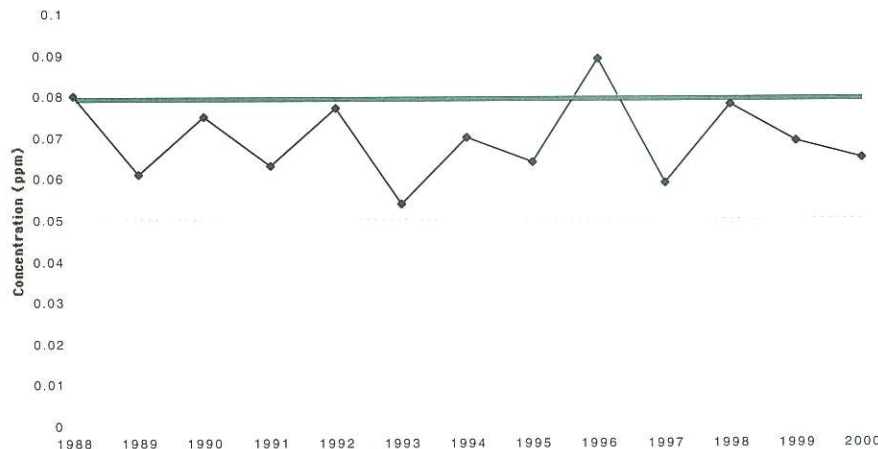
### Notes:

- a** Highest 8-hour concentration
- b** 4th highest 8-hour concentration
- c** Number of exceedances
- No data collected at site during year
- \* Prior to the 1998 established standard; not a formal exceedance

Ozone: Max. 8-hr. Levels



Yearly 8 hour Ozone Levels:  
4th highest concentration





### Yearly One-hour Ozone Levels — 1990 - 2000

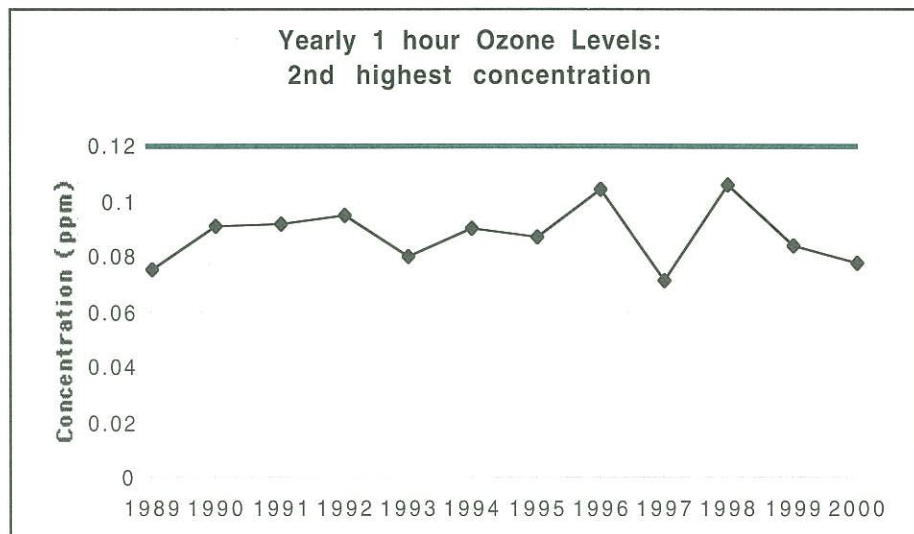
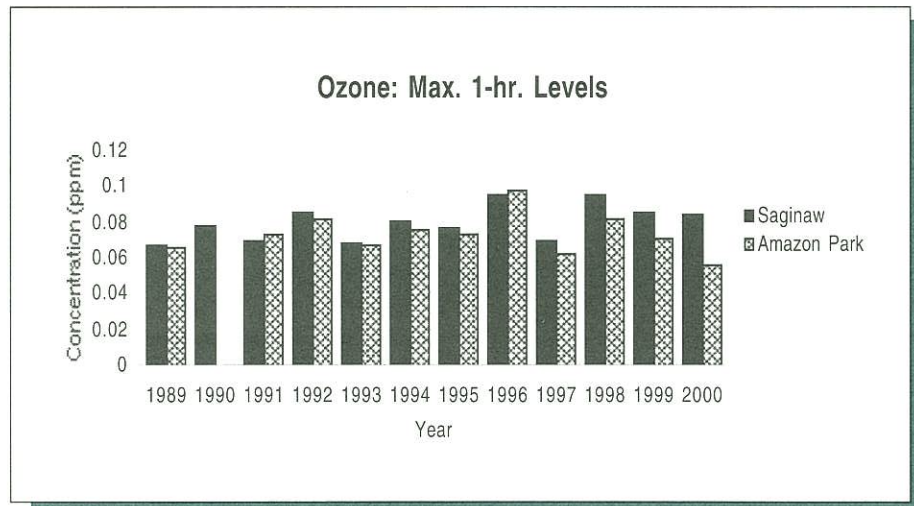
Site #	Site Name	Notes	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
2000036	Delight Valley School — Saginaw	a	.092	.094	.103	.084	.094	.090	.111	.077	.121	.086	.084
		b	.091	.092	.095	.080	.090	.087	.104	.071	.106	.084	.078
		c	0	0	0	0	0	0	0	0	1	0	0
2018060	Amazon Park	a	---	.089	.099	.081	.085	.089	.111	.077	.094	.071	.056
		b	---	.088	.095	.073	.082	.077	.105	.073	.089	.068	.056
		c	---	0	0	0	0	0	0	0	0	0	0

