

# 2015 Oregon Annual Ambient Air Monitoring Network Plan

Submitted to: Environmental Protection Agency, Region 10.

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State of Oregon  
Department of  
Environmental  
Quality

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

# 2015 Oregon Annual Ambient Air Monitoring Network Plan

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# 2015 Oregon Annual Ambient Air Monitoring Network Plan

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## Glossary of Air Quality Terms

AQI	Air Quality Index – standardized EPA method of reporting air quality
CO	Carbon monoxide – An odorless, colorless gaseous pollutant
DV	Design Value – the pollutant concentration used to compare to the NAAQS
FEM	Federal Equivalence Method (Method approved for comparison to NAAQS)
FRM	Federal Reference Method (Method approved for comparison to NAAQS)
HAPs	Hazardous Air Pollutant as defined in Title III of the Clean Air Act
IMPROVE	EPA's PM <sub>2.5</sub> speciation visibility network
NAAQS	National Ambient Air Quality Standards – federal air quality standards
NATTS	National Air Toxics Trends network
NO	Nitrogen oxide
NO <sub>2</sub>	Nitrogen dioxide
NOx	Nitrogen oxides – redish brown gaseous pollutant - mainly NO and NO <sub>2</sub>
NOy	NOx + HNO <sub>3</sub> + organic nitrates + inorganic nitrates = NOx + NOz
O <sub>3</sub>	Ozone – a gaseous pollutant and a component of smog at ground level
PM <sub>2.5</sub>	Particulate Matter 2.5 micrometers in diameter and smaller
PM <sub>10</sub>	Particulate Matter 10 micrometers in diameter and smaller
PM <sub>10-2.5</sub>	The particle size between 10 and 2.5.
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
TSP	Total Suspended Particulates
VOC	Volatile Organic Compounds
WAQR	Wildfire Air Quality Rating - wildfire smoke health internet page

### Air Pollutant Concentration Units:

ppm	Parts per million
ppb	Parts per billion
µg/m <sup>3</sup>	Microgram per cubic meter
ng/m <sup>3</sup>	Nanograms per cubic meter

## Executive Summary

In 2015/2016 the following changes will be made to the monitoring network upon approval from EPA.

### Burns PM2.5 FRM site sampling change

The 2012-14 PM2.5 daily design value is no longer <5% of the NAAQS so DEQ will go from daily sampling back to every third day following the acceptance of this plan.

### La Grande National Air Toxics Trends Site Move

The monitor is being impacted from a chimney next door and needs to be moved to a more representative area. A new location has been found in an open field on next to a playground. The new location is downwind of the central business district and will measure air where people work, live, and play.

### Portland N. Roselawn National Air Toxics Trends Site Move

A three story condominium complex is being built directly next to the monitoring site (within 30 feet) and it will block wind flow from the north and west. The condominiums may also contribute woodstove or barbeque smoke directly into the monitor. These sources are too close to the monitor and will not represent the neighborhood.

Network changes not requiring EPA approval:

### Gresham Air Toxics Assessment

The state funded air toxic site will move to Gresham, in or around the spring of 2015 and operate for at least one year. Gresham was the next city identified in the 2010 five year monitoring plan to be assessed for air toxics. This site will also have wind speed and wind direction and PM2.5 estimate.

### Expand the Willamette Field Burning Network to Mill City and Detroit Lake

The Oregon Department of Agriculture and Oregon DEQ have agree to add Mill City and Detroit Lakes to the Willamette Valley field burning network which operates from July into October. The current network includes Silverton, Salem, and Lyons. The new sites will enable ODA to monitor field burning smoke impacts further east up the Santiam Pass.

## 1. Purpose

Code of Federal regulations, 40 CFR 58.10, requires the state and local air quality surveillance agencies to write an annual ambient air quality monitoring network plan. EPA requires the plan to be put out for public comment and submitted to EPA by July 1<sup>st</sup>. This report is used to determine if the network meets the monitoring objectives defined in Part 58, Appendix D and to propose modifications to the network in the following year. A more detailed air quality data summary is available annually at <http://www.deq.state.or.us/aq/forms/annrpt.htm> .

## 2. Introduction

The Oregon Department of Environmental Quality's (ODEQ) ambient air quality monitoring network is designed in response to the Environmental Protection Agency's (EPA) National Monitoring Strategy, state and local needs, the requirements of air quality maintenance plans and the State Implementation Plans (SIPs) for non-attainment areas, and CFR requirements.

### 2.1 National Monitoring Strategy

The National Monitoring Strategy directs state and local agencies to operate more continuous monitors and to collect real time air quality data. The real time information is available through EPA's AIRNow and ODEQ's Air Quality Index (AQI) web pages. In particular, EPA encouraged states to use continuous PM<sub>2.5</sub> monitors instead of the filter base samplers which do not provide real time information. The National Monitoring Strategy also created National Core (NCORE) sites which contain a wide array of pollutant monitoring. ODEQ's NCORE site has monitors for Carbon monoxide (CO), Nitrogen oxides (NOx), Sulfur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter 2.5 and 10 micrometers in diameter and smaller (PM<sub>2.5</sub> and PM<sub>10</sub>), PM coarse (PM<sub>10</sub>-PM<sub>2.5</sub>=PMc), PM<sub>2.5</sub> Speciation, visibility, and meteorology. The NCORE site is at SE Lafayette, Portland.

#### 2.1.1 State and Local Support

Our monitors support state and local needs by providing data for the Air Quality Index, local wood stove management programs, Clean Air Quality Advisories, the Department of Agriculture's field burning program, and the US Forest Service and BLM's forest health program. ODEQ also operates a visibility network in the Cascades and near the Eagle Cap wilderness to support Regional Haze requirements protecting pristine Class 1 areas.

#### 2.1.2 AQ Maintenance and Non-attainment support

ODEQ monitoring supports the SIPs and maintenance plans developed for many cities. ODEQ also has monitors in attainment areas with fast growing populations to support pollution prevention measures.

## 2.2 Non-attainment and Maintenance Areas

Areas are designated attainment or non-attainment a few years after a standard is issued. If an area exceeds the standard a State Implementation Plan (SIP) is written to bring the area into attainment. After monitoring shows a non-attainment area has reached attainment, a maintenance plan is created to keep it there. Oregon's non-attainment and maintenance areas are below.

### 2.2.1 Non-attainment Areas:

PM<sub>2.5</sub>            Klamath Falls Urban Growth Boundary (moving to maintenance designation)  
Oakridge Urban Growth Boundary

### 2.2.2 Maintenance Areas in Oregon (formerly non-attainment areas):

CO:                Grants Pass Central Business District  
Portland Metropolitan Service District Boundary  
Klamath Falls Urban Growth Boundary  
Medford Urban Growth Boundary  
Salem-Kaiser Area Transportation Study

PM<sub>10</sub>:            Grants Pass Urban Growth Boundary  
Klamath Falls Urban Growth Boundary  
Medford-Ashland Air Quality Maintenance Area  
La Grande Urban Growth Boundary  
Lakeview Urban Growth Boundary  
Eugene/Springfield Urban Growth Area  
Oakridge Urban Growth Boundary

Ozone (1hr): Portland/Vancouver AQMA

# 3. Overview of Network Operations

## 3.1 Air Monitoring Network Design

### Site Type and Spatial Scale

Federal regulations, specifically 40 CFR Part 58, Appendix D, require that a State and Local Air Monitoring (SLAMS) network be designed to meet a minimum of three basic monitoring objectives: Provide air pollution data to the public in a timely manner, support compliance with the National Ambient Air Quality Standards (NAAQS), and support air pollution research. A variety of site types are needed to support these basic objectives, including the six general types identified in Appendix D.

1. Sites located to determine the **highest concentrations** expected to occur in the area covered by the network.
2. Sites located to measure typical **concentrations in areas of high population** density.
3. Sites located to determine the **impact of significant sources** or source categories on air quality.
4. Sites located to determine general **background concentration** levels.
5. Sites located to determine the extent of **regional pollutant transport** among populated areas; and in support of secondary standards.
6. Sites located to measure air pollution **impacts on visibility, vegetation damage**, or other welfare-based impacts.

The physical siting of air monitoring station must conform to 40 CFR Part 58 and its location must achieve a spatial scale of representativeness that is consistent with the monitoring objective and site type. The spatial scale results from the physical location of the site with respect to the pollutant sources and categories. It estimates the size of the area surrounding the monitoring site that experiences uniform pollutant concentrations. The categories of spatial scale are:

1. Microscale—Defines the concentrations in air volumes associated with area dimensions ranging from several meters up to about 100 meters.
2. Middle scale—Defines the concentration typical of areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometer.
3. Neighborhood scale—Defines concentrations within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers range. The neighborhood and urban scales listed below have the potential to overlap in applications that concern secondarily formed or homogeneously distributed air pollutants.

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4. Urban scale—Defines concentrations within an area of city-like dimensions, on the order of 4 to 50 kilometers. Within a city, the geographic placement of sources may result in there being no single site that can be said to represent air quality on an urban scale.
5. Regional scale—Defines usually a rural area of reasonably homogeneous geography without large sources, and extends from tens to hundreds of kilometers.
6. National and global scales—These measurement scales represent concentrations characterizing the nation and the globe as a whole.

Table 1. Relationship Among Site Type and Scale of Representativeness

<b>Site Type</b>	<b>Appropriate Spatial Scale</b>
Highest Concentration	Micro, Middle, Neighborhood (sometimes urban)
Population Exposure	Middle, Neighborhood, Urban
Source Oriented	Micro, Middle, Neighborhood
General/Background	Neighborhood, Urban, Regional
Welfare-related Impacts	Urban, Regional



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Table 2 Table of ODEQ and LRAPA Ambient Air Monitoring Network

City	Site	SO <sub>2</sub>	CO	NO <sub>2</sub>	O <sub>3</sub>	PM Estimate	HAPS	PM <sub>10</sub>	PM <sub>2.5</sub>	Spec	Lead	WS/WD	Temp	DT	BP	RH	SR
Albany	Calapooia School					X											
Applegate Vly	Provolt					X											
Bend	Bend Rd Dept				X							X	X		X	X	X
	Bend Pump Station					X											
Baker City	Forest Service					X											
Burns	E. Washington St.					X			X			X	X		X	X	X
Cave Junction	Forest Service					X											
Corvallis	Intermediate School					X											
Cottage Grove	City Shops					X			X								
Cove	City Hall					X						X	X				
Crater Lake	Maintenance Area					X											
Enterprise	Forest Service					X											
Eugene	Pacific Hwy 99N					X	X	X	X		X						
	Amazon Park				X	X	X		X		X						
Saginaw Springfield	Wilkes Drive											X	X				
	Delight Valley Sch Rd				X												
Springfield	City Hall					X			X			X					
Grants Pass	Parkside School					X			X		X	X		X			
Hermiston	Municipal Airport				X							X	X				
John Day	Davidson Street					X											
Klamath Falls	Clinton St, Peterson Sch					X			X	X		X	X	X	X	X	
La Grande	Ash Street					X	X	X			X	X	X		X	X	
Lakeview	Center & M Streets					X			X			X	X		X		
Lyons	Marylynn School					X											
Madras	Westside School					X											
Medford	Welch & Jackson Sts							X									
	Grant & Belmont Sts					X			X								
	Talent				X	X											
	Rossanley Drive											X	X	X	X	X	X
Eagle Cap	Mt Fanny					X											
Mt. Hood	Multopor					X											
Oakridge	School Street					X		X	X		X	X					
Pendleton	SW Marshall Place					X					X	X		X			

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City	Site	SO <sub>2</sub>	CO	NO <sub>2</sub>	O <sub>3</sub>	VIS/PM	HAPS	PM <sub>10</sub>	PM <sub>2.5</sub>	Spec	TSP Pb	WS/WD	Temp	DT	BP	RH	SR
Portland	N. Stafford St.						X	X				X	X	X			
	St. Johns, Sitton Elementary						X	X				X					
	SE Lafayette & 58 <sup>th</sup> Sts	X	X	X	X	X		X	X	X		X	X	X	X	X	X
	Near Roadway Site		X	X	X		X*		X			X	X			X	
	N Roselawn						X										
	N Kirby, Jefferson High											X					
<i>Beaverton</i>	Highland Park School					X											
<i>Carus</i>	Spangler Road				X	X						X	X				
<i>Hillsboro</i>	NE Grant St.					X			X	X							
<i>Gresham</i>	Gresham						X	X				X	X				
<i>Sauvie Is</i>	Route 1 Box 442				X	X						X	X				
<i>Sherwood</i>	SW Lasich Lane				X							X	X		X	X	X
Prineville	SE Court Street					X			X	X		X	X		X	X	X
Roseburg	NW Garden Valley Blvd					X											
Salem	Salem State Hospital					X											
<i>Turner</i>	Cascade Jr. High				X							X	X				
Silverton	James & Western Sts.					X						X	X				
Sisters	Forest Service					X											
Shady Cove	Shady Cove School					X											
Sweet Home	Fire Department					X											
The Dalles	Cherry Heights					X											

\* The roadway site's HAP monitoring is only black carbon monitoring (used as a diesel PM surrogate).

**Key:**

**Gasses:**

SO<sub>2</sub> = Sulfur dioxide    CO = Carbon Monoxide    NO<sub>2</sub> = Nitrogen dioxide    O<sub>3</sub> = ozone

**Particulates:**

PM Estimate = PM<sub>2.5</sub> estimated using nephelometers

PM<sub>10</sub> = Particulate Matter 10 microns in diameter or smaller

PM<sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or smaller

Spec = PM<sub>2.5</sub> chemical speciation,

Lead = PM<sub>10</sub> lead,

**Meteorology monitors:**

WS/WD = Wind speed and direction,

Temp = outdoor temperature at 2 meters,

DT = Delta (difference) in Temperature at 2 and 10 meters,

BP = Barometric Pressure,    RH = Relative Humidity,    SR = solar radiation

**Other:**

HAPS = Hazardous air pollutants or air toxics

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## 3.2.1 Ozone Network

Oregon DEQ and LRAPA have 11 monitoring sites. Five in the Portland-Metro area, one in Salem, Two in Eugene-Springfield, one in the Medford-Ashland area, one in Hermiston, and one in Bend. Maps of the network are shown below.

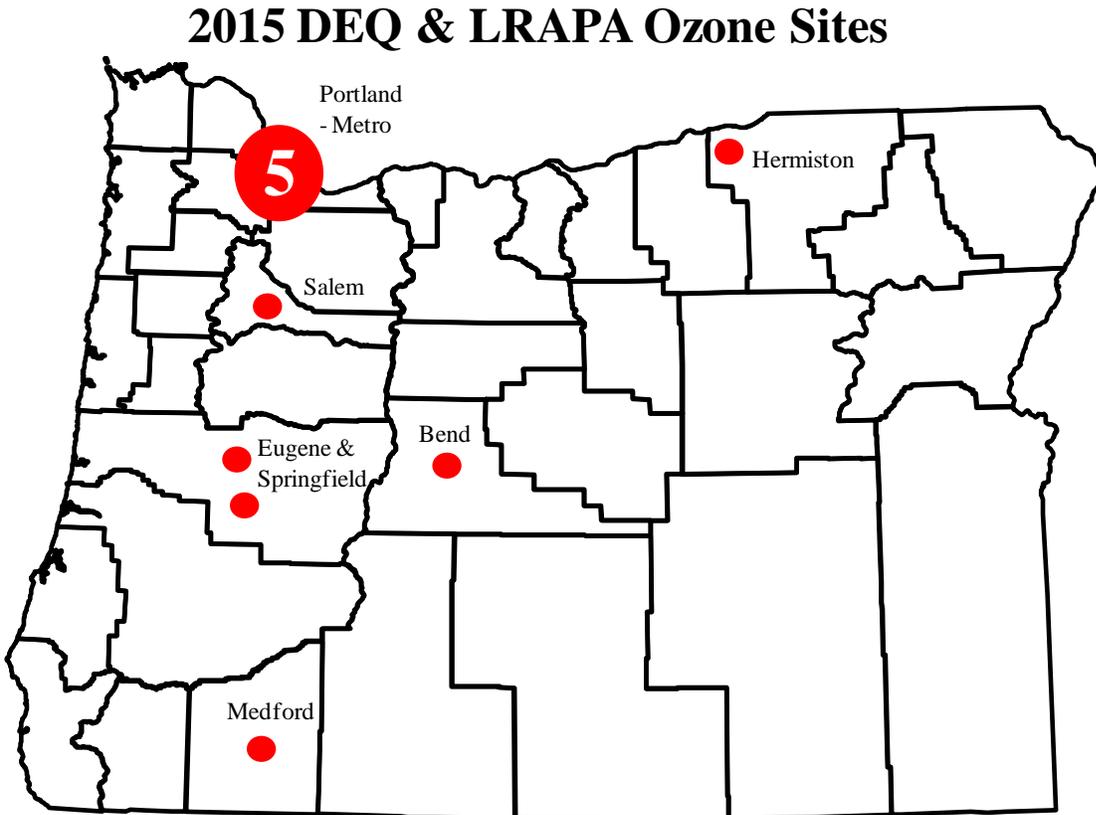


Figure 2. Ozone Monitoring Network

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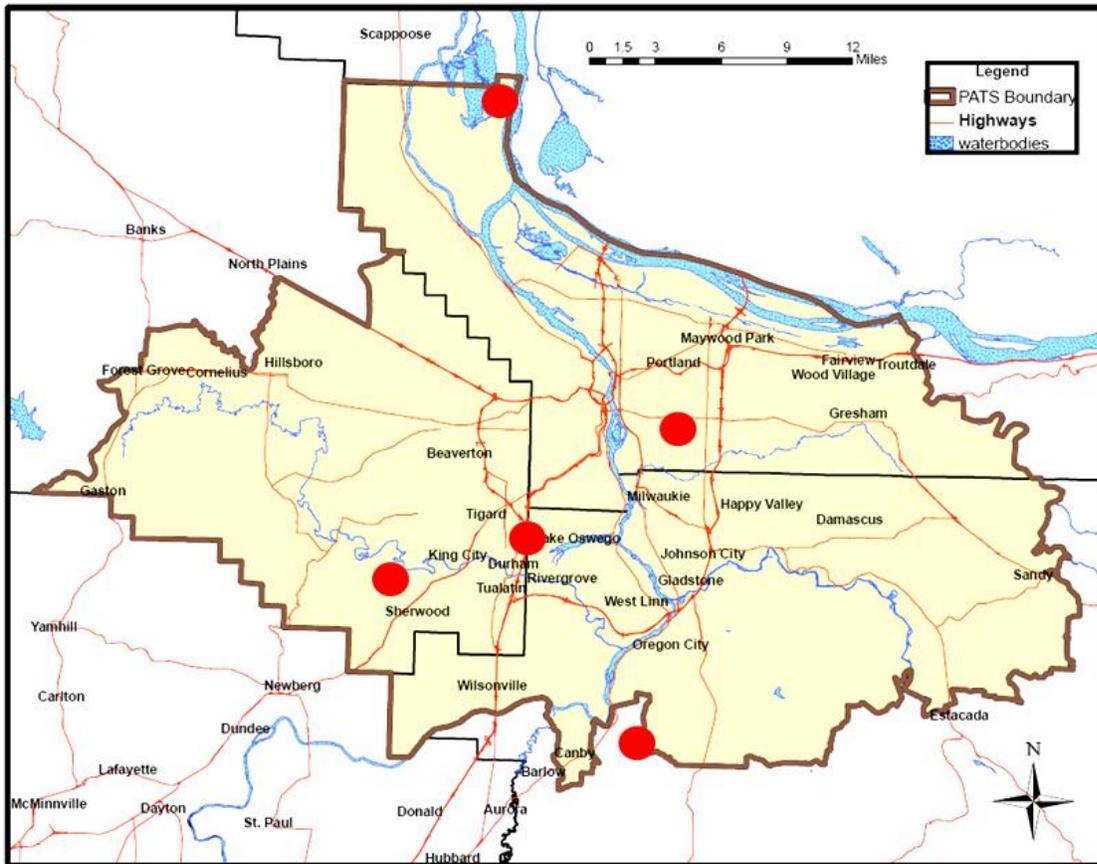


Figure 3. Portland- Metro Ozone Monitoring Sites.

