



2024 Oregon Annual Ambient Criteria Pollutant Air Monitoring Network Plan

To be submitted to: EPA Region 10

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Executive Summary

This annual criteria pollutant network plan is required by EPA and discusses changes to the Oregon's criteria pollutant monitoring network. ODEQ also has an ambient air toxics monitoring network plan at <http://www.oregon.gov/deq/air/Pages/Air-Quality-Monitoring.aspx>

In 2024/2025 ODEQ plans the following changes to the criteria monitoring network upon approval from EPA.

PM2.5 Federal Equivalence Monitoring (FEM)

ODEQ is requesting funds from the EPA Inflation Reduction Grant to add special purpose Federal Equivalence monitors at sites around the state for the purpose of providing regional collocated calibration for the PM2.5 AQI non-FEM monitors.

PM10 Monitoring in Lane County

Wildfire smoke impacts in Oakridge have triggered the requirement to add another PM10 monitoring site to the Eugene-Springfield MSA (Lane County). ODEQ and LRAPA are requesting that EPA use its discretion to remove this requirement since another monitor would not help the MSA with wildfire smoke impacts.

ODEQ and LRAPA are also requesting a waiver from EPA to allow Oakridge's PM2.5 monitor be used as a surrogate for PM10 monitoring, since most of the PM10 in Oakridge is made up of PM2.5. A waiver request showing that the accuracy of using PM2.5 as a surrogate, and the low PM10 concentrations in Oakridge is included.

Photochemical Assessment Monitoring Stations (PAMS)

ODEQ is starting the PAMS monitoring in the summer of 2024. This will measure the precursors to ozone (smog) formation in the Portland Metro area.

Near Road Site

The Portland –Vancouver- Hillsboro CBSA has over 2.5 million people in 2020, triggering the requirement for a second near road site measuring NO2. ODEQ is working on finding a location on I-5, between the I-84 and Fremont Bridge interchanges. The ideal location would be near Tubman School since there is a lot of concern about the impact of the freeway on the neighborhood. ODEQ hopes to have this operational by the summer of 2025.



This document is available on the Oregon Department of Environmental Quality's website at:

<https://www.oregon.gov/deq/air/pages/air-quality-monitoring.aspx>

Key word search: Oregon DEQ Air Quality Monitoring

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Acronyms

AQI	Air Quality Index – standardized method of reporting air Quality
AQS	EPA's air quality database
BAM	Beta Attenuation Monitor
CBSA	Core-Based Statistical Area
CFR	Code of Federal Regulations
CO	Carbon monoxide – An odorless, colorless gas
CSN	Chemical Speciation Network
DV	Design Value – the concentration used to compare to the NAAQS
FEM	Federal Equivalence Method (used for comparison to NAAQS)
FRM	Federal Reference Method (Method used for comparison to NAAQS)
HAPs	Hazardous Air Pollutant as defined in Title III of the Clean Air Act
IMPROVE	EPA's PM _{2.5} speciation visibility network
LRAPA	Lane Regional Air Protection Agency (Lane County)
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NATTS	National Air Toxics Trends network
NCore	National Core Monitoring Site
NO	Nitrogen oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of Nitrogen (NO + NO ₂)
NO _y	Total reactive Oxides of Nitrogen
O ₃	Ozone
PAMS	Photochemical assessment monitoring stations
Pb	Lead
PM _{2.5}	Particulate Matter 2.5 micrometers in diameter and smaller
PM ₁₀	Particulate Matter 10 micrometers in diameter and smaller
PM _{10-2.5} or PM _c	The particle size between 10 and 2.5.
SIP	State Implementation Plan
SLAMS	State and Local Monitoring Sites (used for comparison to the NAAQS)
SO ₂	State Implementation Plan
SPM	Special Purpose Sites (Informational)
TSP	Total Suspended Particulates
VOC	Volatile Organic Compounds
Concentrations	
ppm	Parts per million
ppb	Parts per billion
µg/m ³	Microgram per cubic meter
ng/m ³	Nanograms per cubic meter
LTP or LC	Local temperature and pressure
STP	Standard temperature and pressure (25°C and 1 atmosphere)

1. Introduction

The Oregon Department of Environmental Quality's (DEQ) 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 Code of Federal Regulations (CFR) requirements.

EPA's ambient air quality surveillance regulations in 40 C.F.R. Part 58 require states to establish air quality monitoring network in their State Implementation Plans (SIPs). The monitoring network of State and Local Air Monitoring Stations are referred to as SLAMS and are used for comparison to the National Ambient Air Quality Standards (NAAQS). These stations measure ambient concentrations of those air pollutants for which 40 C.F.R. Part 50 sets standards. SLAMS must meet the requirements of 40 C.F.R. Part 58 contained in:

- Appendix A (Quality Assurance Requirements)
- Appendix C (Ambient Air Quality Monitoring Methodology)
- Appendix D (Network Design Criteria)
- Appendix E (Probe and Path Siting Criteria)

States determine if they conform to Appendices A and C in part through periodic performance audits. States conform to Appendices D and E by conducting an annual network review. This review is documented in this annual network plan that meets the following requirements:

- The plan describes any network modifications planned in the upcoming 18 months. NCore or SLAMS network modifications are subject to approval of the EPA Regional Administrator
- For each existing and proposed monitoring site, the plan includes the following information:
 - o The AQS site number
 - o The represented MSA or other geographic area
 - o The special scale, sampling method, and operating schedule
- The plan must be made available for public comment for at least 30 days prior to submission to the EPA. The final plan includes, and addresses comments received through the public notification process.

2. Monitoring background

The Oregon monitoring network is designed to meet the three monitoring objectives defined in 40 C.F.R. Part 58 Appendix D:

2.1 Provide air pollution data to the public in a timely manner.

ODEQ provides timely air quality data in a variety of ways:

- Hourly PM2.5, ozone, NO2, CO, SO2, and meteorology updates on the ODEQ Air Quality Index web page and phone app.
- Access to all past continuous data through the ODEQ Air Quality Index web page.
- Access to hourly data on EPA's AIRNow AQI web site.
- Access to hourly PM2.5 data on EPA's fire and smoke map.

- Access to all criteria pollutant, air toxics, and meteorology data through EPA's AQS web site, AIR DATA.
- Air Quality Health Advisories.
- Agricultural field burning feedback.
- Prescribed burning feedback.
- Visibility information for recreational activities (i.e. Crater Lake visits)

2.2 Support compliance with National Ambient Air Quality Standards (NAAQS) and development of pollution control strategies.

- Ambient air quality data are used to:
- Determine compliance with the NAAQS.
- Determine the location of maximum concentrations.
- Track the SIPs and maintenance plan progress.
- Support the maintenance plans control advisory programs (i.e. woodstove no burn days).
- Provide data for legislative key performance measures.
- Provide data for regional haze protection of Class 1 areas.

2.3 Support air pollution research.

- PAMS, PM2.5 Chemical Speciation, Near Road data are collected to verify models and evaluate pollution reduction programs.
- Support development of new monitoring methods.
- Evaluating air pollution impacts on public health.
- Track air quality trends.
- Identify emerging air quality issues.
- Analyze impacts of air quality episodes like wildfire impacts.

In order to meet these three objectives, 40 C.F.R. Part 58 Appendix D calls for the design of SLAMS networks to include several different types of monitors. These general types are sites that:

1. Determine the highest concentrations in an area.
2. Determine representative concentrations in high population areas.
3. Determine the impact of significant sources or source categories on pollutant concentrations in the ambient air.
4. Determine background concentrations.
5. Determine pollutant transport between populated areas.
6. Determine the impacts on visibility or vegetation in more rural and remote areas.

Appendix D of 40 C.F.R. Part 58 also provides guidance on spatial scales of representativeness for the SLAMS network. Ideally, the station is located so that its sample represents the air quality across the scale that the station is intended to represent. Appendix D defines the following spatial scales:

1. **Microscale:** Dimensions between several and 100 meters.
2. **Middle scale:** Between 100 and 500 meters, typically several city blocks.

3. **Neighborhood scale:** Between 0.5 and 4 kilometers with relatively uniform land use.
4. **Urban scale:** City-like dimensions between 4 and 50 kilometers. Urban and neighborhood scales can overlap considerably. Heterogeneous urban areas may not have a single representative site.
5. **Regional scale:** From tens to hundreds of kilometers with relatively homogeneous geography and no large sources.
6. **National and global scales:** Scales representing the nation or globe as a whole.

Table 1. Appropriate spatial scales for each criteria pollutant and applicable site types.

Scale	SO2	CO	O3	NO2	Pb	PM10	PM2.5	Site Types
Micro	x	x	X	x	x	x	x	High concentration, source impact
Middle	x	x	X	x	x	x	x	
Neighborhood	x	x	x	x	x	x	x	High concentration, source impact, general/background
Urban	x		x	x			x	High concentration, source impact, general/background, regional transport, welfare-related impacts.
Regional	x		x				x	General/background, regional transport, welfare-related impacts.

2.4 Other ambient monitoring data needs

In addition to the SLAMS criteria pollutant monitoring sites, ODEQ and LRAPA uses nephelometers and DEQ SensORs to estimate PM2.5 concentrations and inform the public of air quality conditions in communities where criteria pollutant monitoring is not required. Typically, nephelometer monitoring sites use site-specific PM2.5 correlations developed from collocated Federal Reference Method (FRM) or Federal Equivalent Method (FEM) monitor data. Lower concentration sites may use generalized regional correlations developed at sites with similar geographic and source characteristics. These sites are operated in accordance with 40 C.F.R. Part 58 Appendix A requirements for quality assurance and quality control. At nephelometer sites where PM2.5 concentrations are consistently measured at or greater than 80 percent of the NAAQS, ODEQ has transitions to FEM monitoring. ODEQ has PM2.5 sensors at all the ozone sites These sensors serve as an important public information tool during summer wildfire smoke events and have eliminated much confusion around conflicting AQI information from ozone-only monitoring sites during periods of elevated PM2.5.

The ODEQ SensOR is a non-FEM light scattering monitor developed by ODEQ to measure PM2.5 estimates without the need for the nephelometer. The SensOR is easier to install, less expensive, and just as accurate and reliable as the nephelometer sites. More information on the ODEQ SensOR is available on ODEQ's Air Quality Monitoring website.

2.5 Oregon Core-Based Statistical Areas and Population

The minimum monitoring requirements listed in 40 C.F.R. Part 58 Appendix D are based on the core-based statistical areas (CBSAs) defined by the U.S. Office of Management and Budget. Oregon’s CBSAs are shown in Figure 1 (U.S. Census Bureau, 2020). The 2023 population estimates of CBSAs in Oregon over 50,000 people are listed in Table 2. The table also includes areas with populations less than 50,000 people as estimated by the Portland State University, Population Research Center. Oregon’s population is mainly centered in the Portland Metro Area down through the Willamette Valley. These areas account for nearly 70% of the state’s population. The largest population areas outside the Willamette Valley are in the Rogue Valley (Medford) and in Deschutes County (Bend).

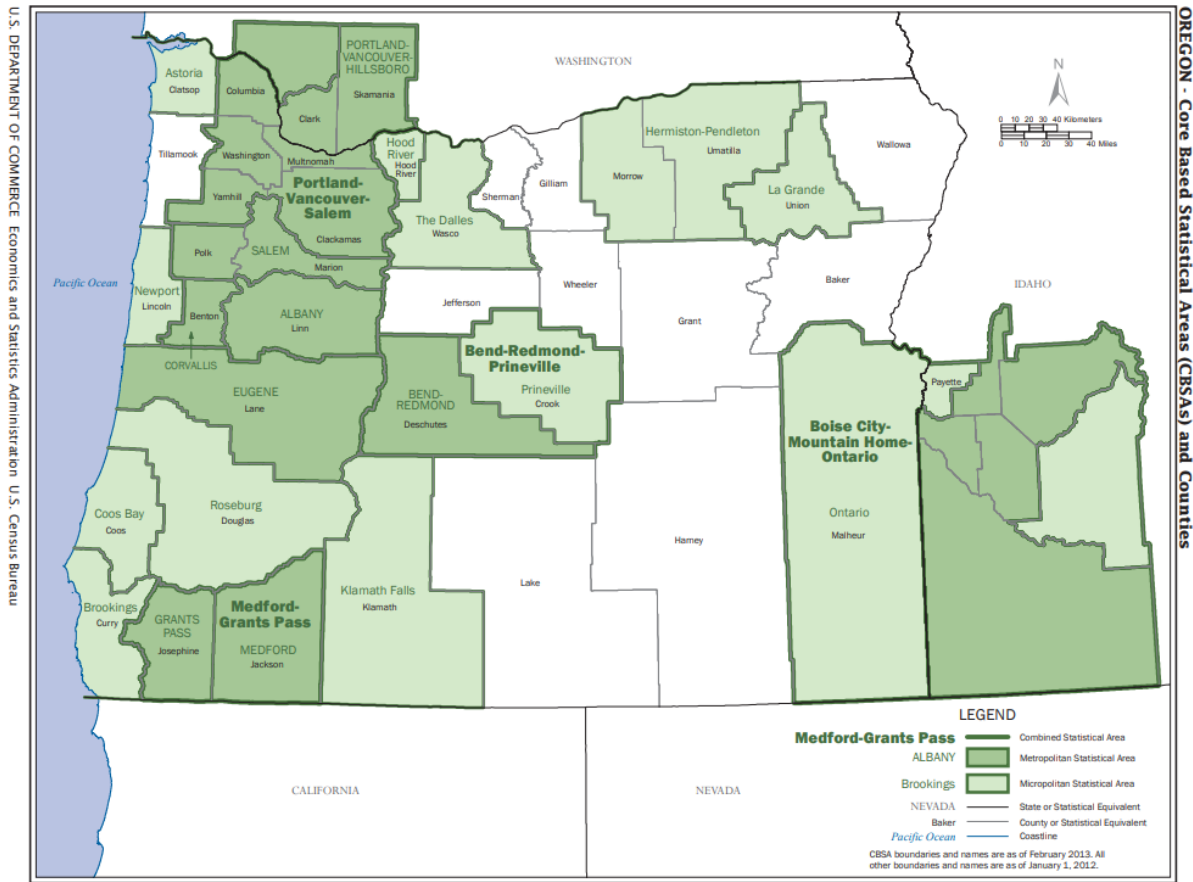


Figure 1. Oregon 2020 CBSA map (US. Census Bureau)

Table 2. 2023 Oregon Population estimates

MSA or City	2023	Estimate Source	Area
Portland-Vancouver-Hillsboro, OR-WA Metro Area	2,508,050	US Census	North Willamette Valley
Salem, OR Metro Area	436,546	US Census	Willamette Valley
Eugene-Springfield, OR Metro Area	381,181	US Census	
Bend, OR Metro Area	260,919	US Census	Central Eastern OR
Medford, OR Metro Area	220,768	US Census	SW OR
Albany, OR Metro Area	131,496	US Census	Willamette Valley
Corvallis, OR Metro Area	97,713	US Census	
Grants Pass, OR Metro Area	87,821	US Census	SW OR
Pendleton-Hermiston	57,003	PSU-PRC	Eastern OR
Roseburg	41,193	PSU-PRC	SW OR
Coos Bay	27,302	PSU-PRC	Coast
Woodburn city	27,044	PSU-PRC	Willamette Valley
Klamath Falls	24,142	PSU-PRC	SE OR
La Grande	17,568	PSU-PRC	NE OR
The Dalles	16,898	PSU-PRC	Columbia Gorge
Astoria	16,629	PSU-PRC	Coast
St. Helens	15,009	PSU-PRC	Lower Columbia River
Ontario city	14,312	PSU-PRC	Eastern OR
Prineville	11,598	PSU-PRC	Central Eastern OR
Cottage Grove	11,095	PSU-PRC	Willamette Valley
Baker City	10,102	PSU-PRC	Eastern OR
Sweet Home	10,028	PSU-PRC	Willamette Valley
Hood River	9,977	PSU-PRC	Columbia Gorge
Brookings	7,161	PSU-PRC	Coast
Burns	4,435	PSU-PRC	NE OR
Oakridge	3,235	PSU-PRC	Willamette Valley
Lakeview	2,476	PSU-PRC	SE OR

Sources:
 US Census Bureau
 Portland State University, Population Research Center

2.6 Non-attainment and Maintenance Areas

Maintenance areas are those geographic areas that had a history of non-attainment, but are now consistently meeting the National Ambient Air Quality Standard. Maintenance areas have been re-designated by EPA from "nonattainment" to "attainment with a maintenance plan,". Legal descriptions of these areas are listed in Oregon Administrative Rules, [Chapter 340, Division 204-0010](#).

Non-attainment areas awaiting maintenance plans:

PM2.5 Klamath Falls - Moderate nonattainment of 2006 daily PM2.5 standard.
2012 State implementation Plan.

Maintenance Areas in Oregon:

CO: Grants Pass Central Business District – Limited maintenance plan - 2015
Portland Metropolitan Service District Boundary – Maintenance plan - 2004
Klamath Falls Urban Growth Boundary - Maintenance plan - 2000
Medford Urban Growth Boundary - Limited maintenance plan - 2015
Salem-Kaiser Area Limited Maintenance plan - Maintenance plan - 2007

PM10: Grants Pass Urban Growth Boundary - Limited maintenance plan - 2015
Klamath Falls Urban Growth Boundary - Maintenance plan - 2000
Medford-Ashland Air Quality Maintenance Area - Maintenance plan - 2005
La Grande Urban Growth Boundary - Maintenance plan - 2006
Lakeview Urban Growth Boundary – Maintenance plan - 2006
Eugene/Springfield Urban Growth Area – Maintenance plan – 2013
Oakridge Urban Growth Boundary - Maintenance plan - 2022

Ozone (1hr): Portland-Vancouver Air Quality Maintenance Area (Oregon Portion) and Salem-Keizer Area Ozone Maintenance Plan – 2007

PM2.5: Oakridge - Urban Growth Boundary - Maintenance plan - 2022

More information on these maintenance areas is available on DEQ's [AQ maintenance areas](#) web page or EPA's [Nonattainment/maintenance status](#) page.

3. Overview of Network Operations

3.1 Oregon Criteria Pollutant Monitoring Network

Oregon DEQ operates the ambient monitoring network for the entire state, with the exception of Lane County, which is operated by the Lane Regional Air Protection Authority (LRAPA). Tribal lands are sovereign and do not fall under ODEQ's jurisdiction. Several of the tribes operate their own monitoring networks.

Oregon DEQ's and LRAPA's air quality monitoring networks measure ambient concentrations of the criteria pollutants – O3, CO, NO2, SO2, PM2.5, PM10, PMcoarse, and lead (through the air toxics program). The map below shows Oregon's criteria pollutant monitoring network including the large light scattering network used for the AQI PM2.5 estimates. Note that the particulate sites used for the NAAQS will also be shown in the respective pollutant's tables below. The table below the map lists the SLAMS networks sites.

Oregon DEQ and Washington DEC have a monitoring MOU for the Portland -Vancouver-Hillsboro CBSA that distributes monitoring responsibilities. The MOU is in Appendix F of this plan.