Standard:

1-hour average: 0.12 parts per million

Notes:

- a** Highest 1-hour concentration
- b** 2nd highest 1-hour concentration
- c** Number of exceedances
- 





# Carbon Monoxide Concentrations

## Yearly Carbon Monoxide Levels — 1990 - 2000

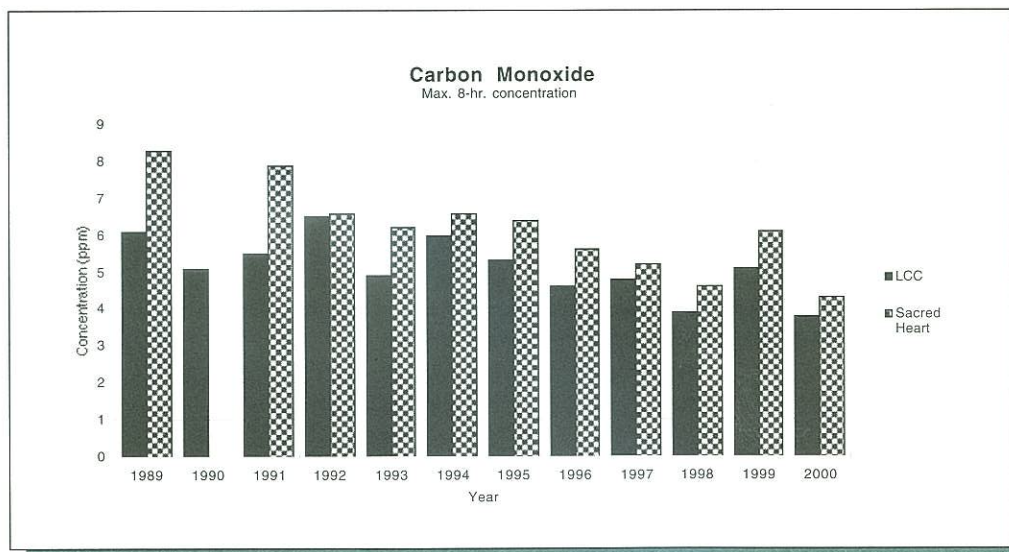
Site #	Site Name	Notes	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
2018056	Lane Comm. College (downtown)	a	5.1	5.5	6.5	4.9	6.0	5.3	4.6	4.8	3.9	5.1	3.8
		b	4.8	5.4	5.5	4.7	4.5	4.7	4.6	4.7	3.9	3.9	3.5
		c	0	0	0	0	0	0	0	0	0	0	0
2018058	Sacred Heart Medical Center	a	6.0	7.9	6.6	6.2	6.6	6.4	5.6	5.2	4.6	6.1	4.3
		b	5.5	6.7	6.4	5.9	6.3	5.7	5.5	5.2	4.6	4.9	4.3
		c	0	0	0	0	0	0	0	0	0	0	0