## Changes to the Ozone network in the past year

- 1) No changes.

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## 3.2.2 Nitrogen Dioxide Network

Oregon DEQ has two monitoring sites both in the Portland-Metro area. One is a community scale site located in SE Portland. The other is the near roadway site which measures vehicle contributions to NO<sub>2</sub>. LRAPA has no monitoring sites.

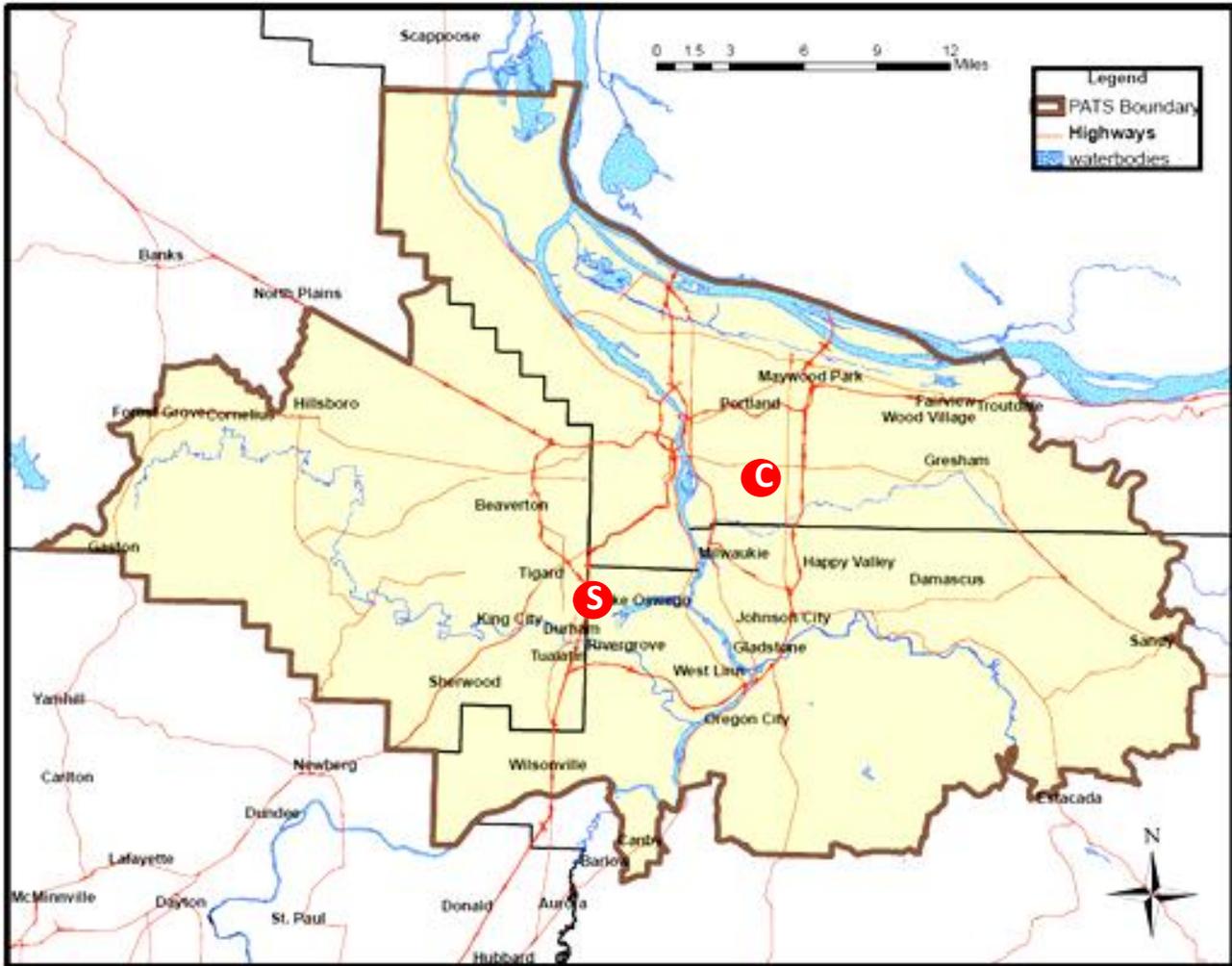


Figure 4. NO<sub>2</sub> Monitoring Network  
S = Source monitor (measuring I-5)  
C = Community monitor (Measuring in neighborhood)

### Changes to the NO<sub>2</sub> network in the past year

- 1) No changes.

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## 3.2.3 Carbon monoxide Network

Oregon DEQ has two monitoring sites both in the Portland-Metro area. One is a community scale site located in SE Portland. The other is the near roadway site which measures vehicle contributions to CO.

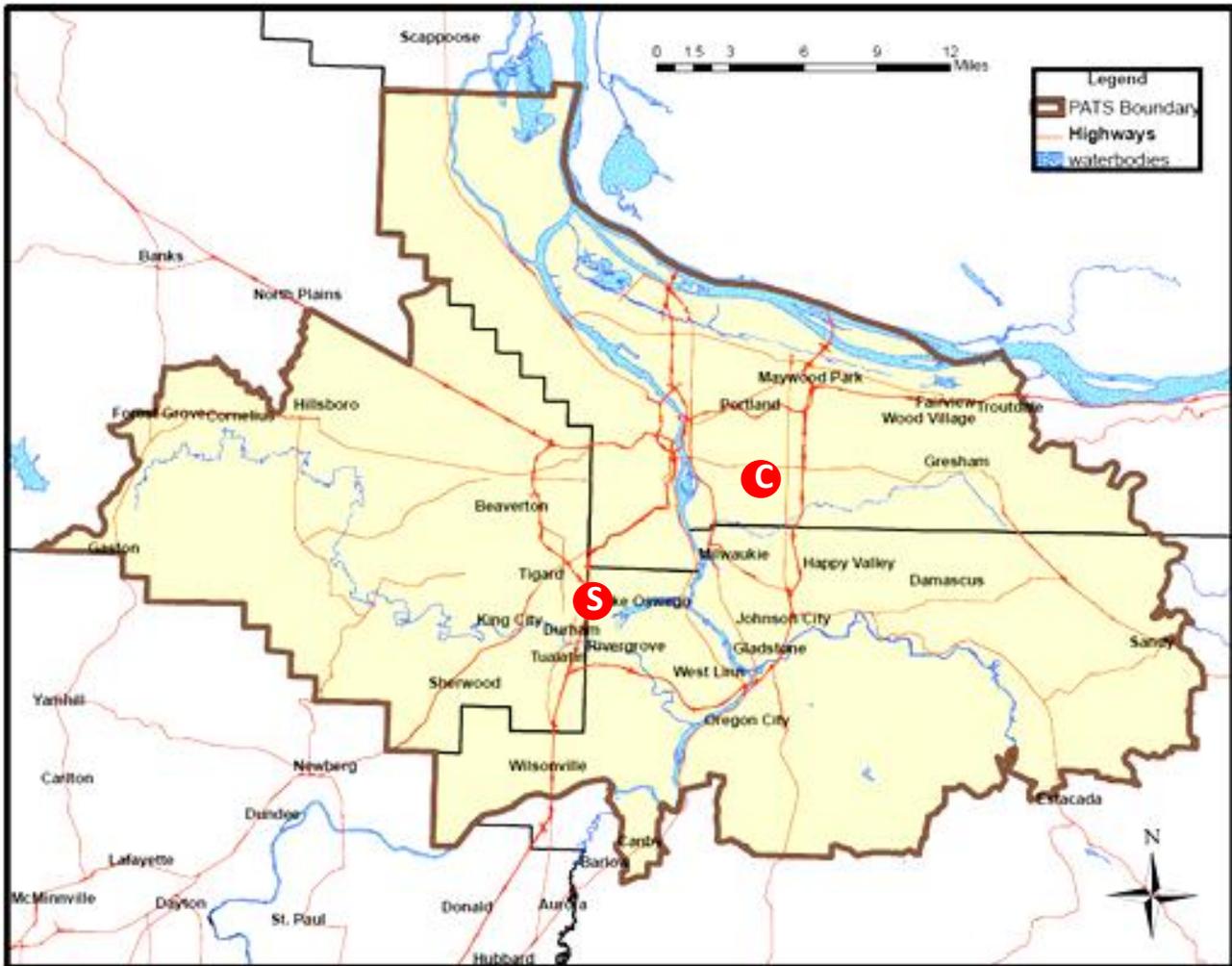


Figure 5. CO Monitoring Network  
S = Source monitor (measuring I-5)  
C = Community monitor (Measuring in neighborhood)

### Changes to the CO network in the past year

- 1) No changes.

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### 3.2.4 PM<sub>2.5</sub> Network

Oregon DEQ and LRAPA have 12 NCORE or SLAMS Federal Reference Monitoring (FRM) sites. Two in the Portland-Metro area, two in Eugene, and one each in Oakridge, Cottage Grove, Grants Pass, Medford, Klamath Falls, Lakeview, and Prineville. LRAPA operates one special purpose FRM site in Springfield. DEQ has four PM<sub>2.5</sub> speciation sites. One in SE Portland (the trend site), one in Hillsboro, one in Prineville, and one in Klamath Falls.

### 2015 Oregon PM<sub>2.5</sub> NAAQS Compliance Monitoring Network

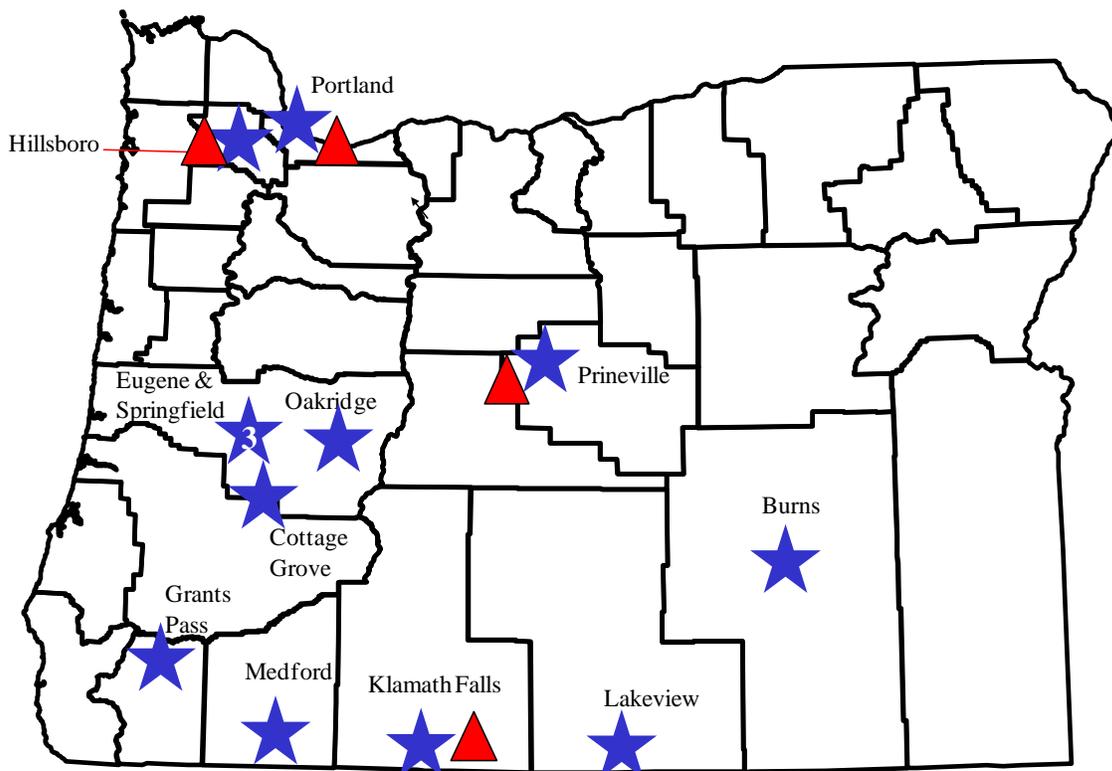


Figure 6. PM<sub>2.5</sub> Monitoring Network

#### Changes to the PM<sub>2.5</sub> network in the past year

1) PM<sub>2.5</sub> was added to the Near Roadway site on January 1<sup>st</sup>, 2015. The site is next to Interstate-5 and will measure the contribution of heavy traffic to PM<sub>2.5</sub> pollution. The PM<sub>2.5</sub> is co located with other pollutant monitors so the interaction of the different pollutants can be measured.

2) The PM<sub>2.5</sub> speciation sampler was moved from Lakeview (41-037-0001) to Hillsboro (41-067-0004) because DEQ had enough speciation data for Lakeview for now and needed to determine the composition of the elevated PM<sub>2.5</sub> in Hillsboro is. This is not required by EPA and not subject to their approval.

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3) The PM<sub>2.5</sub> speciation sampler at Eugene, Hwy 99 was discontinued in February, 2015 because LRAPA had enough speciation data to determine the composition of the PM<sub>2.5</sub> in the area. The sampler is slated to be set up Prineville in the summer of 2015. This is not required by EPA and not subject to their approval.

3) Burns (41-025-0003) had a 2011 to 2013 daily design value that was within 5% of the NAAQS so the sampling schedule changed from every third day to daily. This change took place on January 1, 2015.

### 3.2.5 PM<sub>10</sub> Network

Oregon DEQ and LRAPA have seven Federal Reference monitoring sites. Two are in the Portland-Metro area, one each in Eugene-Springfield, Oakridge, Medford, and La Grande. Three additional PM<sub>10</sub> sites are in the Portland Metro area as a benefit from running Air Toxics.

### 2015 DEQ & LRAPA FRM PM<sub>10</sub> Network

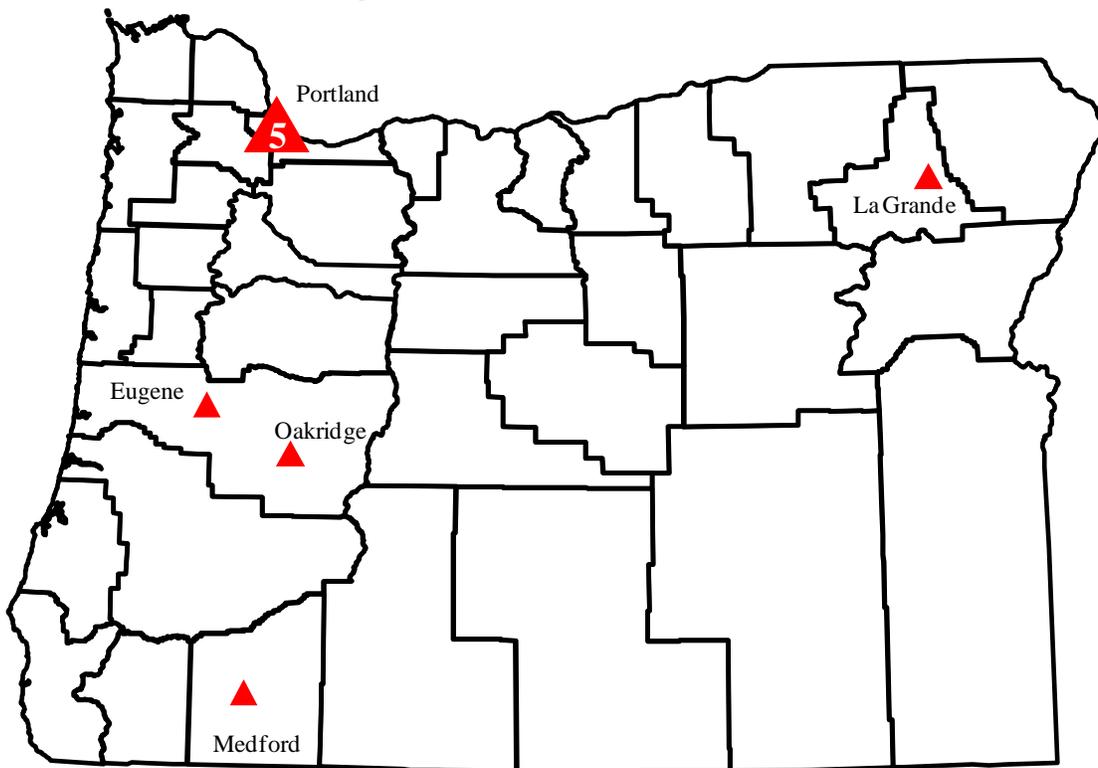


Figure 7. PM<sub>10</sub> Monitoring Network

#### Changes to the PM<sub>10</sub> network in the past year

1) The special purpose PM<sub>10</sub> monitor at Hillsboro (part of the Air Toxics metals) was shut down and will be moved to Gresham. This is not required by EPA and not subject to their approval.

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

2) A special purpose PM10 monitor was started in North Portland, near Swan Island, as part of the air toxics assessment of the impact of Swan Island industry on the adjacent neighborhood. This is not required by EPA and not subject to their approval.

3) A special purpose PM10 monitor was started in North Portland, in the St. Johns neighborhood, as part of the air toxics metals assessment of nearby industry on that neighborhood. This is not required by EPA and not subject to their approval.

### 3.2.6 PM10-2.5 Network

Oregon DEQ has one PM10-2.5 Federal Reference monitoring site, and it is in Portland. LRAPA has two collocated PM10 and PM2.5 monitors that are used for PM10-2.5 for informational purposes, one in Eugene and one in Oakridge. LRAPA PM10-2.5 is not required by EPA and changes to these data are not subject to EPA approval. The LRAPA sites are not required by EPA and not subject to their approval.