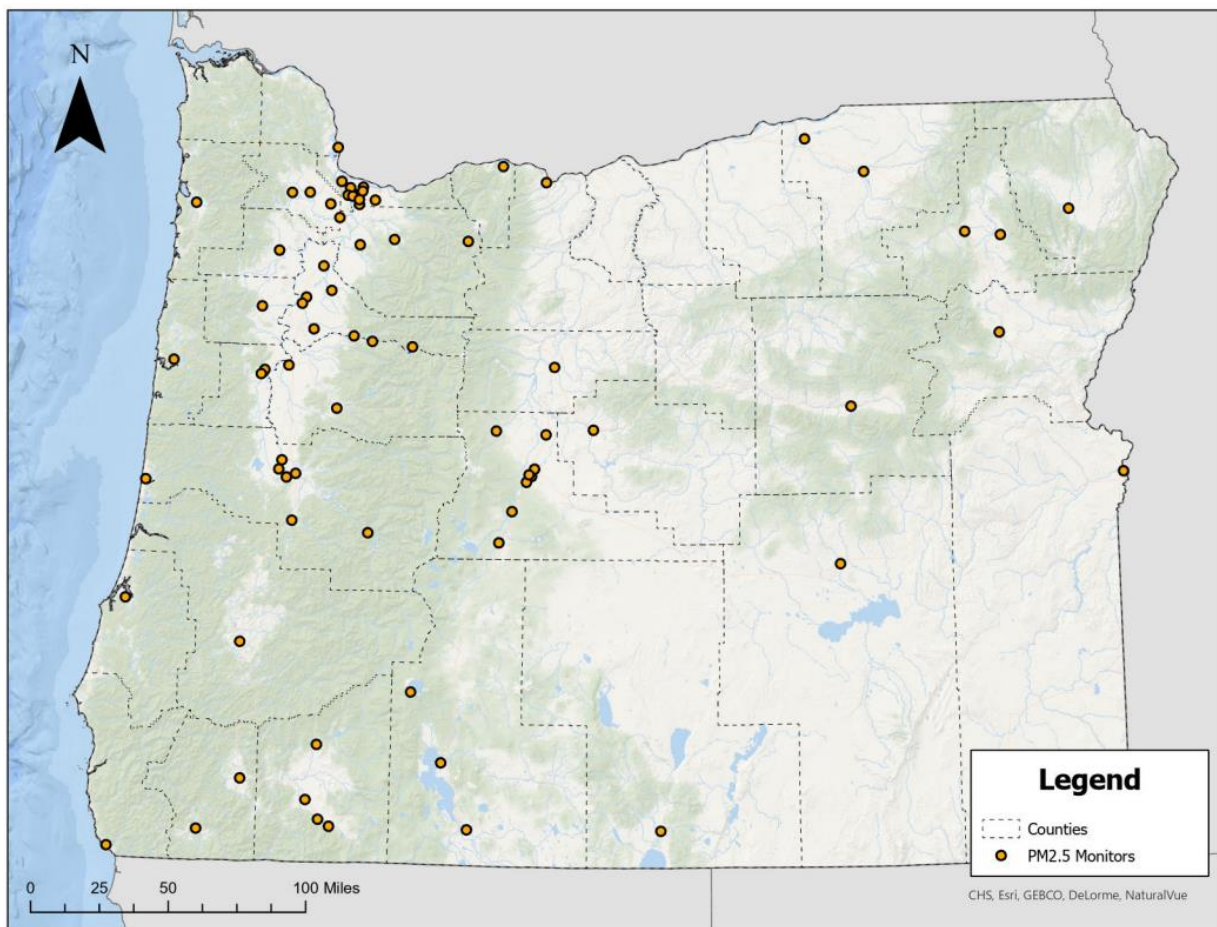


Figure 2. ODEQ and LRAPA Ambient Air Monitoring Network

Table 3. 2023 ODEQ and LRAPA SLAMS Criteria Pollutant Ambient Air Monitoring Network

City	Address	Site Code	EPA#	SO2	CO	NO ₂	Ozone	PM2.5	PM2.5 Spec	PM10	WS/WD
Burns	Washington Street	BWS	410250003					x			x
Cottage Grove	City Shops	CGC	410399004					x			
Eugene (Saginaw)	Pacific Hwy 99N	E99	410390059					x		x	
	Amazon Park	EAP	410390060				x	x			
	Delight Valley Sch	SAG	410391007				x				
Grants Pass	Parkside School	GPP	410330114					x			x
Hermiston	Municipal Airport	HMA	410591003				x				x
Klamath	Peterson School	KFP	410350004					x			x
La Grande	Hall and North Sts	LHN	410610123							x	x
Lakeview	Center & M Streets	LCM	410370001					x		x	x
Medford	Rapp Rd Talent	TAL	410290201				x				
	Jackson Park	MJP	410290029					x		x	
Oakridge	School St.	OAK	410392013					x		x	x
Portland Tualatin Carus Hillsboro Sauvie	57 th & SE Lafayette	SEL	410510080	x	x	x	x	x	x	x	x
	Humboldt School	PHS	410512010							x	x
	Tualatin – I-5	TBC	410670005		x	x	x	x			x
	Spangler Rd.	SPR	410050004				x				x
	NE Grant St.	HHF	410670004					x			x
	NW SI	SIS	410090004				x				x
Prineville	SE Court St.	PDP	410130100					x			x
Salem (Turner)	Salem State Hosp.	SSH	410470041				x	x			
	Cascade Jr. High,	CJH	410470004				x				x

Key:

Gasses:

SO2 = Sulfur dioxide, CO = Carbon Monoxide, NO2 = Nitrogen dioxide, ozone

Particulates:

PM10 = Particulate Matter 10 microns in diameter or smaller

PM2.5 = Particulate Matter 2.5 microns in diameter or smaller

Spec = PM2.5 chemical speciation,

Lead = no criteria pollutant lead monitors, only air toxics lead monitors.

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, includes lead. Not shown here.

3.1.1 Ozone Network

Oregon DEQ and LRAPA have 10 monitoring sites for ozone. Four in the Portland-Metro area (Southwest Clean Air Agency also has an additional one in Vancouver), two in Salem, Two in Eugene-Springfield, one in the Medford-Ashland area, and one in Hermiston. A table and maps of the network are shown below. Two temporary sites are running during the 2024 summer to evaluate ozone levels. They are in Silverton, which is upwind of Salem, and in Bend.

Table 4. Oregon ozone SLAMS network and purpose

AQS ID - POC	Site Name	CBSA	Scale	Purpose	Start Date
410090004- 1	Sauvie Island	Portland-Vancouver-Hillsboro	Regional	Transport	01/01/1980
410510080- 1	Portland, SE Lafayette		Neighborhood	In town	07/10/2003
410670005- 1	Tualatin		Middle	Near Road	04/21/2014
410050004 -1	Carus		Urban	Downwind	07/23/1976
410470041- 1	Salem State Hospital	Salem	Neighborhood	In town	05/01/2018
410470004- 1	Turner		Urban	Downwind	06/23/1995
410390060- 1	Eugene Amazon Park	Eugene	Neighborhood	In town	01/01/1985
410391007- 1	Saginaw		Urban	Downwind	01/01/1985
410290201- 1	Medford at Talent	Medford	Urban	Downwind	05/01/1992
410591003- 1	Hermiston Airport	Pendleton-Hermiston	Urban	Downwind	02/27/2007

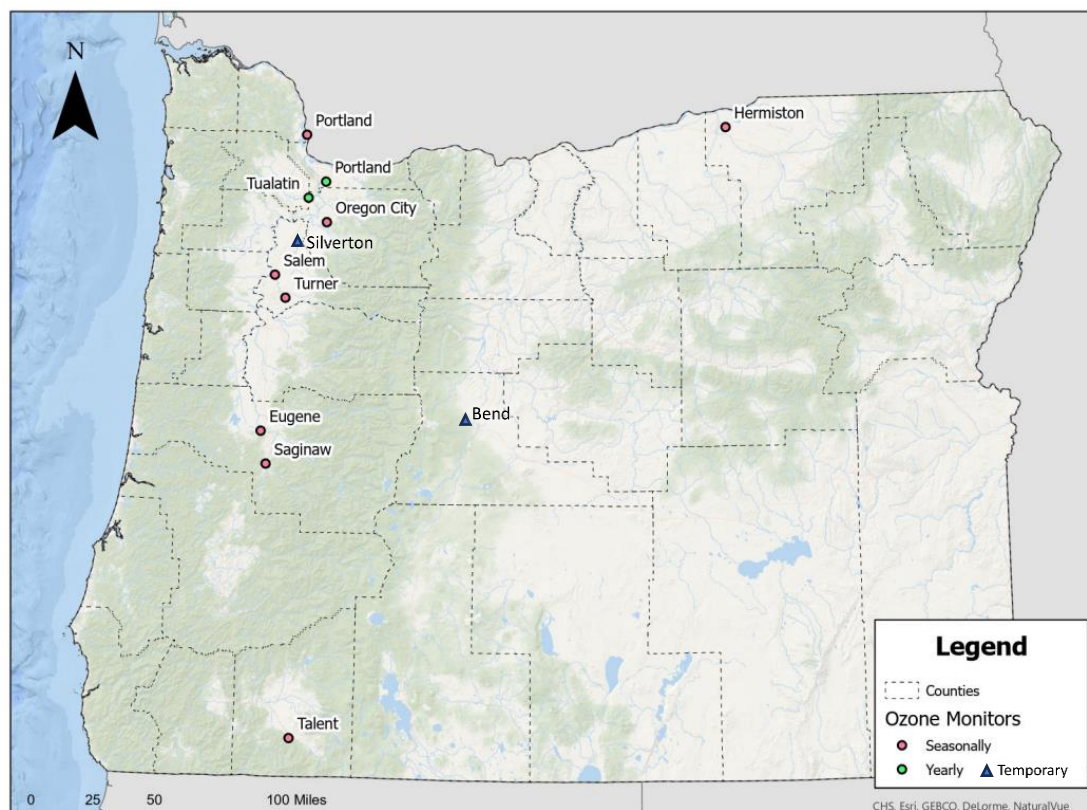


Figure 3. Ozone SLAMS Monitoring Network Map

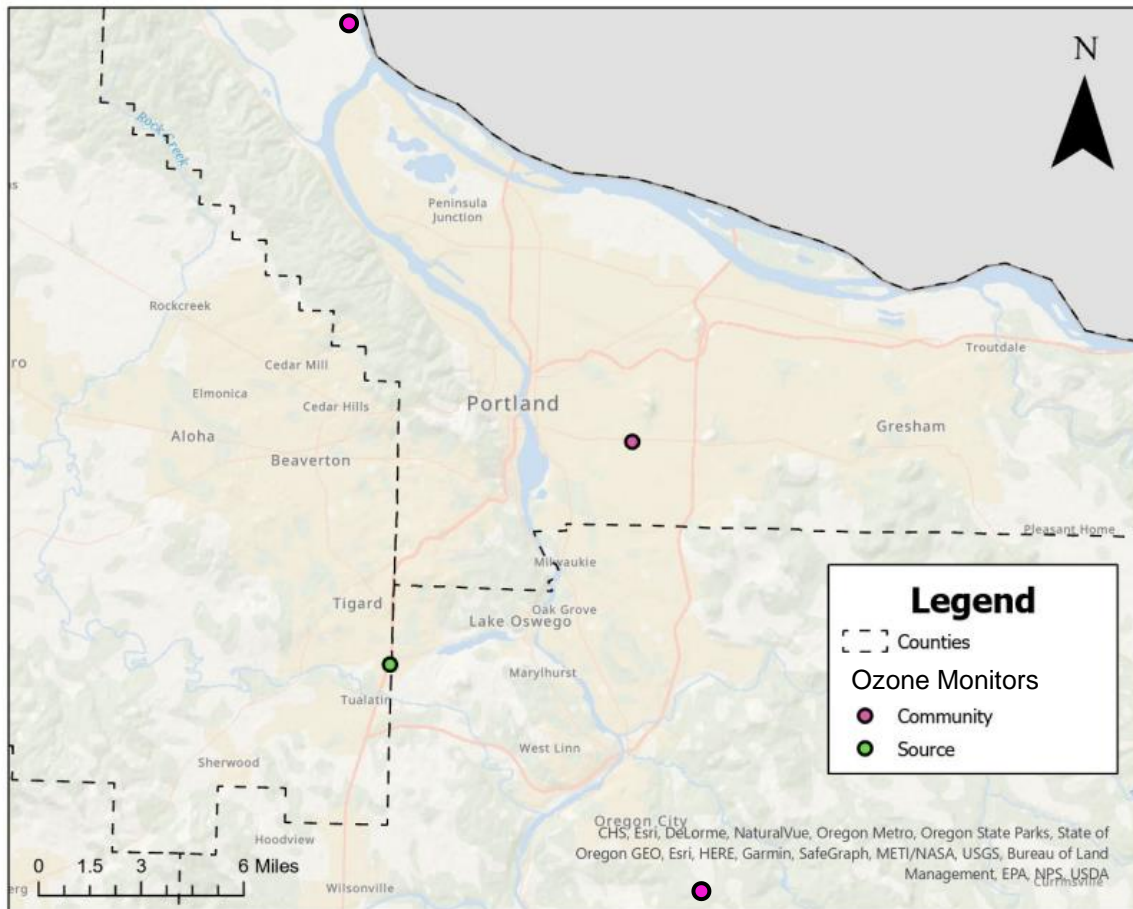


Figure 4. Portland- Metro Ozone SLAMS Monitoring Sites.

Changes to the Ozone network in the past year

1. PAMS monitoring was added to the NCore site (SE Lafayette) in 2024 to measure precursors of ozone formation. The precursors are nitrogen dioxide, formaldehyde, and other volatile organic compounds that contribute to ozone formation. See EPA's [Photochemical Assessment Monitoring Stations \(PAMS\)](#) site for more information.
2. Temporary ozone sites have been set up for the 2024 summer in Bend and in Silverton to access the current ozone levels. There is no long-term funding to operate these monitors.

3.1.2 Nitrogen Dioxide Network

Oregon DEQ has two monitoring sites for NO₂, 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 NO₂. LRAPA has no monitoring sites. ODEQ is required to add another near-road site because the Portland-Vancouver-Hillsboro population meets the 2.5 million population threshold for a tier 2 site. EPA OAQPS has agreed with ODEQ that this is a lower priority to install than other pressing monitoring installations, such as the PAMS site. The site will be located in downtown Portland, along I-5.

Table 5. NO₂ monitoring network

AQS ID - POC	Site Name	CBSA	Scale	Purpose	Start Date
410510080- 1	Portland, SE Lafayette	Portland-Vancouver-Hillsboro	Neighborhood	NCore	01/01/1984
410670005- 1	Tualatin		Middle	Near Road	04/21/2014

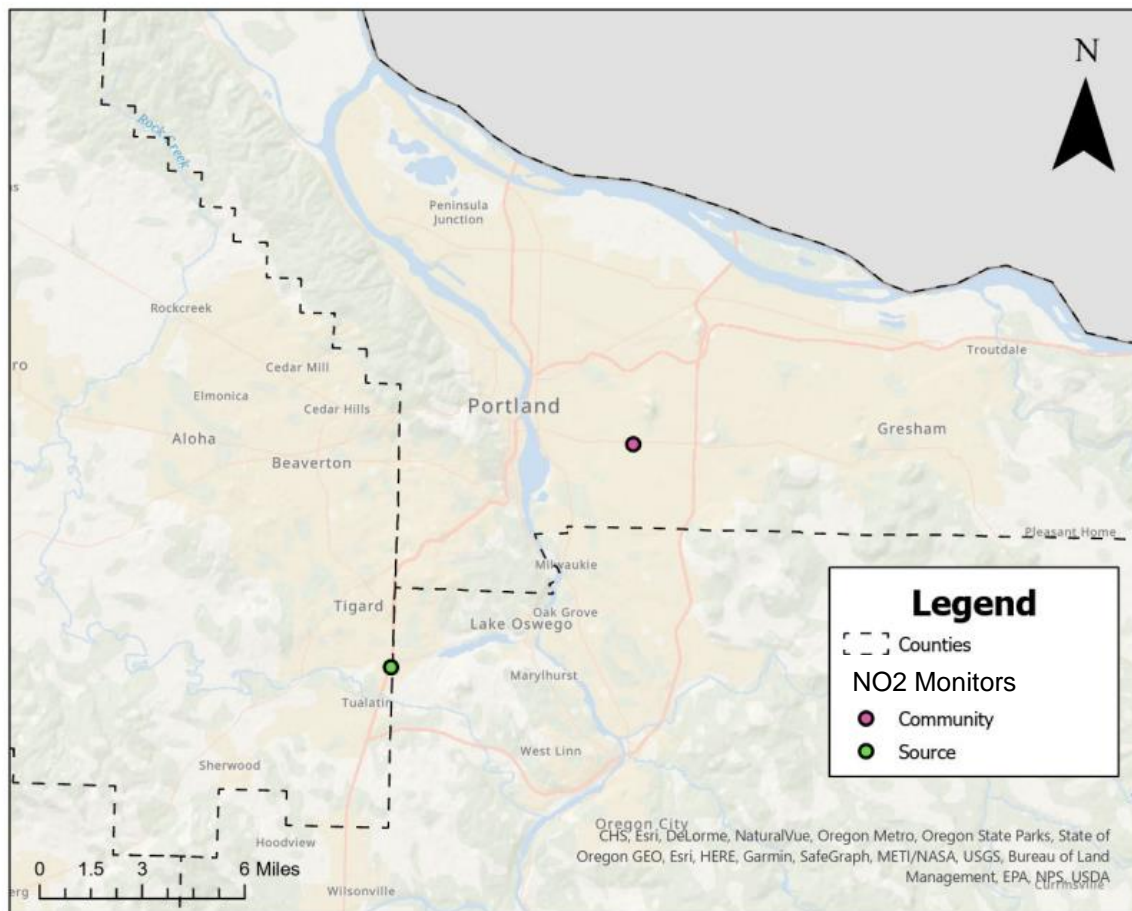


Figure 5. NO₂ Monitoring Network

Source monitor (measuring I-5 emissions)
Community monitor (Measuring in neighborhood)

Changes to the NO₂ network in the past year

An NO_y monitor was added to the NCore site at SE Lafayette as part of the EPA PAMS project. See the ozone section for more information.

3.1.3 Carbon Monoxide Network

Oregon DEQ has two monitoring sites for CO, 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. LRAPA has no CO sites.