Standard:

8-hour average — 9 parts per million

Notes:

- a** Highest 8-hour concentration
- b** 2nd highest 8-hour concentration
- c** Number of exceedances
- No data collected at site during year





# Wood Heating Programs

## Lane County Home

The Eugene/Springfield area and the city of Oakridge have home wood heating advisory programs due to episodes of poor wintertime air quality. Residential wood stove smoke is a major source of  $PM_{10}$  and  $PM_{2.5}$  emissions in these areas. Home wood heating advisory programs in Lane County use a simple "green, yellow, red" advisory system to inform residents whether or not wood-burning is allowed. The programs do not generally ban the practice of burning, but rather ban visible emissions during "red" advisory periods. Residents are notified of the daily advisories through local media, such as newspapers, radio and television stations. In addition, residents may call a 24-hour advisory line for up-to-date information. While home wood heating is allowed on most days, the agency encourages residents to avoid burning to reduce the health impacts associated with inhalation of wood smoke.

### Eugene/Springfield Program

The Eugene/Springfield area began its home wood heating advisory program in 1986 to reduce pollution caused from home wood-heating, a major wintertime source of particulate. Eugene/Springfield was designated a federal non-attainment area August 7, 1987, after violating the federal  $PM_{10}$  standards on various occasions in past years. The program changed from voluntary to mandatory in January 1991, as part of LRAPA's federally required implementation plan designed to bring the area back into compliance with  $PM_{10}$  standards.

The Eugene/Springfield mandatory program is now in its tenth season. Residents living within the Eugene/Springfield Urban Growth Boundary (ESUGB) are affected by the program, which runs from November 1 through the end of February each year. Residents with economic hardship may be granted exemptions from the program on a yearly basis.

In addition to the "green, yellow, red" advisories, the mandatory program includes a Phase II "red" advisory, which prohibits all burning in wood stoves without an exemption in cases of severe deterioration in air quality.

Because this program is mandatory, residents who violate a "red" advisory provision may be fined \$50 to \$500. No "red" advisory periods have been called since the inception of the program, nor have the  $PM_{10}$  standards been exceeded.

### Oakridge Program

The city of Oakridge adopted its home wood heating advisory program in 1989, after air quality data showed Oakridge exceeded the federal  $PM_{10}$  standard on numerous occasions. Five years later, on January 20, 1994, EPA officially declared Oakridge a  $PM_{10}$  non-attainment area. The 1999-2000 season marked the eleventh season of the program.

As in the Eugene/Springfield area, the advisory season runs from November 1 through February of each year. However, unlike Eugene/Springfield, strategies in the Oakridge program have remained voluntary. The Oakridge plan was adopted by EPA in March '99, and became effective May 14, 1999.

Strategies to improve Oakridge air quality include provisions for mandatory curtailment upon failure to meet a predetermined attainment schedule. A city-operated program to replace old, uncertified wood stoves with cleaner burning systems, a tarp give-away program, enhanced public education, and measures to reduce road dust have all been pieces of the strategic plan.