### 2015 DEQ & LRAPA FRM PM10-2.5 Network

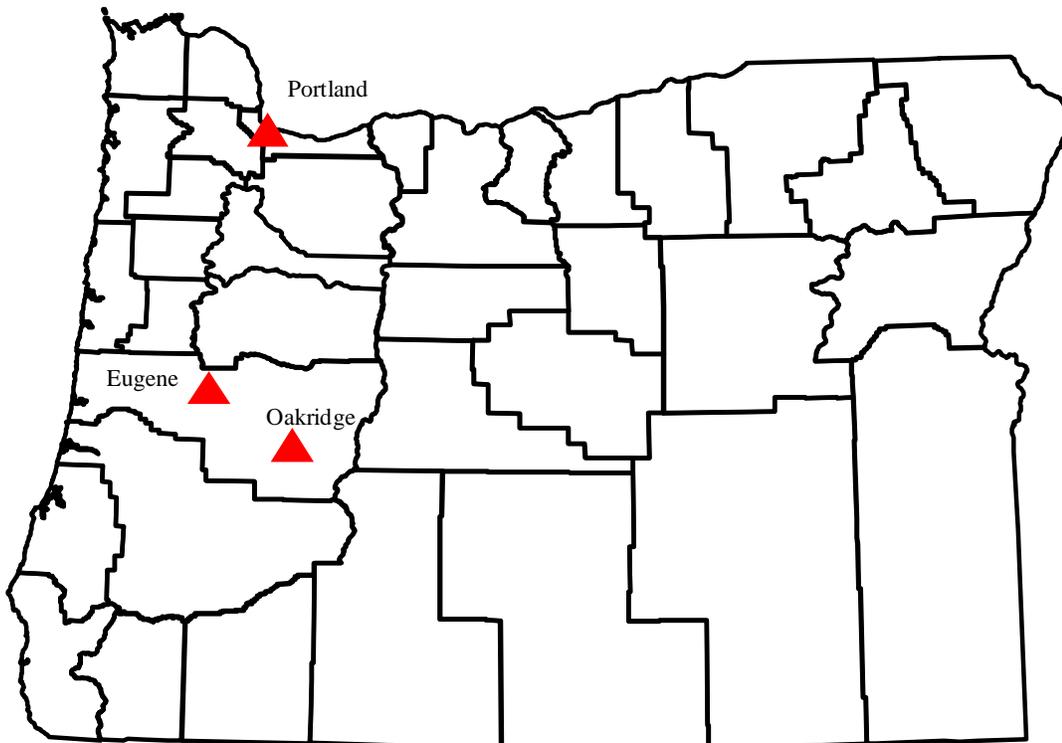


Figure 8. PM10-2.5 Network

Changes to the PM10-2.5 network in the past year: No changes.

### 3.2.7 PM10 Lead Network

Oregon has one Federal Reference monitoring site, and it is in Portland.

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Changes to the PM10 network in the past year: No changes.

## 3.2.8 Sulfur Dioxide (SO2) Network

Oregon has one SO2 site, and it is in Portland. The site is for community monitoring. There are no sources in Oregon that require SO2 monitoring at this time.

Changes to the SO2 network in the past year: No changes.

## 3.3 Overview of Non- Federal Reference Monitoring

### 3.3.1 Air Toxics Network

Oregon DEQ has two National Air Toxics Trends sites, one in N. Portland and one in La Grande. In addition, Oregon has one air shed assessment site which will operate in Gresham during 2015-2016 and one source assessment site which is currently operating in North Portland next to Swan Island. The purpose of these sites are to move around the state assessing the air toxics levels in different communities. The Trend sites are funded by EPA and DEQ needs EPA approval to make any changes to the approved monitoring. The assessment sites are state funded and DEQ does not need EPA approval to move or change the monitoring. DEQ will submit any changes to the assessment sites in the Annual Network Plan for public comment and input.

### 2015 DEQ AIR TOXICS Network

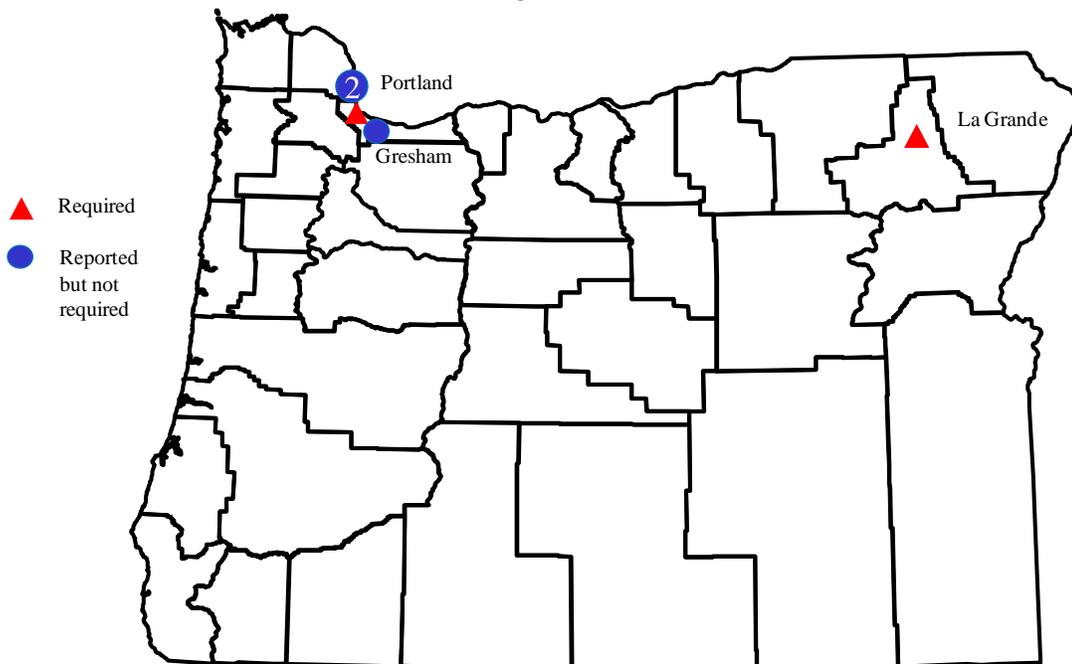


Figure 9. Air Toxics Network

Changes to the air toxics network in the past year: No changes.

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## 3.3.2 PM2.5 Air Quality Index Network

Oregon has a network of PM2.5 real time monitors that are used for hourly reporting of air quality for the Air Quality Index (AQI). The AQI is used by health officials, forestry managers, and the public to get timely information about air quality health levels. The data is also sent to EPA's AIRNow AQI web page which combines all the states and tribal AQIs in one place. The AQI data is also loaded to the Oregon Smoke Blog which provides emergency information during forest fire smoke inundations.

Oregon and LRAPA have 28 annual PM2.5 AQI sites and an additional nine summer AQI sites. DEQ partners with other government agencies to provide AQI information and sharing resources. Around 10 of these sites are funded by the USFS and BLM. Three of these summer sites are funded by the Oregon Dept. of Ag. for field burning. One summer site each is funded by Jefferson and Union Counties for field burning. DEQ does not need to request EPA approval for changes to non-EPA funded AQI sites but will submit any changes in the Annual Network Plan for public comment and input.

## 2015 Oregon PM2.5 Air Quality Index Monitoring Network

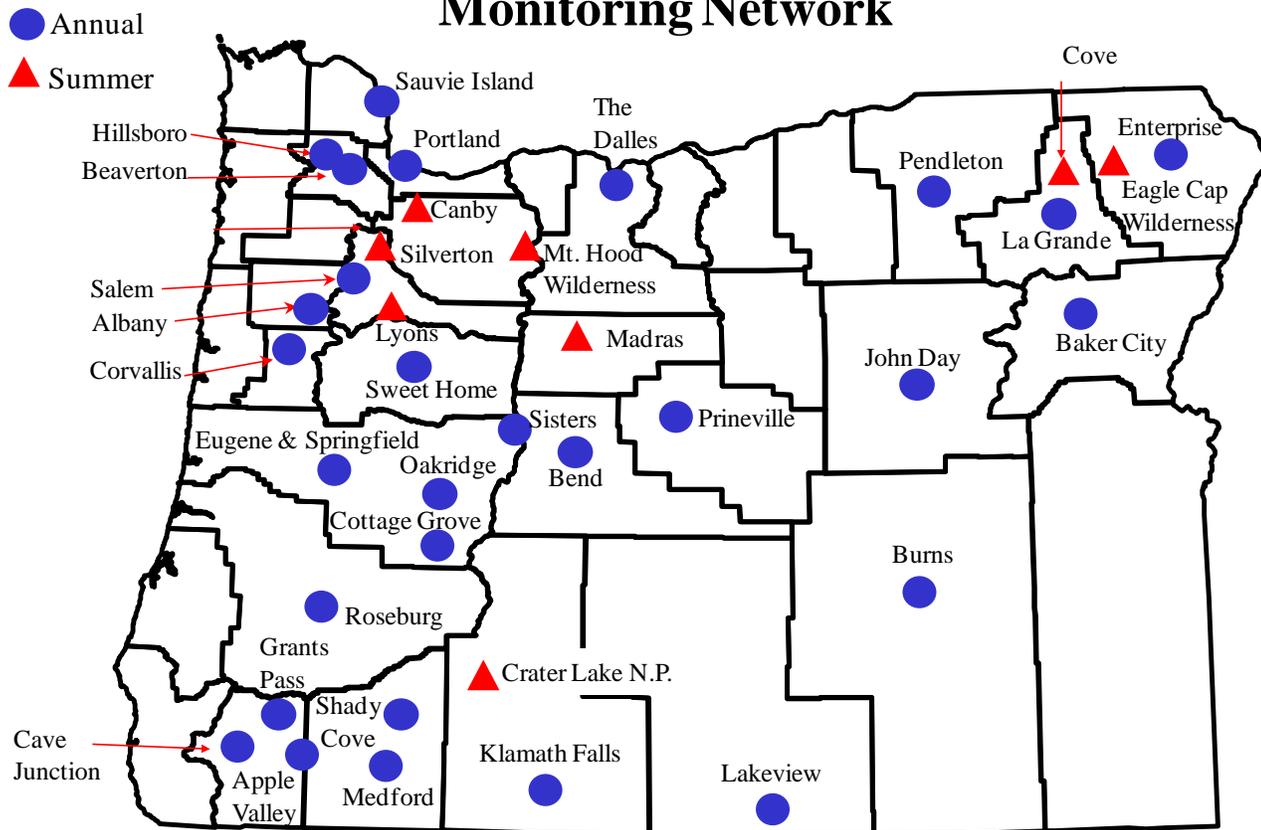


Figure 10. PM2.5 AQI Network

Changes to the PM2.5 AQI Network in the past year: No changes.

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## 3.3.3 Meteorology Network

Oregon DEQ and LRAPA operate a meteorology (met) network in support of the criteria and air toxics pollutant networks. The met network provides modelers, forecasters, and local health officials with information on origin of pollutant emissions and pollutant movement. DEQ does not need to request EPA approval for changes to met network sites but will submit any changes in the Annual Network Plan for public comment and input.

### 2015 DEQ & LRAPA Meteorology Network

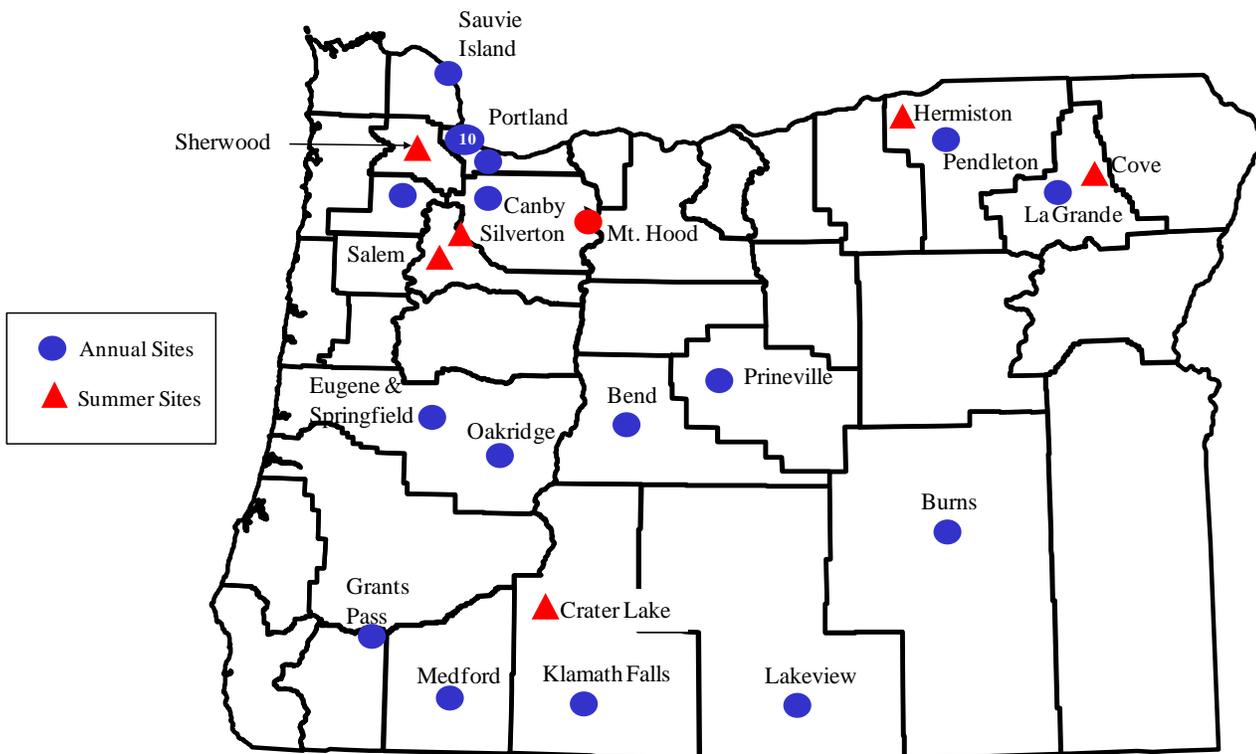


Figure 11. Meteorology Network

Changes to the Meteorological Network in the past year: Seven wind direction and wind speed sensors were placed around Swan Island in Portland as part of the Swan Island air toxics monitoring project. One met system was placed in Portland St. Johns as part of the St. Johns air toxics metals monitoring project. These are not required by EPA and not subject to their approval.

# 4. Planned Changes to Network

All major modifications to the ambient air quality monitoring network required by EPA are submitted to the regional administrator for review and approval in the network assessment. Changes that do not require EPA approval are also mentioned for informational purposes.

## 4.1 Changes to the PM<sub>2.5</sub> Monitoring Network

The Burns, Washington St site (41-025-0003) had a 2012-2014, three year average 98th percentile is  $31.4\mu\text{g}/\text{m}^3$  which is 12% below the daily standard. In January 2015 DEQ had to adjust the sampling to daily because the 2011-13 design value was <5% of the NAAQS (CFR40Part 58.12 d(1)(iii)). DEQ requests EPA approval to change back from daily to every third day sampling.

## 4.2 Changes to the Air Toxics Monitoring Network

### 4.2.1 La Grande National Air Toxics Trends site move

DEQ would like to move the La Grande Ash Street (LAS) site (41-061-0119) 2.2 Kilometers to the southeast for three reasons.

#### 1. Nearby Chimney impacts

The La Grande Street site is being impacted from nearby chimneys during the winter. There is a chimney that is 16 meters to the north of the site that is likely impacting the monitored data. This was never an ideal location but the chimney was only used sporadically in the past and did not impact the site. About a year ago, the woodstove usage seems to have increased and the nephelometer shows much more frequent spiky data. Spiky data occurs when particulate in a high concentration comes in contact with the probe suddenly then disappears suddenly. This occurs when a nearby plume of smoke hits then moves away much like it does at a campfire when you constantly have to move to stay out of the smoke. There are other chimneys further away that could possibly impact the monitor and auto repair activity next door that could be a source of VOCs.

The map below shows the current location of the monitoring site (LAS Station) and the nearby chimneys and auto repair area. Until a couple of years ago, these nearby sources seemed to be mostly inactive. Now the real time nephelometer data shows rapid increases and decreases (spikes) indicating that a nearby source is impacting the site. The picture below the map shows the nearest chimney where we suspect the smoke is coming from.

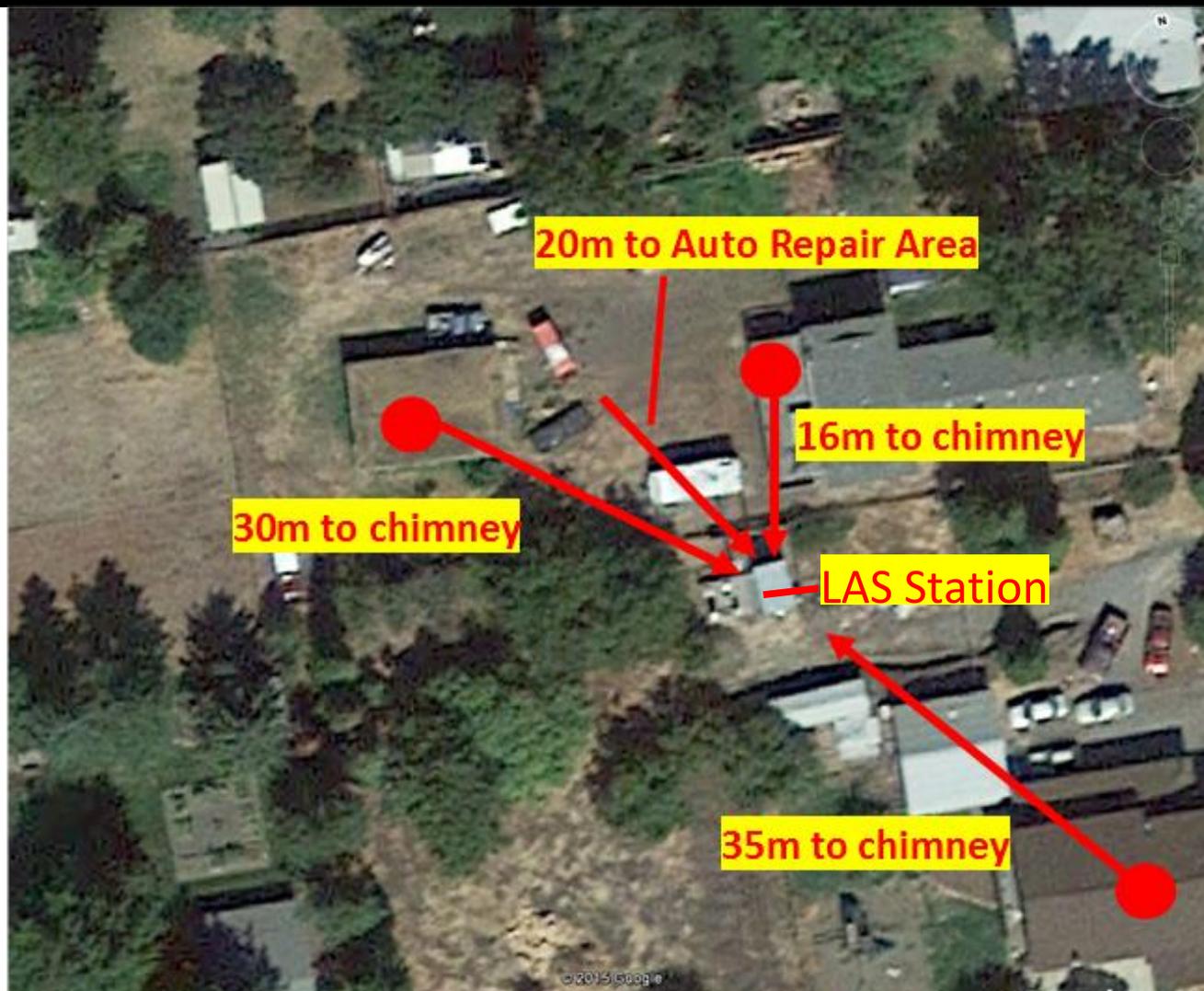


Figure 12. La Grande Ash Street monitoring station and nearby air quality pollutant sources.