Table 6. CO monitoring network

AQS ID - POC	Site Name	CBSA	Scale	Purpose	Start Date
410510080- 1	Portland, SE Lafayette	Portland-Vancouver-Hillsboro	Neighborhood	NCore	12/24/1980
410670005- 1	Tualatin		Middle	Near Road	04/21/2014

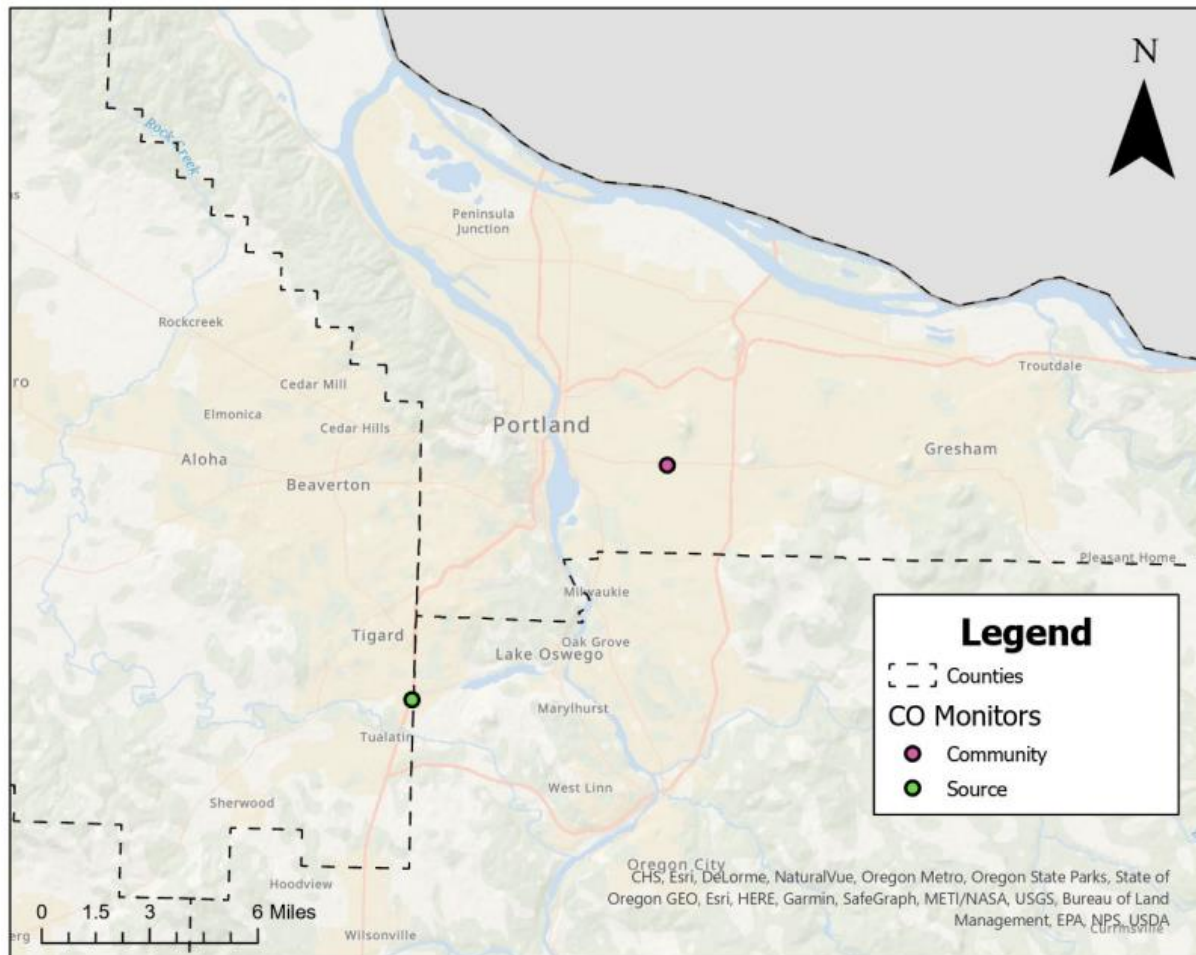


Figure 6. CO Monitoring Network

Source monitor (measuring I-5 emissions)
Community monitor (Measuring in neighborhood)

Changes to the CO network in the past year
 No changes

3.1.4 PM2.5 Network

Oregon DEQ and LRAPA have one NCore and 12 SLAMS Federal Equivalence Method (FEM) sites for PM2.5. Three in the Portland-Metro area, two in Eugene, and one each in Oakridge, Cottage Grove, Grants Pass, Medford, Klamath Falls, Lakeview, Burns, and Prineville. DEQ only has one PM2.5 speciation site and it is in SE Portland (the trend site). ODEQ has added two special purpose FEM site in 2024, to help correlate the nephelometer and ODEQ SensOR network discussed in the Section 3.3 below. ODEQ's background and transport site is at Sauvie Island, along the lower Columbia River. It is a previously correlated nephelometer site used to make a PM2.5 estimate.

Table 7. PM2.5 monitoring network.

AQS ID - POC	Site Name	CBSA	Scale	Category	Start Date
410670004 -1	Hillsboro	Portland-Vancouver-Hillsboro	Neighborhood	SLAMS	01/28/2005
410510080- 1	SE Portland		Neighborhood	NCore/SLAMS	01/01/1999
410670005- 1	Tualatin		Neighborhood	SLAMS	04/21/2014
410090004- 3	Sauvie Island		Regional	SPM Transport/ Background	
410470041- 1	Salem State Hospital	Salem	Neighborhood	SPM	01/01/2024
410390060- 1	Eugene Amazon Park	Eugene-Springfield	Neighborhood	SLAMS	01/01/1999
410390059- 1	Eugene – Hwy 99 W		Neighborhood	SLAMS	07/01/2011
410392013- 1	Oakridge		Neighborhood	SLAMS	01/01/1999
410399004 -1	Cottage Grove		Neighborhood	SPM	01/01/2008
410330114 -1	Grants Pass	Grants Pass	Neighborhood	SLAMS	06/15/2002
410290029- 1	Medford	Medford	Neighborhood	SLAMS	07/21/2023
410170120 -1	Bend	Bend	Neighborhood	SPM	01/01/2024
410130100 -1	Prineville	Prineville	Neighborhood	SLAMS	01/01/2009
410250003 -1	Burns	Burns	Neighborhood	SLAMS	09/16/2009
410350004 -1	Klamath Falls	Klamath Falls	Neighborhood	SLAMS	01/01/1999
410370001 -1	Lakeview	Lakeview	Neighborhood	SLAMS	01/01/1999

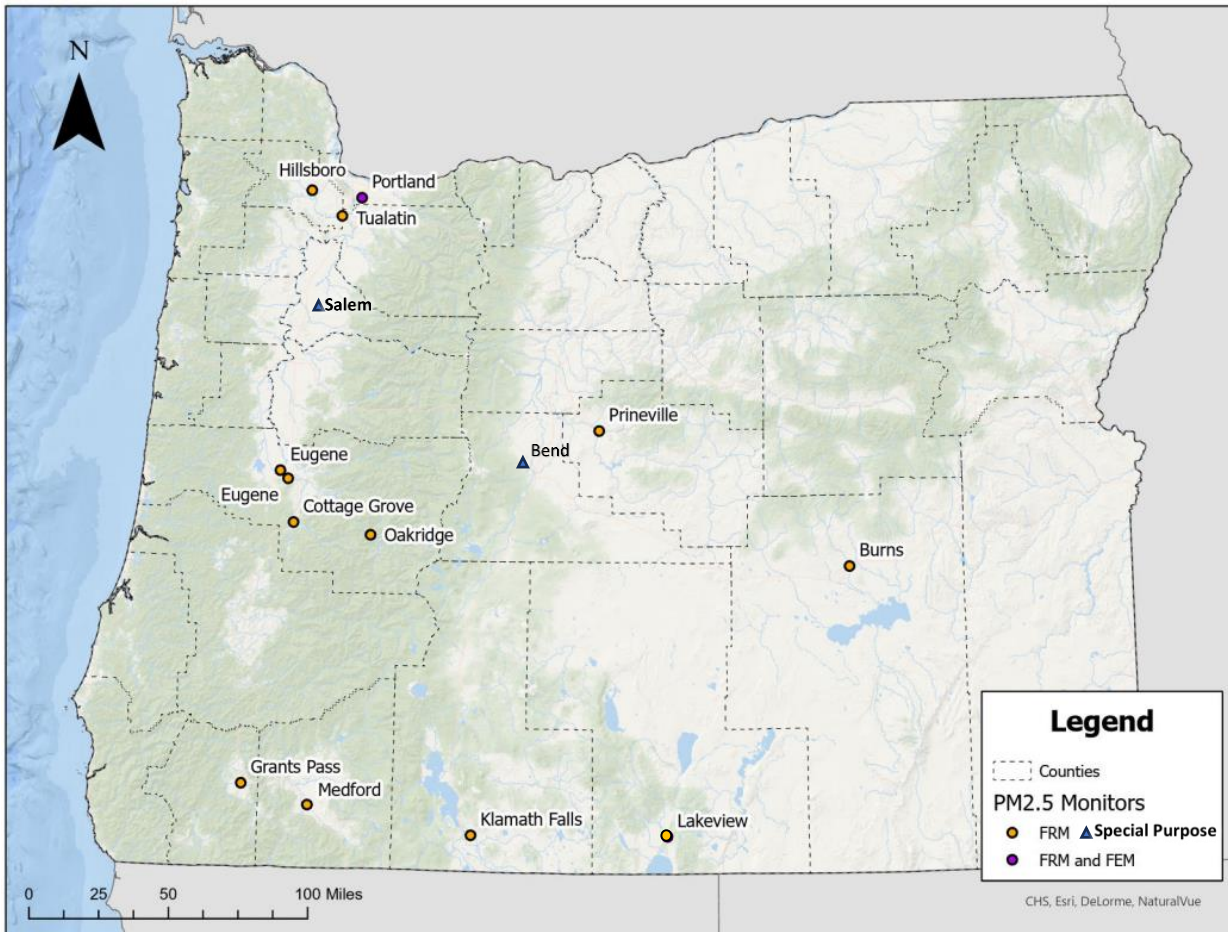


Figure 7. PM2.5 FEM Monitoring Network

Changes to the PM2.5 network in the past year

1. In January of 2024, ODEQ started an FEM at Salem State Hospital (41-042-0047) in anticipation of the population requirement that CBSA of over 500K population must have an FEM. The Salem-Kaiser CBSA is currently at 430K. This is also used to correlate the nephelometer and ODEQ SensOR network.
2. DEQ also placed an FEM in Bend at the Pump Station site to be used to correlate the many nephelometer and ODEQ SensORs in Central Oregon. The correlation will be used to convert light scattering to PM2.5 estimates throughout the region.

3.1.5 PM10 Network

Oregon DEQ and LRAPA have six FRM monitoring sites for PM10. Two in the Portland-Metro area, one each in Eugene-Springfield, La Grande, Medford, and Oakridge. ODEQ is using PM2.5 as a surrogate for PM10 in Grants Pass, Klamath Falls, and Lakeview.

Table 8. PM10 monitoring network.

AQS ID - POC	Site Name	CBSA	Scale	Category	Start Date
410512010 -7	N. Portland	Portland-Vancouver-Hillsboro	Neighborhood	SLAMS	02/01/2017
410510080- 1	SE Portland		Neighborhood	NCore/SLAMS	01/01/1984
410390059- 7	Eugene – Hwy 99 W	Eugene-Springfield	Neighborhood	SLAMS	04/01/2018
410392013- 1	Oakridge		Neighborhood	SLAMS	11/01/1989
410290029- 7	Medford	Medford	Neighborhood	SLAMS	07/21/2023
410610123 -7	La Grande	La Grande	Neighborhood	SLAMS	09/01/2016
410330114	Grants Pass	Grants Pass	Neighborhood	PM2.5 surrogate SLAMS	06/15/2002
410350004	Klamath Falls	Klamath Falls	Neighborhood		01/01/1986
410370001	Lakeview	Lakeview	Neighborhood		10/01/1991

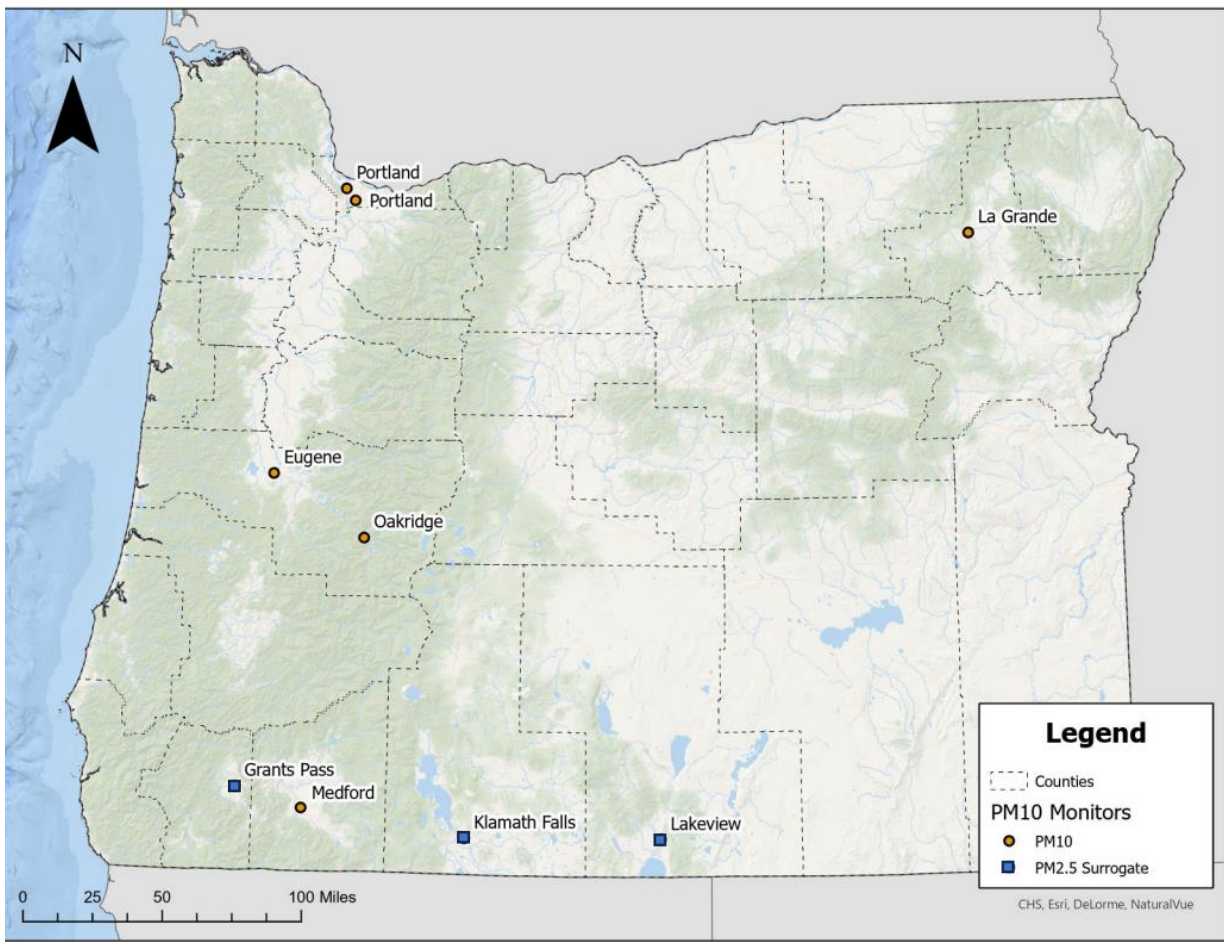


Figure 8. PM10 Monitoring Network

Changes to the PM10 network in the past year

1. PM10 was removed from Lakeview in 2024 and the PM2.5 FEM will be used as a

surrogate monitor for PM10.

2. In June of 2023, the continuous PM10 monitor at Eugene Hwy 99 W (41-039-0059) malfunctioned and was replaced with the PM10 High Volume sampler that was already operating at the site as part of the air toxics suite of instruments. The PM10 HV collects samples every sixth day. LRAPA has no plans to repair and reinstall the continuous sampler because it adds costs without any benefit.

3.1.6 PM10-2.5 Network

Oregon DEQ has one PM10-2.5 monitoring site, and it is at the Portland NCore site.

Table 9. PMcoarse monitoring network

AQS ID - POC	Site Name	CBSA	Scale	Category	Start Date
410510080- 1	SE Portland	Portland-Vancouver-Hillsboro	Neighborhood	NCore/SLAMS	01/01/2010

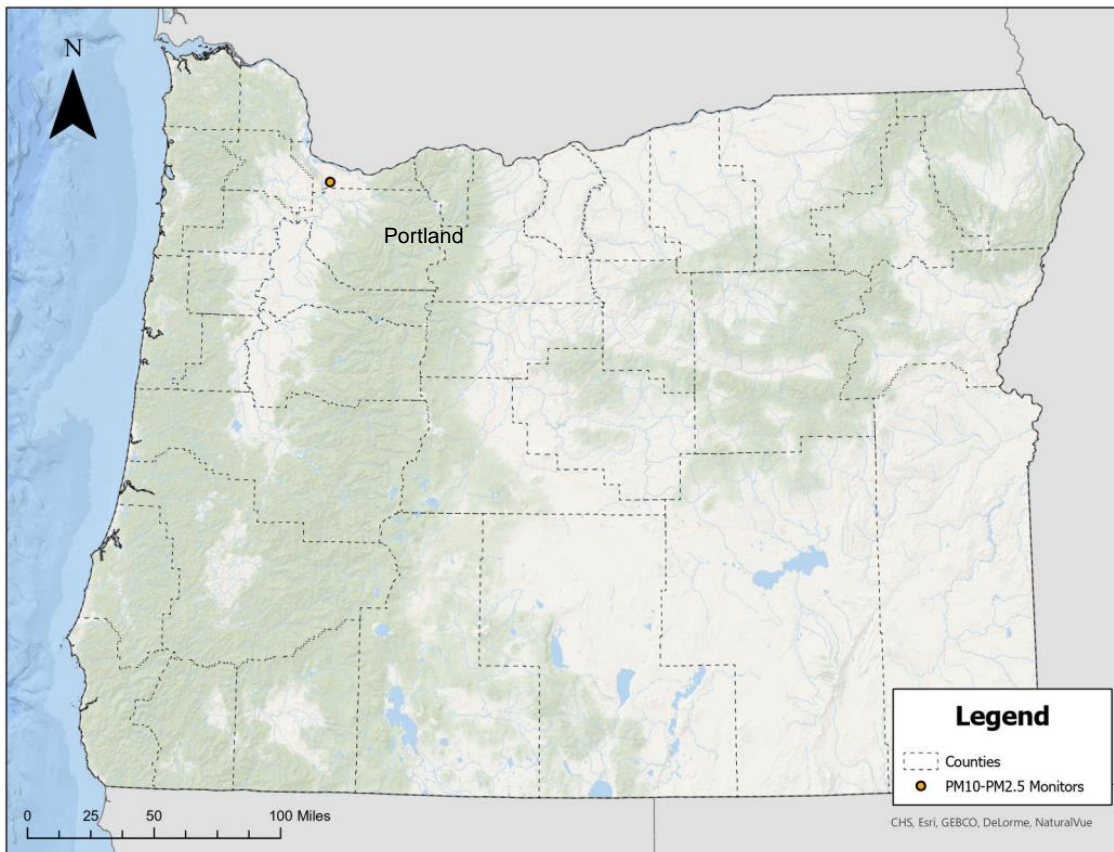


Figure 9. PM10-PM2.5 Monitoring Network

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

3.1.7 Criteria Pollutant Lead Network

Oregon was required to operate one community level lead site at the NCore site. In 2018, DEQ received a waiver to discontinue this monitoring because the data was well below the NAAQS.

Note: DEQ is still monitoring for lead in the air toxics monitoring program which currently has 9 sites. See the [DEQ Air Quality Monitoring](#) web page for more information.

Table 10. PM10 lead monitoring as part of the air toxics network.