Home wood heating advisories are an integral part of the home wood heating program. Advisories are determined by comparing current pollution levels to current meteorological conditions and weather forecasts. Typically, a "green" advisory is called when pollution levels are less than 50 percent of the federal standard. A "yellow" advisory is called when pollution levels are between 50-70 percent of the federal standard. A stage I "red" advisory is called when levels rise between 70-85 percent of the standard, and a stage II advisory is called when levels rise above 85 percent of the standard and weather conditions are forecast to remain the same or worsen.

<b>Eugene/Springfield HWH Advisories 1989 - 2000 Season</b>				
<b>Season Year</b>	<b>Yellow</b>	<b>Red I</b>	<b>Red II</b>	<b>PM<sub>10</sub> Exceedances</b>
*1999-2000	0	0	0	0
*1998-1999	0	0	0	0
1997-1998	0	0	0	0
1996-1997	0	0	0	0
1995-1996	0	0	0	0
1994-1995	0	0	0	0
1993-1994	0	0	0	0
1992-1993	3	0	0	0
1991-1992	1	0	0	0
1990-1991	4	1	0	0
1989-1990	25	0	0	0

<b>Oakridge HWH Advisories 1990 - 2000 Season</b>			
<b>Season</b>	<b>Yellow</b>	<b>Red</b>	<b>PM Exceedances</b>
*1999-2000	11	0	2
*1998-1999	6	0	1
1997-1998	1	0	0
1996-1997	5	0	0
1995-1996	5	0	0
1994-1995	7	3	0
1993-1994	16	3	0
1992-1993	11	7	1
1991-1992	5	11	3
1990-1991	8	13	8

\* Based on PM<sub>2.5</sub> monitored levels.



<b>Firewood</b>	<b>Available Heat</b>
Tree Species	Million Btu/Cord 20% Moisture
Alder	20
Apple	35
Ash	27
Birch	24
Cedar	16
Cherry	25
Cottonwood	17
Elm, American	18
Fir, Douglas	23
Fir, White	19
Hemlock	21
Juniper	25
Madrone	34
Oak, Red	29
Oak, White	33
Maple	25
Pine, Lodge pole	20
Pine, Ponderosa	18
Pine, White	18
Poplar	12
Walnut, Black	25
Walnut, English	25
Willow	16

<b>Wood Burning Advisories</b>	
<i>(November — February)</i>	
<b>Eugene/Springfield</b>	
<b>Green—</b>	means air quality is good at this time and unrestricted use of a wood heating device is allowed.
<b>Yellow—</b>	means air quality is deteriorating. Residents are asked to cut back on home wood-heating use.
<b>Red I—</b>	means air quality is reaching an unhealthy stage. Visible smoke from a chimney will result in a violation, unless the resident has an exemption. Burning is allowed if done without producing any visible smoke.
<b>Red II—</b>	means all burning must stop. Use of a pellet stove is allowed if no visible smoke is emitted into the air.
<b>Oakridge</b>	
<b>Green—</b>	Burn cleanly. Use only dry, well-seasoned wood.
<b>Yellow—</b>	Don't burn unless absolutely necessary.
<b>Red—</b>	Stop using wood stoves and fireplaces.

<b>2000 Home Wood Heating Exemptions (Eug./Spfld.)</b>	
Number of applications received <i>(economic need only)</i>	28
Number of exemptions granted	28

<b>Where to find advisory information</b>	
✓	Major area radio stations
✓	Local television stations during weather portion of newscasts
✓	Local newspaper weatherpages
✓	Guardline — 485-2000, ext. 4273
✓	Home wood-heating call line — <b>746-HEAT (746-4328)</b>



# Permit Program Summary

There are 178 industrial and commercial businesses that have LRAPA air permits, allowing them to operate in Lane County. Typically, two types of permits are issued — operating permits, which establish conditions under which an industrial company may operate in accordance with LRAPA regulations; and construction-type permits, which allow for construction activities of LRAPA-regulated companies. Both permit types are designed to allow a business to operate in a manner consistent with LRAPA's goal to protect public health and the environment.