Figure 13. Photo of nearest chimney from LAS deck.  
*The chimney is 16 meters to the north of the monitoring site.*

The nephelometer chart from an evening last winter is shown below, to illustrate the impact from the nearby chimney. (The nephelometer is used to estimate PM<sub>2.5</sub> and has a one second resolution time.) On this occasion, the spikes occurred on January 6<sup>th</sup> from 5 to 8 p.m. with the highest impact at 5:40. This is about the time when people start their woodstoves during the winter.

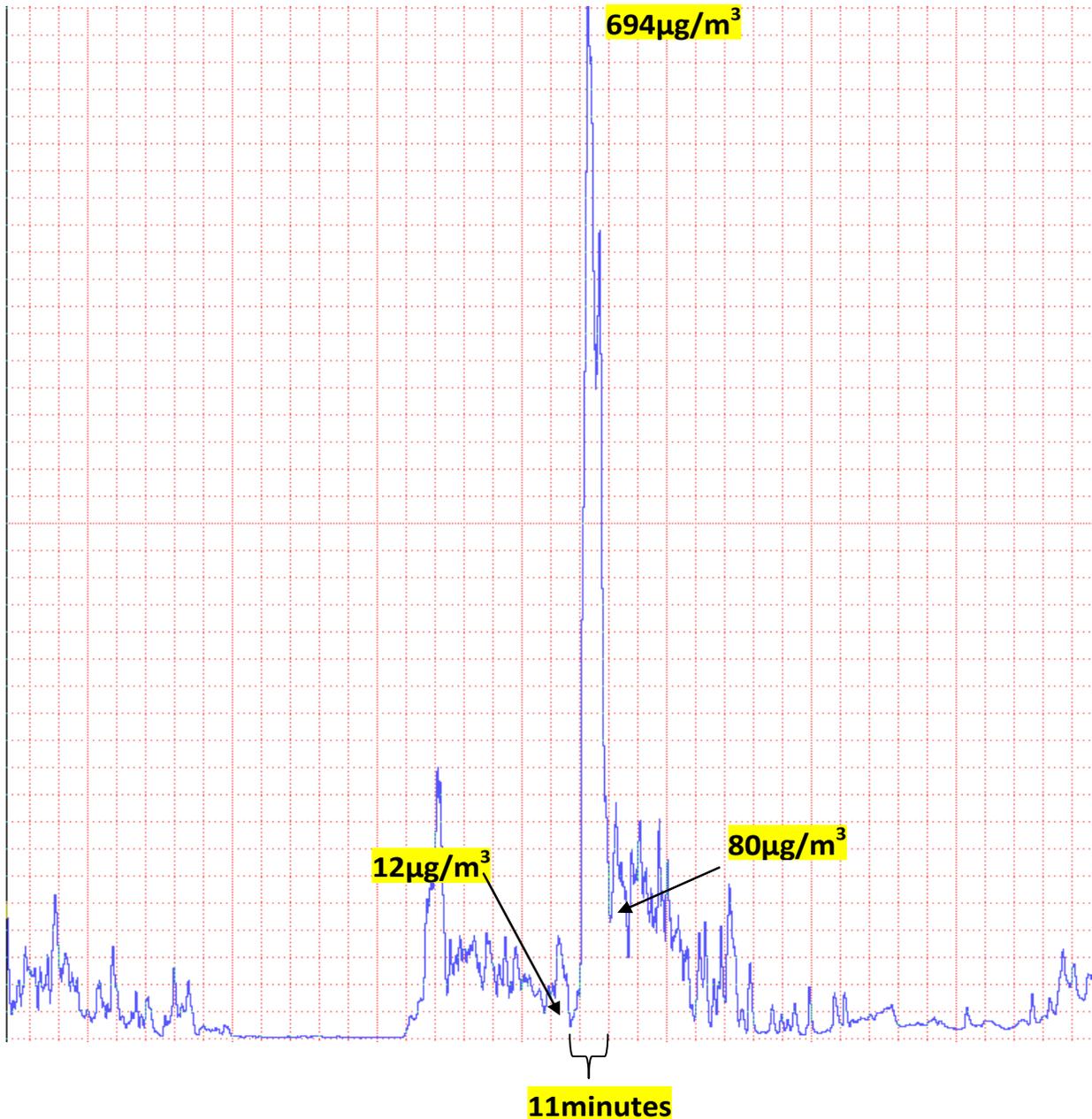
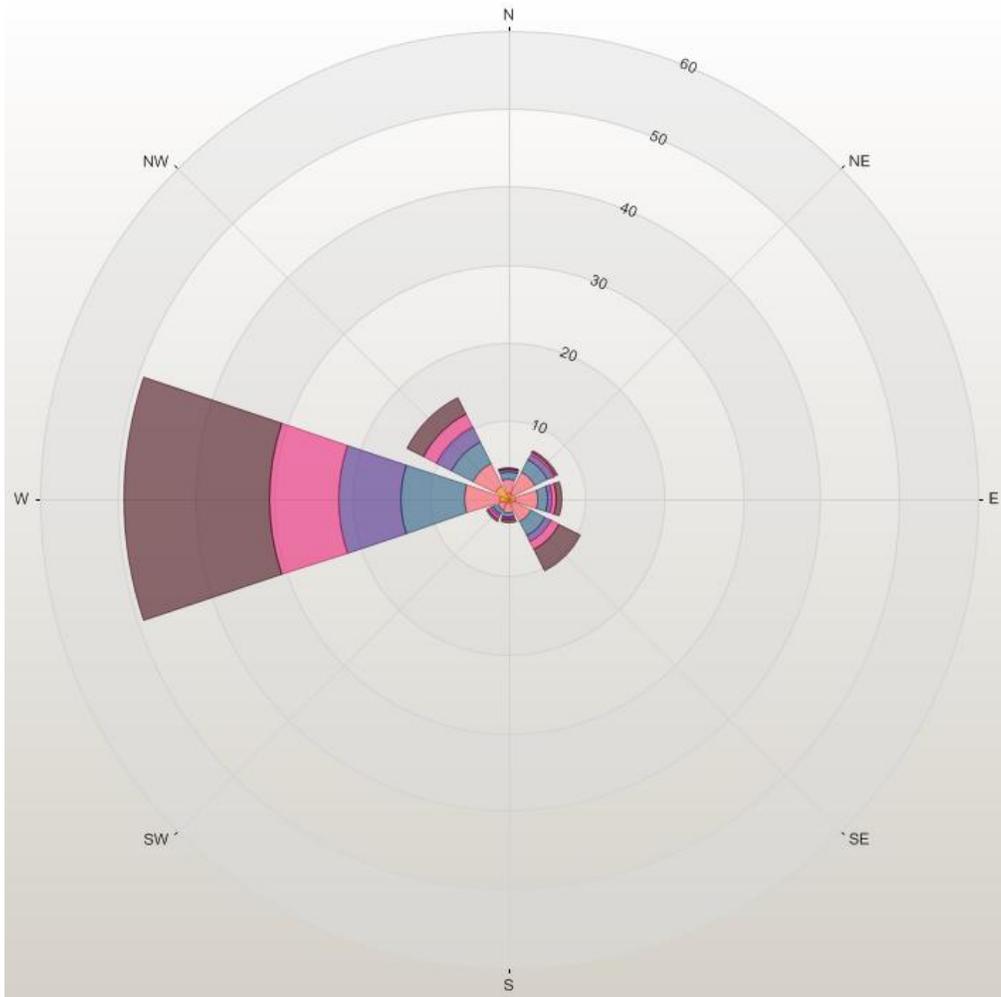


Figure 14. Nephelometer readings for January 6<sup>th</sup>, 2015 showing spiky PM2.5 levels. Spiky data are typical of a nearby plume. The PM2.5 changes from  $12\mu\text{g}/\text{m}^3$  (at 5:18p.m.) to over  $694\mu\text{g}/\text{m}^3$  in under five minutes. It drops back down to  $80\mu\text{g}/\text{m}^3$  about 10 minutes later and remains spiky for the rest of the evening. This occurred frequently over the winter indicating nearby burning activity.

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## 2. Current Site on Upwind side of town

The LAS station's wind rose shows the wind coming mostly from the west and northwest (see below). This site was originally a PM2.5 site and being on the upwind side of town may not have mattered as much because the highest days occurred during stagnation events and from nearby sources (chimneys). For air toxics sources emit pollutants all year long and may not be from woodstoves. Metals for instance might come from the industrial area. This means that the site should be on the downwind side of town but still in a neighborhood to pickup both the transport winds and the neighborhood conditions.



%	Icon	Classes (mph)	8	0.5-1.2	20	1.2-2.4	18	2.4-3.6
			13	3.6-4.8	13	4.8-6.0	26	>6.0

Figure 15. La Grande (LAS Station) 2014 annual wind rose. *La Grande's winds are mostly out of the west with some northwest and southeast influence.*

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### 3. Where sensitive people are

Finally, the current site has a good location in a neighborhood but it could be better sited if it also measured the air where a large number of sensitive people are. A school playground is ideal for this because children's lungs are still developing (sensitive) and the children are running and breathing at a higher rate thus getting more exposure.

### Proposed New Location

DEQ proposes moving the monitoring station 2.1 kilometers to the south to the La Grande Public School Headquarters on Hall Street. The proposed site location and a photo of the location are shown below.



Figure 16. Proposed La Grande NATTS site relocation from Ash Street to Halls Street.

## 2015 Oregon Annual Ambient Air Monitoring Network Plan



Figure 17. Photo of proposed Hall street location.

The proposed Hall Street site is much better suited to measure ambient air quality for the community as a whole because:

- 1) it is in an open area away from any direct source of pollutants. It is still surrounded by a neighborhood but no one chimney will have a direct impact.
- 2) it is more east of the downtown and with the prevailing winds from the west it will measure more of the emissions than the LAS station which is located on the west side of town.
- 3) it is at a play ground where children are exerting themselves and thus measures the air quality for sensitive populations.

We request EPA approval to move the site. We would like to set up the new site and run both simultaneously for a month. The overlap would provide some information about the difference in air quality in the two locations. We would try to start the new site before January 1<sup>st</sup>, 2016.

### 4.2.2 Portland N. Roselawn National Air Toxics Trends site move

DEQ would like to move the Portland N. Roselawn site (41-051-0246) 0.5 Kilometers to the southwest.

#### Why move the site?

The area directly adjacent to the N. Roselawn site is being developed into a three story condominium complex. The complex property will be one foot from our monitoring station. The buildings will be approximately 10 meters away. The impact will be to cut off air flow from the north and west and to possibly add smoke impacts from woodstoves and barbeques. The photo below shows the construction adjacent to our monitoring station (the photo is taken from the monitoring deck in May 2015).

## 2015 Oregon Annual Ambient Air Monitoring Network Plan



Figure 18.

Construction of base for three story condominiums adjacent to Portland N. Roselawn monitoring station.

### Proposed New Location

The site would be moved to an open field on Alberta Street in the same neighborhood, 0.5Km to the southwest. The Alberta St. location was our original, first choice prior to locating at N. Roselawn but we could not install wind speed and wind direction because of nearby trees. After we installed N. Roselawn, we discovered we could not install a met tower there either and settled for locating wind speed and direction on top of Jefferson High School. The Alberta St. site would actually be closer to the meteorological station located on top of Jefferson High School. See the map below.

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Figure 19. N. Roselawn move to N. Alberta St.

We request EPA approval to move the site. We would like to set up the new site and run both simultaneously for a month. The overlap would provide some information about the difference in air quality in the two locations. We would try to start the new site before January 1<sup>st</sup>, 2016.

### 4.2.3 Near Source Assessment Monitor

(Informational, no EPA approval needed)

DEQ is operating one full air toxics assessment monitor in N. Portland near Swan Island and one air toxics metal site in St. Johns in N. Portland. The monitors are supported with eight wind speed and wind direction sites until December, 2015. If they are refunded, we will move the monitors to another location with high density and industry following the completion of the Swan Island study. The results from this monitoring will be summarized in the air quality annual report in the following year. Since EPA is not funding this site, DEQ is not seeking comment from EPA. We include it in the annual network plan to notify EPA and to seek public comment and input. Note: This data will be reported to EPA.

### 4.2.4 Community Assessment Monitor

(Informational, no EPA approval needed)

DEQ moved the community air toxics assessment monitor from Hillsboro to Gresham in the spring of 2015. The monitor will run from one to two years depending on the data quality during the first year. The results from this monitoring will be summarized in the air quality

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

annual report in the following year. Since EPA is not funding this site, DEQ is not seeking comment from EPA. We include it in the annual network plan to notify EPA and to seek public comment and input. This site will also include wind speed and direction and PM2.5 estimate.

### **4.2.5 New Willamette Field Burning Monitors**

(Informational, no EPA approval needed)

DEQ and Oregon Dept of Ag will add two new monitors into the Willamette Valley field burning network which runs from July 1<sup>st</sup> to October 15<sup>th</sup> every year. The new sites will measure PM2.5 and will be located in Mill City and at Detroit Lake. These sites will join the PM2.5 monitors already in Silverton, Salem, and Lyons to track smoke impact from planned and control field burning near Salem.

## **4.3 Other Changes to Monitoring Networks**

No other changes are planned to the network in the next year. If unexpected changes are needed do to EPA funded or required monitoring, DEQ will submit the planned changes for public comment for 30 days than to EPA for approval.

## Appendix A. Minimum Monitoring Requirements

DEQ and LRAPA meet the minimum monitoring requirements for all criteria pollutants measured as established in 40 CFR 58. The tables in Appendix A list the criteria used to determine compliance with federal regulations.

The minimum requirements tables:

Table	Subject	Page
A1	NCORE minimum site requirements	29
A2	Ozone minimum site requirements	30
A3	Carbon Monoxide minimum site requirements	31
A4	NO2 minimum site requirements	32
A5	SO2 minimum site requirements	33
A6	Lead minimum site requirements	34
A7	PM10 minimum site requirements	35
A8	PM2.5 minimum site requirements	36
A9	minimum site requirements	37

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Table A 1. Minimum Monitoring Requirements for **NCORE Site**.

NCORE Site: SE Lafayette (SEL), AQS# 41-051-0080, Address 57 <sup>th</sup> Avenue and SE Lafayette St., Portland, OR MSA – Portland-Vancouver, OR-WA (#6440) Counties represented – (OR) Multnomah, Clackamas, Washington, (WA) Clark MSA Population (2013)* - 2,292,725								
Pollutant	Std Type	Std	DV	Units	Years	# of Monitors		
						Minimum required	Active	needed
PM <sub>2.5</sub>	Daily	35	29.1	µg/m <sup>3</sup>	2011-13	1	1	0
	Annual	12	8.1	µg/m <sup>3</sup>	2011-13			
PM <sub>2.5</sub> Speciation	N/A	-	-	-	-	1	1	0
PM <sub>10-2.5</sub>	N/A	-	-	-	-	1	0	1
PM <sub>2.5</sub> Continuous estimate	N/A	-	-	-	-	0	1	0
PM <sub>10</sub>	Daily	150	43	µg/m <sup>3</sup>	2013	1	1	0
PM <sub>10-2.5</sub>	N/A	-	-	-	-	1	1	0
PM <sub>10</sub> lead	Annual	0.15		µg/m <sup>3</sup>	2013	1	1	0
Ozone	8 hr Ave	75	57	ppb	2011-13	1	1	0
NO <sub>2</sub>	1 hour	100	33	ppb	2013	1	1	0
	Annual	53	10	ppb	2013			
NO <sub>x</sub> (substituted for NO <sub>y</sub> - EPA waiver)	N/A	-	-	-	-	1	1	0
Trace SO <sub>2</sub>	1 hour	75		ppb	2013	1	1	0
Trace CO	8 hour	9		ppm	2013	1	1	0
Wind Direction	N/A	-	-	-	-	1	1	0
Wind Speed	N/A	-	-	-	-	1	1	0
Relative Humidity	N/A	-	-	-	-	1	1	0
Solar Radiation	N/A	-	-	-	-	0	1	0
Barometric Press	N/A	-	-	-	-	0	1	0
Outdoor Temp	N/A	-	-	-	-	1	1	0
Delta Temp	N/A	-	-	-	-	0	1	0

\*MSA Population (2013) from Portland State University, College of Urban and Public Affairs, Population Research Center

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Table A 2. Ozone Minimum Monitoring Requirements

MSA	County	Population	DV (ppb)	Site name	Season	Years	# of Monitors		
							Minimum required	Active	needed
Portland-Vancouver, OR-WA (#6440)	Multnomah, Clackamas, Washington,	2,292,725	62	Carus (41-005-0004)	May-Sept	2012-14	2	5 in OR, 1 in WA	0
Salem (#7080)	Marion	399,945	59	Cascade Sch. Turner (41-047-0004)	May-Sept	2012 - 14	1	1	0
Eugene-Springfield (#2400)	Lane	356,125	58	Saginaw (41-039-1007)	May-Sept	2012-14	1	2	0
Bend-Redmond (0000)	Deschutes	162,525	59	Bend Rd Dept (41-017-0121)	May-Sept	2012-14	0	1	0
Medford-Ashland (#4890)	Jackson	206,310	61	Talent (41-029-0201)	May-Sept	2012-14	0	1	0
Hermiston (0000)	Umatilla	17,240	64	Airport (41-059-1003)	May-Sept	2012-14	0	1	0
Corvallis (#1890)	Benton	87,725	-	-	-	-	0	0	0
Albany (CBSA#24420)	Linn	118,665	-	-	-	-	0	0	0
Grants Pass (CBSA#10540)	Josephine	82,815	-	-	-	-	0	0	0

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Table A 3. Carbon Monoxide Minimum Monitoring Requirements:

MSA (Maintenance areas)	County	Population	Standard Exceeded more than once per year	Site name	Last Year	# of Monitors		
						Minimum required	Active	needed
Portland-Vancouver, OR-WA (#6440) (Portland Metropolitan Service District Boundary)	Multnomah, Clackamas, Washington, Clark (WA)	2,292,725	No	SE Lafayette, Portland (41-051-0080)	2013	2	2	0
Salem (#7080) (Salem-Kaiser Transportation Area)	Marion	399,945	No	-	2005	0	0	0
Medford-Ashland (#4890) (Medford Urban Growth Boundary)	Jackson	206,310	No	Monitor CO with modeling	2009	0	0	0
Klamath Falls (#0000) (Klamath Falls Urban Growth Boundary)	Klamath	21,495	No	-	2004	0	0	0
Grants Pass (CBSA#10540) (Grants Pass Central Business District)	Josephine	82,815	No	-	2005	0	0	0

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

### NO2 Minimum Monitoring Requirements:

EPA requires NO2 near roadway monitoring in CBSAs above 500,000. The monitoring is to be next to a freeway at a location with the highest annual average daily traffic and highest heavy duty diesel traffic. Portland-Vancouver is the only CBSA in Oregon required to have near road NO2 monitoring. In addition, EPA requires one neighborhood or larger spatial scale monitoring in CBSA's above one million. The Portland-Vancouver is the only CBSA in Oregon required to have community scale monitoring. The NCORE site is required to have NO2, NO, NOx, and NOy monitoring. The NCORE site is in Portland and doubles as the community scale site for NO2. EPA granted a waiver under CFR40 Part 58 Appendix D, Seciton 3 (b.1) to allow NOx to substitute for NOy because DEQ showed there was minimal difference between the two. The table below shows the current monitoring status.