AQS ID - POC	Site Name	CBSA	Scale	Category	Start Date
410512010 -7 & 9	N. Portland–Humboldt	Portland-Vancouver-Hillsboro	Neighborhood	NATTS/SPM	02/01/2017
410512011-7	NE. Portland – Cully		Neighborhood	SPM	05/10/2018
410670004 -7	Hillsboro		Neighborhood	SPM	01/01/2019
410670005 -7	Tualatin		Neighborhood	Near Rd/SPM	01/01/2019
410390059- 7	Eugene – Hwy 99W	Eugene-Springfield	Neighborhood	SPM	04/01/2018
410391013 -7	Springfield		Neighborhood	SPM	01/01/2024
410290029- 7	Medford	Medford	Neighborhood	SPM	07/21/2023
410610123 -7	La Grande	La Grande	Neighborhood	NATTS/SPM	09/01/2016
410170123 -7	Bend	Bend	Neighborhood	SPM	07/01/2020

Changes to the Criteria Pollutant Lead network in the past year: No changes.

3.1.8 Sulfur Dioxide (SO2) Network

The Portland-Vancouver-Hillsboro CBSA is the only area in Oregon where SO2 monitoring is required. Its population weighted emission index (PWEI) is between 5K and 100K. This is considered an SO2 community monitoring site and is at the NCore site. There are no sources in Oregon that require SO2 monitoring at this time.

Table 11. SO2 monitoring network

AQS ID - POC	Site Name	CBSA	Scale	Purpose	Start Date
410510080- 1	Portland, SE Lafayette	Portland-Vancouver-Hillsboro	Neighborhood	In town	02/01/2005

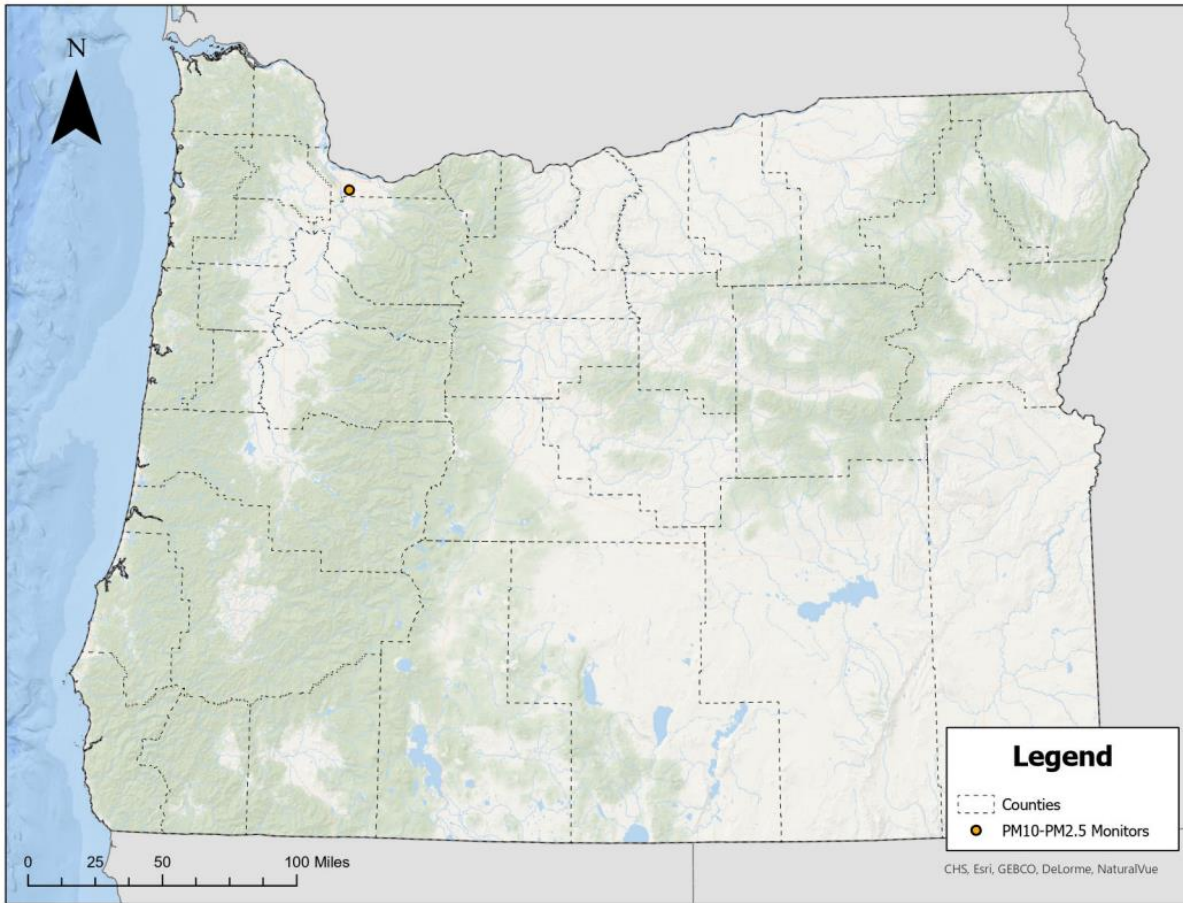


Figure 10. SO2 Monitoring Network

Changes to the SO2 network in the past year:

No changes

3.2 PM2.5 and Ozone 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). Oregon also includes ozone, NO2, CO, and SO2 on the AQI, although they rarely have the highest levels. Ozone and PM2.5 are nearest to the NAAQS and therefore, usually have the highest AQIs.

The AQI is used by health officials, forestry managers, agricultural field burning managers, and the public to get timely information about air quality health levels. Recently, Oregon Occupational Safety and Health Administration developed rules regarding employee exposure to wildfire smoke with the AQI as a primary source of PM2.5 information. 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 around 70 AQI sites. The table and map below show the AQI network at the time of this report.

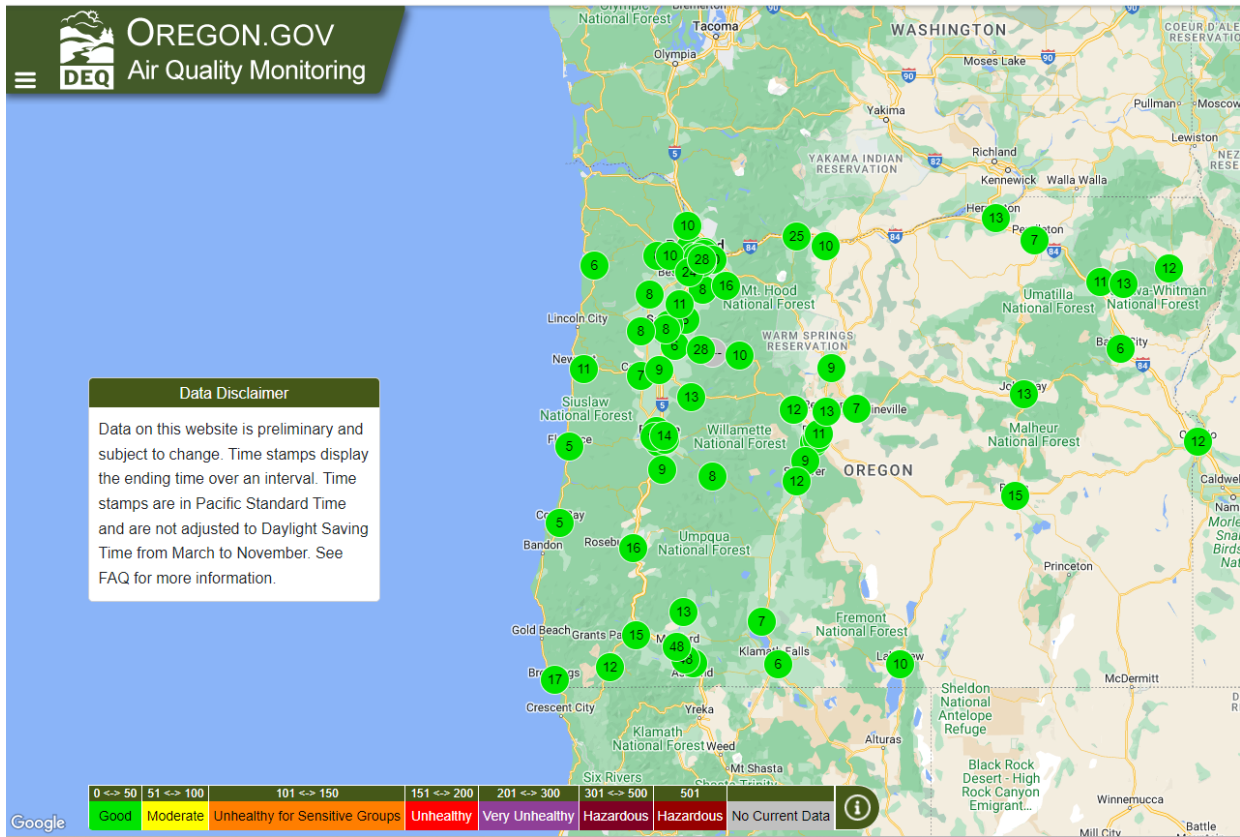


Figure 11. PM2.5 AQI Network

Table 12. AQI site list

City	Address	Site Code	EPA#	Ozone	PM2.5	Comment
Albany	Calapooia School	ACS	41043000		x	
Bend	Bend Pump Station	BPS	41017012		x	
	Ponderosa Elementary	BPE	41017011		x	
	Pine Ridge Elementary	BPR	41017011		x	
	Sun River Elementary	SRE	41017011		x	
	Bend High School	BEE	41017012		x	
	La Pine Fire Department	LFD	41017200		x	
Baker City	Forest Service	BFS	41001000		x	
Brookings	Forestry Center	BDF	41015000		x	
Burns	Washington St.	BWS	41025000		x	
Cave	USFS Station	CJFS	41033003		x	
Coos Bay	Marshfield HS	CBM	41011000		x	
Corvallis	North Corvallis	CCB	41003001		x	
	South Corvallis	CJT	41003001		x	
Cottage Grove	City Shops	CGC	41039900		x	Cottage Grove
		4				

City	Address	Site Code	EPA#	Ozone	PM2.5	Comment
Crater Lake	Rim	CLP	41035100		x	Summer only
Dallas	Le Creole Middle School	DLM	41053000		x	
Detroit Lake	USFS Station	DFS	41047012		x	Summer only
Eugene	Pacific Hwy 99N	E99	41039005		x	
	Amazon Park	EAP	41039006	x	x	
Springfield (Saginaw)	Wilkes Drive	EWD	41039010		x	
	City Hall	SCH	41039100		x	
	Delight Valley School	SAG	41039100	x		
Enterprise	Forest Service	EFS	41063000		x	
Estacada	Clackamas River School	ECR	41005001		x	
Florence	Forestry Department	FFD	41039010		x	
Grants Pass	Parkside School	GPP	41033011		x	
Hermiston	Municipal Airport	HMA	41059100	x	x	
Hood River	Westside FD #2	HRF	41027000		x	
John Day	Davidson St.	JDD	41023000		x	
Klamath Falls	Peterson School	KFP	41035000		x	
Chiloquin	Duke Drive	CDD	41035204		x	
La Grande Cove	Hall and North	LHN	41061012		x	
	City Hall	CCH	41061012		x	
Lakeview	Center & M Streets	LCM	41037000		x	
Lyons	Marylynn School	LMS	41043200		x	
Madras	Westside School	MWS	41031000		x	
McMinnville	McMinnville HS	MHS	41071100		x	
Medford	Rapp Rd Talent	TAL	41029020	x	x	
	Welch & Jackson	MWJ	41029212		x	
Ashland	Fire Department	AFD	41029020		x	
Shady Cove	School	SCS	41029001		x	
City	Address	Site	EPA#	Ozon	PM2.5	
Mill City	High School	MCS	41043010		x	
Mt. Hood	Ski Bowl at Multopor	MUL	41005010		x	Summer only
Oakridge	School St.	OAK	41039201		x	
Ontario	May Roberts School	OMR	41045000		x	
Pendleton	SW Marshall PI	PMC	41059012		x	

City	Address	Site Code	EPA#	Ozone	PM2.5	Comment
Portland	57 th & SE Lafayette	SEL	410510080	x	x	
	Humboldt School	PHS	410512010		x	
	Cully	PNS	410512011		x	
	McDaniel High School	PMH	410510039		x	
	SE 12th and Main	VIP	410510035		x	
	Lincoln High School	PLH	410510034		x	
	Lane Middle School	PLM	410510032		x	
	Roosevelt High School	PRH	410510003		x	
Beaverton	Highland Park Sch	BHP	410670111		x	
Carus	Spangler Rd.	SPR	410050004	x	x	
Forest Grove	Pacific University	FGP	410670006		x	
Gresham	Centennial HS	GCH	410510031		x	
Hillsboro	NE Grant St.	HHF	410670004		x	
Sauvie Island	NW SI	SIS	410090004	x	x	
Tualatin	Tualatin – I-5	TBC	410670005	x	x	
Prineville	SE Court St.	PDP	410130100		x	
Redmond	Redmond HS	RHS	410171001		x	
Roseburg	Fire Department	RFD	410190004		x	
Salem (Turner)	Salem State Hosp.	SSH	410470041	x	x	
	Cascade Jr. High,	CJH	410470004	x	x	
East Salem	Salem Chemeketa	SCC	410470022		x	
Silverton	James & Western St	SJW	410470007		x	
Sisters	USFS Office	SFS	410170004		x	
Sweet Home	Fire Department	SFD	410432002		x	
The Dalles	Cherry Heights	TDC	410650007		x	
Tillamook	Tillamook Jr. HS	TJH	410570002		x	
Toledo	Police Station	TPD	410410004		x	
Woodburn	Chemeketa CC	WCC	410470023		x	

Key:

Gasses: Sulfur dioxide, carbon Monoxide, and nitrogen dioxide are collected at SEL and TBC.

The PM2.5 estimates are from the DEQ SensOR or from nephelometers. See DEQ's Air Quality Monitoring Web page for more detail.

Changes to the PM2.5 AQI Network in the past year:

A new site is planned at Roseburg High School in 2024. Roseburg FD will be relocated to the nearby Elementary School in south Roseburg.

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 meteorology network sites but will submit any changes in the Annual Network Plan for public comment and input. The table and map below show the current meteorology network.

Table 13. Meteorology Network

City	Address	Site Code	EPA#	Wind	Temp	Delta T	RH	BP	SR	UV	Precip.	Mixing Height
Bend	Road Department	BRD	410140121	x	x		x	x	x			
Burns	Washington St.	BWS	410250003	x	x			x				
Eugene	Hwy 99	E99	410390059	x								
	Wilkes Drive	EWD	410390101	x	x			x				
Springfield	City Hall	SCH	410391009	x								
Florence	Forestry Department	FFD	410390100	x	x		x	x				
Grants Pass	Parkside School	GPP	410330114	x	x			x				
Hermiston	Municipal Airport	HMA	410591003	x								
Klamath Falls	Peterson School	KFP	410350004	x	x	x	x	x				
La Grande	Hall and North	LHN	410610123	x	x		x	x				
Cove	City Hall	CCH	410610120	x								
Lakeview	Center & M Streets	LCM	410370001	x	x			x				
Medford	Rossanley Drive	MTV	410291002	x	x	x	x	x	x			
Oakridge	School St.	OAK	410392013	x	x			x				
Portland	57 th & SE Lafayette	SEL	410510080	x	x		x	x	x	x	x	x
	Jefferson High Sch.	PJH	410511191	x								
	Cully	PNS	410512011	x								
Carus	Spangler Rd.	SPR	410050004	x	x			x				
Hillsboro	NE Grant St.	HHF	410670004	x								
Sauvie Island	NW SI	SIS	410090004	x	x							
Tualatin	Tualatin – I-5	TBC	410670005	x	x		x					
Prineville	SE Court St.	PDP	410130100	x	x		x	x	x			
Salem-Turner	Cascade Jr. High,	CJH	410470004	x								
Silverton	James & Western St..	SJW	410470007	x								

Met:

Wind = 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

Changes to the Meteorological Network in the past year:

New met tower at the NCore site for PAMS. Ceilometer, precipitation, and uv sensors added.

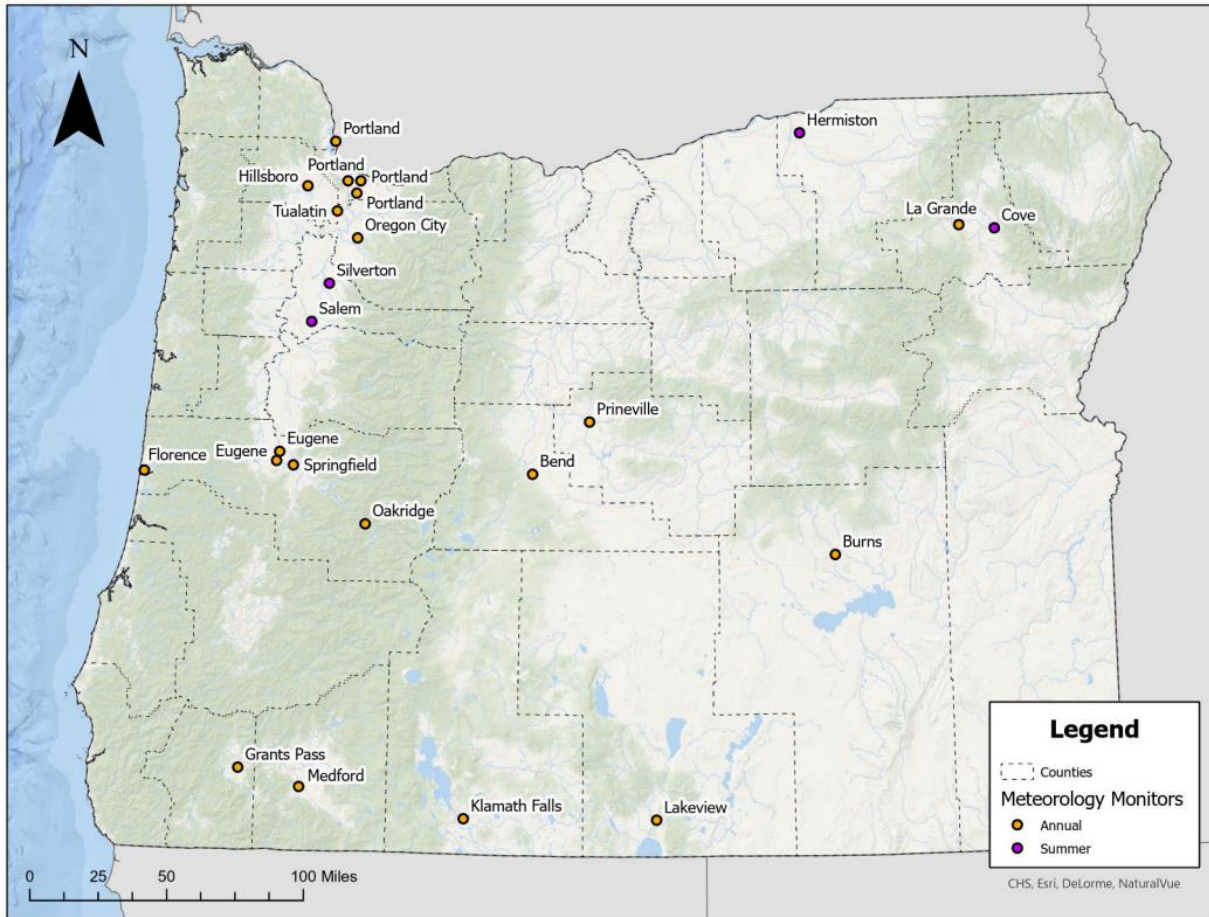


Figure 12. DEQ and LRAPA Meteorology Network

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 Criteria Pollutant Changes

PM_{2.5}

- ODEQ is still trying to move the Lakeview Center and M Street PM_{2.5} site to a new location on school district property. We have approval from EPA to move the site, but the City of Lakeview has still not signed the site agreement even though they have agreed in principle. We hope to move the site in the summer of 2024.
- ODEQ is requesting funding from the Inflation Reduction Act grant to purchase FEMs to strengthen our correlation equations for the nephelometers and ODEQ SensOR network. ODEQ hopes to add FEMS in La Grande for the NE network, in Toledo for the coastal

network, and in other not yet determined areas. These FEMs will be special purpose monitors.