## Operating Permits

LRAPA issues two types of operating permits, the Air Contaminant Discharge Permit (ACDP) and Title V Federal Operating Permit (Title V). Both permits allow for operation of industrial sources, although the ACDP is also a construction permit.

ACDPs are the most common type of operating permit issued by LRAPA. Of the 178 permitted industrial sources in Lane County, 156 require ACDPs. The remaining 22 industrial sources are required to have Title V permits.

ACDPs are issued to all industries that are required by LRAPA rules to obtain permits, except those "major" sources subject to federal operating permit requirements. Industrial sources are classified as "major" sources if they have the potential to emit into the air more than 100 tons of any criteria pollutant (see pg. 10), or 10 tons or more of any single hazardous air pollutant (HAP) or 25 tons or more of any combination of HAPs on an annual basis.

Companies can choose to "opt out" of the Title V permitting process by agreeing to limit their emissions to levels below the federal program thresholds, thereby avoiding the comprehensive permitting and monitoring required under the federal program. Twenty-four Lane County industries have chosen to do this, thereby reducing their permitting and monitoring costs, while at the same time, making improvements to the airshed by limiting the amount of pollutants they emit into the air.

Industrial source categories in Lane County which require operating permits include: food

and agriculture, wood products manufacturing, chemical products manufacturing, mineral products manufacturing, metal products manufacturing, waste treatment, fuel burning, fuel transfer operations, coating operations, sources of toxic air pollutants, and any source emitting more than 10 tons per year of any combination of criteria pollutants.

## Construction Permits

Prior to construction of a new major industrial source or modification of an existing industrial source, a construction permit is issued to assure that the project complies with applicable LRAPA rules so that the resulting construction will not jeopardize the airshed. Construction permits address such aspects as pollution control equipment, and operation and maintenance requirements.

Industries located in areas of Lane County that are recognized as "non-attainment" areas (areas not meeting the Clean Air Act standards, i.e. Eugene/Springfield and Oakridge) for particulate matter may be required to obtain a more complex type of construction permit from LRAPA prior to the start of construction or modification when the planned construction or modification could potentially cause emissions to significantly increase.

In addition, industries located in attainment areas of the county (areas meeting the Clean Air Act standards) must obtain construction permits subject to special requirements when their emissions have the potential to exceed thresholds which protect an area from significant deterioration.

## 2000 Permitting Summary

January 16, 2000 - January 15, 2001

Permits issued or renewed.....	47
Permits modified .....	9
Industries inspected .....	52



AirMetrics is an LRAPA enterprise which began a number of years ago when the agency, in partnership with the EPA, developed an inexpensive, portable, battery-operated air sampler to help address the need for particulate matter (PM) survey sampling of metropolitan areas. Since that time, the sampler, now patented as the MiniVol, has been adapted to sample gaseous pollutants, such as carbon monoxide and nitrogen oxides, as well as fine particulates (PM<sub>2.5</sub>), in addition to the coarse particles (PM<sub>10</sub>) it was originally designed to sample. Applications for the sampler range from use in urban air quality studies, to cropland erosion and roadside monitoring, and indoor air monitoring.

## AIR METRICS™ INNOVATIVE AIR SAMPLING EQUIPMENT



While not a federally recognized sampling method, independent studies have demonstrated the sampler gives results that closely approximate data obtained from EPA reference method samplers — those samplers approved for EPA-required monitoring. This has made the sampler especially popular for special studies where numerous samplers are necessary or where it may be

difficult to temporarily access power or locate a reference sampler.

