
LRAPA
Lane Regional Air Protection Agency

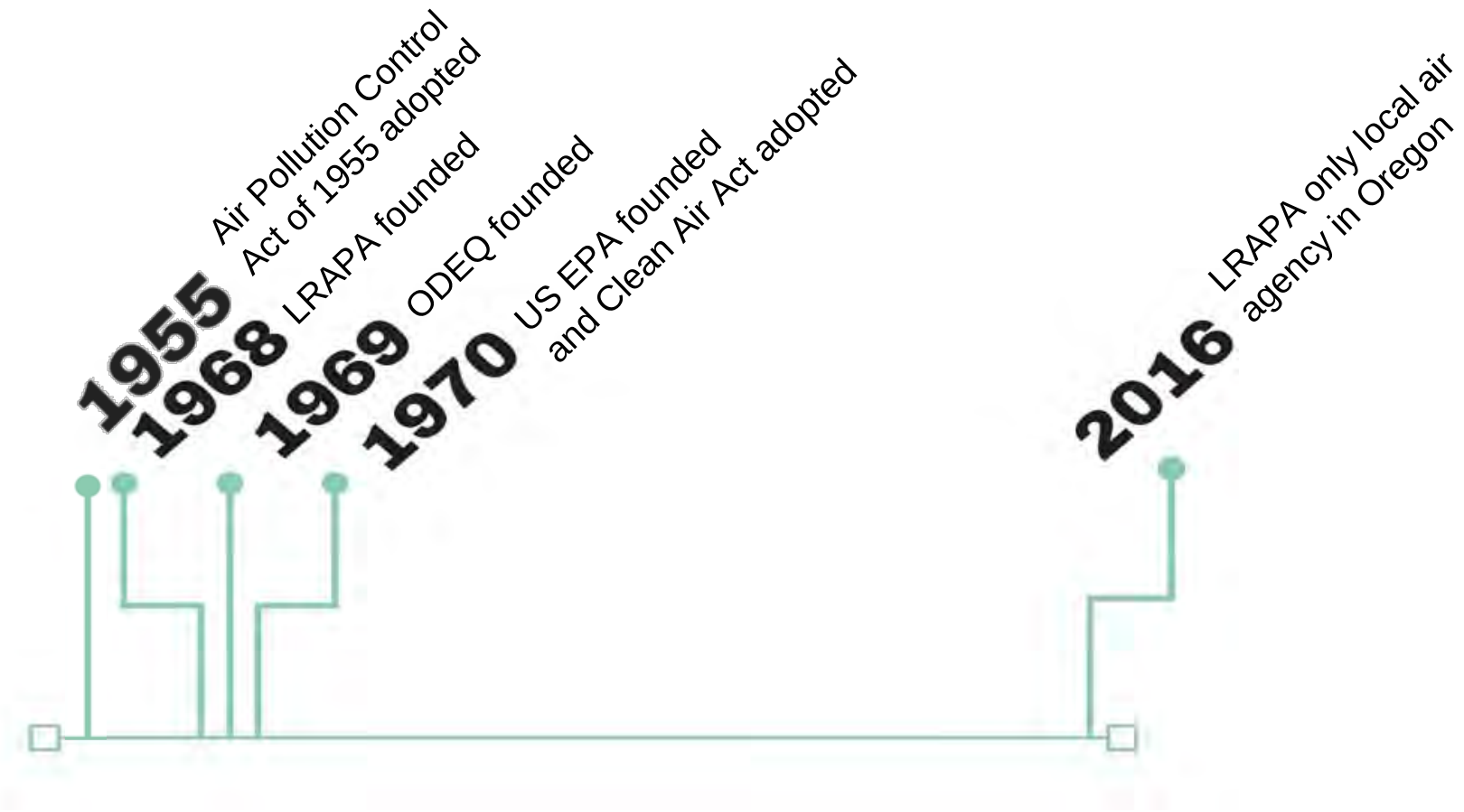
Vision

Community partners working together to ensure clean air for everyone.

Mission

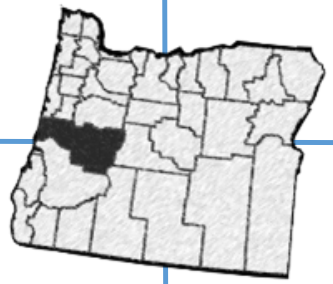
To protect public health, quality of life, and the environment as a leader and advocate for the continuous improvement for air quality in Lane County.


Pacific Ocean
Hwy. 101
Junction City
Hwy. 36
Hwy. 99
I-5
McKenzie River Valley
Leaburg
Hwy. 126
Coburg
Florence
Veneta
Springfield
Hwy. 126
Eugene
Cascade Mountains
Willamette Valley
I-5
Hwy. 58
Creswell
Oakridge
Cottage Grove
Washington
Pacific Ocean
OREGON
Idaho
Lane County
California
Map: Lane Council of Governments
N


1955
Air Pollution Control Act of 1955 adopted
1968
LRAPA founded
1969
ODEQ founded
1970
US EPA founded and Clean Air Act adopted
2016
LRAPA only local air agency in Oregon

AIR QUALITY

INVOLVEMENT



SERVICE

PARTNERSHIPS

Local Agency = Local Control

- Board of directors and advisory committee comprised of local elected officials and citizen appointees
- Programs target local air quality problems
- Decisions made here, not in Salem or Portland
- Local rules must be at least as stringent as state and federal requirements

Our Functions

Monitoring

Permitting

Enforcement

Education and Outreach

The Congress, the Administration and the public all share a profound commitment to the rescue of our natural enviro
and the preservation of the Earth as a place both habitable by and hospitable to man.