Photochemical Assessment Monitoring Stations (PAMS)

Based on 40 CFR part 58, Appendix D, State air monitoring agencies are required to begin making PAMS measurements at their NCore site. DEQ is starting PAMS monitoring in June of 2024 with the addition of NO_y, near real time VOC, aldehyde, and mixing heights monitoring.

NO₂

The Portland–Vancouver–Hillsboro CBSA is estimated to have a 2024 population over 2.5 million people, triggering the requirement for a second near road site. In 2024, ODEQ hopes to determine a location for the site and begin purchasing the equipment. ODEQ's goal is to have the site operational by the summer of 2025. The site is tentatively planned to be located along Interstate-5 in Portland, between the Interstate 84 interchange and the Fremont Bridge interchange. The site of choice would be at (or near) Tubman School, where there is a lot of public interest the impact of freeway emissions on the park adjacent to the school. The school is currently empty because of these concerns, but the park is still in use.

PM₁₀

- The PM₁₀ network currently consists of a mix of PM₁₀ high volume (HV) and low volume (LV) samplers. The HV samplers are not as reliable as the low volume LV samplers, so DEQ is going to modify the network to all LV samplers. LVs will replace HVs in Medford, La Grande, Eugene, and Portland Humboldt School. The LV collocate will move from Portland, SE Lafayette to Portland Humboldt School. This change is planned for July 2024.
- Wildfire smoke impacts in Oakridge (41-039-2013) has resulted in the requirement for a third PM₁₀ monitoring site in the Eugene-Springfield MSA which encompasses all of Lane County. LRAPA and ODEQ are requesting a ruling by the Region 10 AQ Administrator that the MSA will remain at two PM₁₀ sites. This request is presented in Appendix H.
- The Oakridge PM₁₀ monitor (41-039-2013) has a very high correlation with the collocated PM_{2.5} monitor. LRAPA and ODEQ are requesting that EPA approve a waiver to allow LRAPA to use the PM_{2.5} monitor as a surrogate for PM₁₀ as is done in Klamath Falls, Grants Pass, and Lakeview. The PM₁₀ in these rural communities comes primarily from residential wood combustion and wildfire smoke, which consists mostly of PM_{2.5}. This waiver request is in Appendix I.

Meteorology

ODEQ is going to add wind speed and direction monitoring at Salem State Hospital (41-047-0041) to go along with the ozone and PM_{2.5} monitoring. This may also include other met parameters such as relative humidity, temperature, and barometric pressure.

Appendix A. Minimum Monitoring Requirements

ODEQ 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.

A.1. Oregon National Core Site (NCore)

Oregon has one NCore site, in Portland which operates all criteria pollutants, shown in Table A.1.

NCore Site: SE Lafayette (SEL), AQS# 41-051-0080, Address 57th Avenue and SE Lafayette St., Portland, OR MSA – Portland-Vancouver, OR-WA (#6440) Counties represented – (OR) Multnomah, Clackamas, Washington, WA) Clark MSA. Population (2023) - 2,508,050 (US Census)								
Pollutant	Std Type	Std	DV	Units	Years	# of Monitors		
						Minimum required	Active	Needed
PM2.5	Daily	35	20	µg/m ³	21-23			
	Annual	12	6.7	µg/m ³	21-23	1	1	0
PM2.5 Speciation	N/A	-	-	-	-	1	1	0
PM10	Daily	150	0 exceedances		21-23	1	1	0
PM10-2.5	N/A	-	-	-	-	1	1	0
Ozone	8 hr Ave	70	57	ppb	21-23	1	1	0
NO2	1 hour	100	33	ppb	21-23	1	1	0
	Annual	53	6.4	ppb	21-23			
NOx (substituted for NOy - EPA waiver)	N/A	-	-	-	-	1	1	0
Trace SO2	1 hour	75	3	ppb	21-23	1	1	0
5 Minute Trace SO2 -	N/A	-	-	-	-	-	1	1
Trace CO	8 hour	9 ppm	0 exceedances		21-23	1	1	0
Wind Direction (15 m)	N/A	-	-	-	-	1	1	0
Wind Speed (15 m)	N/A	-	-	-	-	1	1	0
Relative Humidity (2 m)	N/A	-	-	-	-	1	1	0
Solar Radiation (2 m)	N/A	-	-	-	-	0	0	0
Barometric Press (2 m)	N/A	-	-	-	-	0	1	0
Outdoor Temp (2 m)	N/A	-	-	-	-	1	1	0
Delta Temp (2 and 10 m)	N/A	-	-	-	-	0	0	0
PAMS – NOy, VOC, Aldehyde, Celiometer	N/A	-	-	-	-	1	1	0
CSN PM2.5 Speciation	N/A	-	-	-	-	1	1	0

A.2. Minimum Required Ozone Sites

Oregon DEQ and LRAPA have an ambient ozone monitoring network with 10 permanent sites. There is also one site in Vancouver Washington operated by the Southwest Clean Air Agency. The table below lists the sites.

MSA	County	Population 2023	Design Value (ppb)	max design value site name	Season	Years	# of Monitors		
							Minimum required	Active	Needed
Portland-Vancouver-Hillsboro, OR-WA (38900)	Multnomah, Clackamas, Washington, Clark (WA)	2,508,050	65	Carus (41-005-0004)	Annual for Ncore and Roadway sites. May-Sept for upwind and downwind sites	21-23	2	4 in OR, 1 in WA	0
Salem (41420)	Marion	436,546	65	Turner (41-047-0004)	May-Sept	21-23	2	2	0
Eugene-Springfield (21660)	Lane	381,181	60	Amazon Pk. (41-039-0060)	May-Sept	21-23	1	2	0
Medford (32780)	Jackson	220,768	65	Talent (41-029-0201)	May-Sept	21-23	1	1	0
Pendleton-Hermiston (37820)	Umatilla	92,355	63	Airport (41-059-1003)	May-Sept	21-23	1	1	0

A.3. Carbon Monoxide Minimum Monitoring Requirements

Oregon DEQ and LRAPA have discontinued most of the CO monitoring sites years ago, because the levels were less than 1/5th the standard. See the table below for required monitoring sites.

MSA (Maintenance areas)	County	Population 2023 estimate	Standard Exceeded more than once per year	Site name	Last Year	# of Monitors		
						Minimum required	Active	needed
Portland-Vancouver-Hillsboro, OR-WA (38900)	Multnomah, Clackamas, Washington, Clark (WA)	2,508,050	No	SE Lafayette, Portland (41-051-0080)	Active	2	2	0

A.4. Sulfur Dioxide 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.

CBSA	County	Population 2023 estimate	PWEI	Design Value (ppb)	% of Std	Site name	Season/Frequency	Years	# of Monitors		
									Minimum required	Active	Need
Portland-Vancouver-Hillsboro, OR-WA (38900)	Multnomah, Clackamas, Washington, Clark (WA)	2,508,050	SO ₂ PWEI = 7,880	3	4	Portland, SE Lafayette (41-005-0080)	Annual, Hourly	21-23	1 For NCore site	1 at NCore site	0

A.5. Nitrogen Dioxide 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 area is the only CBSA in Oregon required to have community scale monitoring. The NCore site is required to have NO₂, NO, NO_x, and NO_y 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, Section 3 (b.1) to allow NO_x to substitute for NO_y because DEQ showed there was minimal difference between the two. The table below shows the current monitoring status.

CBSA	County	Population 2023 estimate	Design Value (ppb)	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								Minimum required	Active	need
Portland-Vancouver-Hillsboro, OR-WA (38900)	Multnomah, Clackamas, Washington, Clark (WA)	2,508,050	1hr = 33 ppb Annual= 6.4 ppb	1hr = 33% Annual= 12%	Portland, SE Lafayette (41-005-0080)	Annual, Hourly	21-23	1	1	0
			1hr = 30 ppb Annual= 9.3 ppb	1hr = 30% Annual= 18%	Tualatin Bradbury Ct. (Near Roadway site) (41-067-0005)	Annual, Hourly	21-23	1	1	0
			No data	No data	2 nd Near Roadway site	Annual, Hourly	2024	1	0	1

A.6. 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 there are no sources that meet this criterion. Cascade Rolling Mills in McMinnville did in the past but has since change their Plant Site Emission Limit for lead below 0.5 tons/year.

EPA requires monitoring at airports with emission estimates greater than 1 tons/year 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 in aviation fuel.

City	County	Population 2023 estimate	Design Value	% of Std	Site name	Season/ Frequency	Years	# of Monitors		
								Minimum required	Active	Need
NA								0	0	0

A.7. 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. Continuous PM10 samplers will be placed at these sites in the future.

CBSA or MSA	County	Population 2023 estimate	Exceedence/yr	Site name	Season	Years	# of Monitors		
							Minimum required	Active	need
Portland-Vancouver-Hillsboro, OR-WA (38900)	Multnomah, Clackamas, Washington, Clark (WA)	2,508,050	0	Portland SE Lafayette (41-005-0080) Portland Humboldt (41-051-2010)	Annual/ 3 rd day 6 th day	21-23	2-4	2	0
Eugene-Springfield (21660)	Lane	381,181	0 6.7 ^a	Eugene Hwy 99W (41-039-0059) Oakridge (41-039-2013)	Annual/ 6th day Daily		3 ^c	2 ^e	0
La Grande (29260)	Union	25,944	0	Hall & North Sts. (41-067-0123)	Annual/ 6th day		1	1	0
Medford (32780)	Jackson	220,768	2.0 ^a	Jackson Park (41-029-0029)			1	1	0
Grants Pass (24420)	Josephine	87,821	1.7 ^{ab}	Parkside School (41-033-0114)	PM2.5 FRM/ FEM as surrogate		1	0	0
Klamath Falls (28900)	Klamath	70,003	0	Peterson School (41-035-0004)			1	0	0
Lakeview ^c (00000)	Lake	2,476	0	Center & M (41-037-0001)			1	0	0

a. DV is not zero because of wildfire smoke.

b. PM2.5 is used as a surrogate for PM10.

c. The US Census Bureau did not have estimates. Used Portland State Population Research Center's 2023 estimates.

d. Normally only 2 sites are required but wildfire smoke in Oakridge in 2022-2023 has put the Eugene/Springfield CBSA over the NAAQS so now 3 are required. LRAPA and DEQ will be requesting a waiver in the 2024 ANP to not run a 3rd monitor.

e. The MSA is required to have three monitors because wildfire smoke put Oakridge over the High Concentration requirements in for a Table D-4 of CFR 40 Part 58 Appendix A. ODEQ and LRAPA are requesting that EPA R10 use their discretion provided to them in Section 4 of Appendix A to keep the required monitors at 2. The request is in Appendix H.

Oregon had five violations (Table A. 7b) of the PM10 maintenance areas in the 2020–2022 period, but all the violations were caused by summer wildfire smoke. Klamath Falls is the only maintenance plan that directly addresses contingencies triggered by natural event, and it states: “no further action may be needed”. DEQ does have the [wildfire smoke protocol](#) which addresses real time responses to wildfire smoke to protect public health. The USFS, ODF, and DEQ also have a [Smoke Management plan](#) which balances forest prescribed burning with impacts on nearby smoke sensitive receptor areas. Both plans address the current PM10 maintenance area violations.

A.8. PM10 Maintenance Plan Contingency Triggers:

CBSA or MSA	2021	2022	2023	2021–23 Exceedance/yr	Triggers	Cause	Contingency Requirements
Eugene-Springfield	0	0	0	0	≥ 150 µg/m3		Woodstove curtailment program which is already in place. There is no contingency for exceedances caused by wildfire smoke.
Oakridge	1	19	0	6.7	≥ 150 µg/m3	Wildfire Smoke	Woodstove curtailment program which is already in place. There is no contingency for exceedances caused by wildfire smoke.
Medford	1 (6 expected)	0	0	2.0	≥ 120 µg/m3	Wildfire Smoke	PM10 Maintenance Plan, Section 4.14.90.0 - Contingency Measures (PM10_Part8.PDF) states: <u>Phase 2: Measured Violation</u> If a violation of PM10 standards occurs, the Department and Committee will determine the probable emissions and meteorological events contributing to the violation, and will implement additional emission reduction strategies as needed to return the AQMA to compliance. The Clean Air Act also requires that all nonattainment area strategies be reinstated until the violation can be resolved and the maintenance plan revised. This 2004 maintenance plan already continues all previous nonattainment strategies. Therefore, should a violation occur, the Department will work to identify the new strategies necessary to ensure compliance.
Grants Pass	0	0	5	1.7	≥ 120 µg/m3	Wildfire Smoke	Grant Pass PM10 Limited Maintenance Plan, Section 8 Contingency Measures . DEQ would reinstate the New Source Review requirement for Lowest Achievable Emission Rate for new and expanding industry, and remove the offsets exemption.
Klamath Falls	0	0	0	0	≥ 135 µg/m3		Klamath Falls PM10 Maintenance Plan, Section 4.56.3.3 Contingency Plan, Phase 1 states: The County and DEQ will reconvene a planning group to develop an action plan if ambient concentrations (actual or estimated) equal or exceed 90% of the NAAQS concentration of PM10 (135 µg/m3) ... If the high PM10 concentration was determined to be a natural event based on EPA’s policy or an exceptional event, no further action may be needed.
La Grande	0	0	0	0	≥ 135 µg/m3		If the high PM10 concentration were determined to be based on a natural event per EPA’s policy or an exceptional event , no further action may be needed other than a discussion of the elements of a Natural Events Action Plan.
Lakeview	0	0	0	0	≥ 140 µg/m3		The air quality committee and DEQ will evaluate the cause of the exceedance and recommend strategies to be considered for implementation.

All of the PM10 exceedances over the past three years occurred during wildfire smoke intrusions and in the case of Oakridge the 2020 year values had regulatory significance. LRAPA submitted an exceptional event demonstration for Oakridge. For Klamath Falls, the PM10 is calculated using the PM2.5 as a surrogate. DEQ submitted a 2020 and 2021 PM2.5 exceptional event demonstration for Klamath Falls because of regulatory significance. These verify the intrusion of wildfire smoke caused the exceedances. Medford had one exceedance in 2021 but samples every sixth day so the expected exceedance is 6. The exceedance occurred on August 14th, 2021. The Hysplit model from AIRNow Tech shows that winds at 500 meters were coming from the complex of fires to the north. The PM2.5 concentration was 151 $\mu\text{g}/\text{m}^3$ at the Medford Welch and Jackson monitoring site (41-029-2129) on the day of the PM10 exceedance.

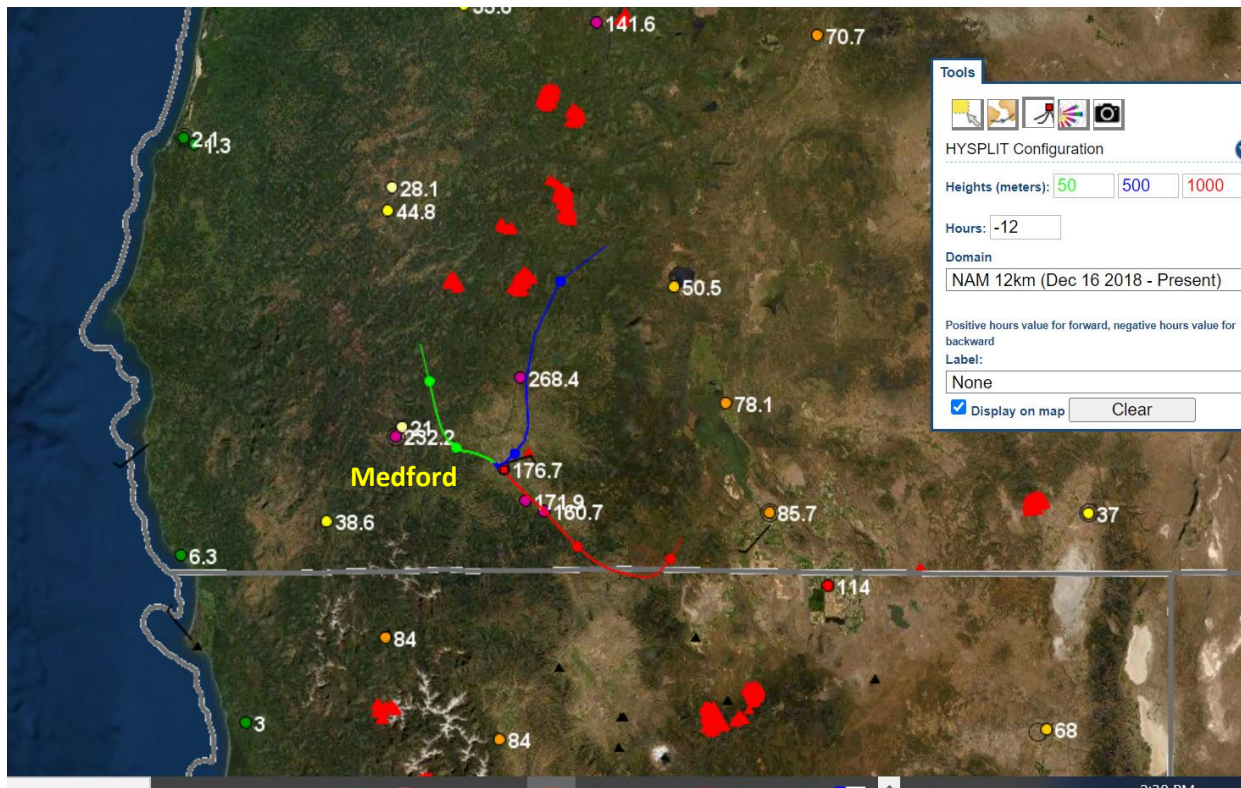


Figure 13. August 14th, 2021 Hysplit 12 hour back trajectory showing the source of PM2.5 at different elevations.