MiniVol samplers have been used extensively throughout the world. On average, 50 percent of annual sales are international, a market which includes:

- |                |             |                  |
|----------------|-------------|------------------|
| * Hong Kong    | * Mexico    | * Chile          |
| * South Korea  | * Canada    | * New Zealand    |
| * Philippines  | * Norway    | * United Kingdom |
| * Malaysia     | * Australia | * Jamaica        |
| * Egypt        | * Honduras  | * Trinidad       |
| * South Africa | * Singapore | * Bolivia        |
| * Argentina    | * Japan     | * Taiwan         |

Highlights from the '99-'00 fiscal year include strong distributor sales in Japan, South Africa, Mexico, Egypt and South Korea. Over 20 samplers were sold to Battelle for work with the US Department of Energy and over 40 samplers were sold to the US Army, for use in its Deployment Environmental Surveillance Program. In addition, over \$50,000 in parts sales were sold to California Air Resources Board for use with 100 MiniVol samplers from Desert Research Institute. Weighed filters continued to be popular among northwest Indian tribes, environmental consultants and the US Army. Airmetrics products and services were marketed through its brochure and website at [www.airmetrics.com](http://www.airmetrics.com). Airmetrics has continued design work on the MiniVol 2 sampler, which features a microprocessor and should debut in the summer of 2001.

Sales for the '99-'00 fiscal year grossed \$795,000, out-performing last year's gross sales by almost \$5,000, making it the highest total in history. Net profit to the agency was about \$30,000. Revenues raised from the enterprise are allocated to help defray fixed agency costs. Over the past five years, AirMetrics has transferred \$150,000 to capital improvements for LRAPA, and contributed more than \$250,000 to LRAPA's fixed costs.

AirMetrics employs four full-time employee equivalencies, comprising one part-time and two full-time employees and a number of part-time university students, and uses local manufacturers and vendors for much of its production materials. Governments and public health agencies are the agency's primary customers, although consulting groups and private companies doing heavy industrial work, such as mining and smelting, also use the device.



# Complaint Summary

Complaints, compiled into one of ten categories on a monthly basis, were up 35 percent in 2000 over '99 totals, according to LRAPA data. Agricultural field burning, industry, backyard burning and open burning led the categories for greatest number of complaints. Other categories with substantial numbers include home wood heating, unknown sources, and miscellaneous sources (types which do not fit into other listed categories).

Two of the ten categories showed increases in the number of complaints received by the agency. The largest categorical increase was in the industry category, up 317 percent in 2000. Slash burning, the only other category to show an increase, was up 289 percent.

Categories that showed decreases in 2000 include general air quality, home wood heating,

field burning, backyard burning, and unknown sources.

Dust and open burning, and miscellaneous complaints remained constant.

The percent changes in numbers of complaints from '00 over '99, by category, are as follows:

- ◆ Backyard burning.....-12.5%
- ◆ Dust .....0%
- ◆ Field burning.....-29%
- ◆ General air quality.....-64%
- ◆ Home wood-heating .... -30%
- ◆ Industry ..... +317%
- ◆ Miscellaneous ..... 0%
- ◆ Open burning ..... 0%
- ◆ Slash burning ..... +289%
- ◆ Unknown ..... -11%
- ◆ Total complaints ..... +35%

Complaints 1990 - 2000											
Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Backyard burning	54	46	60	63	88	50	85	77	71	104	91
Dust	0	11	7	14	8	17	18	19	30	17	17
Field burning	508	834	417	187	407	301	747	247	218	279	198
General air quality	24	17	2	5	3	5	3	4	7	11	4
Home wood heating	50	49	40	53	48	41	38	52	45	53	37
Industry	114	146	111	111	134	99	92	111	99	118	492
Miscellaneous *	120	59	47	19	45	35	25	27	31	46	46
Open burning *	85	59	69	85	74	77	89	91	98	91	91
Slash burning	247	28	42	16	64	29	16	16	13	9	35
Unknown	36	58	38	36	78	50	37	39	26	55	49
Total	1238	1307	833	589	949	704	1150	683	638	783	1060
* Began calculation in 1990											



# Enforcement Summary

LRAPA initiates enforcement actions in instances of excessive industrial air pollution, illegal open burning activities, improper handling or transport of asbestos-containing materials, and failure to obtain necessary air pollution permits prior to construction or operation.