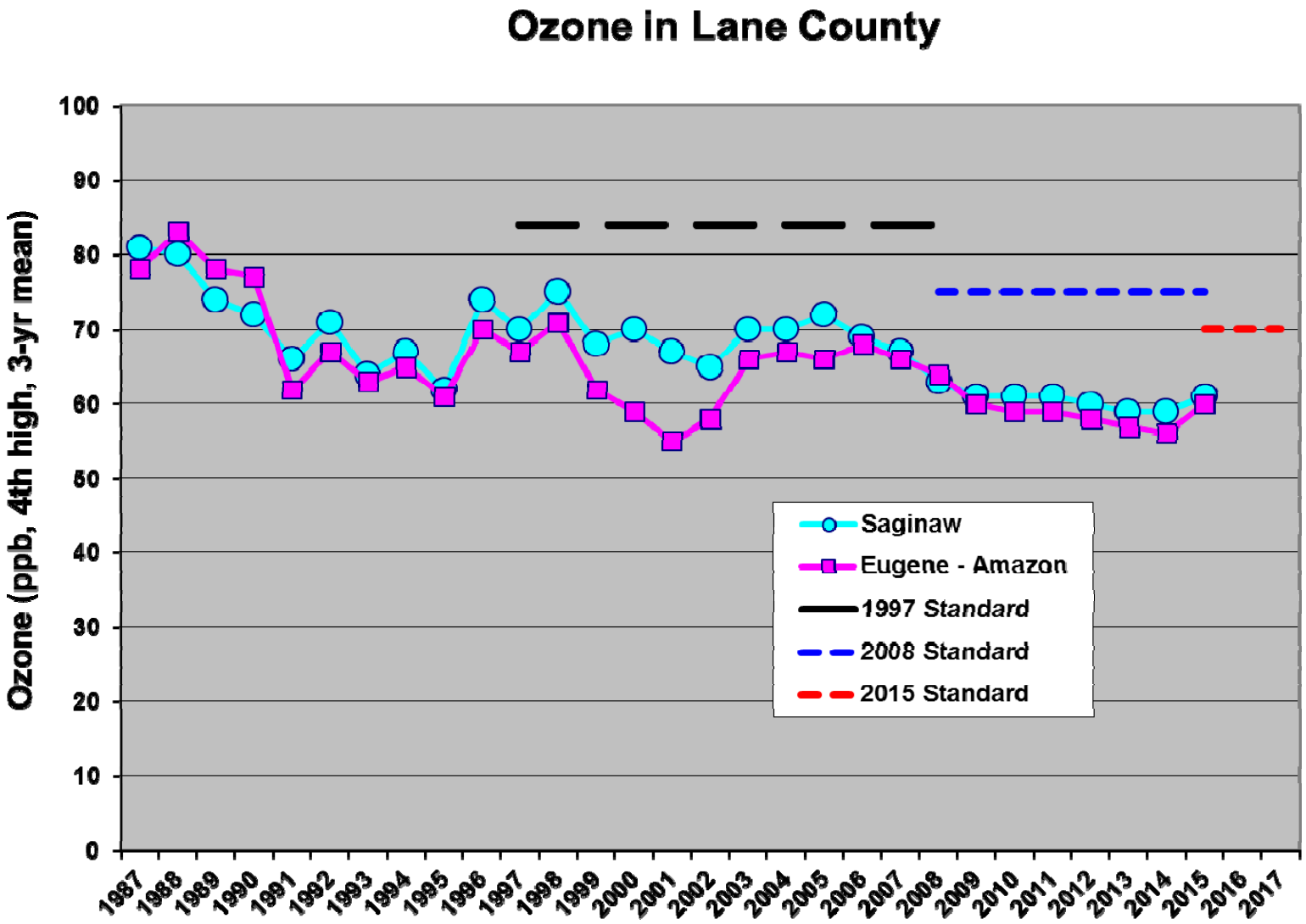
—**President Richard Nixon** (1913-1994), "Reorganization Plan No. 3," message to Congress about establishing EP

Status of Federal Air Quality Health Standards in Lane County

- **Lane County currently meets federal air quality standards in most areas**
- **Oakridge violates the standard for respirable Particulate Matter: PM 2.5**
- **Eugene/Springfield are maintenance areas for PM10 and Carbon Monoxide**

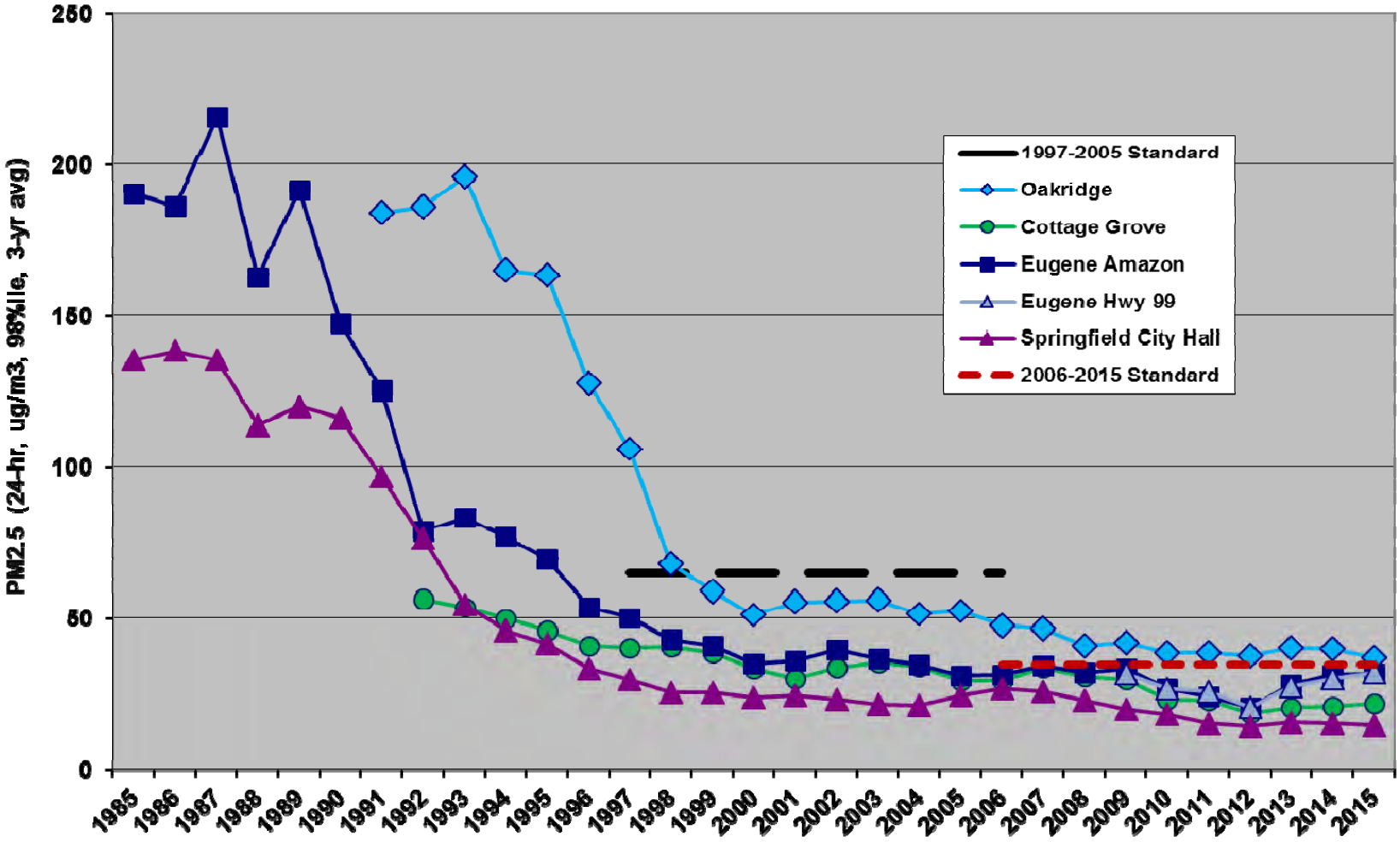
OZONE


Volatile Organic Compounds
Nitrogen Oxides
Ozone
Biogenic
Area
Mobile
Off-road
Point
Dry Clean


Ozone in Lane County
Ozone (ppb, 4th high, 3-yr mean)
100
90
80
70
60
50
40
30
20
10
0
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Saginaw
Eugene - Amazon
1997 Standard
2008 Standard
2015 Standard

PARTICULATE MATTER

Respirable Particulate Matter ($PM_{2.5}$) in Lane County



Air Pollution Complaints in Lane County:

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Dust	17	35	33	6	21	21	34	33	44	30	14	25
Ag/Field Burning	103	330	576	341	101	24	9	13	1	17	4	12
General Air Quality	2	8	7	63	14	21	2	6	6	26	30	15
Home Wood Heating	82	80	89	82	130	113	62	135	95	219	121	342
Industry	880	768	465	327	231	270	265	169	128	122	127	52
Open Burning	163	179	169	390	293	277	268	341	268	321	279	251
Slash Burning	8	31	41	33	25	3	5	16	7	5	7	11
Miscellaneous	66	75	95	109	137	61	77	101	79	52	57	85
Unknown	110	97	105	124	59	25	12	25	17	14	35	46
Total	**1525**	**1719**	**1643**	**1496**	**1011**	**815**	**734**	**839**	**645**	**806**	**674**	**839**

LRAPA-DEQ Example of Differences: Coffee Roasters

Permit Type	LRAPA Number	Facility Name	Location	Activity	Category	Description
Basic	206122	Caffe Pacori	Eugene	Coffee Roaster	A10*	Roasting < 30 tons per year)
Basic	201312	Coffee Plant Roaster	Eugene	Coffee Roaster	A10*	Roasting < 30 tons per year)
Basic	203153	Global Delights	Eugene	Coffee Roaster	A10*	Roasting < 30 tons per year)
Basic	207526	Siuslaw River Coffee Roaster (By the Bridge)	Florence	Coffee Roaster	A10*	Roasting < 30 tons per year)
Basic	208300	Tailored Coffee Roasters LLC	Eugene	Coffee Roaster	A10*	Roasting < 30 tons per year)
Basic	208669	Voyage Coffee Roasters	Eugene	Coffee Roaster	A10*	Roasting < 30 tons per year)
General 1	201270	Cafeto Custom Roasting	Eugene	Coffee Roaster	B21	Roasting 30+ tons per year)
General 1	201283	Cascade Estate Coffees	Eugene	Coffee Roaster	B21	Roasting 30+ tons per year)
General 1	202541	Equator Coffee	Eugene	Coffee Roaster	B21	Roasting 30+ tons per year)
General 1	200573	Full City Coffee Roasters (Beans & Leaves)	Eugene	Coffee Roaster	B21	Roasting 30+ tons per year)
General 1	208939	Wandering Goat Coffee	Eugene	Coffee Roaster	B21	Roasting 30+ tons per year)

Note: * Below statewide permitting threshold.

Industrial Control Technologies

- **Reasonably Available Control Technology (RACT) – for existing sources in clean areas**
- **Best Available Control Technology (BACT) – for new sources in clean areas**
- **Lowest Achievable Emission Rate (LAER) – for new sources in problem areas**
- **Maximum Achievable Control Technology (MACT) – for hazardous air pollutants**
- **Best Work Practices – for nuisance sources**

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Industrial Case Studies

- **Best Work Practices – for nuisance sources**
  - **J.H. Baxter wood treatment facility**
- **Maximum Achievable Control Technology (MACT) – for hazardous air pollutants**
  - **Flakeboard medium density fiberboard plant**
- **Lowest Achievable Emission Rate (LAER)**
  - **Seneca Sustainable Energy co-generation plant**

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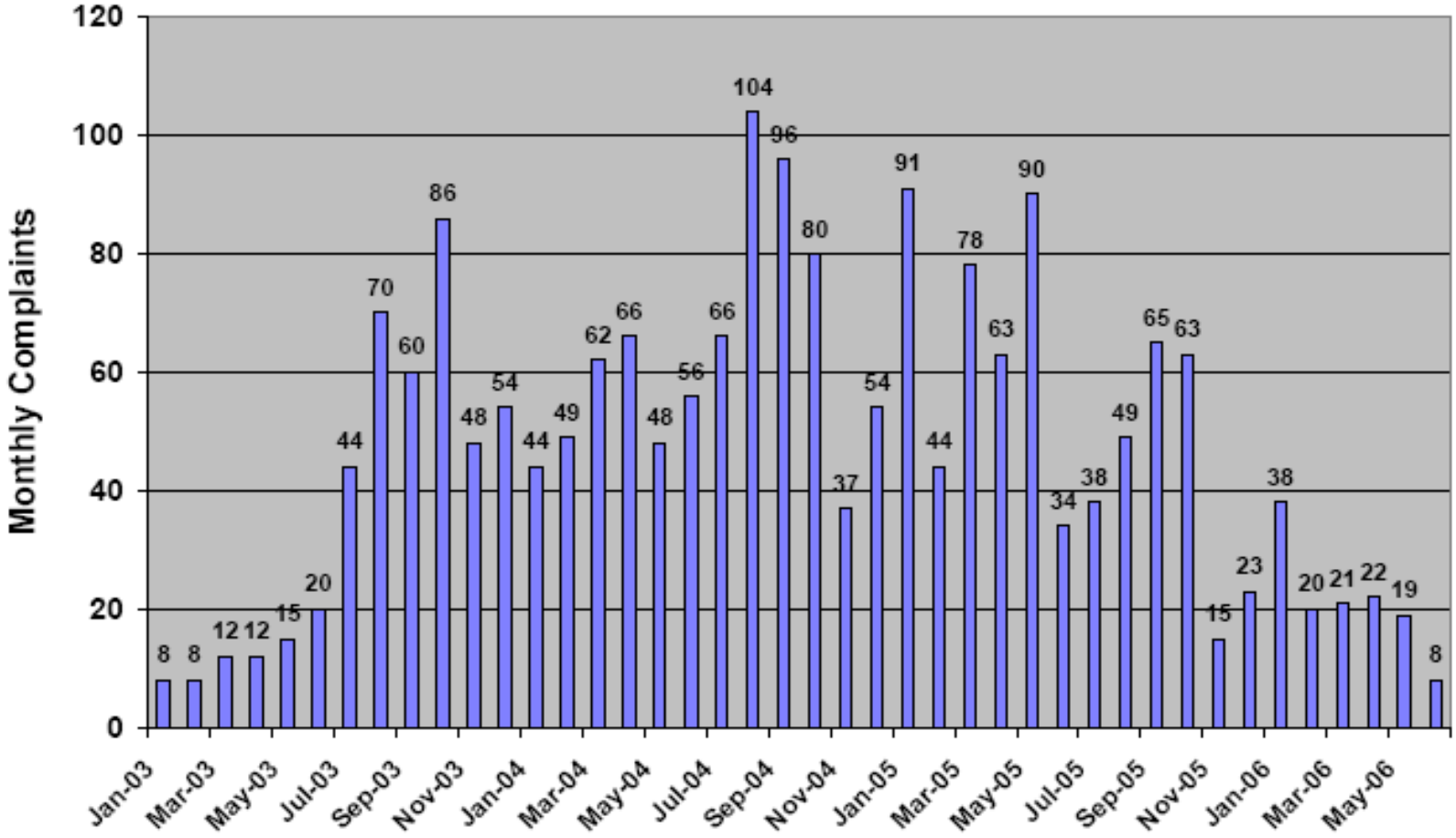
Case Study: J.H. Baxter Wood Treatment Facility in Eugene