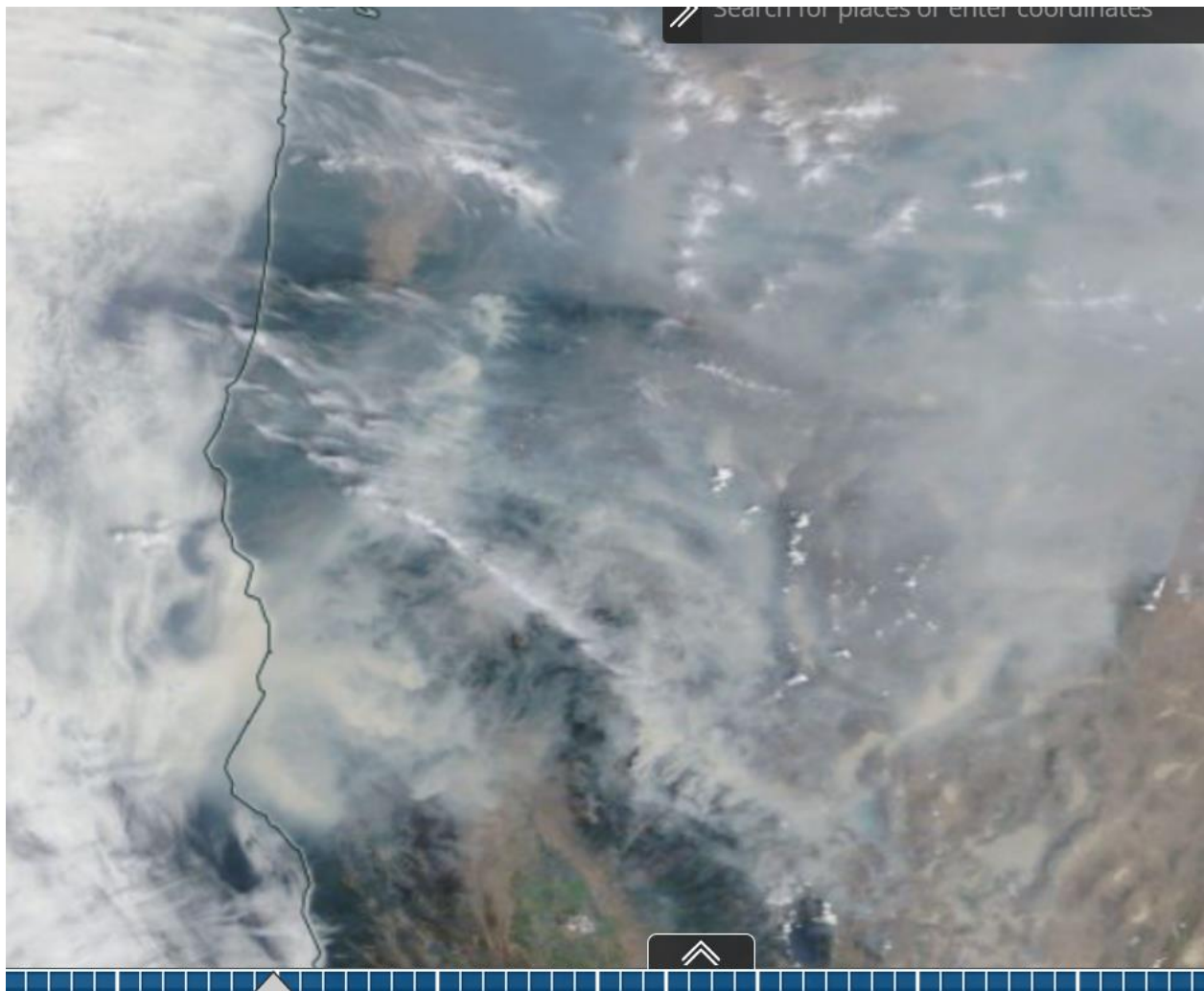


Figure 14. August 14th, 2021 Satellite photo showing wildfire smoke over Southern Oregon and Northern California.

Most of Oregon's PM10 maintenance plans were written 10 to 20 years ago before wildfire smoke became such a huge problem in Oregon. Some plans included exemptions from triggering contingency plans if the violation was due to wildfires. The plans that don't have this language, should also follow the same procedure. DEQ works with the USFS, ODF, and EPA to identify wildfire smoke intrusions that cause violations. DEQ has a [smoke management program](#) that is working with partners to mitigate smoke incursions from wildfires through prescribed burning, fuels removal, and public outreach. Oregon also has an emergency smoke response which is outlined in the [Oregon Wildfire Smoke Protocol](#).

A.9. PM2.5 Minimum Monitoring Requirements

DEQ and LRAPA operate an PM2.5 federal reference network largely based on EPA required sites, and areas known to have elevated PM2.5 levels from past monitoring. The network sites are shown in the table below.

MSA	County	Population 2023 estimate	Design Value ($\mu\text{g}/\text{m}^3$) Daily Std = 35.5 Annual = 9.1		Site name Max concentration site indicated for multiple site MSAs. Single site MSA's are max sites.	Season/ Frequency	Years	# of Monitors		
			Excluding wildfire days	Including wildfire days ^a				Minimum required	Active	need
Portland-Vancouver-Hillsboro, OR-WA (38900)	Multnomah, Clackamas, Washington, Clark (WA)	2,508,050	18 6.5	21 6.6	Max Site - Hillsboro (410670004) NCore- SE Lafayette (410510080) Near Rd Site: Tualatin (410670005)	Annual/ Every 3 rd day before 2023, then Daily	21-23	3	3	0
Lakeview (00000)	Lake	2,476 ^c	28 7.4	42 9.1	Lakeview (41-037-0001)			0	1	0
Medford (32780)	Jackson	220,768	22 8.8	75 12.3	Welch & Jackson (41-029-2129) Jackson Park (41-029-0029)			1	1	0
Prineville (39260)	Crook	11,598 ^c	19 6.3	33 7.5	Davidson Park (41-013-0100)			0	1	0
Grants Pass (24420)	Josephine	87,821	23 7.5	47 10.2	Parkside Sch. (41-033-0114)			0	1	0
Salem-Kaizer	Marion	436,546	ND	ND	Salem State Hospital		2024	0	1	0
Eugene-Springfield (21660)	Lane	381,181	25 7.0	28 7.9	Max Site- Hwy 99 (410390059) Neighborhood site: Amazon Park (41-039-0060)	Annual/ Daily	21-23	1	2	0
			23 7.2	121 14.4	Oakridge (41-039-2013)			0	1	0
			19 6.3	30 7.2	Cottage Grove (41-039-9004)			0	1	0
Klamath Falls (28900)	Klamath	70,003	31 8.9	49 12.2^b	Petersen Sch. (41-035-0004)			0	1	0
Burns-Hines (Harney Co. 00000)	Harney	4,435 ^c	26 9.0	34 10.0	Washington Park (41-025-0003)			0	1	0

- If DV with wildfire data has regulatory significance, DEQ will request exceptional event concurrence from EPA.
- DEQ is requesting exceptional event concurrence from EPA for forest fire impacts in 2021 and 2022 for Klamath Falls.
Note: **Bolded** design values exceed the NAAQS.
- The US Census Bureau did not have estimates. Used Portland State Population Research Center's 2023 estimates.

A.10. PM2.5 for AQI (Non-FEM) site information

Most of DEQ's PM2.5 monitoring is done using non-FEM nephelometers and DEQ's own SensOR. These monitors are cheaper to operate and correlate very closely to the FEM monitors. Using these allows DEQ to have many more AQI sites for public use. If a design value of one of these sites is near or above the NAAQS, DEQ considers placing a FEM sampler at the site for comparison to the NAAQS. The site list is in the table below.

MSA	County	Population 2023 estimate	Design Value ($\mu\text{g}/\text{m}^3$) Daily Std = 35.5 Annual = 9.1		Site name	Years	# of Monitors		
			Excluding wildfire days	Including wildfire days			required	Active	need
Bend-Redmond (CBSA 13460)	Deschutes	260,919	20 5.1	57 7.8	Bend Pump Station (41-017-0120)	21-23	0	1	0
			19 5.5	61 8.6	Sisters USFS (41-017-0004)	21-23	0	1	0
Albany-Lebanon (CBSA 10540)	Linn	131,496	19 5.6	21 5.8	Albany (41-043-0009)	21-23	0	1	0
			16 5.7	19 6.2	Sweet Home FD (41-043-2002)	21-23	0	1	0
Corvallis (MSA 18700)	Benton	97,713	14 4.6	14 4.8	Corvallis FD 3 (41-003-0013)	21-23	0	1	0
Roseburg (County Pop. 40700)	Douglas	112,435	20 7.1	36 8.8	Fire Department (41-019-0004)	21-23	0	1	0
The Dalles (County Pop. 17180)	Wasco	26,333	18 5.3	21 6.0	Cherry Heights (41-065-0007)	21-23	0	1	0
La Grande (County Pop. 29260)	Union	25,944	18 5.7	23 6.4	Hall & North (41-061-0123)	21-23	0	1	0
Baker City - Ontario (County Pop. 36620)	Baker	16,912	19 6.5	26 7.2	Baker City USFS (41-001-0003)	21-23	0	1	0
Enterprise/Joseph (00000)	Wallowa	3,326	18 5.4	31 6.9	Forest Service Off (41-063-0001)	21-23	0	1	0
Cave Junction – (24420)	Josephine	2,163	30 7.8	82 14.9	Cave Junction USFS (41-033-0036)	21-23	0	1	0
John Day/Canyon City (00000)	Grant	1,866	27 9.7	33 10.7	Forest Service Off (41-023-0002)	21-23	0	1	0
Pendleton (37820)	Umatilla	92,355	18 5.7	24 6.6	McKay Creek (41-059-0121)	21-23	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 ODEQ is the PQAO for Oregon. ODEQ and LRAPA use the FEM method 209 for PM2.5 SLAMS sites. ODEQ has one FRM/FEM collocated site and one FRM/FRM site. ODEQ and LRAPA use methods 127, 122, and 141 for PM10 samplers. ODEQ has one collocated site for each of methods 127 and 141.

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)
209	13	1FRM, 1FEM	1FRM	1FEM

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)
122	1	0	0	0
127	5	1	1	0
141	0	0	0	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	0	0	0	0

Appendix C. Detailed Site Information

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

C.1. Portland, SE Lafayette Site Information

Local Site Name	Portland, SE		
AQS ID	41-051-0080		
GPS Coordinates	45.4966, -122.6029		
Street address	5824 SE Lafayette, Portland, OR		
County	Multnomah		
Distance from roadways (meters)	80		
Latest Traffic count (AADT, yr)	SE Powell Blvd @ 79th Ave. AADT = 28,416, Yr= 2018 west, 2019 East - PBOT		
Groundcover (e.g. asphalt, dirt, grass)	Grass		
Representative statistical area name (CBSA, MSA,)	Portland-Vancouver (#6440)		
Pollutant	PM2.5	PM2.5	PM10
Parameter code, POC	88101,1	88101,2	85101,1 & 81102,1
MSA, CBSA, CSA or area represented	6440		
Monitor purpose	NAAQS, AQI, NCore, PAMS, Research		
Monitoring Objective	Population, Non-source		
Spatial scale of Representativeness	Neighborhood		
Monitoring types	SLAMS/NCore, AQI		
Instrument type and model	Beta attenuation BAM,1022	Gravimetric, R&P 2025	Gravimetric, R&P 2025
Instrument parameter occurrence code	Primary	Collocate	Primary
Method number	209	145	127
FRM/FEM/FRM/other	FRM	FEM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)	ODEQ (0821)
Analytical lab	NA	ODEQ (0821)	ODEQ
Reporting agency	ODEQ	ODEQ	ODEQ
Monitoring start date	1/1/2023	1/1/2023	1/1/1984
Current sampling frequency	1/1	1/3	1/3
Sampling season	Annual		
Probe height (meters)	5.4	5.4	5.4
Distance from Collocated monitor	1	1	1
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)	10.2	10.2	10.2
Distance from to furnace or incinerator flue (meters)	14	14	14
Unrestricted airflow (degrees)	360°	360°	360°
Probe material for reactive gases	Aluminum	Aluminum	Aluminum
Residence time for reactive gases (seconds)	NA	NA	NA
Will there be changes with the next 18 months?	No	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes	Yes

Local Site Name	Portland, SE Lafayette	
AQS ID	41-051-0080	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	See above	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	PM10	PM10-2.5
Parameter code, POC	85101,2 & 81102,2	86101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Urban Population, Max concentration, Non-source	NCORE, Urban, Population, Non- source
Monitoring Objective	NAAQS, AQI	Required
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS/NCORE	NCORE, Research
Instrument type and model	Gravimetric, R&P 2025	Gravimetric, R&P 2025s
Instrument parameter occurrence code	Collocated	Primary
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)	5.4	5.4
Distance from Collocated monitor (meter)	1	1
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)	10.2	10.2
Distance from to furnace or incinerator flue (meters)	14	14
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	N/A

Local Site Name	Portland, SE Lafayette	
AQS ID	41-051-0080	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	See above	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	NO2	Ozone
Parameter code, POC	42602, 1	44201, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Population, Non-source, NCore	
Monitoring Objective	NAAQS, AQI	
Spatial scale of Representativeness	Urban	Urban
Monitoring types	SLAMS/NCore	SLAMS/NCore
Instrument type and model	Cavity Attenuated Phase Shift, Teledyne T500U	UV absorption, Teledyne T400
Instrument parameter occurrence code	Primary	Primary
Method number	212	087
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	7/10/2003
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	4.6	4.6
Distance from supporting structure (meters)	1.2	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)	12.7	12.7
Distance from to furnace or incinerator flue (meters)	14	14
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	Teflon
Residence time for reactive gases (seconds)	3.7	5.1
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

Local Site Name	Portland, SE Lafayette	
AQS ID	41-051-0080	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	See above	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	CO	SO2
Parameter code, POC	42101, 1	42401, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Population, Non-source, NCore	
Monitoring Objective	NAAQS, AQI	
Spatial scale of Representativeness	Micro	Urban
Monitoring types	SLAMS/NCore, AQI	
Instrument type and model	IR Absorption, Teledyne T300	UV absorption, Teledyne T100u
Instrument parameter occurrence code	Primary	Primary
Method number	093	100
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)	4.6	4.6
Distance from supporting structure (meters)	1.2	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)	12.7	12.7
Distance from to furnace or incinerator flue (meters)	14	14
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Glass, Teflon	Glass, Teflon
Residence time for reactive gases (seconds)	2.3	6.3
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

Local Site Name	Portland, SE Lafayette
AQS ID	41-051-0080
GPS Coordinates	45.4966, -122.6029
Street address	5824 SE Lafayette, Portland, OR
County	Multnomah
Distance from roadways (meters)	80
Traffic count (AADT, yr)	See above
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)
Pollutant	Chemical Speciation
Parameter code, POC	Numerous parameters, P OC 6
MSA, CBSA, CSA or area represented	6440
Monitor purpose	Trend information, Population, NCore
Monitoring Objective	NAAQS support, CSN, Research
Spatial scale of Representativeness	Neighborhood
Monitoring types	NCore, STN, Research
Instrument type and model	Super SASS & URG 3000N w/Pall Quartz filter and Cyclone Inlet
Instrument parameter occurrence code	Primary
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	Every third day
Sampling season	Annual
Probe height (meters)	5.4
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)	10.2
Distance from to furnace or incinerator flue (meters)	14
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	This monitor is a SPM, in support of the criterial pollutant network. It is not required to meet Appendices A, B, C, D, and E, but it has an EPA approved QAPP and meets the STN requirements.
Is it suitable for comparison against the standard?	NA

Local Site Name	Portland, SE Lafayette	
AQS ID	41-051-0080	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	See above	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	NOy	VOC
Parameter code, POC	42101, 1	42401, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Population, Non-source, NCore	
Monitoring Objective	PAMS	
Spatial scale of Representativeness	Urban	Urban
Monitoring types	NCore	
Instrument type and model	IR Absorption, Teledyne T300	UV absorption, Teledyne T100u
Instrument parameter occurrence code	Primary	Primary
Method number	093	100
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	6/1/2024	6/1/2024
Current sampling frequency	Hourly	Hourly
Sampling season	June-Sept	June-Sept
Probe height (meters)	10	4.9
Distance from supporting structure (meters)	1.2	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)	12.7	11.2
Distance from to furnace or incinerator flue (meters)	14	14
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	316 grade Stainless Steel
Residence time for reactive gases (seconds)	11.1	16.6
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	These monitors are SPM, in support of the criterial pollutant network. They are not required to meet Appendices A, B, C, D, and E, but have an EPA approved QAPP and meet the PAMS requirements.	
Is it suitable for comparison against the standard?	N/A	N/A

Local Site Name	Portland, SE Lafayette	
AQS ID	41-051-0080	
GPS Coordinates	45.4966, -122.6029	
Street address	5824 SE Lafayette, Portland, OR	
County	Multnomah	
Distance from roadways (meters)	80	
Traffic count (AADT, yr)	See above	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	Carbonyls	Mixing Height
Parameter code, POC	42101, 1	42401, 1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Population, Non-source, NCore	
Monitoring Objective	PAMS	
Spatial scale of Representativeness	Urban	Urban
Monitoring types	NCore	
Instrument type and model	IR Absorption, Teledyne T300	UV absorption, Teledyne T100u
Instrument parameter occurrence code	Primary	Primary
Method number	093	100
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	6/1/2024	2/1/2005
Current sampling frequency	Hourly	Hourly
Sampling season	June-Sept	June-Sept
Probe height (meters)	4.9	
Distance from supporting structure (meters)	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)	11.2	11.2
Distance from to furnace or incinerator flue (meters)	14	14
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	316 grade Stainless Steel	No probe
Residence time for reactive gases (seconds)	16.6	NA
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	These monitors are SPM, in support of the criterial pollutant network. They are not required to meet Appendices A, B, C, D, and E, but have an EPA approved QAPP and meet the PAMS requirements.	
Is it suitable for comparison against the standard?	N/A	N/A

C.2. Portland, Humboldt School Site Information

Local Site Name	Portland, Humboldt School	
AQS ID	41-051-2010	
GPS Coordinates	45.558081, -122.670985	
Street address	4915 N Gantenbein Ave, Portland	
County	Multnomah	
Distance from roadways (meters)	12 from minor road, 108 from major	
Latest Traffic count (AADT, yr)	AADT = 4079 (N Alberta St E Of 7 th Ave), yr =2018 PBOT AADT = 372 (N Blandena St E at Kerby Ave), yr =2022 PBOT	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	PM10	PM10
Parameter code, POC	81102, 7	81102, 9
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Population, Non - source oriented	
Monitoring Objective	NAAQS	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	SLAMS
Instrument type and model	Gravimetric, Tisch PM10 HV+	
Instrument parameter occurrence code	Primary	Collocated
Method number	141	141
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 between Primary and Collocate (meters)	1	1
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)	NA	NA
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the annual pm10?	Yes	Yes

C.3. Portland Near Roadway Site Information

Local Site Name	Portland Near Roadway	
AQS ID	41-067-0005	
GPS Coordinates	45.8992, -	
Street address	6745 SW Bradbury Ct, Tualatin, OR	
County	Washington	
Distance from roadways (meters)	27	
Traffic count (AADT, yr)	I-5 at MP 290.14. 156,016, 2022 ODOT https://www.oregon.gov/odot/Data/Pages/Traffic-Counting.aspx	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	NO2	PM2.5
Parameter code, POC	42602,1	88101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Source (Freeway)	
Monitoring Objective	NAAQS, AQI, Research	
Spatial scale of Representativeness	Microscale	Microscale
Monitoring types	SLAMS	SLAMS
Instrument type and model	Cavity Attenuated Phase Shift, Teledyne T500U	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary	Primary
Method number	212	209
FRM/FEM/FRM/other	FRM	FEM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	04/21/2015	1/1/2023
Current sampling frequency	Hourly	1/1
Sampling season	Annual	
Probe height (meters)	3.7	2.5
Distance from collocated monitor(meters)	NA	NA
Distance from supporting structure (meters)	1	2.1
Distance from obstructions on roof (meters)	No obstructions	
Distance from obstructions not on roof (meters)	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	Aluminum
Residence time for reactive gases (seconds)	3.7	NA
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