Table A 4. NO2, NO, NOx Minimum Monitoring Requirements:

MSA	County	Population	DV (ppb)	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								Minimum required	Active	needed
Portland-Vancouver, OR-WA (#6440)	Multnomah, Clackamas, Washington,	2,292,725	1hr= 35ppb	1hr= 35%	Portland, SE Lafayette (41-005-0080)	Annual, Hourly	2012-14	1	1	0
			Annual = 9ppb	Annual= 17%	Portland-Tualatin, (41-067-0005)					
			Not a full year of data	Not a full year of data	Near Roadway Site (41-067-0005)	Annual, Hourly	2014	1	1	0

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### SO2 Minimum Monitoring Requirements:

EPA devised the Population Weighted Emissions Index to determine where SO2 monitoring is needed. This combines population and SO2 emission estimates. Oregon only had one MSA with a PWEI which required monitoring, Portland-Vancouver. The location measures population exposure in the CBSA which meets the minimum spatial siting requirement. The NCORE site also requires trace SO2 monitoring. The NCORE site is also the PWEI site and operates with a trace SO2 monitor meeting both criteria. The table below shows the current monitoring status.

Table A 5. SO2 Minimum Monitoring Requirements:

MSA	County	Population	DV ppb	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								Minimum required	Active	needed
Portland- Vancouver, OR-WA (#6440)	Multnomah, Clackamas, Washington	2,292,725	6	8	Portland, SE Lafayette (41-005-0080)	Annual, Hourly	2012- 2014	1	1	0

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### Lead: Minimum Monitoring Requirements:

EPA requires TSP lead monitoring at any source with an annual plant site emission limit of over 1/2 ton/year. In Oregon only one source meets this criteria, Cascade Rolling Mills in McMinnville. DEQ did fence line monitoring at Cascade Rolling Mills for three years (2010-2012) and determined the levels were less than ½ the standard. With these low values and other resource needs, DEQ asked for and received a waiver under CFR40 Part 58 Appendix D, Section 4.5(i) from EPA to suspend monitoring. This waiver will need to be renewed in 2017.

EPA requires monitoring at airports with emission estimates greater than 1 ton/yr CFR40 Part 58 Appendix D, Section 4.5(iii). No airports in Oregon have estimated lead emissions of over 1 ton/yr. EPA is working with the FAA to find a safe substitute for lead in aviation fuel so all airports no matter how small will be free from lead from aviation fuel .

CFR40 Part 58 Appendix D, Section 4.5(b) requires one non-source oriented lead monitor at the NCORE site in CBSAs of over 500,000. Oregon has one site. The table below shows the current monitoring status.

Table A 6. Lead Minimum Monitoring Requirements:

MSA	County	Population	DV µg/m <sup>3</sup>	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								Minimum required	Active	needed
Portland- Vancouver, OR-WA (#6440)	Multnomah, Clackamas, Washington	2,292,725	0.005	3%	Portland, SE Lafayette (41-005-0080)	Annual, 1/3 at NCORE	2012-14	1	1	0
La Grande (#0000)	Union	13,125	0.001	1%	Ash St. (41-067-0119)	Annual, 1/6	2012 -14	0	0	0
McMinnville*	Yamhill	32,510	0.045	30%	Hwy 99 (41-039-0059)	1/6	2010-12	0	0	0

\* EPA granted a waiver to discontinue McMinnville lead because its three year average was less than ½ the NAAQS and the operating funds were needed at the NO2 roadway site. The Portland lead monitoring is not eligible for a waiver even though it is only 3% of the NAAQS. La Grande lead is sampled as part of the NATTS suite.

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### PM10 Minimum Monitoring Requirements:

PM10 has dropped significantly since the 1980s when numerous Oregon communities were in non-attainment. These communities are now all under maintenance plans and many have EPA waivers to discontinue PM10 and use PM2.5 as a surrogate. This was done because PM10 is mostly comprised of PM2.5 and the PM10 levels are far below the standard.

Table A 7. PM10 Minimum Monitoring Requirements:

MSA	County	Population	Exceedence/ yr	Site name	Season/ Frequency	Years	# of Monitors		
							Minimum required	Active	needed
Portland-Vancouver, OR-WA (#6440)	Multnomah, Clackamas, Washington,	2,292,725	0	SE Lafayette (41-005-0080) N. Roselawn (41-051-0246)	Annual, 1/3 at NCORE & 1/6 other sites	2012-14	2-4	2	0
Eugene-Springfield (#2400)	Lane	356,125	0	Hwy 99 (41-039-0059)	Annual 1/6	2012-14	1	3	0
La Grande (#0000)	Union	13,125	0	Ash St. (41-067-0119)	Annual, 1/6	2012-14	1	1	0
Oakridge (#0000)	Lane	3,215	0	Oakridge (41-039-2013)	Annual 1/6	2012-14	1	1	0
Medford-Ashland (#4890)	Jackson	206,310	0	Grant & Belmont (41-029-2129)	Annual, 1/6	2012-14	1	1	0
Grants Pass (CBSA#10540)	Josephine	82,815	0	Parkside School (41-033-0114)	PM2.5 as surrogate	2012-14	1	0	0*
Klamath Falls (#0000)	Klamath	21,495	0	Klamath Falls Petersen Sch. (41-035-0004)	PM2.5 as surrogate	2012-14	1	0	0*

\* PM2.5 is used as a surrogate for PM10

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Table A 8. PM<sub>2.5</sub> (FRM) Minimum Monitoring Requirements:

MSA	County	Population	DV µg/m <sup>3</sup>	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								Minimum required	Active	needed
Portland- Vancouver, OR-WA (#6440)	Multnomah, Clackamas, Washington	2,292,725	31.3	88	Hillsboro Hare Field (41-067-0004)	Annual 1/3	2012-14	3	3	0
Eugene- Springfield (#2400)	Lane	356,125	28.4	80	Hwy 99 (41-039-0059)	Annual 1/3	2012-14	1	3	0
Cottage Grove (#0000)	Lane	9,785	21.2	60	City Shops (41-039-9004)	Annual 1/3	2012-14	0	1	0
Oakridge (#0000)	Lane	3,215	40.2	<b>113</b>	Oakridge (41-039-2013)	Annual 1/3	2012-14	0	1	0
Medford- Ashland (#4890)	Jackson	206,310	42.6*	<b>120</b>	Medford, Grant & Belmont (41-029-2129)	Annual 1/3	2012-14	1	1	0
Grants Pass (CBSA#10540)	Josephine	82,815	26.4	74	Parkside Sch. (41-033-0114)	Annual 1/6	2012-14	0	1	0
Klamath Falls (#0000)	Klamath	21,495	33.9	<b>95</b>	Petersen Sch. (41-035-0004)	Annual 1/3	2012-14	0	1	0
Lakeview (#0000)	Lake	7,940	57.5	<b>162</b>	Lakeview (41-037-0001)	Annual 1/3	2012-14	0	1	0
Burns-Hines (#0000)	Harney	4,395	31.4	88	Washington Park (41-025-0003)	Annual 1/3	2012-14	0	1	0
Prineville (#0000)	Crook	9,270	41.8	<b>118</b>	Davidson Park (41-013-0100)	Annual 1/3	2012-14	0	1	0

\*Medford 2013 and 2014 include forest fire data that impact the 98<sup>th</sup> percentile. If this has regulatory significance in the future, DEQ will request exceptional event concurrence from EPA. The none forest fire DV is 34.0 µg/m<sup>3</sup>.

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AQI (Non-FRM – Informational data). There is no minimum requirement but this type of monitoring allows DEQ to monitor the rest of the state. If a design value is near or above the NAAQS, DEQ considers placing a FRM sampler at the site for comparison to the NAAQS.

Table A 9. PM2.5 for AQI (Non-FRM) site information

MSA	County	Population	DV ( $\mu\text{g}/\text{m}^3$ )	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								required	Active	needed
Salem-Kaiser (#7080)	Marion	399,945	24.2	68	State Hospital (41-047-0041)	Annual, Hourly	2012-14	0	1	0
Bend-Redmond (#0000)	Deschutes	162,525	19.9	56	Bend Rd Dept (41-017-0121)	Annual, Hourly	2012-14	0	1	0
Albany (CBSA#24420)	Linn	118,665	23.9	67	Calapooia Sch. (41-043-0009)	Annual, Hourly	2012-14	0	1	0
Corvallis (#1890)	Benton	87,725	18.7	53	Intermediate Sch. (41-003-0013)	Annual, Hourly	2012-14	0	1	0
Roseburg (#0000)	Douglas	35,605	18.9	53	Forest Service Off (41-019-0002)	Annual, Hourly	2012-14	0	1	0
The Dalles (#0000)	Wasco	14,440	19.9	56	Cherry Heights (41-065-0007)	Annual, Hourly	2012-14	0	1	0
La Grande (#0000)	Union	13,125	29.9	84	Ash St. (41-061-0119)	Annual, Hourly	2012-14	0	1	0
Baker City (#0000)	Baker	9,890	20.7	58	Forest Service Off (41-001-0003)	Annual, Hourly	2012-14	0	1	0
Sweet Home (#0000)	Linn	9,065	21.3	60	Fire Dept (41-043-2002)	Annual, Hourly	2012-14	0	1	0
Sisters (#0000)	Deschutes	2,115	17.3	51	Forest Service Off (41-017-0004)	Annual, Hourly	2012-14	0	1	0
Enterprise (#0000)	Wallowa	1,940	21.5	60	Forest Service Off (41-063-0001)	Annual, Hourly	2012-14	0	1	0
Cave Junction (#0000)	Josephine	1,905	23.5	66	Forest Service Off (41-033-0036)	Annual, Hourly	2012-14	0	1	0
John Day (#0000)	Grant	1,745	29.6	87	Forest Service Off (41-063-0001)	Annual, Hourly	2012-14	0	1	0

## Appendix B. Collocation Requirements

PM10, PM2.5, and lead are subject to the collocation requirements described in 40 CFR Part 58, Appendix A, Section 3. These requirements apply at the Primary Quality Assurance Organization levels and DEQ is the PQAO for Oregon. DEQ and LRAPA use method 118 and 145 for SLAMS, PM2.5 FRM samplers. LRAPA has one collocated site for 145 and DEQ has one for 118. DEQ and LRAPA use method 127 and 063 for PM10 samplers. DEQ has one collocated site for each of these methods. PM10 lead monitoring is only done at one site, and DEQ has one collocated monitor for this.

Table B 1. Collocation Requirements for PM2.5

Method Code	# of Primary monitors	# of Required Collocated Monitors	# Active Collocated Monitors	# Active Collocated FEM monitors (Same method designation as primary)
118	6	1	1	0
145	5	1	1	0

Table B 2. Collocation Requirements for PM10

Method Code	# of Primary monitors	# of Required Collocated Monitors	# Active Collocated Monitors	# Active Collocated FEM monitors (Same method designation as primary)
127	3	1	1	0
063	3	1	1	0

Table B 3. Collocation Requirements for PM10 lead

Method Code	# of Primary monitors	# of Required Collocated Monitors	# Active Collocated Monitors	# Active Collocated FEM monitors (Same method designation as primary)
811	1	1	1	0

## Appendix C. Detailed Site Information

This appendix present detailed site information required by 40CFR Part 58.

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Table C 2. Portland, SE Lafayette Site Information

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500, Yr= 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA,)	Portland-Vancouver (#6440)	
Pollutant	<b>PM2.5</b>	<b>PM10</b>
Parameter code, POC	88101,1	85101,1 & 81102,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS, NCORE, AQI	NAAQS, NCORE, AQI
Monitoring Objective	Population, Non-source	Population, Max Non-source
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS/NCORE	SLAMS/NCORE
Instrument type and model	R&P 2025w/ WINS	R&P 2025
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	118	127
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/1999	1/1/1984
Current sampling frequency	1/3	1/3
Sampling season	Annual	Annual
Probe height (meters)	6	6
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	22	22
Distance from to furnace or incinerator flue (meters)	7	7
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>PM10</b>	<b>PM10-2.5, 1</b>
Parameter code, POC	85101,2 & 81102,2	86101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS	NCORE
Monitoring Objective	Urban Population, Max concentration, Non-source	Urban, Population, Non-source
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS/NCORE	NCORE
Instrument type and model	R&P 2025	R&P 2025
Instrument parameter occurrence code	<b>Collocated</b>	<b>Primary</b>
Method number	127	176
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	7/1/2013	1/1/2010
Current sampling frequency	1/3	1/3
Sampling season	Annual	Annual
Probe height (meters)	6	6
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	22	22
Distance from to furnace or incinerator flue (meters)	7	7
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>PM10 Lead</b>	<b>Ozone</b>
Parameter code, POC	85129, 1	44201, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS, NCORE, AQI	NAAQS, AQI
Monitoring Objective	Population, Non- source oriented, NCORE	Population, Non-source
Spatial scale of Representativeness	Neighborhood	Urban
Monitoring types	SLAMS/NCORE	SLAMS/NCORE
Instrument type and model	R&P 2025	TECO 49C
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	811	047
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/2012	7/10/2003
Current sampling frequency	1/3	Hourly
Sampling season	Annual	Annual
Probe height (meters)	6	5
Distance from supporting structure (meters)	No supports	1.5
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	22	24
Distance from to furnace or incinerator flue (meters)	7	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Teflon
Residence time for reactive gases (seconds)	NA	3.5
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>NO<sub>2</sub></b>	<b>NO<sub>x</sub></b>
Parameter code, POC	42602, 1	42603, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS, NCORE	Information, NCORE
Monitoring Objective	Population, Urban, Non-source	Population, Urban, Non-source
Spatial scale of Representativeness	Urban	Urban
Monitoring types	SLAMS/NCORE	NCORE
Instrument type and model	Ecotech – EC9841A	Ecotech – EC9841A
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	590	590
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	01/01/1984	01/01/1984
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	6.3	6.3
Distance from supporting structure (meters)	2.7	2.7
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	24	24
Distance from to furnace or incinerator flue (meters)	9	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Glass, Teflon	Glass, Teflon
Residence time for reactive gases (seconds)	4.9	4.9
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

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Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>CO</b>	<b>SO2</b>
Parameter code, POC	42101, 1	42401, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS, NCORE	NAAQS, NCORE
Monitoring Objective	Population, Non- source	Population, Non- source
Spatial scale of Representativeness	Micro	Urban
Monitoring types	SLAMS/NCORE	SLAMS/NCORE
Instrument type and model	ECO Tech EC9830T	ECO Tech EC9850T
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	588	592
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	10/1/2005	2/1/2005
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	6.3	6.3
Distance from supporting structure (meters)	2.7	2.7
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	24	24
Distance from to furnace or incinerator flue (meters)	9	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Glass, Teflon	Glass, Teflon
Residence time for reactive gases (seconds)	3.6	3.6
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>SO2 5min aver.</b>	<b>PM2.5 Estimate</b>
Parameter code, POC	42401, 4	88502,3
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS, NCORE	AQI
Monitoring Objective	Population, Non- source	Population, Non- source
Spatial scale of Representativeness	Urban	Neighborhood
Monitoring types	SLAMS/NCORE	Special purpose
Instrument type and model	ECO Tech EC9850T	Radiance M97 Nephelometer
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	592	011
FRM/FEM/FRM/other	FRM	PM2.5 Surrogate
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	10/1/2005	
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	6.3	6
Distance from supporting structure (meters)	2.7	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	24	24
Distance from to furnace or incinerator flue (meters)	9	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Glass, Teflon	PVC tubing
Residence time for reactive gases (seconds)	3.6	8
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	No

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Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Wind Speed</b>	<b>Wind Direction</b>
Parameter code, POC	61101,1	61104,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NCORE, Information	NCORE, Information
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Urban	Urban
Monitoring types	NCORE	NCORE
Instrument type and model	Climatronics	Climatronics
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	050	020
FRM/FEM/FRM/other	Other	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	7/15/1992	7/15/1992
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	16	16
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	30	30
Distance from to furnace or incinerator flue (meters)	NA	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	NA	NA
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Outdoor Temp</b>	<b>Relative Humidity</b>
Parameter code, POC	62101,1	62201,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Information	NAAQS
Monitoring Objective	NCORE, Information	NCORE, Information
Spatial scale of Representativeness	Neighborhood	Urban
Monitoring types	NCORE	NCORE
Instrument type and model	Climatronics	Climatronics
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	040	012
FRM/FEM/FRM/other	Other	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	7/15/1992	11/1/2001
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	2	3
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	30	24
Distance from to furnace or incinerator flue (meters)	9	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	NA	NA
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, SE Lafayette</b>	
AQS ID	<b>41-051-0080</b>	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	AADT = 23,500 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Chemical Speciation</b>	
Parameter code, POC	Numerous parameters POC 6	
MSA, CBSA, CSA or area represented	6440	
Monitor purpose	Trend information, NCORE	
Monitoring Objective	Population,	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	NCORE, STN	
Instrument type and model	Super SASS & URG 3000N w/Pall Quartz filter and Cyclone Inlet	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	810,811,812,826 831,838, 839,840 841,842	
FRM/FEM/FRM/other	Other	
Collecting agency	ODEQ (0821)	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	9/1/2002	
Current sampling frequency	Hourly	
Sampling season	Annual	
Probe height (meters)	6	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	24	
Distance from to furnace or incinerator flue (meters)	9	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	No	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 3. Portland, N. Roselawn Site Information

Local Site Name	<b>Portland, N. Roselawn</b>	
AQS ID	<b>41-051-0246</b>	
GPS Coordinates	45.5614, -122.6679	
Street address	N. Roselawn, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	43	
Traffic count (AADT, yr)	AADT = 2621 (NE Malory & Ainsworth), yr =2012 (Weekday)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>PM10</b>	<b>PM10</b>
Parameter code, POC	81102, 7 85101,7	81102, 9 85101,9
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS,	NAAQS,
Monitoring Objective	Population, Non-source oriented	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS, NATTS	SLAMS, NATTS
Instrument type and model	Tisch PM10 HV+	Tisch PM10 HV+
Instrument parameter occurrence code	<b>Primary</b>	<b>Collocated</b>
Method number	063	063
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/04/2005	1/1/2013
Current sampling frequency	1/6	1/12
Sampling season	Annual	Annual
Probe height (meters)	6	6
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	25	25
Distance from to furnace or incinerator flue (meters)	15	15
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	VOC/Carb= 1.2s	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the annual pm10?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, N. Roselawn</b>	
AQS ID	<b>41-051-0246</b>	
GPS Coordinates	45.5614, -122.6679	
Street address	N. Roselawn, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	43	
Traffic count (AADT, yr)	AADT = 2621 (NE Malory & Ainsworth), yr =2012 (Weekday)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Air Toxic</b>	<b>Air Toxic</b>
Parameter code, POC	POC 7	POC 9
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NATTS	NATTS
Monitoring Objective	Population, Non-source oriented	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	Special	Special
Instrument type and model	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl
Instrument parameter occurrence code	<b>Primary</b>	<b>Collocated</b>
Method number	110,118,176,156	110,118,176,156
FRM/FEM/FRM/other	Other	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/04/2005	1/1/2013
Current sampling frequency	1/6	1/12
Sampling season	Annual	Annual
Probe height (meters)	6	6
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	25	25
Distance from to furnace or incinerator flue (meters)	15	15
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	PM10- Al, VOC Glass	PM10- Al, VOC Glass
Residence time for reactive gases (seconds)	VOC/Carb= 1.2s	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the annual pm10?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 4. Proposed new site for Portland N. Roselawn NATTS monitor:

Local Site Name	<b>Portland, Humboldt School</b>	
AQS ID	<b>41-051-XXXX</b>	
GPS Coordinates	45.5579, -122.6718	
Street address	N. Commercial Ave, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	50	
Traffic count (AADT, yr)	5580 East bound, 5301 West bound (2011)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Air Toxic</b>	<b>Air Toxic</b>
Parameter code, POC	POC 7	POC 9
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NATTS	NATTS
Monitoring Objective	Population, Non-source oriented	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	Special	Special
Instrument type and model	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl
Instrument parameter occurrence code	<b>Primary</b>	<b>Collocated</b>
Method number	110,118,176,156	110,118,176,156
FRM/FEM/FRM/other	Other	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/2016	1/1/2016
Current sampling frequency	1/6	1/12
Sampling season	Annual	Annual
Probe height (meters)	~4	~4
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	30	30
Distance from to furnace or incinerator flue (meters)	None around	None around
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	PM10- Al, VOC Glass	PM10- Al, VOC Glass
Residence time for reactive gases (seconds)	VOC/Carb= 1.2s	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the annual pm10?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 5. Portland North Stafford Site Information

Local Site Name	<b>Portland, N. Stafford</b>	
AQS ID	<b>41-051-2001</b>	
GPS Coordinates	45.5772, -122.7178	
Street address	4727 N Stafford St, Portland	
County	Multnomah	
Distance from roadways (meters)	50`m from N. Olin Ave	
Traffic count (AADT, yr)	AADT = 210 (N WAYLAND AVE N of AMHERST ST) 425meters from site, yr =2014 (Weekday) 95.5% cars, 4.5% Trucks	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Air Toxic</b>	<b>61101,61103,62101</b>
Parameter code, POC	POC 7	POC 7
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NATTS	NATTS
Monitoring Objective	Population, Non-source	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	Special	Special
Instrument type and model	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl	Wind Speed, Wind Direction, Temperature
Instrument parameter occurrence code	<b>Primary</b>	<b>NA</b>
Method number	110,118,176,156	050,020,040
FRM/FEM/FRM/other	Other	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	11/02/2014	11/02/2014
Current sampling frequency	1/6	Hourly
Sampling season	Annual	Annual
Probe height (meters)	2	10
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	45	45
Distance from to furnace or incinerator flue (meters)	35	35
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Al, Glass	NA
Residence time for reactive gases (seconds)	VOC/Carb= 1.2s	NA
Will there be changes with the next 18 months?	Yes	Yes
Suitable for comparison against the annual PMm10?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 6. Portland, St. Johns, Sitton Elementary Site Information

Local Site Name	<b>Portland, St. Johns, Sitton Elementary</b>	
AQS ID	<b>41-051-2007</b>	
GPS Coordinates	45.5999, -122.7584	
Street address	N. Stafford St, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	50	
Traffic count (AADT, yr)	AADT = 796 (N SMITH ST N of RENO AVE), yr =2010 (Weekday)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Air Toxic</b>	<b>61101,61103</b>
Parameter code, POC	POC 7	POC 7
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NATTS	NATTS
Monitoring Objective	Population, Non-source oriented	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	Special	Special
Instrument type and model	Tisch PM10 HV+,	Wind Speed, Wind Direction
Instrument parameter occurrence code	<b>Primary</b>	<b>NA</b>
Method number	110	050,020
FRM/FEM/FRM/other	Other	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	11/15/2014	11/15/2014
Current sampling frequency	1/6	Hourly
Sampling season	Annual	Annual
Probe height (meters)	2	10
Distance from supporting structure (meters)	No supports	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	160	160
Distance from to furnace or incinerator flue (meters)	40	40
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	PM10- Al, VOC Glass	NA
Residence time for reactive gases (seconds)	VOC/Carb=1.2sec	NA
Will there be changes with the next 18 months?	Yes	Yes
Is it suitable for comparison against the annual pm10?	Yes	NA

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Table C 7. Portland Near Roadway Site Information

Local Site Name	<b>Portland Near Roadway</b>	
AQS ID	<b>41-067-0005</b>	
GPS Coordinates	45.8992, -122.7455	
Street address	6745 SW Bradbury Ct, Tualatin, OR	
County	Washington	
Distance from roadways (meters)	27	
Traffic count (AADT, yr)	AADT = 156,000 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>NO<sub>2</sub></b>	<b>NO<sub>x</sub></b>
Parameter code, POC	42602,1	42603,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS	Information
Monitoring Objective	Source (Freeway)	Source (Freeway)
Spatial scale of Representativeness	Microscale	Microscale
Monitoring types	SLAMS	SLAMS
Instrument type and model	Ecotech, Serinus 40	Ecotech, Serinus 40
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	186	186
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	04/21/2014	04/21/2014
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	4	4
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	35	35
Distance from to furnace or incinerator flue (meters)	58	58
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Glass, Teflon	Glass, Teflon
Residence time for reactive gases (seconds)	3.5	3.5
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

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Local Site Name	<b>Portland – Near Roadway Site</b>	
AQS ID	<b>41-067-0005</b>	
GPS Coordinates	45.8992, -122.7455	
Street address	6745 SW Bradbury Ct, Tualatin, OR	
County	Washington	
Distance from roadways (meters)	27	
Traffic count (AADT, yr)	AADT = 156,000 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Ozone</b>	<b>CO</b>
Parameter code, POC	44201,1	42101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS	NAAQS
Monitoring Objective	Source (Freeway)	Source (Freeway)
Spatial scale of Representativeness	Microscale	Microscale
Monitoring types	SLAMS	SLAMS
Instrument type and model	Teledyne API 400e	Ecotech 9830T
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	087	588
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	04/21/2014	04/21/2014
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	3.8	4
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	35	35
Distance from to furnace or incinerator flue (meters)	58	58
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	Glass, Teflon
Residence time for reactive gases (seconds)	7.1	3.7
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland – Near Roadway Site</b>	
AQS ID	<b>41-067-0005</b>	
GPS Coordinates	45.8992, -122.7455	
Street address	6745 SW Bradbury Ct, Tualatin, OR	
County	Washington	
Distance from roadways (meters)	27	
Traffic count (AADT, yr)	AADT = 156,000 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>PM2.5</b>	<b>Wind Speed</b>
Parameter code, POC	88101,1	61101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS	Information
Monitoring Objective	Source (Freeway)	Support Source Monitoring
Spatial scale of Representativeness	Microscale	Microscale
Monitoring types	SLAMS	SLAMS
Instrument type and model	R&P 2025 w/ WINS	Climatronics, Sonic Anemometer
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	118	050
FRM/FEM/FRM/other	FRM	other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	04/21/2014	04/21/2014
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	4	10
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	35	35
Distance from to furnace or incinerator flue (meters)	58	58
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Glass tubing	Glass tubing
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the Standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland – Near Roadway Site</b>	
AQS ID	<b>41-067-0005</b>	
GPS Coordinates	45.8992, -122.7455	
Street address	6745 SW Bradbury Ct, Tualatin, OR	
County	Washington	
Distance from roadways (meters)	27	
Traffic count (AADT, yr)	AADT = 156,000 yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Wind Direction</b>	<b>Temperature</b>
Parameter code, POC	61104,1	62101,1
MSA, CBSA, CSA or area represented	6440	64404
Monitor purpose	Information	Information
Monitoring Objective	Support Source Monitoring	Support Source Monitoring
Spatial scale of Representativeness	Microscale	Microscale
Monitoring types	SLAMS	SLAMS
Instrument type and model	Climatronics, Sonic Anemometer	Climatronics,
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	020	040
FRM/FEM/FRM/other	other	other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	04/21/2014	06/21/2014
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	10	2
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	35	35
Distance from to furnace or incinerator flue (meters)	58	58
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	NA	NA
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	NA	NA

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Table C 8. Hillsboro, Hare Field Site Information

Local Site Name	<b>Hillsboro, Hare Field</b>	
AQS ID	<b>41-067-0004</b>	
GPS Coordinates	45.5285, -122.9724	
Street address	1151 NE Grant St, Hillsboro, OR	
County	Washington	
Distance from roadways (meters)	88	
Traffic count (AADT, yr)	AADT = 23,318 (Cornell & Grant), Yr = 2013 (3/19/2013)	
Groundcover (e.g. asphalt, dirt, grass)	Asphalt	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>PM2.5</b>	<b>Chemical Speciation</b>
Parameter code, POC	88101,1	Numerous POC 5
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS, AQI	Informational
Monitoring Objective	Population	Population,
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	STN
Instrument type and model	R&P 2025 w/ WINS	Super SASS & URG3000N Quartz filter Cyclone Inlet
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	118	810,811,812,826 831,838,839,840 841,842
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/28/2005	9/1/2002
Current sampling frequency	1/3	Hourly
Sampling season	Annual	Annual
Probe height (meters)	2	6
Distance from supporting structure (meters)	No supports	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	125	24
Distance from to furnace or incinerator flue (meters)	150	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	No

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Table C 9. Portland, Sauvie Island Site Information

Local Site Name	<b>Portland, Sauvie Island</b>	
AQS ID	<b>41-009-0004</b>	
GPS Coordinates	45.7685, -122.7721	
Street address	Social Security Beach, Sauvie Island, OR	
County	Columbia	
Distance from roadways (meters)	94	
Traffic count (AADT, yr)	AADT = No Data, rural area	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Ozone</b>	<b>Wind Speed</b>
Parameter code, POC	44201,1	61101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Upwind of Urban, Transport	Information
Monitoring Objective	Urban Scale	Population
Spatial scale of Representativeness	Rural	Urban
Monitoring types	SLAMS	SPM
Instrument type and model	Teledyne API 400 – Ultraviolet	Climatronics 100243
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	087	050
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/1980	1/1/1999
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	Annual
Probe height (meters)	4.3	10
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	105	10
Distance from to furnace or incinerator flue (meters)	NA	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	7.1	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland, Sauvie Island</b>	
AQS ID	<b>41-009-0004</b>	
GPS Coordinates	45.7685, -122.7721	
Street address	Social Security Beach, Sauvie Island, OR	
County	Columbia	
Distance from roadways (meters)	94	
Traffic count (AADT, yr)	AADT = No Data, rural area	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Wind Direction</b>	
Parameter code, POC	61104,1	
MSA, CBSA, CSA or area represented	6440	
Monitor purpose	Information	
Monitoring Objective	Population	
Spatial scale of Representativeness	Urban	
Monitoring types	SPM	
Instrument type and model	Climatronics 100243	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	020	
FRM/FEM/FRM/other	Other	
Collecting agency	ODEQ (0821)	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	1/1/1999	
Current sampling frequency	Hourly	
Sampling season	Annual	
Probe height (meters)	10	
Distance from supporting structure (meters)	1	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	10	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	NA	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	NA	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 10. Portland - Carus – Spangler Rd. Site Information

Local Site Name	<b>Portland - Carus – Spangler Rd.</b>	
AQS ID	<b>41-005-0004</b>	
GPS Coordinates	45.2593, -122.5882	
Street address	13575 Spangler Rd., Carus, OR	
County	Clackamas	
Distance from roadways (meters)	12	
Traffic count (AADT, yr)	AADT = 465 yr = 2011	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Ozone</b>	<b>Wind Speed</b>
Parameter code, POC	44201,1	61101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS	Information
Monitoring Objective	Downwind of Urban, Maximum Concentration	Population
Spatial scale of Representativeness	Urban Scale	Urban
Monitoring types	SLAMS	SPM
Instrument type and model	Dasibi 1003–Ultraviolet	Climatronics WM-III
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	019	050
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	7/23/1976	7/23/1976
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	Annual
Probe height (meters)	6.4	10
Distance from supporting structure (meters)	2.7	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	250	10
Distance from to furnace or incinerator flue (meters)	NA	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	2.8	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland - Carus – Spangler Rd.</b>	
AQS ID	<b>41-005-0004</b>	
GPS Coordinates	45.2593, -122.5882	
Street address	13575 Spangler Rd., Carus, OR	
County	Clackamas	
Distance from roadways (meters)	12	
Traffic count (AADT, yr)	AADT = 465 yr = 2011	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Wind Direction</b>	
Parameter code, POC	61104,1	
MSA, CBSA, CSA or area represented	6440	
Monitor purpose	Information	
Monitoring Objective	Population	
Spatial scale of Representativeness	Urban	
Monitoring types	SPM	
Instrument type and model	Climatronics WM-III	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	020	
FRM/FEM/FRM/other	Other	
Collecting agency	ODEQ (0821)	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	7/23/1976	
Current sampling frequency	Hourly	
Sampling season	Annual	
Probe height (meters)	10	
Distance from supporting structure (meters)	1	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	10	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	NA	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	NA	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 11. Portland – Sherwood Site Information

Local Site Name	<b>Portland – Sherwood</b>	
AQS ID	<b>41-067-1004</b>	
GPS Coordinates	45.4024, -122.8544	
Street address	17180 SW Lasich Ln, Sherwood, OR	
County	Washington	
Distance from roadways (meters)	210	
Traffic count (AADT, yr)	AADT = 2635 yr = 2013	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Ozone</b>	<b>Wind Speed</b>
Parameter code, POC	44201,1	61101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	NAAQS	Information
Monitoring Objective	Downwind of Urban, Max concentration, Non-source oriented	Downwind of Urban, Max concentration, Non-source oriented
Spatial scale of Representativeness	Urban Scale	Urban
Monitoring types	SLAMS	SPM
Instrument type and model	TECO 49C–Ultraviolet	Climatronics 100243
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	047	050
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	8/1/2008	8/1/2008
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	Annual
Probe height (meters)	3	10
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	115	115
Distance from to furnace or incinerator flue (meters)	NA	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	3.5	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Portland – Sherwood.</b>	
AQS ID	<b>41-067-1004</b>	
GPS Coordinates	45.4024, -122.8544	
Street address	17180 SW Lasich Ln, Sherwood, OR	
County	Washington	
Distance from roadways (meters)	210	
Traffic count (AADT, yr)	AADT = 2635 yr = 2013	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	<b>Wind Direction</b>	
Parameter code, POC	61104,1	
MSA, CBSA, CSA or area represented	6440	
Monitor purpose	Information	
Monitoring Objective	Downwind of Urban, Max concentration, Non-source oriented	
Spatial scale of Representativeness	Urban	
Monitoring types	SPM	
Instrument type and model	Climatronics 100243	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	020	
FRM/FEM/FRM/other	Other	
Collecting agency	ODEQ (0821)	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	8/1/2008	
Current sampling frequency	Hourly	
Sampling season	Annual	
Probe height (meters)	10	
Distance from supporting structure (meters)	1	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	115	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	NA	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	NA	

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Table C 12. Salem/Turner - Cascade Jr. High Site Information

Local Site Name	<b>Salem/Turner - Cascade Jr. High</b>	
AQS ID	<b>41-047-0004</b>	
GPS Coordinates	44.8103, -122.9151	
Street address	10226 Marion Rd SE, Turner, OR	
County	Marion	
Distance from roadways (meters)	60	
Traffic count (AADT, yr)	AADT = 1700, Yr = 2012 (9/4/2012)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Salem	
Pollutant	<b>Ozone</b>	<b>Wind Speed</b>
Parameter code, POC	44201,1	61101,1
MSA, CBSA, CSA or area represented	7080	6440
Monitor purpose	NAAQS, AQI	Information
Monitoring Objective	Downwind of Urban, Max concentration, Non-source oriented	Downwind of Urban, Max concentration, Non-source oriented
Spatial scale of Representativeness	Urban Scale	Urban
Monitoring types	SLAMS	SPM
Instrument type and model	Dasibi 1003H–Ultraviolet	Climatronics F-460
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	019	050
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	6/23/1995	6/23/1995
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	Annual
Probe height (meters)	4.5	10
Distance from supporting structure (meters)	1.5	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	620	620
Distance from to furnace or incinerator flue (meters)	45	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	2.8	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Salem /Turner - Cascade Jr. High</b>	
AQS ID	<b>41-047-0004</b>	
GPS Coordinates	45.8103, -122.9151	
Street address	10226 Marion Rd SE, Turner, OR	
County	Marion	
Distance from roadways (meters)	60	
Traffic count (AADT, yr)	AADT = 1700, Yr = 2012 (9/4/2012)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Salem	
Pollutant	<b>Wind Direction</b>	
Parameter code, POC	61104,1	
MSA, CBSA, CSA or area represented	6440	
Monitor purpose	Information	
Monitoring Objective	Downwind of Urban, Max concentration, Non-source oriented	
Spatial scale of Representativeness	Urban	
Monitoring types	SPM	
Instrument type and model	Climatronics F-460	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	020	
FRM/FEM/FRM/other	Other	
Collecting agency	ODEQ (0821)	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	6/23/1995	
Current sampling frequency	Hourly	
Sampling season	Annual	
Probe height (meters)	10	
Distance from supporting structure (meters)	1	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	620	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	NA	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	NA	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 13. Eugene – Amazon Park Site Information

Local Site Name	<b>Eugene – Amazon Park</b>	
AQS ID	<b>41-039-0060</b>	
GPS Coordinates	44.0263, -123.0837	
Street address	E. 29 <sup>th</sup> Amazon Park, Eugene, OR	
County	Lane	
Distance from roadways (meters)	61	
Traffic count (AADT, yr)	AADT = 1700, Yr = 2013	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>Ozone</b>	<b>PM2.5</b>
Parameter code, POC	44201,1	88101,1
MSA, CBSA, CSA or area represented	2400	2400
Monitor purpose	NAAQS, AQI	NAAQS, AQI
Monitoring Objective	Urban Population	Urban Population
Spatial scale of Representativeness	Urban Scale	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	Teledyne API 400 – Ultraviolet	R&P 2025 w/ VSCC
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	087	145
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	LRAPA	LRAPA
Analytical lab	LRAPA	LRAPA
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/1985	1/1/1999
Current sampling frequency	Hourly	1/3
Sampling season	May-Sept	Annual
Probe height (meters)	4	5
Distance from supporting structure (meters)	1	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	29	29
Distance from to furnace or incinerator flue (meters)	NA	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Eugene – Amazon Park</b>	
AQS ID	<b>41-039-0060</b>	
GPS Coordinates	44.0263, -123.0837	
Street address	E. 29 <sup>th</sup> Amazon Park, Eugene, OR	
County	Lane	
Distance from roadways (meters)	61	
Traffic count (AADT, yr)	AADT =1700, Yr = 2013	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>PM2.5</b>	
Parameter code, POC	88101,2	
MSA, CBSA, CSA or area represented	2400	
Monitor purpose	NAAQS	
Monitoring Objective	Population	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	R&P 2025 w/ VSCC	
Instrument parameter occurrence code	<b>Collocated</b>	
Method number	145	
FRM/FEM/FRM/other	FRM	
Collecting agency	LRAPA	
Analytical lab	LRAPA	
Reporting agency	ODEQ	
Monitoring start date	1/2/2002	
Current sampling frequency	1/12	
Sampling season	Annual	
Probe height (meters)	5	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	29	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

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Table C 14 Springfield Site Information