Complaints from J.H.Baxter Neighbors

January 2003 through June 2006



LRAPA Air Monitoring Equipment

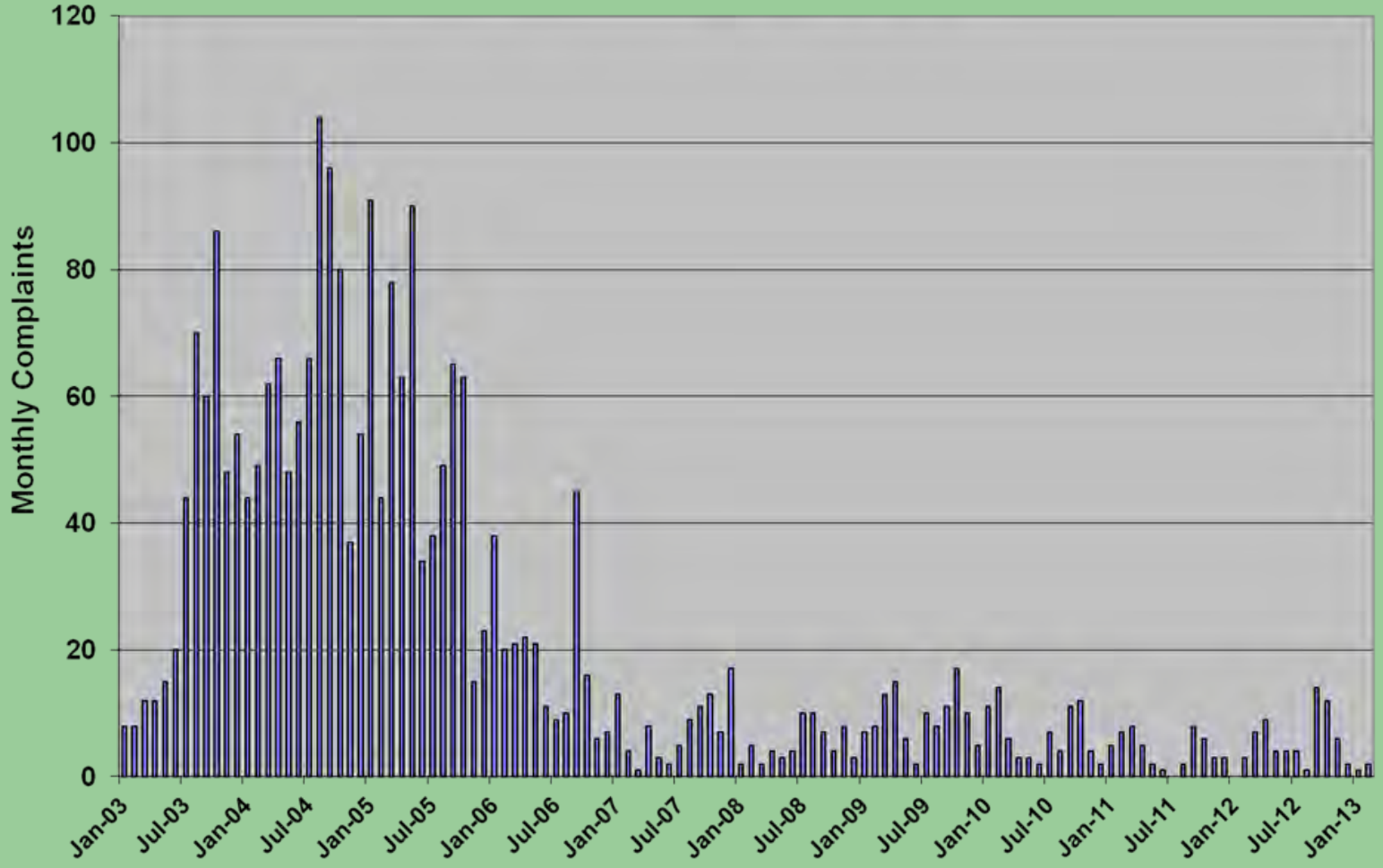
J.H.Baxter wood treatment facility in background

New Vacuum Collection System at J.H.Baxter

Piping Hook-up to Carbon Adsorption Filter System

Complaints from J.H.Baxter Neighbors

January 2003 through February 2013



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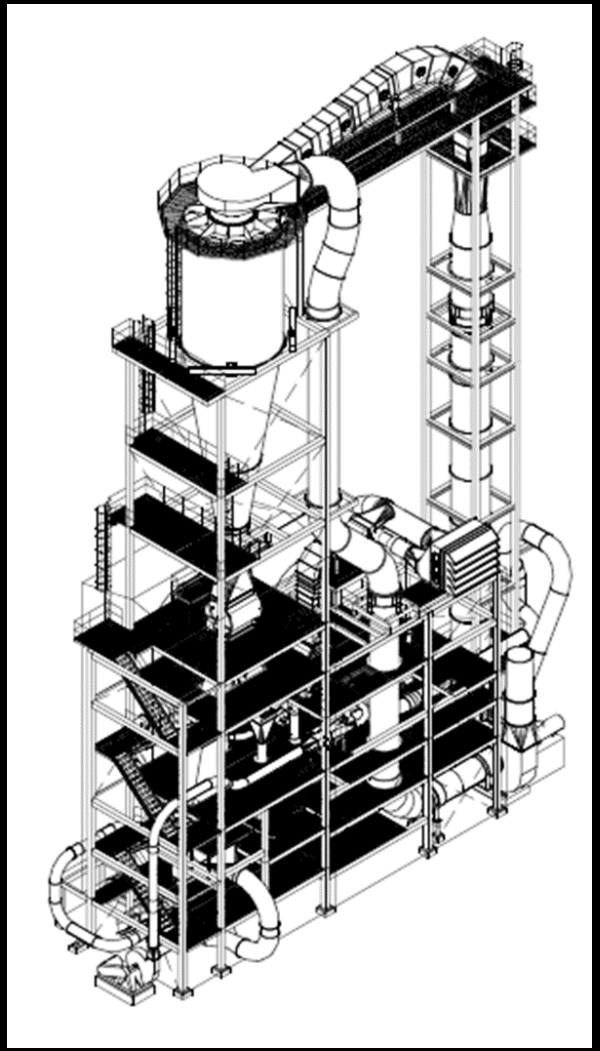
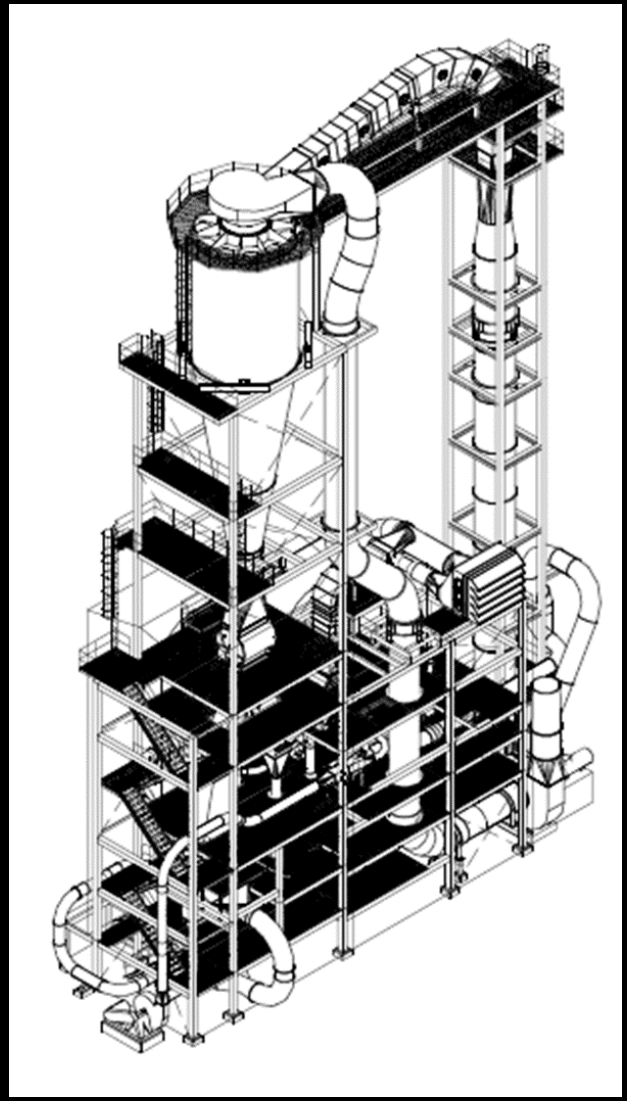
Maximum Achievable Control Technology (MACT) for hazardous air pollutants at Flakeboard medium density fiberboard plant