Typically, penalties collected from enforcement actions vary from year to year. However, the dollar amount collected does not strictly reflect the penalties assessed or settled during the year, due to pending cases and collections received on previous years' penalties. Several 2000 enforcement actions remained pending at the close of the year.

LRAPA collected \$49,437 in penalties during 2000. All penalties collected are forwarded to Lane County; however, the county reimburses LRAPA for attorney fees associated with contested cases.

Enforcement Actions									
Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
Administrative warnings and Notices of non-compliance	10	18	32	47	89	75	57	91	118
Notices of violation	10	8	3	—*	—*	—*	—*	—*	—*
Notices of violation with civil penalty	11	26	54	33	25	12	17	39	80
Notices of permit violation	0	0	9	—**	—**	—**	—**	—**	—**
Total civil penalties collected \$\$	10,565	5,500	29,560	63,958	22,635	49,950	16,775	18,070	49,437

\* Notices of violation without civil penalty assessments are no longer issued.

\*\* Notices of permit violations are no longer issued.



# Field Burning Summary

As reported by the Oregon Department of Agriculture, open field-burning in 2000 totaled 50,801 acres, up about 2 percent from the 49,999 acres burned in 1999. In the southern Willamette Valley of western Oregon, 32,812 acres were burned, up about 3 percent from the number of acres burned in '99. Counties comprising the southern Willamette Valley region include Benton, Linn and Lane. Sixty-five percent of the total acreage burned was burned in the South Valley.

Open burning of harvested perennial and annual grass seed and cereal grain crops is practiced as a means of straw disposal and ground sanitation. Oregon law allowed up to 65,000 acres to be open-burned during '00 — 40,000 acres for normal applications, and an additional 25,000 acres for steep terrain and specially identified species.

Acreage propane flamed during the season totaled 2,124, up about 10 percent from the number of acres flamed in '99. Of the total, 924

acres propaned were burned in the southern Willamette Valley, about 44 percent of all acreage propane flamed. Oregon law allowed for 37,500 acres to be propane-flamed.

Acreage stack/piled burned in western Oregon was down sharply in the '00 season, from 5,021 acres in '99 to 1,050 acres in '00. Acreage stack/pile burned in the south Willamette Valley is not available, but incorporated into the total.

Officially, there were no intrusions of smoke into the Eugene/Springfield area during the '00 season. LRAPA staff answered 198 field burning phone complaints during the three-month season.

Total acreage burned in western Oregon collectively during 2000 was 53,986. Total acreage burned collectively in the southern Willamette Valley was 33,736 (excluding acreage stack/piled burned).

**FIELD BURNING YEAR-END TOTALS**

Year end	S. Willamette acres open burned	Number of intrusions	Impact hours	Number of complaints
2000	32,812	0/Eug. 0/Spfld.	0/Eug. 0/Spfld.	198
1999	31,953	1/Eug. 1/Spfld.	2/Eug. 2/Spfld.	279
1998	28,425	0/Eug. 0/Spfld.	0/Eug. 0/Spfld.	218
1997	36,527	0/Eug. 0/Spfld.	0/Eug. 0/Spfld.	247
1996	49,620	0/Eug. 1/Spfld.	0/Eug. 1/Spfld.	747
1995	54,025	1/Eug. 0/Spfld.	1/Eug. 0/Spfld.	301
1994	51,740	0/Eug. 0/Spfld.	0/Eug. 0/Spfld.	407
1993	43,114	0/Eug. 0/Spfld.	0/Eug. 0/Spfld.	186



# Community Outreach

Although much of LRAPA's overall program focuses on industrial and commercial sources of air pollution, the agency understands the cumulative impacts of individual activities as well. Increased public awareness about the health effects of poor air quality and individual responsibility is essential for community ownership of, and solutions to, local air quality issues.