Local Site Name	Portland – Near Roadway Site	
AQS ID	41-067-0005	
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)	See above	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)	
Pollutant	Ozone	CO
Parameter code, POC	44201,1	42101,1
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Source (Freeway)	
Monitoring Objective	NAAQS, AQI	
Spatial scale of Representativeness	Microscale	Microscale
Monitoring types	SLAMS	SLAMS
Instrument type and model	UV absorption, Teledyne T400	IR Absorption, Teledyne T300
Instrument parameter occurrence code	Primary	Primary
Method number	087	093
FRM/FEM/FRM/other	FRM	FRM
Collecting agency	ODEQ (0821)	ODEQ (0821)
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	04/21/2015	04/21/2015
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	3.7	3.7
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)	3.7	3.2
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

C.4. Hillsboro, Hare Field Site Information

Local Site Name	Hillsboro, Hare Field
AQS ID	41-067-0004
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 = 24,580 (Cornell & Grant), Yr 2/28/2019
Groundcover (e.g. asphalt, dirt, grass)	Asphalt
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)
Pollutant	PM2.5
Parameter code, POC	88101,1
MSA, CBSA, CSA or area represented	6440
Monitor purpose	Population
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary
Method number	209
FRM/FEM/FRM/other	FEM
Collecting agency	ODEQ (0821)
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	1/1/2023
Current sampling frequency	1/1
Sampling season	Annual
Probe height (meters)	3
Distance from collocated monitor (meters)	2
Distance from supporting structure (meters)	2.1
Distance from obstructions on roof (meters)	No obstructions
Distance from obstructions not on roof (meters)	No obstructions
Distance from trees (meters)	125
Distance from to furnace or incinerator flue (meters)	150
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.5. Portland, Sauvie Island Site Information

Local Site Name	Portland, Sauvie	
AQS ID	41-009-0004	
GPS Coordinates	45.7685, -122.7721	
Street address	Social Security Beach, Sauvie Is,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	Ozone	PM2.5
Parameter code, POC	44201,1	88502,3
MSA, CBSA, CSA or area represented	6440	6440
Monitor purpose	Upwind of Urban, Transport	Urban background
Monitoring Objective	AQI, NAAQS	AQI
Spatial scale of Representativeness	Rural	Rural
Monitoring types	SLAMS	SPM
Instrument type and model	UV absorption,	Light Scattering
Instrument parameter occurrence code	Primary	Primary
Method number	087	771
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	
Current sampling frequency	Hourly	Hourly
Sampling season	May-Sept	Annual
Probe height (meters)	4.3	2.5
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	105
Distance from to furnace or incinerator flue (meters)	NA	NA
Unrestricted airflow (degrees)	360°	360°
Probe material for reactive gases	Teflon	PVC
Residence time for reactive gases (seconds)	7.1	38 (L 10", D 2", Flow 16 lpm
Will there be changes with the next 18 months?	No	No
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	No
Is it suitable for comparison against the standard?	Yes	No

**EPA approved the discontinuation of the FRM background site at Medford Dodge Road in THE 2010 ANP because of budget cuts from the "great recession". EPA has not provided funds to restart the background site. DEQ uses correlated FRM- nephelometers to meet this purpose. If EPA deems a background FRM/FEM is required to be reinstalled, the I03 grant funding to operate the site will need to be increased.*

C.6. Portland-Carus Site Information

Local Site Name	Portland - Carus – Spangler Rd.
AQS ID	41-005-0004
GPS Coordinates	45.2593, -122.5882
Street address	13575 Spangler Rd., Carus, OR
County	Clackamas
Distance from roadways (meters)	12
Traffic count (AADT, yr)	ADT = 645 yr = 2021 Spangler Rd. Clackamas Co. N 45 15.853 W
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Portland-Vancouver (#6440)
Pollutant	Ozone
Parameter code, POC	44201,1
MSA, CBSA, CSA or area represented	6440
Monitor purpose	Downwind of Urban, Maximum Concentration
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Urban Scale
Monitoring types	SLAMS
Instrument type and model	UV absorption, Teledyne
Instrument parameter occurrence code	Primary
Method number	087
FRM/FEM/FRM/other	FRM
Collecting agency	ODEQ (0821)
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	7/23/1976
Current sampling frequency	Hourly
Sampling season	May-Sept
Probe height (meters)	6.4
Distance from supporting structure (meters)	2.7
Distance from obstructions on roof (meters)	No obstructions
Distance from obstructions not on roof (meters)	No obstructions
Distance from trees (meters)	250
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.7. Salem – State Hospital Information

Local Site Name	Salem State	
AQS ID	41-047-0041	
GPS Coordinates	44.9431, -123.0059	
Street address	867 Medical Center	
County	Marion	
Distance from roadways (meters)	30 meters	
Latest Traffic count (AADT, yr)	ADT = 4295 1/14/2021. City of Salem. at D Street NE: East of Evergreen Ave.	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Salem	
Pollutant	Ozone	PM2.5
Parameter code, POC	44201,1	88101,1
MSA, CBSA, CSA or area represented	6440	
Monitor purpose	In urban core	Population
Monitoring Objective	NAAQS, AQI	NAAQS, AQI
Spatial scale of Representativeness	Urban Scale	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	UV absorption, Teledyne T400	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary	Primary
Method number	087	209
FRM/FEM/FRM/other	FRM	FEM
Collecting agency	ODEQ (0821)	LRAPA
Analytical lab	ODEQ	LRAPA
Reporting agency	ODEQ	ODEQ
Monitoring start date	5/1/2018	Jan 1, 2024
Current sampling frequency	Hourly	1/1
Sampling season	May-Sept	Annual
Probe height (meters)	3	2.5
Distance from supporting structure (meters)	1	2.1
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)	18	18
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)	3.5	NA
Will there be changes with the next 18 months?	No	Yes - Install
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Does the monitor meet the
Is it suitable for comparison against the standard?	Yes	Yes, but SPM

C.8. Salem/Turner Site Information

Local Site Name	Salem/Turner - Cascade Jr. High
AQS ID	41-047-0004
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)	ADT = 1705, Yr = (9/15/2021) Jct of Marion Rd (928) & 70th Ave SE to West Stayton Rd., Marion Co.
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Salem
Pollutant	Ozone
Parameter code, POC	44201,1
MSA, CBSA, CSA or area represented	7080
Monitor purpose	Downwind of Urban, Max
Monitoring Objective	NAAQS, AQI.
Spatial scale of Representativeness	Urban Scale
Monitoring types	SLAMS
Instrument type and model	UV absorption, Teledyne T400
Instrument parameter occurrence code	Primary
Method number	087
FRM/FEM/FRM/other	FRM
Collecting agency	ODEQ (0821)
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	6/23/1995
Current sampling frequency	Hourly
Sampling season	May-Sept
Probe height (meters)	4.5
Distance from supporting structure (meters)	1.5
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)	45
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?	Yes, new updated shelter
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.9. Eugene – Amazon Park Site Information

Local Site Name	Eugene – Amazon Park	
AQS ID	41-039-0060	
GPS Coordinates	44.0263, -123.0837	
Street address	E. 29 th Amazon Park, Eugene, OR	
County	Lane	
Distance from roadways (meters)	61	
Traffic count (AADT, yr)	2022 AADT = 12,902 Patterson St. Central Lane MPO	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	Ozone	PM2.5
Parameter code, POC	44201,1	88101,1
MSA, CBSA, CSA or area represented	2400	2400
Monitor purpose	Urban Population	NAAQS
Monitoring Objective	NAAQS, AQI	NAAQS, AQI
Spatial scale of Representativeness	Urban Scale	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	Teledyne API 400 – Ultraviolet	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary	Primary
Method number	087	209
FRM/FEM/FRM/other	FRM	FEM
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	2.1
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)	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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes
Technically, the Eugene-Springfield MSA should have a PM10 monitor here because wildfires adjacent to Oakridge and the Eugene -Springfield population put the MSA over the requirement to have three monitors . ODEQ and LRAPA are asking EPA R10 to use the discretion afforded to them in the PM10 minimum monitoring section of CFR 40 Part 58 Appendix A.		

C.10. Eugene – Saginaw Site Information

Local Site Name	Eugene – Saginaw
AQS ID	41-039-1007
GPS Coordinates	43.8345, -123.0353
Street address	2021 Delight Valley School Road, Saginaw, OR
County	Lane
Distance from roadways (meters)	140
Traffic count (AADT, yr)	2022 AADT = 39,090. 0.30 mile south of
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Eugene-Springfield
Pollutant	Ozone
Parameter code, POC	44201,1
MSA, CBSA, CSA or area represented	2400
Monitor purpose	Downwind of Urban, Highest Concentration
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Urban Scale
Monitoring types	SLAMS
Instrument type and model	UV Absorption, Teledyne API 400
Instrument parameter occurrence code	Primary
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.11. Eugene – Hwy 99 Site Information

Local Site Name	Eugene – Hwy 99	
AQS ID	41-039-0059	
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= 21,585, Hwy 99W (Hwy # 91) & Irving Road. yr = 2021	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Eugene-Springfield	
Pollutant	PM2.5	PM10
Parameter code, POC	88101,1	81102,1
MSA, CBSA, CSA or area represented	2400	2400
Monitor purpose	Population	
Monitoring Objective	NAAQS, AQI	NAAQS
Spatial scale of Representativeness	Neighborhood	Neighborhood
Monitoring types	SLAMS	SLAMS
Instrument type and model	Beta Attenuation, Met One BAM1022	Tisch HV PM10+
Instrument parameter occurrence code	Primary	Primary
Method number	209	141
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	Hourly	1/6
Sampling season	Annual	Annual
Probe height (meters)	5	5
Distance from supporting structure (meters)	2.1	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)	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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

C.12. Cottage Grove, City Shops Site Information

Local Site Name	Cottage Grove, City Shops
AQS ID	41-039-9004
GPS Coordinates	43.7995, -123.0535
Street address	Harvey Lane & N 14 th St., 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	PM2.5
Parameter code, POC	88101,1
MSA, CBSA, CSA or area represented	0000
Monitor purpose	Population
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Beta ray attenuation Met One, BAM1022
Instrument parameter occurrence code	Primary
Method number	209
FRM/FEM/FRM/other	FEM
Collecting agency	LRAPA
Analytical lab	LRAPA
Reporting agency	ODEQ
Monitoring start date	1/1/2008
Current sampling frequency	Hourly
Sampling season	Annual
Probe height (meters)	5
Distance from supporting structure (meters)	2.1
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.13. Oakridge, Willamette Center Site Information

Local Site Name	Oakridge, Willamette Center	
AQS ID	41-039-2013	
GPS Coordinates	43.7443, -122.4805	
Street address	School St., Oakridge, OR	
County	Lane	
Distance from roadways (meters)	115	
Traffic count (AADT, yr)	Oakridge Automatic Traffic Recorder, Sta. 20-017, 0.10 mile east of Kitson Springs Road AADT = 3200, yr =2019	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	PM2.5	PM10
Parameter code, POC	88101,1	81102,1
MSA, CBSA, CSA or area represented	0000	
Monitor purpose	Population	
Monitoring Objective	NAAQS, AQI	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	Beta Attenuation, Met One BAM1022	Beta Attenuation, Met One BAM1020
Instrument parameter occurrence code	Primary	Primary
Method number	209	122
FRM/FEM/FRM/other	FEM	FEM
Collecting agency	LRAPA	LRAPA
Analytical lab	LRAPA	LRAPA
Reporting agency	ODEQ	ODEQ
Monitoring start date	1/1/1999	11/1/1989
Current sampling frequency	Hourly	Continuous
Sampling season	Annual	Annual
Probe height (meters)	5	4
Distance from supporting structure (meters)	2.1	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)	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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

C.14. Grants Pass, Parkside School Site Information

Local Site Name	Grants Pass, Parkside School
AQS ID	41-033-0114
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	PM2.5
Parameter code, POC	88101,1
MSA, CBSA, CSA or area represented	0000
Monitor purpose	Population
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Beta Attenuation BAM 1022
Instrument parameter occurrence code	Primary
Method number	145
FRM/FEM/FRM/other	209
Collecting agency	FEM
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	8/31/1999
Current sampling frequency	Hourly
Sampling season	Annual
Probe height (meters)	3
Distance from collocated monitor (meters)	NA
Distance from supporting structure (meters)	2.1
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.15. Medford, Jackson Park Information

Local Site Name	Medford, Jackson Park	
AQS ID	41-029-0029	
GPS Coordinates	42.3324, -122.8891	
Street address	750 N Columbus Ave	
County	Jackson	
Distance from roadways (meters)	86 meters	
Traffic count (AADT, yr)	AADT 10,500 N. Columbus Ave. (Jackson to McAndrews. 2018)	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Medford	
Pollutant	PM2.5	PM10
Parameter code, POC	88101,1	81102,7
MSA, CBSA, CSA or area represented	32780	
Monitor purpose	Population	
Monitoring Objective	NAAQS, AQI	NAAQS
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	SLAMS
Instrument type and model	Beta Attenuation, Met One BAM1022	Gravimetric Tisch HV PM10+
Instrument parameter occurrence code	Primary	Primary
Method number	209	141
FRM/FEM/FRM/other	FEM	FRM
Collecting agency	ODEQ	ODEQ
Analytical lab	ODEQ	ODEQ
Reporting agency	ODEQ	ODEQ
Monitoring start date	7/21/2023	7/21/2023
Current sampling frequency	Hourly	1/6
Sampling season	Annual	Annual
Probe height (meters)	3	3
Distance from collocated monitor (meters)	NA	NA
Distance from supporting structure (meters)	2.1	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)	34	34
Distance from to furnace or incinerator flue (meters)	132	132
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

C.16. Medford - Talent Site Information

Local Site Name	Medford - Talent
AQS ID	41-029-0201
GPS Coordinates	42.2299, -122.7877
Street address	7120 Rapp In, Talent, OR
County	Jackson
Distance from roadways (meters)	220
Traffic count (AADT, yr)	AADT = 8400 Rogue Valley Hwy, yr = 2019
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Medford-Ashland
Pollutant	Ozone
Parameter code, POC	44201,1
MSA, CBSA, CSA or area represented	32780
Monitor purpose	Downwind of Urban, Highest Concentration
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Urban Scale
Monitoring types	SLAMS
Instrument type and model	UV Absorption, Teledyne T400
Instrument parameter occurrence code	Primary
Method number	087
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.17. Klamath Falls, Petersen School Site Information

Local Site Name	Klamath Falls, Petersen School	
AQS ID	41-035-0004	
GPS Coordinates	42.1903, -	
Street address	4856 Clinton Ave, Klamath Falls, OR	
County	Klamath	
Distance from roadways (meters)	8	
Traffic count (AADT, yr)	AADT = 7985 (Clinton & Summers) , Yr = 4/25/2018.	
Groundcover (e.g. asphalt, dirt, grass)	Grass	
Representative statistical area name (CBSA, MSA)	Other	
Pollutant	PM2.5	PM2.5
Parameter code, POC	88101,1	88101,2
MSA, CBSA, CSA or area represented	0000	0000
Monitor purpose	Population	
Monitoring Objective	NAAQS, AQI	
Spatial scale of Representativeness	Neighborhood	
Monitoring types	SLAMS	
Instrument type and model	Beta Attenuation, Met One BAM1022	
Instrument parameter occurrence code	Primary	Collocate
Method number	209	209
FRM/FEM/FRM/other	FEM	FEM
Collecting agency	ODEQ	
Analytical lab	ODEQ	
Reporting agency	ODEQ	
Monitoring start date	1/1/2019	1/1/2023
Current sampling frequency	Hourly	Hourly
Sampling season	Annual	Annual
Probe height (meters)	3	3
Distance from collocated monitor (meters)	2	2
Distance from supporting structure (meters)	2.1	2.1
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)	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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes	Yes
Is it suitable for comparison against the standard?	Yes	Yes

C.18. Lakeview, Center & M Sts. Site Information

Local Site Name	Lakeview, Center and M Sts
AQS ID	41-037-0001
GPS Coordinates	42.1892, -120.3540
Street address	8 South M St., Lakeview, OR
County	Lake
Distance from roadways (meters)	25 meters
Traffic count (AADT, yr)	AADT = 2959 ODOT (Hwy 20 & L St.) yr = 2021
Groundcover (e.g. asphalt, dirt, grass)	Dirt
Representative statistical area name (CBSA, MSA)	Other
Pollutant	PM2.5
Parameter code, POC	88101,1
MSA, CBSA, CSA or area represented	0000
Monitor purpose	Population
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary
Method number	209
FRM/FEM/FRM/other	FEM
Collecting agency	ODEQ
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	1/5/1998
Current sampling frequency	Hourly
Sampling season	Annual
Probe height (meters)	3
Distance from supporting structure (meters)	NA
Distance from supporting structure (meters)	2.1
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)	46
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?	Site relocation
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.19. Burns, Washington Street Site Information

Local Site Name	Burns, Washington Street
AQS ID	41-025-0003
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= 3672 (Steens Hwy 442 and US20), Yr = 2022
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Other
Pollutant	PM2.5
Parameter code, POC	88101,1
MSA, CBSA, CSA or area represented	0000
Monitor Objective	NAAQS, AQI
Monitoring purpose	Population
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary
Method number	209
FRM/FEM/FRM/other	FEM
Collecting agency	ODEQ
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	9/19/2009
Current sampling frequency	Hourly
Sampling season	Annual
Probe height (meters)	3
Distance from supporting structure (meters)	2.1
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.20. Prineville, Davidson Park Site Information

Local Site Name	Prineville, Davidson Park
AQS ID	41-013-0100
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)	11,173 (Ochoco HW No. 41 MP 19. (Fairview St) , 2022)
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Other
Pollutant	PM2.5
Parameter code, POC	88101,1
MSA, CBSA, CSA or area represented	0000
Monitor purpose	Population
Monitoring Objective	NAAQS. AQI
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Beta Attenuation, Met One BAM1022
Instrument parameter occurrence code	Primary
Method number	209
FRM/FEM/FRM/other	FEM
Collecting agency	ODEQ
Analytical lab	ODE
Reporting agency	ODEQ
Monitoring start date	1/1/2023
Current sampling frequency	Hourly
Sampling season	Annual
Probe height (meters)	3
Distance from collocated monitor (meters)	NA
Distance from supporting structure (meters)	2.1
Distance from obstructions on roof (meters)	No obstructions
Distance from obstructions not on roof (meters)	No obstructions
Distance from trees (meters)	37
Distance from to furnace or incinerator flue (meters)	39
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.21. La Grande, Hall and North Site Information

Local Site Name	La Grande, Hall and North Street
AQS ID	41-061-0119
GPS Coordinates	45.32363, -118.07806
Street address	1305 N Willow St, La Grande, OR
County	Union
Distance from roadways (meters)	18
Traffic count (AADT, yr)	No data
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Other
Pollutant	PM10
Parameter code, POC	81102,7
MSA, CBSA, CSA or area represented	0000
Monitor purpose	Population
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Neighborhood
Monitoring types	SLAMS
Instrument type and model	Gravimetric, Tisch PM10 HV+
Instrument parameter occurrence code	Primary
Method number	141
FRM/FEM/FRM/other	FRM
Collecting agency	ODEQ
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	9/1/2017
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)	26
Distance from to furnace or incinerator flue (meters)	39
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

C.22. Hermiston Municipal Airport Site Information

Local Site Name	Hermiston Municipal Airport
AQS ID	41-059-1003
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 = 7968 (MP 8.7, US395 or Hwy 54), Yr = 2022
Groundcover (e.g. asphalt, dirt, grass)	Grass
Representative statistical area name (CBSA, MSA)	Hermiston (CBSA 25840)
Pollutant	Ozone
Parameter code, POC	44201,1
MSA, CBSA, CSA or area represented	0000
Monitor purpose	Population
Monitoring Objective	NAAQS, AQI
Spatial scale of Representativeness	Urban
Monitoring types	SLAMS
Instrument type and model	UV Absorption, Teledyne T400
Instrument parameter occurrence code	Primary
Method number	087
FRM/FEM/FRM/other	FRM
Collecting agency	ODEQ
Analytical lab	ODEQ
Reporting agency	ODEQ
Monitoring start date	2/27/2007
Current sampling frequency	Hourly
Sampling season	May-Sept
Probe height (meters)	4
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)	134
Distance from to furnace or incinerator flue (meters)	72
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
Does the monitor meet the requirements of 40 CFR Part 58 Appendices A, B, C, D and E?	Yes
Is it suitable for comparison against the standard?	Yes

Appendix D. Checklist Corrections from last year's ANP.