Local Site Name	<b>Springfield</b>	
AQS ID	<b>41-039-1009</b>	
GPS Coordinates	44.0467, -123.0177	
Street address	Springfield, OR	
County	Lane	
Distance from roadways (meters)	55	
Traffic count (AADT, yr)	AADT = 13,700, Yr = 2004	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>PM2.5</b>	
Parameter code, POC	88101,1	
MSA, CBSA, CSA or area represented	2400	
Monitor purpose	NAAQS	
Monitoring Objective	Population	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SPM	
Instrument type and model	R&P 2000 w/ WINS	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	117	
FRM/FEM/FRM/other	FRM	
Collecting agency	LRAPA	
Analytical lab	LRAPA	
Reporting agency	ODEQ	
Monitoring start date	1/4/2004	
Current sampling frequency	1/6	
Sampling season	Annual	
Probe height (meters)	9	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	53	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 15. Eugene – Saginaw Site Information

Local Site Name	<b>Eugene – Saginaw</b>	
AQS ID	<b>41-039-1007</b>	
GPS Coordinates	43.8345, -123.0353	
Street address	Delight Villy Sch Rd., Saginaw, OR	
County	Lane	
Distance from roadways (meters)	140	
Traffic count (AADT, yr)	No data available	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>Ozone</b>	
Parameter code, POC	44201,1	
MSA, CBSA, CSA or area represented	2400	
Monitor purpose	NAAQS, AQI	
Monitoring Objective	Downwind of Urban, Highest Concentration	
Spatial scale of Representativeness	Urban Scale	
Monitoring types	SLAMS	
Instrument type and model	Teledyne API 400 – Ultraviolet	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	087	
FRM/FEM/FRM/other	FRM	
Collecting agency	LRAPA	
Analytical lab	LRAPA	
Reporting agency	ODEQ	
Monitoring start date	5/1/1994	
Current sampling frequency	Hourly	
Sampling season	May-Sept	
Probe height (meters)	5	
Distance from supporting structure (meters)	1	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	43	
Distance from to furnace or incinerator flue (meters)	36	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Teflon	
Residence time for reactive gases (seconds)	3.5	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

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Table C 16. Eugene – Hwy 99 Site Information

Local Site Name	<b>Eugene – Hwy 99</b>	
AQS ID	<b>41-039-0059</b>	
GPS Coordinates	44.0672, -123.1414	
Street address	450 Pacific Hwy 99, Eugene, OR	
County	Lane	
Distance from roadways (meters)	75	
Traffic count (AADT, yr)	AADT= 29,000, yr = 2013	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>PM2.5</b>	<b>PM10</b>
Parameter code, POC	88101,1	81102,1 & 85101,1
MSA, CBSA, CSA or area represented	2400	2400
Monitor purpose	NAAQS, AQI	NAAQS
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	R&P 2025 w/ VSCC	R&P 2025
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	145	127
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	LRAPA	LRAPA
Analytical lab	LRAPA	LRAPA
Reporting agency	ODEQ	ODEQ
Monitoring start date	7/1/2011	1/1/2012
Current sampling frequency	1/3	1/6
Sampling season	Annual	Annual
Probe height (meters)	5	5
Distance from supporting structure (meters)	2	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	19	19
Distance from to furnace or incinerator flue (meters)	19	19
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name		
AQS ID		
GPS Coordinates		
Street address		
County		
Distance from roadways (meters)		
Traffic count (AADT, yr)		
Groundcover (e.g. asphalt, dirt, grass)		
Representative statistical area name (CBSA, MSA)		
Pollutant		
Parameter code, POC		
MSA, CBSA, CSA or area represented		
Monitor purpose		
Monitoring Objective		
Spatial scale of Representativeness		
Monitoring types		
Instrument type and model		
Instrument parameter occurrence code		
Method number		
FRM/FEM/FRM/other		
Collecting agency		
Analytical lab		
Reporting agency		
Monitoring start date		
Current sampling frequency		
Sampling season		
Probe height (meters)		
Distance from supporting structure (meters)		
Distance from obstructions on roof (meters)		
Distance from obstructions not on roof (meters)		
Distance from trees (meters)		
Distance from to furnace or incinerator flue (meters)		
Unrestricted airflow (degrees)		
Probe material for reactive gases		
Residence time for reactive gases (seconds)		
Will there be changes with the next 18 months?		
Is it suitable for comparison against the standard?		

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 17. Cottage Grove, City Shops Site Information

Local Site Name	<b>Cottage Grove, City Shops</b>	
AQS ID	<b>41-039-9004</b>	
GPS Coordinates	43.7995, -123.0535	
Street address	Cottage Grove, OR	
County	Lane	
Distance from roadways (meters)	177	
Traffic count (AADT, yr)	No Data Available	
Groundcover (e.g. asphalt, dirt, grass)	Dirt	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	
Parameter code, POC	88101,1	
MSA, CBSA, CSA or area represented	0000	
Monitor purpose	NAAQS,AQI	
Monitoring Objective	Population	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	R&P 2025 w/ WINS	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	118	
FRM/FEM/FRM/other	FRM	
Collecting agency	LRAPA	
Analytical lab	LRAPA	
Reporting agency	ODEQ	
Monitoring start date	1/1/2008	
Current sampling frequency	1/3	
Sampling season	Annual	
Probe height (meters)	5	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	36	
Distance from to furnace or incinerator flue (meters)	60	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 18. Oakridge, Willamette Center Site Information

Local Site Name	<b>Oakridge, Willamette Center</b>	
AQS ID	<b>41-039-2013</b>	
GPS Coordinates	43.7443, -122.4805	
Street address	School St., Oakridge, OR	
County	Lane	
Distance from roadways (meters)	115	
Traffic count (AADT, yr)	AADT = 6600, yr =2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	<b>PM10</b>
Parameter code, POC	88101,1	81102,1 & 85101,1
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	NAAQS, AQI	NAAQS
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	R&P 2025 w/ VSCC	R&P 2025
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	145	145
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	LRAPA	LRAPA
Analytical lab	LRAPA	LRAPA
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/1999	11/1/1989
Current sampling frequency	1/3	1/6
Sampling season	Annual	Annual
Probe height (meters)	5	5
Distance from supporting structure (meters)	2	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	20	20
Distance from to furnace or incinerator flue (meters)	63	63
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 19. Grants Pass, Parkside School Site Information

Local Site Name	<b>Grants Pass, Parkside School</b>	
AQS ID	<b>41-035-0114</b>	
GPS Coordinates	42.4342, -123.3485	
Street address	735 SW Wagner Meadows Dr., Grants Pass, OR	
County	Josephine	
Distance from roadways (meters)	85	
Traffic count (AADT, yr)	AADT = 4900, yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	
Parameter code, POC	88101,1	
MSA, CBSA, CSA or area represented	0000	
Monitor purpose	NAAQS, AQI	
Monitoring Objective	Population	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	R&P 2025 w/ WINS	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	118	
FRM/FEM/FRM/other	FRM	
Collecting agency	ODEQ	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	8/31/1999	
Current sampling frequency	1/6	
Sampling season	Annual	
Probe height (meters)	3	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	27	
Distance from to furnace or incinerator flue (meters)	87	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

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Table C 20. Medford, Grant & Belmont Site Information

Local Site Name	<b>Medford, Grant &amp; Belmont</b>	
AQS ID	<b>41-029-0133</b>	
GPS Coordinates	42.3141, -122.8792	
Street address	695 Belmont Street, Medford, OR	
County	Jackson	
Distance from roadways (meters)	13	
Traffic count (AADT, yr)	AADT = 1500, yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	<b>PM2.5</b>
Parameter code, POC	88101,1	88101,2
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	NAAQS, AQI	NAAQS
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	R&P 2025 w/ WINS	&P 2025 w/ WINS
Instrument parameter occurrence code	<b>Primary</b>	<b>Collocated</b>
Method number	118	118
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	10/21/1998	
Current sampling frequency	1/3	1/12
Sampling season	Annual	Annual
Probe height (meters)	3	3
Distance from supporting structure (meters)	2	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	29	29
Distance from to furnace or incinerator flue (meters)	21	21
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 21. Medford - Talent Site Information

Local Site Name	<b>Medford - Talent</b>	
AQS ID	<b>41-029-0201</b>	
GPS Coordinates	42.2299, -122.7877	
Street address	7120 Rapp ln, Talent, OR	
County	Jackson	
Distance from roadways (meters)	220	
Traffic count (AADT, yr)	AADT = 764, yr = 2006	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Medford-Ashland	
Pollutant	<b>Ozone</b>	
Parameter code, POC	44201,1	
MSA, CBSA, CSA or area represented	0000	
Monitor purpose	NAAQS, AQI	
Monitoring Objective	Downwind of Urban, Highest Concentration	
Spatial scale of Representativeness	Urban Scale	
Monitoring types	SLAMS	
Instrument type and model	Dasibi 1003	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	019	
FRM/FEM/FRM/other	FRM	
Collecting agency	ODEQ (0821)	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	5/12/1992	
Current sampling frequency	Hourly	
Sampling season	May-Sept	
Probe height (meters)	7	
Distance from supporting structure (meters)	1	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	49	
Distance from to furnace or incinerator flue (meters)	NA	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Teflon	
Residence time for reactive gases (seconds)	2.8	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 22. Klamath Falls, Petersen School Site Information

Local Site Name	<b>Klamath Falls, Petersen School</b>	
AQS ID	<b>41-035-0004</b>	
GPS Coordinates	42.1903, -121.7314	
Street address	4856 Clinton Ave, KlamathFalls,OR	
County	Klamath	
Distance from roadways (meters)	8	
Traffic count (AADT, yr)	AADT = 9090 (Clinton & Summers) , Yr = 2011	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	<b>PM2.5 Speciation,</b>
Parameter code, POC	88101,1	POC 5
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	NAAQS, AQI	Special Purpose
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	Special Purpose
Instrument type and model	R&P 2025 w/ VSCC	Super SASS & URG 3000N w/Pall Quartz filter and Cyclone Inlet
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	145	810,811,812,826 831,838, 839,840 841,842
FRM/FEM/FRM/other	FRM	other
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/5/1998	7/6/2009
Current sampling frequency	1/3	1/6
Sampling season	Annual	Annual
Probe height (meters)	3	3
Distance from supporting structure (meters)	2	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	43	43
Distance from to furnace or incinerator flue (meters)	46	46
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	No

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 23. Lakeview, Center and M Sts Site Information

Local Site Name	<b>Lakeview, Center and M Sts</b>	
AQS ID	<b>41-037-0001</b>	
GPS Coordinates	42.1892, -120.3540	
Street address	8 South M St., Lakeview, OR	
County	Lake	
Distance from roadways (meters)	25	
Traffic count (AADT, yr)	AADT = 3100 (Hwy 20 & L st., yr = 2012)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	
Parameter code, POC	88101,1	
MSA, CBSA, CSA or area represented	0000	
Monitor purpose	NAAQS, AQI	
Monitoring Objective	Population	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	R&P 2025 w/ WINS	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	118	
FRM/FEM/FRM/other	FRM	
Collecting agency	ODEQ	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	1/5/1998	
Current sampling frequency	1/3	
Sampling season	Annual	
Probe height (meters)	3	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	19	
Distance from to furnace or incinerator flue (meters)	19	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 24. Burns, Washington Street Site Information

Local Site Name	<b>Burns, Washington Street</b>	
AQS ID	<b>41-025-0003</b>	
GPS Coordinates	43.5892, -119.0487	
Street address	E. Washington St., Burns, OR	
County	Harney	
Distance from roadways (meters)	16	
Traffic count (AADT, yr)	AADT=3200 (Hwy20 & A St.), Yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	
Parameter code, POC	88101,1	
MSA, CBSA, CSA or area represented	0000	
Monitor purpose	NAAQS, AQI	
Monitoring Objective	Population	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	R&P 2025 w/ WINS	
Instrument parameter occurrence code	<b>Primary</b>	
Method number	118	
FRM/FEM/FRM/other	FRM	
Collecting agency	ODEQ	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	9/19/2009	
Current sampling frequency	1/1	
Sampling season	Annual	
Probe height (meters)	3	
Distance from supporting structure (meters)	2	
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	No obstructions	
Distance from trees (meters)	80	
Distance from to furnace or incinerator flue (meters)	41	
Unrestricted airflow (degrees)	360°	
Probe material for reactive gases	Aluminum	
Residence time for reactive gases (seconds)	NA	
Will there be changes with the next 18 months?	No	
Is it suitable for comparison against the standard?	Yes	

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 25. Prineville, Davidson Park Site Information

Local Site Name	<b>Prineville, Davidson Park</b>	
AQS ID	<b>41-013-0100</b>	
GPS Coordinates	44.2998, -120.8448	
Street address	251 SE Court St, Prineville, OR	
County	Crook	
Distance from roadways (meters)	10	
Traffic count (AADT, yr)	8800 (Hwy 26 & OR 27), 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM2.5</b>	<b>Chemical Speciation</b>
Parameter code, POC	88101,1	Numerous POC 5
MSA, CBSA, CSA or area represented	0000	6440
Monitor purpose	NAAQS, AQI	Informational
Monitoring Objective	Population	Population,
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	STN
Instrument type and model	R&P 2025 w/ WINS	Super SASS & URG3000N Quartz filter Cyclone Inlet
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	118	810,811,812,826 831,838,839,840 841,842
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/2009	9/1/2002
Current sampling frequency	1/3	Hourly
Sampling season	Annual	Annual
Probe height (meters)	3	6
Distance from supporting structure (meters)	2	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	37	24
Distance from to furnace or incinerator flue (meters)	39	9
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	No

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 26. La Grande, Ash Street Site Information

Local Site Name	<b>La Grande, Ash Street</b>	
AQS ID	<b>41-061-0119</b>	
GPS Coordinates	45.3390, -118.0952	
Street address	N. Ash St., La Grande, OR	
County	Union	
Distance from roadways (meters)	43	
Traffic count (AADT, yr)	No data	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM10</b>	<b>Air Toxic</b>
Parameter code, POC	81102,1	POC 7
MSA, CBSA, CSA or area represented	0000	6440
Monitor purpose	NAAQS, AQI	NATTS,
Monitoring Objective	Population	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	Special
Instrument type and model	Tisch PM10 HV+	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	063	110,118,176,156
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/2009	1/04/2005
Current sampling frequency	1/6	1/6
Sampling season	Annual	Annual
Probe height (meters)	3	6
Distance from supporting structure (meters)	2	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	37	25
Distance from to furnace or incinerator flue (meters)	39	15
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	PM10- Al, VOC Glass
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 27. La Grande, Ash Street Replacement Site Information

Local Site Name	<b>La Grande, Willow School</b>	
AQS ID	<b>41-061-XXXX</b>	
GPS Coordinates	45.3236, -118.0783	
Street address	N. Hall St. & E. N Ave, La Grande, OR	
County	Union	
Distance from roadways (meters)	43	
Traffic count (AADT, yr)	No data	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	<b>PM10</b>	<b>Air Toxic</b>
Parameter code, POC	81102,1	POC 7
MSA, CBSA, CSA or area represented	0000	6440
Monitor purpose	NAAQS, AQI	NATTS,
Monitoring Objective	Population	Population, Non-source oriented
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	Special
Instrument type and model	Tisch PM10 HV+	Tisch PM10 HV+, Tisch, PUF+, Entech VOC & Carbonyl
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	063	110,118,176,156
FRM/FEM/FRM/other	FRM	Other
Collecting agency	ODEQ	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/2016	1/1/2016
Current sampling frequency	1/6	1/6
Sampling season	Annual	Annual
Probe height (meters)	3	6
Distance from supporting structure (meters)	2	No supports
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	~55	~55
Distance from to furnace or incinerator flue (meters)	~60	~60
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Aluminum	PM10- Al, VOC Glass
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	Yes

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 28. Hermiston Municipal Airport Site Information

Local Site Name	<b>Hermiston Municipal Airport</b>	
AQS ID	<b>41-059-1003</b>	
GPS Coordinates	45.8290, -119.2630	
Street address	1498 Airport Way, Hermiston, OR	
County	Umatilla	
Distance from roadways (meters)	888,	
Traffic count (AADT, yr)	AADT = 7300 (MP 8.7, US395 or Hwy 54), Yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>Ozone</b>	<b>Wind Speed</b>
Parameter code, POC	44201,1	61101,1
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	NAAQS, AQI	Information
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Urban	Urban
Monitoring types	SLAMS	SLAMS
Instrument type and model	Dasibi 1003 – Ultraviolet	R M Young
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	019	050
FRM/FEM/FRM/other	FRM	other
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	2/27/2007	2/27/2007
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	May-Sept
Probe height (meters)	4	10
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	134	134
Distance from to furnace or incinerator flue (meters)	72	72
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	2.8	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Hermiston Municipal Airport</b>	
AQS ID	<b>41-059-1003</b>	
GPS Coordinates	45.8290, -119.2630	
Street address	1498 Airport Way, Hermiston, OR	
County	Umatilla	
Distance from roadways (meters)	888	
Traffic count (AADT, yr)	AADT = 7300 (MP 8.7, US395 or Hwy 54), Yr = 2012	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	<b>Wind Direction</b>	<b>Temperature</b>
Parameter code, POC	61104,1	62101,1
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	Information	Information
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Urban	Urban
Monitoring types	SLAMS	SLAMS
Instrument type and model	R M Young	Climatronics –
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	020	040
FRM/FEM/FRM/other	other	FRM
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	2/27/2007	2/27/2007
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	May-Sept
Probe height (meters)	4	10
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	134	134
Distance from to furnace or incinerator flue (meters)	72	72
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	NA	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Table C 29. Bend Rd Dept. Site Information

Local Site Name	<b>Bend Rd Dept.</b>	
AQS ID	<b>41-017-0121</b>	
GPS Coordinates	44.0219, -121.2602	
Street address	61150 SE 27th St., Bend, OR	
County	Deschutes	
Distance from roadways (meters)	221	
Traffic count (AADT, yr)	4370, 2009 (Stevens Rd.), City of Bend Publication	
Groundcover (e.g. asphalt, dirt, grass)	Scrubby ground	
Representative statistical area name (CBSA, MSA)	Bend	
Pollutant	<b>Ozone</b>	<b>Wind Speed</b>
Parameter code, POC	44201,1	61101,1
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	NAAQS, AQI	Information
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Urban	Urban
Monitoring types	SLAMS	SLAMS
Instrument type and model	Teledyne API 400E – uv absorption	Climatronics –
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	087	020
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	5/1/2009	1/1/2009
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	Annual
Probe height (meters)	4	10
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	26	26
Distance from to furnace or incinerator flue (meters)	34	34
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	NA
Residence time for reactive gases (seconds)	7.1	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	Yes	NA

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

Local Site Name	<b>Bend Rd Dept.</b>	
AQS ID	<b>41-017-0121</b>	
GPS Coordinates	44.0219, -121.2602	
Street address	61150 SE 27th St., Bend, OR	
County	Deschutes	
Distance from roadways (meters)	221	
Traffic count (AADT, yr)	4370, 2009 (Stevens Rd.), City of Bend Publication	
Groundcover (e.g. asphalt, dirt, grass)	Scrubby ground	
Representative statistical area name (CBSA, MSA)	Bend	
Pollutant	<b>Wind Direction</b>	<b>Temperature</b>
Parameter code, POC	61104,1	62101,1
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	Information	Information
Monitoring Objective	Population	Population
Spatial scale of Representativeness	Urban	Urban
Monitoring types	SLAMS	SLAMS
Instrument type and model	Climatronics	Climatronics
Instrument parameter occurrence code	<b>Primary</b>	<b>Primary</b>
Method number	050	040
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/2009	1/1/2009
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	10	2
Distance from supporting structure (meters)	1	1
Distance from obstructions on roof (meters)	No obstructions	No obstructions
Distance from obstructions not on roof (meters)	No obstructions	No obstructions
Distance from trees (meters)	26	26
Distance from to furnace or incinerator flue (meters)	34	34
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	NA	NA
Residence time for reactive gases (seconds)	NA	NA
Will there be changes with the next 18 months?	No	No
Is it suitable for comparison against the standard?	NA	NA

## Appendix D. Site Evaluation Checklist

### Region 10 ANNUAL AIR MONITORING NETWORK PLAN CHECKLIST

Year:

Agency:

40 CFR 58.10(a)(1) requires that each Annual Network Plan (ANP) include information regarding the following types of monitors: SLAMS monitoring stations including FRM, FEM, and ARM monitors that are part of SLAMS, NCore stations, STN stations, State speciation stations, SPM stations, and/or, in serious, severe and extreme ozone nonattainment areas, PAMS stations, and SPM monitoring stations.