Maximum Achievable Control Technology (MACT) for hazardous air pollutants at Flakeboard medium density fiberboard plant



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Monroe
Harrisburg
Junction City
Cox Butte
5
Tom Mt
Mohawk
Santa Clara
Fern Ridge Reservoir
105
Springfield
Eugene
Veneta
99

Proposed Project

- 18.8 MW Wood-Fired Power Plant
- East of Highway 99 and Airport Road
- Wood-Fired Boiler, 352 million Btu/Hr
- Steam Turbine, Cooling Tower, Diesel Generator (for backup power only)

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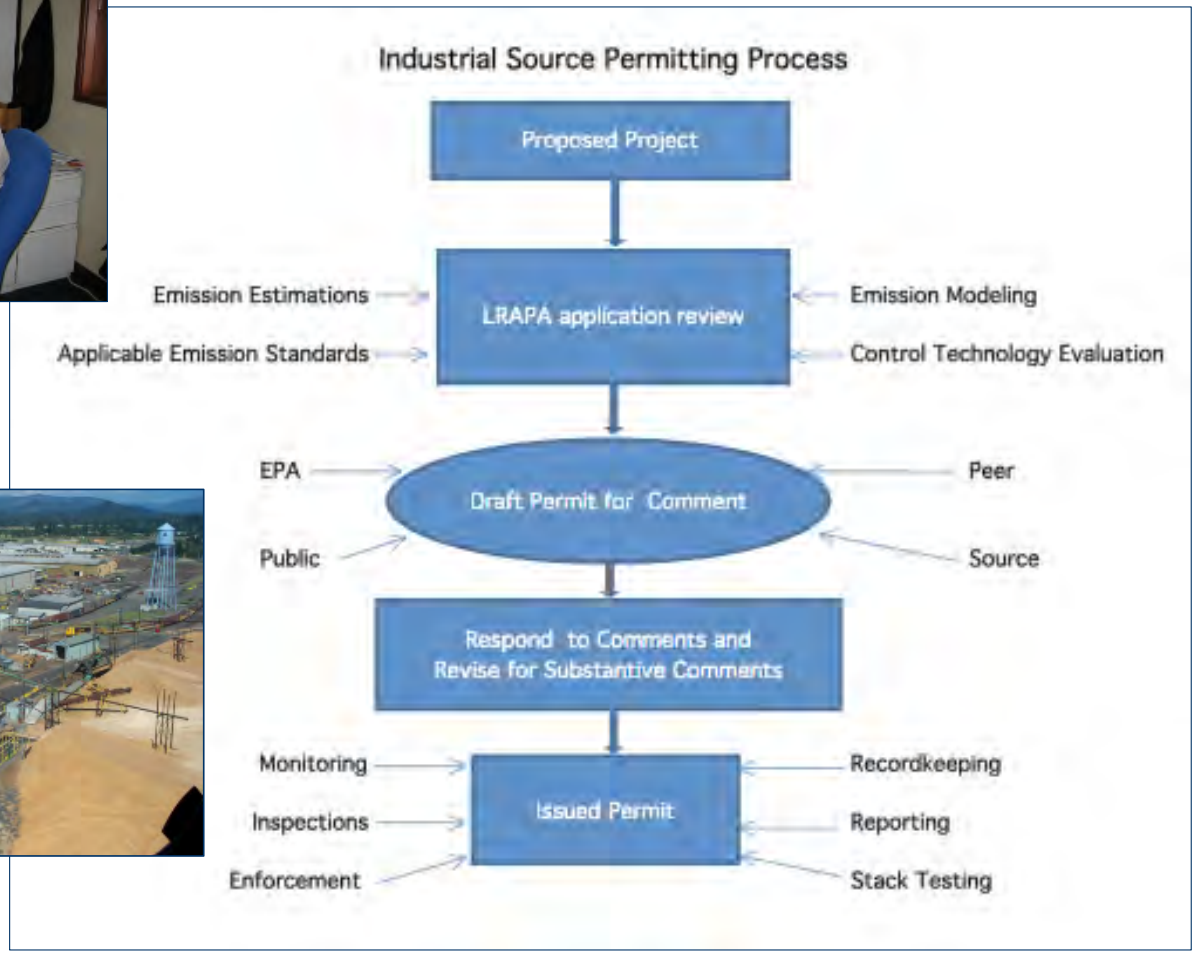
Industrial Source Permitting Process



Proposed Pollution Controls

- **Multiclone for control of large particulate**
- **Electrostatic Precipitator (4-field) for control of fine particulate matter (fly ash and HAP)**
- **Flue Gas Recirculation (FGR) for control of NOx**
- **Selective Non Catalytic Reduction for control of NOx**
- **Design and Good Combustion practices for control of CO, VOC, and Air Toxics**