LRAPA provides these services to the community in a number of different ways, including forming partnerships with local media and other private and public entities; providing written materials such as brochures and fact sheets; making presentations to service-clubs, professional associations and schools; participating in local fairs and trade shows; and sharing agency information on its website - [www.lrapa.org](http://www.lrapa.org).

## **2000 Projects:**

- ◆ City of Oakridge Health Fair
- ◆ Pollution Prevention Coalition of Lane County
- ◆ Lane County Home Show
- ◆ Fourth grade "clean air" classroom presentations
- ◆ City of Oakridge PM<sub>2.5</sub> public education program
- ◆ Oakridge outdoor school program
- ◆ Ozone Air Action Day education program
- ◆ Lane Co. Health and Human Services: Low Income Assistance partnership
- ◆ Earth Day downtown event
- ◆ Remote (drive-by) auto emission testing project
- ◆ Clean-air car: Toyota Prius hybrid
- ◆ Eugene Commute Challenge
- ◆ Community informational workshops

*LRAPA'S new hybrid vehicle, a Toyota Prius:* Hybrid cars combine gasoline and electricity for power, usually getting 50-60 miles a gallon in the city. The Prius is a "SULEV"- (Super Ultra Low Emission Vehicle) and emits about 50 percent less carbon dioxide and 90 percent less carbon monoxide, hydrocarbons and nitrogen oxide than an average gas-powered vehicle. The agency is one of the first local owners of the production vehicle.



*Earth Day Celebration parade:* LRAPA co-sponsored (along with the Earth Day Alliance) the community's 1st annual Earth Day Celebration. An estimated 2,000 people showed up to celebrate the 30th anniversary of Earth Day, April 22.



# Special Projects

Special projects/studies carried out by LRAPA may be conducted internally, or in support of planning or community development efforts by other local, state and federal agencies. These studies and projects are conducted in addition to routine agency functions and often require the use of additional temporary staff.

A number of special studies/projects were conducted in 2000.

- ◆ Statewide Hazardous Air Pollution Consensus group to develop and provide to the Environmental Quality Commission recommendations for an Oregon Air Toxics Program (in progress).
- ◆ Statewide toxics emission inventory partnership with the Oregon Department of Environmental Quality (DEQ) (in progress).
- ◆ Statewide "Streamlined Permitting Process Improvement Team," to improve efficiency in the process of providing air permits for industrial sources in Oregon (in progress).
- ◆ Fourth-grade air quality classroom pilot presentation program tailored to Lane County air issues (in progress).
- ◆ Ozone Action Day partnership with the local transit district and local media (completed).
- ◆ Pollution Prevention Coalition (P2C) public education campaign to educate the community about individual choice and the environment (in progress).
- ◆ Website upgrade to incorporate ozone mapping technology and transmit "real-time" data onto the website (in progress).
- ◆ "Fast Track Ozone Reporting" effort to include Lane County data in EPA's national effort (in progress).
- ◆ Purchase of portable hazardous air pollution monitoring/analysis equipment to conduct field studies for presence of hazardous air pollutants in Lane County (completed).
- ◆ Lane County volatile organic compound (VOC) emission inventory (completed).
- ◆ Agency strategic plan completed and adopted by board of directors.
- ◆ Interagency organization of Earth Day event on downtown mall (completed).
- ◆ Remote auto emission testing geographic comparison project in partnership with DEQ (completed).



*LRAPA'S Sheri Morelli shows students particulate on glass.*



*KEZI-TV airs a news report on the remote emission testing project.*



### **LRAPA Phone Numbers**

Business Office.....	736-1056
Home Wood Heating Advisory Line.....	746-HEAT
Backyard Burning Advisory Line.....	726-3976
24-Hour Complaint Line .....	726-1930
Toll-Free Line .....	1-877-285-7272
LRAPA Air Line .....	485-2000, ext. 4273
Internet Home Page .....	<a href="http://www.lrapa.org">www.lrapa.org</a>



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Toll-free 1-877-285-7272  
Fax (541) 726-1205  
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**LRAPA**

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