1.	ANP requirement	Citation within 40 CFR 58	Was the info submitted? <sup>1</sup> If yes, page #s. Flag if incorrect? <sup>2</sup>	Does the information provided <sup>3</sup> meet the req? <sup>4</sup>	Notes
1.	Submit plan by July 1 <sup>st</sup>	58.10 (a)(1)	No		Competing reporting requirements like AQS certification makes it difficult to finish the plan on time.
2.	Statement of purpose for each monitor including SPMs per 58.20(a)	58.10 (a)(1)	Yes, pages 41 to 86.	Yes	
3.	30-day public comment / inspection period <sup>5</sup>	58.10 (a)(1), 58.10 (a)(2)	Yes	Yes	

<sup>1</sup> Response options: NA (Not Applicable), Yes, No, Incomplete, Incorrect. The responses “Incomplete” and “Incorrect” assume that some information has been provided.

<sup>2</sup> To the best of our knowledge.

<sup>3</sup> Assuming the information is correct

<sup>4</sup> Response options: NA (Not Applicable) – [reason], Yes, No, Insufficient to Judge.

<sup>5</sup> The affected state or local agency must document the process for obtaining public comment and include any comments received through the public notification process within their submitted plan.

## 2015 Oregon Annual Ambient Air Monitoring Network Plan

1.	ANP requirement	Citation within 40 CFR 58	Was the info submitted? <sup>1</sup> If yes, page #s. Flag if incorrect? <sup>2</sup>	Does the information provided <sup>3</sup> meet the req? <sup>4</sup>	Notes
4.	Modifications to SLAMS network – case when we are not approving actual system modifications (i.e., we will do it outside the ANP process <sup>6</sup> )	58.10 (a)(2) 58.10(e)	No	NA – no changes	
5.	Modifications to SLAMS network – case when we are approving actual system modifications per 58.14(c)	58.10 (a)(2) 58.10 (b)(5) 58.10(e) 58.14 (c)	Yes, page 19.	NA – no changes	
6.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?		No	NA – no changes	
7.	NCORE site operational (by 1/1/2011)	58.10 (a)(3)	Yes, page 41	Yes	
8.	Pb site for 0.5-1.0 tpy sources operational (by 12/27/2011)	58.10 (a)(4)	No	Yes, Appendix E – Waivers	The only Pb source site was discontinued in the 2012 ANP with a waiver granted by EPA.
9.	NO <sub>2</sub> plan for area-wide and RA40 sites submitted by 7/1/2012	58.10 (a)(5)	Yes, page 33.	NA	
10.	NO <sub>2</sub> area-wide and RA40 sites operational by 1/1/2014	58.10 (a)(5)	No	NA	Starting date was 4/15/2014.
11.	NO <sub>2</sub> plan for near-road sites submitted by 7/1/2013	58.10 (a)(5)	Yes, page 33.	NA	.
12.	SO <sub>2</sub> sites operational (by 1/1/2013)	58.10 (a)(6) and 58.13(d)	Yes, page 34.	NA	
13.	AQS site identification number for each site	58.10 (b)(1)	Yes, pages 41 to 86.	Yes	
14.	Location of each site: street address and geographic coordinates	58.10 (b)(2)	Yes, pages 41 to 86.	Yes	
15.	Sampling and analysis method(s) for each measured parameter	58.10 (b)(3)	Yes, pages 41 to 86.	Yes	
16.	Any proposals to remove or move a monitoring	58.10 (b)(5)	Yes, page 19	Yes	Two NATTS site moves needed.

<sup>6</sup> See 58.14(c)

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1.	ANP requirement	Citation within 40 CFR 58	Was the info submitted? <sup>1</sup> If yes, page #s. Flag if incorrect? <sup>2</sup>	Does the information provided <sup>3</sup> meet the req? <sup>4</sup>	Notes
	station within a period of 18 months following plan submittal				
17.	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D	Yes, pages 41 to 86.	Yes	
18.	Identification of sites suitable and sites not suitable for comparison to the annual PM2.5 NAAQS as described in Part 58.30	58.10 (b)(7)	Yes, pages 41 to 86.	Yes	
19.	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)	Yes, pages 41 to 86.	Yes	
20.	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)	Yes, page 35.	Yes	
21.	Any source-oriented Pb site for which a waiver has been requested or granted by EPA RA	58.10 (b)(10)	Yes, page 94.	Yes	
22.	Any Pb monitor for which a waiver has been requested or granted by EPA RA for use of Pb-PM10 in lieu of Pb-TSP	58.10 (b)(11)	Yes, page 35.	Yes	
23.	Identification of required NO2 monitors as either near-road or area-wide, or vulnerable and susceptible population monitors	58.10 (b)(12)	Yes, 54.	Yes	<i>One Area wide site, one near-road site</i>
24.	Identification of any PM2.5 FEMs and/or ARMs not eligible to be compared to the NAAQS ( <i>Note 1: must include required data assessment.</i> ) ( <i>Note 2: Required SLAMS must monitor PM2.5 with NAAQS-comparable monitor at the required sample frequency.</i> )	58.10 (b)(13) 58.11 (e)	No	NA	<i>We are not submitting FEMs or ARMs for comparison to the NAAQS. DEQ and LRAPA are running PM2.5 FEMS for informational purposes.</i>
25.	For SPMs listed as non-regulatory, note the start Date of FRM/FEM/ARM at SPM. If > 24 months, and monitor is eligible for comparison to the NAAQS per 58.11 (e) and 58.30, the agency must supply information that App A, C or E requirements were not met.	58.20(c)	Yes, page 60.	Yes	Springfield City Hall PM2.5 FRM
26.	Document how states and local agencies provide for the review of changes to a PM2.5 monitoring	58.10 (c)	No.	Yes	There have been no changes to the PM2.5 monitoring network but DEQ will

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	network that impact the location of a violating PM2.5 monitor.				document how any future changes will be processed.
27.	Does the plan include a request for approval for and alternative to appendix A requirements for SPMs operating a FRM/FEM/ARM which also meets appendix E?	58.11 (a) (2)	NA	NA	<i>No such monitoring sties</i>
28.	Start date for each monitor	Required to determine if other req. (e.g., min # and co-lo) are met	Yes, pages 41 to 86.	Yes	
29.	Instrument monitor type for each monitor	Required to determine if other req. (e.g., min # and co-lo) are met	Yes, pages 41 to 86 and Appendix A.	Yes	
30.	Monitoring objective for each instrument	App D 1.1 58.10 (b)(6)	Yes, pages 41 to 86.	Yes	
31.	Site type for each instrument	App D 1.1.1	Yes, pages 41 to 86.	Yes	
32.	Instrument parameter code for each instrument	Required to determine if other req. (e.g., min # and co-lo) are met	Yes, pages 41 to 86.	Yes	
33.	Instrument parameter occurrence code for each instrument	Required to determine if other req. (e.g., min # and co-lo)	Yes, pages 41 to 86.	Yes	

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		are met			
34.	Sampling season for ozone (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4) App D, 4.1(i)	Yes, pages 41 to 86.	Yes	
35.	Sampling schedule for PM2.5 - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4) 58.12(d) App D 4.7	Yes, pages 41 to 86.	Yes	
36.	Sampling schedule for PM10	58.10 (b)(4) 58.12(e) App D 4.6	Yes, pages 41 to 86.	Yes	
37.	Sampling schedule for Pb	58.10 (b)(4) 58.12(b) App D 4.5	Yes, pages 41 to 86.	Yes	
38.	Sampling schedule for PM10-2.5	58.10 (b)(4) 58.12(f) App D 4.8	Yes, pages 41 to 86.	Yes	
39.	Minimum # of monitors for O3 met? [Note: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors] (see footnote) <sup>7</sup>	App D, 4.1(a) and Table D-2	Yes, page 22	Yes	
40.	Identification of max. conc. O3 monitor(s)	App D 4.1 (b)	Yes, pages 41 to 86.	Yes	
41.	Minimum monitoring requirements met for near-road NO2 (2014 start date)	App D 4.3.2	Yes, pages 30 to 37.	Yes	
42.	Minimum monitoring requirements met for area-wide NO2	App D 4.3.3	Yes, pages 30 to 37.	Yes	
43.	Minimum monitoring requirements met for SO2	App D 4.4	Yes, pages 30 to	Yes	

<sup>7</sup> Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements. In addition, ozone monitors that do not meet traffic count/distance requirements to be neighborhood scale (40 CFR 58 Appendix E, Table E-1) cannot be counted towards minimum monitoring requirements.

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1.	ANP requirement	Citation within 40 CFR 58	Was the info submitted? <sup>1</sup> If yes, page #s. Flag if incorrect? <sup>2</sup>	Does the information provided <sup>3</sup> meet the req? <sup>4</sup>	Notes
	<i>[Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]</i>		37.		
44.	Minimum monitoring requirements met for Pb <i>[Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]</i>	App D 4.5 58.13(a)	Yes, pages 30 to 37.	Yes	
45.	Minimum # of monitors for PM2.5 met? <i>[Note 1: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]</i>	App D, 4.7.1(a) and Table D-5	Yes, pages 30 to 37.	Yes	
46.	Minimum monitoring requirements for continuous PM2.5 met?	App D 4.7.2	Yes, pages 30 to 37.	Yes	These are used for the Air Quality Index only.
47.	Minimum # of monitors for PM10 met?	App D, 4.6 (a) and Table D-4	Yes, pages 30 to 37.		
48.	Minimum monitoring requirements met for PM10-2.5 mass at NCore sites?	App D 4.8 App D 4.7.2	Yes, pages 30 to 37.	Yes	
49.	Distance of site from nearest road	App E 6	Yes, pages 41 to 86.	Yes	
50.	Traffic count of nearest road	App E	Yes, pages 41 to 86.	Yes	Where traffic counts to the nearest road was unavailable, the traffic count to the nearest road with data was provided.
51.	Probe height	App E 5 App E 2	Yes, pages 41 to 86.	Yes	
52.	Distance from supporting structure	App E 3(b) App E 2	Yes, pages 41 to 86.	Yes	
53.	Distance from obstructions on roof	App E, 4(a) and 4(b) App E 4(b)	Yes, pages 41 to 86.	Yes	

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1.	<b>ANP requirement</b>	<b>Citation within 40 CFR 58</b>	<b>Was the info submitted?<sup>1</sup> If yes, page #s. Flag if incorrect<sup>2</sup>?</b>	<b>Does the information provided<sup>3</sup> meet the req?<sup>4</sup></b>	<b>Notes</b>
54.	Distance from obstructions not on roof	App E 9 App E 4(a)	Yes, pages 41 to 86.	Yes	
55.	Distance from trees	App E 9 App E 5	Yes, pages 41 to 86.	Yes	
56.	Distance to furnace or incinerator flue	App E 3(b)	Yes, pages 41 to 86.	Yes	
57.	Unrestricted airflow	App E, 4(a) and 4(b)	Yes, pages 41 to 86.	Yes	
58.	Probe material (if applicable)	App E 9	Yes, pages 41 to 86.	Yes	
59.	Residence time (if applicable)	App E 9	Yes, pages 41 to 86.	Yes	

2.

## Appendix E. Waivers

EPA Region 10 has granted DEQ and LRAPA waivers to discontinue required monitoring that was of lower value in order to keep higher value monitors operational and start up new required monitoring. The tables below show the monitoring sites with waivers and their required reported values from surrogate sources.

### 1. TSP Lead Waiver

EPA approved ODEQ’s request to discontinue TSP lead monitoring at Cascade Mills in McMinnville. The measured TSP lead levels were far below the standard and the monitoring resources were needed for the new Portland, Near Roadway site monitoring. The table below shows the waiver parameters.

Table D 1. McMinnville, Cascade Steel TSP lead Waiver

	Waiver requirement	TSP Lead levels	Comments
McMinnville, Cascade Steel (41-071-1702)	Three year average is < 50% of std (Std is 0.15ug/m3)	2010 to 2012 three yr average was 0.04ug/m3 or 24% of Std	Waiver approved by EPA

### 2. Carbon monoxide Waivers

The Medford is a CO maintenance areas but its monitoring site was discontinued in 2010 because of very low concentrations and funding cuts. The maintenance plan requires monitoring however, so EPA and ODEQ agreed upon an alternative method to track CO. The Metropolitan Planning Organization periodically updates their transportation plan and runs a CO emission model. This model is used to track CO. The model is not run every year so the latest result is reported in the table below.

Table D 2. CO emission estimates from the Rogue Valley and Central Lane County MPOs.

Analysis Year	Medford Area Estimated CO Emissions (Tons/yr)
2015	3,485
2020	3,650
2026	3,559
2034	3,871

### 3. PM10 Waivers

In 2010, Klamath Falls and Grants Pass PM<sub>10</sub> monitors were discontinued because their values had dropped far below the NAAQS and funding was cut. The PM<sub>10</sub> maintenance plans for these sites required continued monitoring so EPA and ODEQ agreed upon an alternate method to track PM<sub>10</sub>. EPA allowed ODEQ to discontinue PM<sub>10</sub> monitoring if we used PM<sub>2.5</sub> monitoring as a

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surrogate. In the 2010 network plan, we showed that the PM<sub>10</sub> consisted predominantly of PM<sub>2.5</sub>. We developed correlation equations and calculated 2014 PM<sub>10</sub> estimates for these sites based on PM<sub>2.5</sub>. Klamath Falls also has trigger point values which would lead to restarting the monitor. The PM<sub>10</sub> standard is 150µg/m<sup>3</sup>.

Table D 3. Linear regression equations used to estimate PM10 using PM2.5.

	Klamath Falls	Grants Pass
Linear Regression Equation	$y = 1.4x + 3.2$	$y = 1.2x + 2.6$

Y = PM<sub>10</sub>, X = PM<sub>2.5</sub>

Table D 4. 2013 PM10 estimates for Klamath Falls and Grants Pass.

	PM2.5 98th percentile (µg/m <sup>3</sup> )	PM10 Estimate (µg/m <sup>3</sup> )
Klamath Falls (41-035-0004)	29.6	45
Grants Pass (41-033-0114)	35.5	33

## **Appendix F. Review of Violating monitor changes.**

Documentation and decision processes for changing or moving violating monitors. DEQ, LRAPA, and EPA may decide that a monitoring location, method, frequency, or other properties needs to be changed to provide more accurate or representative information for an area. Any changes will go through public notice and be approved by Region 10 EPA, Oregon DEQ or (Lane Regional Air Protection Agency depending on the location). Changes will meet the siting criteria in 40 CFR Part 58.

## Appendix G 2014 Design Values

Pollutant	Design Value Type	City	Design Value	% of NAAQS
Ozone	8 hour	Hermiston	64 ppb	85%
		Medford	64 ppb	85%
		Portland Metro	62 ppb	83%
		Salem	60 ppb	80%
		Bend	59 ppb	79%
		Eugene/Springfield	58 ppb	77%
CO	8 hour (2nd highest day)	Portland Metro	1.3 ppb	14%
NO <sub>2</sub>	Hourly/Annual	Portland Metro	35/8 ppb	15 / 35%
SO <sub>2</sub>	Hourly	Portland Metro	8 ppb	8%
PM <sub>2.5</sub>	Daily/Annual	Lakeview	57.5/11.0 ug/m <sup>3</sup>	162/ 92 %
		Prineville	41.8/ 9.6 ug/m <sup>3</sup>	118/ 80 %
		Oakridge	40.2/ 9.0 ug/m <sup>3</sup>	113/ 75 %
		Cave Junction	34.0/ 7.8 ug/m <sup>3</sup>	96 / 65 %
		Klamath Falls	33.9/10.4 ug/m <sup>3</sup>	95 / 87 %
		Eugene/Springfield	31.6 / 7.3 ug/m <sup>3</sup>	89 / 61 %
		Burns	31.4 / 9.2 ug/m <sup>3</sup>	88 / 77 %
		La Grande	29.9 / 8.5 ug/m <sup>3</sup>	84 / 71 %
		John Day	29.6 / 9.8 ug/m <sup>3</sup>	83 / 82 %
		Portland Metro	27.7 / 7.8 ug/m <sup>3</sup>	78 / 65 %
		Pendleton	25.5 / 7.4 ug/m <sup>3</sup>	72 / 62 %
		Medford	25.3 /10.1 ug/m <sup>3</sup>	71 / 84 %
		Salem	24.2 / 6.8 ug/m <sup>3</sup>	68 / 57 %
		Albany	23.9 / 6.6 ug/m <sup>3</sup>	67 / 55 %
		Cottage Grove	23.1 / 7.1 ug/m <sup>3</sup>	65 / 59 %
		The Dalles	22.0 / 6.3 ug/m <sup>3</sup>	62 / 53 %
		Enterprise	21.5 / 6.1 ug/m <sup>3</sup>	61 / 51 %
		Sweet Home	21.3 / 6.0 ug/m <sup>3</sup>	60 / 50 %
		Baker City	20.7 / 7.6 ug/m <sup>3</sup>	58 / 63 %
		Bend	19.9 / 5.5 ug/m <sup>3</sup>	56 / 46 %
Grants Pass	18.9 / 8.2 ug/m <sup>3</sup>	53 / 68 %		
Corvallis	18.7 / 5.5 ug/m <sup>3</sup>	53 / 46 %		
Sisters	17.3 / 4.7 ug/m <sup>3</sup>	51 / 39 %		
PM <sub>10</sub>	Daily – 2nd highest day	Klamath Falls	44 µg/m <sup>3</sup>	29%
		Oakridge	43 µg/m <sup>3</sup>	29%
		La Grande	43 µg/m <sup>3</sup>	29%
		Eugene	37 µg/m <sup>3</sup>	25%
		Grants Pass	37 µg/m <sup>3</sup>	25%
		Medford	35 µg/m <sup>3</sup>	23%
		Portland Metro	30 µg/m <sup>3</sup>	20%
Lead	3 Month Aver	Hillsboro (Only 2yrs in average)	0.006 µg/m <sup>3</sup>	3%
		Portland	0.005 µg/m <sup>3</sup>	1%
		La Grande	0.001 µg/m <sup>3</sup>	4%