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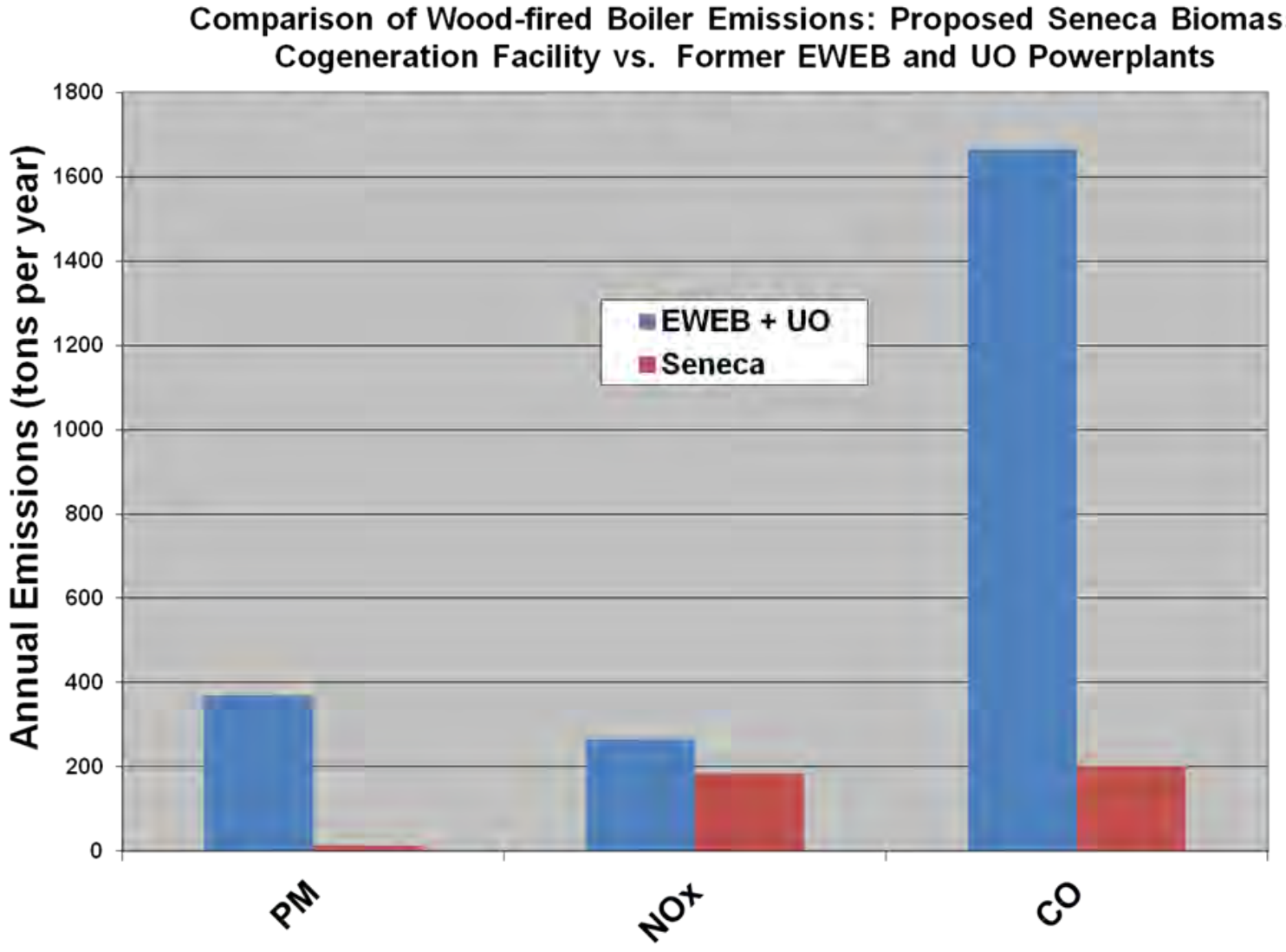

Comparison of Wood-fired Boiler Emissions: Proposed Seneca Biomass Cogeneration Facility vs. Former EWEB and UO Powerplants
Annual Emissions (tons per year)
1800
1600
1400
1200
1000
800
600
400
200
0
EWEB + UO
Seneca
PM
NOx
CO

MULTI-STATE ZEV ACTION PLAN

Report to Central Lane MPO Board
- by Merlyn Hough, Director
- of Lane Regional Air Protection Agency
- on October 2, 2014

May 2014

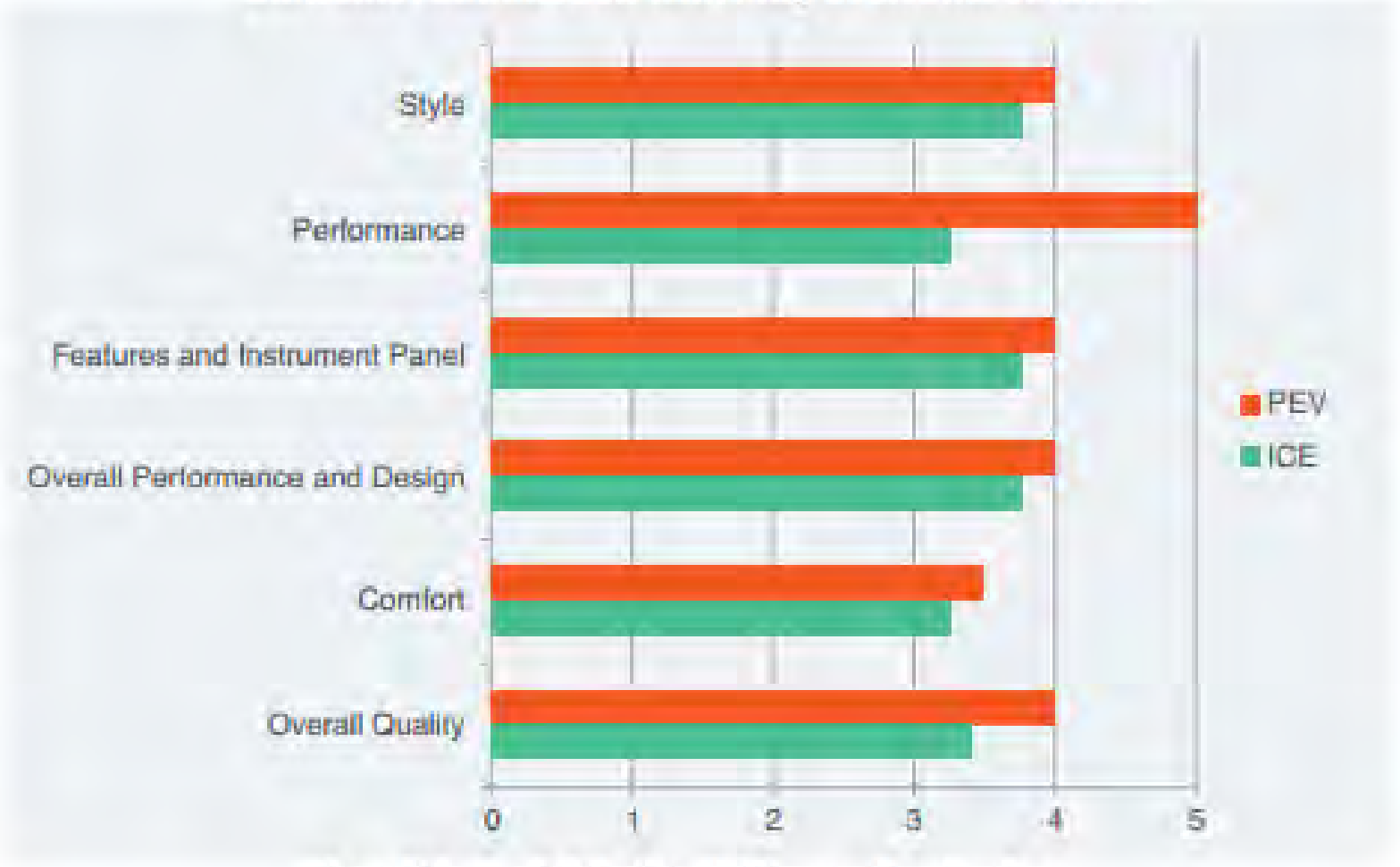
ZEV Program Implementation Task Force

OVERVIEW

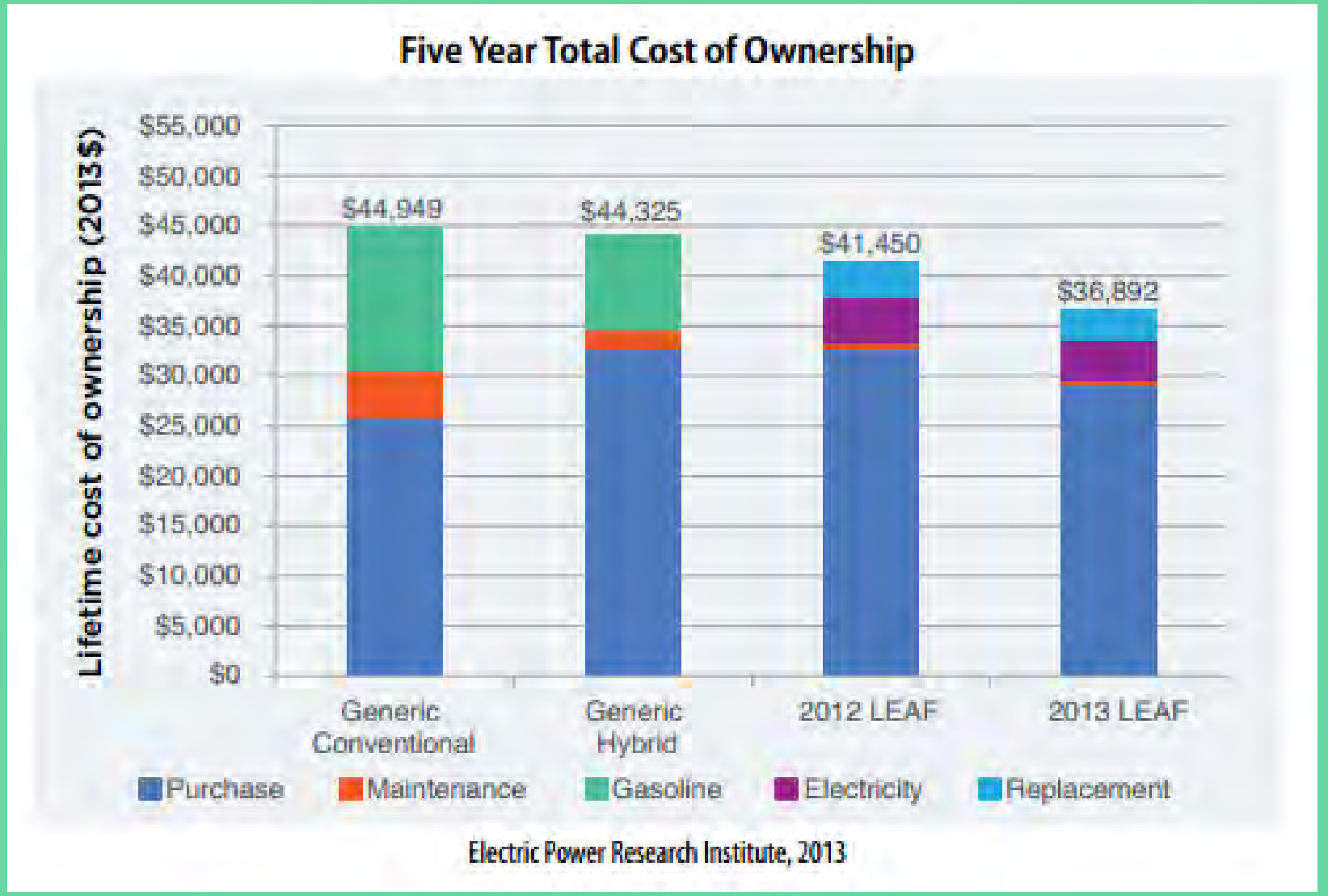
Governors' Memorandum of Understanding and Action Plan

On October 24, 2013, the governors of California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont signed a memorandum of understanding (MOU) committing to coordinated action to ensure the successful implementation of their state zero-emission vehicle (ZEV) programs. ZEVs include pure battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEVs), and hydrogen fuel cell electric vehicles (FCEVs). Collectively these states are committed to having at least 3.3 million ZEVs operating on their roadways by 2025. The MOU identifies joint cooperative actions the signatory states will undertake and additional actions that individual jurisdictions are considering to build a robust market for ZEVs.

Consumer Satisfaction with Plug-in Electric Vehicles

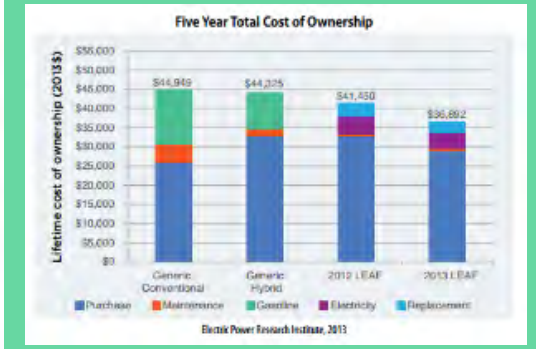


State of Plug-ins, p. 7. EC Analysis of J.D. Power and Associates data.


Five Year Total Cost of Ownership
Lifetime cost of ownership (2013$)
$55,000
$50,000
$45,000
$40,000
$35,000
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$44,949
$44,325
$41,450
$36,892
Generic Conventional
Generic Hybrid
2012 LEAF
2013 LEAF
Purchase
Maintenance
Gasoline
Electricity
Replacement
Electric Power Research Institute, 2013

ACTION #3

Lead by example through increasing ZEVs in state, municipal, and other public fleets



Retail Prices and Lease Rates for Plug-in Electric Vehicles
(includes models currently available for less than $32,000)

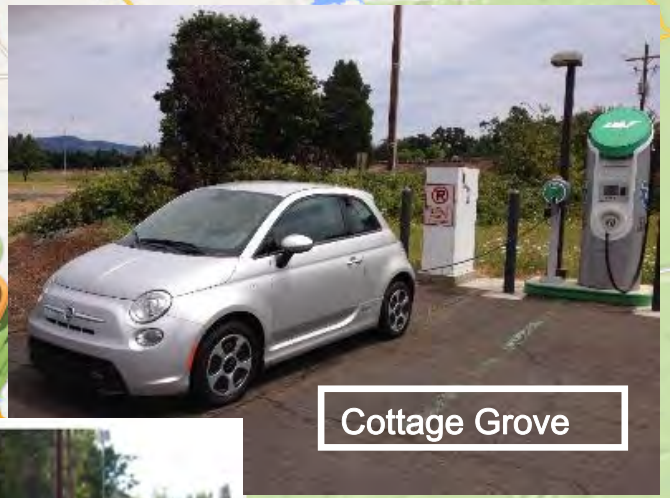
Model	Technology	MSRP for Base Model (after Federal tax credit)	Lease Rates
Smart ForTwo Electric Drive	Battery Electric	$12,490	$139/mo
Mitsubishi i	Battery Electric	$15,495	N/A
Chevy Spark EV	Battery Electric	$19,995	$199/mo
Nissan Leaf	Battery Electric	$21,300	$199/mo
Fiat 500e	Battery Electric	$24,300	$199/mo
Chevy Volt	Plug-in Hybrid Electric	$26,685	$269/mo
Toyota Prius Plug-in Hybrid	Plug-in Hybrid Electric	$27,490	N/A
Ford Focus Electric	Battery Electric	$27,700	$175/mo
Ford C-MAX Energi Plug-In Hybrid	Plug-in Hybrid Electric	$28,943	$240/mo

ACTION #5

Promote workplace charging

Lane Community College EV Charging Stations

LRAPA EV Charging Stations



ACTION #6

Promote ZEV infrastructure planning and investment by public and private entities

ACTION #7

Provide clear and accurate signage to direct ZEV users to charging and fueling stations and parking

ACTION #8

Remove barriers to ZEV charging and fueling station installations

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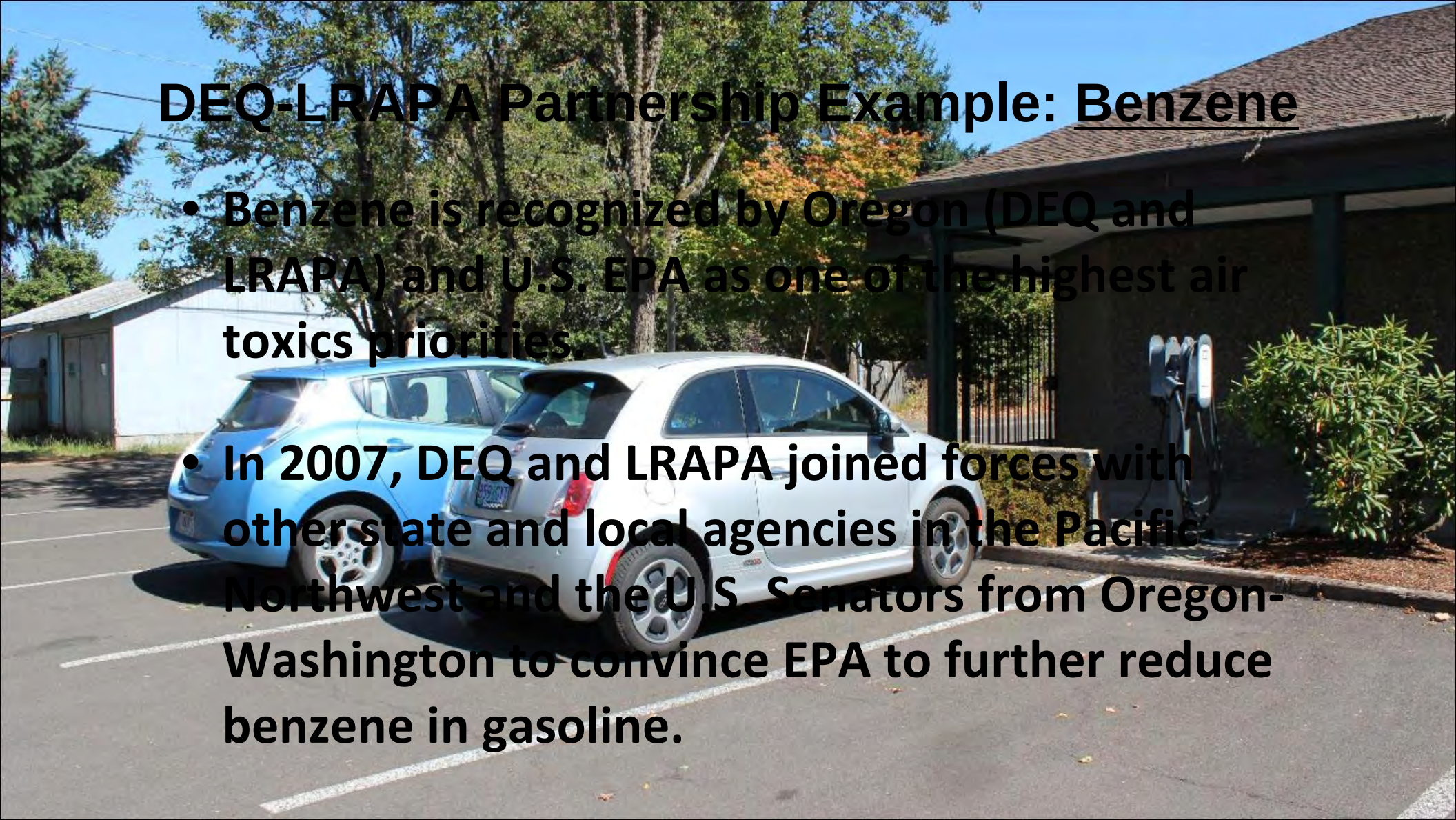
The 2017 electric vehicle game changers!



DEQ-LRAPA Partnership Example: Benzene

- Benzene is recognized by Oregon (DEQ and LRAPA) and U.S. EPA as one of the highest air toxics priorities.
- In 2007, DEQ and LRAPA joined forces with other state and local agencies in the Pacific Northwest and the U.S. Senators from Oregon-Washington to convince EPA to further reduce benzene in gasoline.

United States Senate

WASHINGTON, DC 20510

January 12, 2007

The Honorable Stephen L. Johnson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Administrator Johnson:

We are writing to you to highlight the many concerns that our state environmental agencies and constituents have raised regarding the Environmental Protection Agency's (EPA's) proposed Mobile Sources Air Toxics rule. As these comments point out, the structure of the proposed rule fails to ensure that the high levels of benzene now present in gasoline in our region will be significantly reduced.

Given the small incremental cost per gallon of implementing a maximum average annual benzene standard at 1.3% by volume, how did EPA reach the conclusion that it was not cost effective to impose such a standard?

If you or your staff have any questions concerning this letter please contact David Berick with Senator Wyden at 202-224-5244, Valerie West with Senator Smith at 202-224-3753, Jamie Shimek with Senator Murray at 202-224-2621, and Amit Ronen with Senator Cantwell at 202-224-3441.

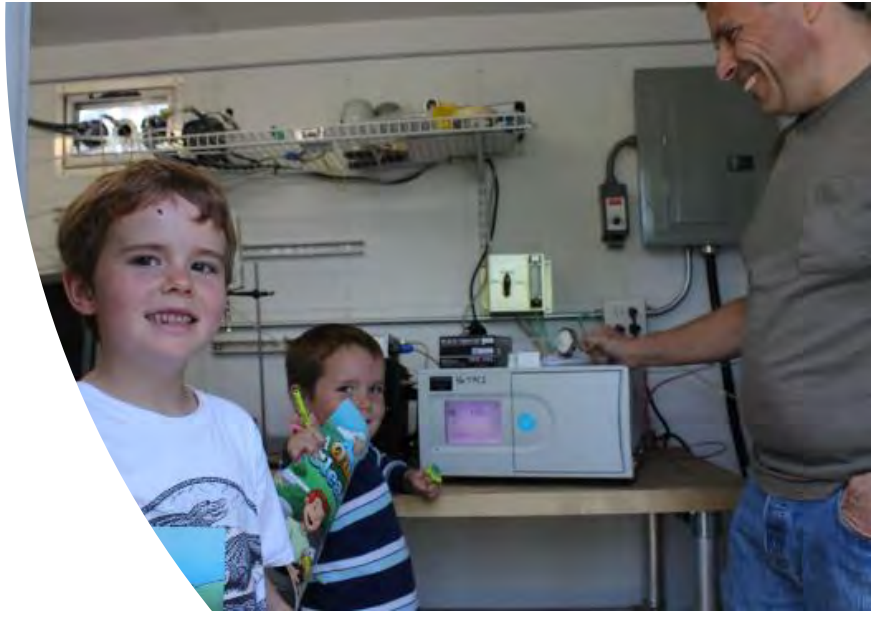
Sincerely,

Ron Wyden
United States Senator

Gordon H. Smith
United States Senator

Patty Murray
United States Senator

Maria Cantwell
United States Senator



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