This section is for EPA Region 10 reviewers. The table below addresses EPA comments from the 2023 ANP.

D.1. EPA comments from the 2023 ANP and ODEQ response.

	EPA notes	ODEQ comment
1	Did not submit ANP by July 1 st . Had to make corrections to ANP and resubmitted on July 27 th .	ODEQ submitted the ANP on July 1 but EPA asked for more information and considered it a draft. This year's ANP is submitted by July 1 st .
2	Screenshot of public comment website was taken after the public comment period lapsed. While the table in App D specifies that no public comments were received, please add a similar statement to Appendix K in the future.	Screenshot of public comment announcement is included in Appendix K.
3	Statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E, where applicable was missing in ANP.	This statement is explicitly stated for each SLAMS monitor in Appendix C.
6	R10 approved relocation of the Medford site outside of the ANP in June 2023. ODEQ may not have had time to include the approval letter in the public comment version of the ANP.	ODEQ did put this move out for public comment along with the 2023 ANP.
10	Oregon and Washington Portland-Vancouver-Hillsboro MSA shared MOU was signed on 5/14/19 so it will expire on 5/13/24. It needs to be updated.	The updated MOU is included in the 2024 ANP in Appendix F.
15	Table A9's title should be changed from (FRM) to (FEM).	Corrected.
23	App D 4.7.3 allows for regional background and regional transport sites to be non -FEM. ODEQ specifies the Portland, Sauvie (AQS -ID: 41 -009 - 0004) as an "Urban Background" site. However, no regional transport site is designated. ODEQ's network includes many PM2.5 monitoring sites (including 10 non-FEM) that may be considered regional transport sites. Please indicate which site(s) are considered regional transport sites in the 2024 ANP.	Sauvie Island has been the background and transport site for Oregon since the Medford, Dodge Road site's FRM was discontinued due to budget cuts. This has been noted in Appendix C but is now also indicated in the PM2.5 Section 3.1.4 PM2.5 Network.

	EPA notes	ODEQ comment
23	App D 4.7.3 allows for regional background and regional transport sites to be non -FEM. ODEQ specifies the Portland, Sauvie (AQS -ID: 41 - 009 -0004) as an “Urban Background” site. However, no regional transport site is designated. ODEQ’s network includes many PM2.5 monitoring sites (including 10 non-FEM) that may be considered regional transport sites. Please indicate which site(s) are considered regional transport sites in the 2024 ANP.	Sauvie Island has been the background and transport site for Oregon since the Medford, Dodge Road site’s FRM was discontinued due to budget cuts. This has been noted in Appendix C but is now also indicated in the PM2.5 Section 3.1.4 PM2.5 Network.
23	In the past, only 2 sites were required for the Eugene-Springfield MSA, but wildfire smoke in Oakridge in 2020 and 2022 has bumped the requirement up to three. LRAPA and DEQ plan to request a waiver in the 2024 ANP for this requirement. How DEQ is meeting the minimum monitoring requirements for PM10 is not clear from Table A7. As noted in previous ANP responses, the minimum number of required monitors column needs to either correspond with 40 CFR 58 Appendix D table D-4 or have an explanation of how the minimum required number was established (i.e., whether the area is in the category of high, medium, or low concentration for PM10). Please update the outdated text under PM10 minimum monitoring requirements stating that continuous PM10 samplers will be placed at sites using PM2.5 as a surrogate for PM10 in the future.	Language was added to Table A7 explaining that we are asking EPA to use their discretion afforded to them in Appendix A, to allow LRAPA to continue to operate two monitors. Appendix H also includes the request and demonstration as to why two monitor is appropriate.
40	The Portland-Vancouver-Hillsboro MSA passed the 2.5M mark in 2020. DEQ needs to discuss the progress to install a second near road site.	This information is added in the ANP’s Section 3.1.3 and discussed in Section 4. Work on finding a site has started and the site installed is forecasted to occur in the summer of 2025 near Tubman School along I-5. Tubman school’s impact from I-5 is of great concern for parents and Portland Public Schools. ODOT is planning to add an additional lane along I-5 next to the school in the near future.
51	PAMS is required in 2021 at ODEQ’s NCore site but has still not been installed as of 2023.	PAMS has been installed for the summer of 2024 at the NCore site. A new shelter had to be installed to accommodate PAMS. This is discussed in Section 3.1.1 Ozone Network.

Appendix E. Waivers and Surrogate Monitoring

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. NCORE PM10 Lead Waiver

In 2019 EPA approved ODEQ’s request to discontinue PM10 lead monitoring at DEQ’s NCORE site at Portland, SE Lafayette.

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 E.1. CO emission estimates from the Rogue Valley.

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

3. PM10 Surrogate Monitoring

In 2010 the Grants Pass PM10 monitor was discontinued because its values had dropped far below the NAAQS and funding was cut. The PM10 maintenance plans for this site required continued monitoring so EPA and ODEQ agreed upon an alternate method to track PM10. EPA allowed ODEQ to discontinue PM10 monitoring if we used PM2.5 monitoring as a surrogate. In the 2010 network plan, we showed that the PM10 consisted predominantly of PM2.5. We developed correlation equations and calculated 2015 PM10 estimates for these sites based on PM2.5. The PM10 standard is 150µg/m3.

Table E.2. Linear regression equations used to estimate PM10 using PM2.5.

	Grants Pass	Klamath Falls	Lakeview
Linear Regression Equation	$y = 1.2x + 2.6$	$y = 1.4x + 3.2$	Q1&4: $y = 1.5x + 3.0$ Q2&3: $y = 2.9x + 0.6$ Wildfire smoke: $y = 1.1x + 15.6$

Y = PM10, X = PM2.5

Table E.3. 2013 PM10 estimates for Klamath Falls and Grants Pass.

Klamath Falls	Grants Pass	Lakeview
PM10 estimate. Number of days >150 ($\mu\text{g}/\text{m}^3$)		
2021-23 Average = 0	2021- 23 Average = 1.7	2021-23 Average = 0
2021 - 0	2021 - 0	2021 - 0
2022 – 0	2022 – 0	2022 – 0
2023 - 0	2023 – 5 days, all from wildfire smoke out of 365 days sampled.	2023 - 0

4. Actual Monitoring Waivers.

- 4.1 2005 - Klamath Falls CO monitoring waiver approval
- 4.2 2011 - Klamath Falls PM10, Grants Pass PM10, and Medford CO monitoring waiver request and approval
- 4.3 2018 – NCore PM10 lead waiver request and approval.
- 4.4 2023 – Lakeview PM10 monitoring waiver request and approval.

New Monitoring Waiver Request

- Appendix H. Waiver to operate one PM10 site in Eugene instead of the two required by the CFR due to wildfire smoke in Oakridge.
- Appendix I. Waiver to use PM2.5 as a surrogate for PM10 in Oakridge

4.1. 2005 Klamath Falls CO Monitoring Waiver Approval



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

Reply to
Attn Of: AWT-107

20 JUL 2005

David Collier, Manager
Program Operations Division
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390

Subject: Removal of Klamath Falls Carbon Monoxide Monitor

Dear Mr. Collier:

Thank you for your letter of July 11, 2005 explaining your decision to discontinue CO monitoring in Klamath Falls, Oregon. Current CO levels have been about one half of the standard and future trends suggest that CO concentrations will decrease further as the local motor vehicles and fuels continue to be replaced by cleaner vehicles and fuels.

Periodic review of area growth rates and emission inventory estimates for CO in Klamath Falls, as part of the 3-year periodic statewide emission inventory cycle, will assure that CO levels continue to remain below the CO standard. In the unlikely event that CO emissions in Klamath Falls increase significantly, ODEQ agrees that the monitor will be restarted. This approach will ensure that CO monitoring will resume before CO levels reach the 8-hour CO standard and is acceptable to EPA.

Sincerely,

A handwritten signature in cursive script that reads "Mahbubul Islam".

Mahbubul Islam, Manager
State and Tribal Air Programs Unit

cc: ✓ Jeff Smith, ODEQ
Connie Robinson
Keith Rose

4.2. 2011 - Klamath Falls PM10, Grants Pass PM10, and Medford CO Monitoring Waiver

Request and Approval

Waiver Request:

Justification for Discontinuation of Monitoring in Carbon Monoxide and PM10 Maintenance Areas

(This document is too large to post here and is available upon request)

Waiver Approval:

Note that page two is missing but the page one has the approval of the waiver.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

JAN 08 2012

OFFICE OF
AIR, WASTE AND TOXICS

Mr. Anthony Barnack
Air Monitoring Program
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204-1390

Department of Environmental Quality
Air Quality Division

JAN 09 2012

RECEIVED

Dear Mr. Barnack:

We have evaluated the 2011 Oregon Ambient Air Monitoring Network Plan, which describes changes to the OR monitoring network for 2011-12. The proposed changes, and EPA's responses, are listed below:

Discontinued Monitors:

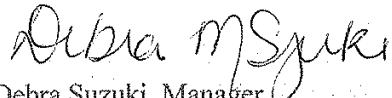
- 1) Discontinued PM_{2.5} FRM sampling at Bend, Pump Station (41-017-0120). This site has been consistently below 75% of the NAAQS. A nephelometer remains at the site for the woodstove advisory program. EPA approves this change.
- 2) Discontinued PM_{2.5} FRM duplicate sampling at Hillsboro, Hare Field (41-067-0004). The reductions in PM_{2.5} FRM samplers in 2011 resulted in a lowering of the requirement duplicate sites from three to two. EPA approves this change.
- 3) Discontinued air toxics monitoring at Salem, State Hospital (41-047-0041). Site was deemed to have enough data. Resources were moved to support an air toxics site in Klamath Falls. EPA approves this change.
- 4) Discontinued the Halsey field burning meteorology site. EPA approves this change.
- 5) Discontinued monitoring for wet Mercury Deposition January 1, 2011 at Beaverton Highland Park (41-067-0111). The grant's funding ended. EPA approves this change.
- 6) Discontinued PM₁₀ FRM sampling at Eugene, Lane Community College (41-039-0013). This site was redundant as discussed in the five year plan. EPA approves this change.
- 7) Discontinue CO monitors in Eugene, at the Lane Community College site (41-039-0013), and in Medford, the Rogue Valley Mall site (41-029-0018). EPA approves discontinuing these monitors, and the justification for discontinuing these monitors provided in the ODEQ report "Justification for Discontinuing of Monitoring in Carbon Monoxide and PM₁₀ Maintenance Areas" (October 2011).

- a) Portland/SE Lafayette
- b) Eugene/Amazon Park
- c) Medford/Grant & Belmont
- d) Klamath Fall

3. Pre-cursor gas monitors at the Portland/SE Lafayette NCore site

“Core” monitors are those monitors in the network that must be operated with available PM2.5 monitoring funds. The “non-core” PM2.5 monitors in the State’s network can be operated at ODEQ’s discretion with any remaining federal funds or State funds. If you have any questions about our approval of the Oregon monitoring network, please contact Keith Rose at (206) 553-1949.

Sincerely,



Debra Suzuki, Manager
State and Tribal Program Unit

4.3. 2018 - NCore PM10 Lead Monitoring Waiver Request and Approval

Waiver Request



Oregon

Kate Brown, Governor

Department of Environmental Quality
Laboratory and Environmental Assessment Division
7202 NE Evergreen Parkway, Suite 150
Hillsboro, OR 97124
Voice & TTY (503) 693-5700
FAX (503) 693-4999

November 5th, 2018

Doug Jager

USEPA REGION 10
1200 Sixth Avenue
Seattle, WA 98101
206-553-2961

Re: Request to discontinue the PM10 lead NCORE monitor.

Dear Mr. Jager,

Oregon DEQ requests EPA approval to discontinue the SLAMS PM10 lead monitor at Oregon's NCORE site (Portland SE Lafayette, 41-051-0080). We have analyzed lead at this site since Jan, 2012 with no results anyway near the NAAQS. Also, EPA no longer requires lead monitoring at the NCORE sites.

Please let us know if we can discontinue the lead monitoring before the end of the year so we can plan for 2019 analysis work.

Thank you,

A handwritten signature in black ink, appearing to read "Anthony Barnack".

Anthony Barnack

Waiver Approval



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

DEC 19 2018

OFFICE OF
AIR AND WASTE

Mr. Anthony Barnack
Air Monitoring Program
Oregon Department of Environmental Quality
7202 NW Evergreen Parkway, Suite 150
Hillsboro, OR 97124

Dear Mr. Barnack:

This letter is in response to your request received by email on November 5, 2018 to discontinue ambient air Pb monitoring at the Portland NCore station (AQS ID: 41-051-0080). This SLAMS monitoring is not specifically required by NCore, and as such, your request for discontinuation can be approved by Region 10.

Review of the NEI database found no facilities exist in the Portland area that would require that Pb monitoring be performed in this area. Region 10 reviewed the available Pb measurements in AQS from this station (2012 – 2017) and found no ambient air concentrations exceeding the 50% NAAQS threshold specified in 40 CFR Part 58 Appendix D 4.5(a)(ii) that would indicate that Pb monitoring is warranted. As such, Region 10 approves your request to discontinue Pb monitoring at the Portland NCore station.

Please notify Doug Jager by email at jager.doug@epa.gov when the monitoring ceases and when this monitoring shutdown is reflected in AQS. If you have any questions about this approval, please contact me at (206) 553-2970 or Doug Jager at (206) 553-2961.

Sincerely,

A handwritten signature in black ink, appearing to read "Gina Bonifacino".

Gina Bonifacino, Acting Manager
Air Planning Unit

4.4. 2023 – Lakeview PM2.5 as a surrogate for PM10 Waiver Approval

Waiver Request:

Justification for Discontinuation of Monitoring in Carbon Monoxide and PM10 Maintenance Areas
(This document is too large to post here and is available upon request)

Waiver Approval:

EPA approved the use of PM2.5 as a surrogate for PM10 for Lakeview in the 2023 ANP approval letter. The excerpt from the letter approving the surrogate is:

We approve the following additional network modifications laid out in the ANP:

- 1) Replacing PM₁₀ monitoring with surrogate PM_{2.5} at the Lakeview site (AQS ID:41-037-0001). Lakeview is a PM₁₀ maintenance area, and its current 10-year Maintenance Plan applies through 2026 (71 FR 14399). ODEQ originally discontinued PM₁₀ monitoring and used PM_{2.5} as a surrogate in 2006 (approved in the 2007 ANP response). However, because the correlation relationship between PM₁₀ and PM_{2.5} was not adequately demonstrated, R10 required ODEQ to reassess their method for demonstrating continued attainment of the PM₁₀ NAAQS.
To evaluate the relationship between PM₁₀ and PM_{2.5} at the site, and to establish PM_{2.5} to PM₁₀ conversion factors, ODEQ deployed a PM₁₀ FRM collocated with the PM_{2.5} FRM at the Lakeview site for all of calendar year 2022. The Lakeview PM_{2.5} surrogate justification (ANP Appendix J) shows the correlation between PM₁₀ and PM_{2.5} at the site for three different categories: winter (first and fourth quarters), summer (second and third quarters) and during wildfire smoke events. The surrogate justification also demonstrates how ODEQ will estimate the PM₁₀ Design Value (DV) from the PM_{2.5} measurements to verify continued attainment. The surrogate justification shows that PM_{2.5} levels would exceed the 24-hour PM_{2.5} NAAQS before reaching PM₁₀ NAAQS levels for all three categories of PM₁₀ to PM_{2.5} correlations. In the justification, DEQ committed to re-initiating PM₁₀ monitoring in the area by January 1 of the following calendar year if correlated PM₁₀ calculations show that concentrations have reached or exceeded 93% of the NAAQS (140 µg/m³). R10 also notes that the use of PM_{2.5} as a surrogate measure for PM₁₀ at this site was previously approved (April 2, 2011 waiver). For all these reasons, we approve the use of PM_{2.5} as a surrogate for PM₁₀ at this site pursuant to 40 C.F.R. part 58 Appendix D, Section 4.7.1.

Appendix F. Interstate Memos of Understanding

F.1 Portland/Vancouver Airshed.

Memorandum of Understanding
Between
Oregon Department of Environmental Quality
And
Washington Department of Ecology

I. PURPOSE

This Memorandum of Understanding (MOU) is entered into by and between the Oregon Department of Environmental Quality Air Quality Program, hereinafter referred to as ODEQ, and the Washington Department of Ecology Air Quality Program, hereinafter referred to as WDOE.

The purpose of this MOU is to agree in principle to cooperate with shared resources to collectively meet the United States Environmental Protection Agency (US EPA) minimum monitoring requirements for criteria air pollutants in the Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area (MSA).

II. STATEMENT OF MUTUAL BENEFITS AND INTEREST

The Portland-Vancouver-Hillsboro, OR-WA MSA consists of Clackamas, Columbia, Multnomah, Washington, and Yamhill Counties in Oregon and Clark and Skamania Counties in Washington. The network design criteria for ambient air quality monitoring described in 40 C.F.R § 58 Appendix D require that in areas where metropolitan statistical areas (MSAs) cross jurisdictional boundaries, “full monitoring requirements apply separately to each affected State or local agency in the absence of an agreement between the affected agencies and the EPA Regional Administrator.” This MOU establishes an agreement that ODEQ and WDOE cooperatively meet the minimum monitoring requirements in the Portland-Vancouver-Hillsboro, OR-WA MSA.

The Portland-Vancouver-Hillsboro, OR-WA MSA had an estimated population of 2,508,050 as of July 1, 2023. Based on 40 C.F.R § 58 Appendix D, the following minimum monitoring requirements for criteria pollutants apply to an MSA of this population size:

Pollutant	Minimum Number of Required Monitors
Ozone (O ₃)	2
Carbon Monoxide (CO)	1
Nitrogen Dioxide (NO ₂)	3
Sulfur Dioxide (SO ₂)	1
Particulate Matter ≤10µm (PM ₁₀)	2
Fine Particulate Matter (PM _{2.5})	3

As of January 1, 2024, the minimum monitoring requirements were met or exceeded in the Portland-Vancouver-Hillsboro, OR-WA MSA for each of the criteria pollutants listed above with the exception of Nitrogen Dioxide (NO₂). ODEQ is currently working with EPA Region 10 to

identify a suitable location and secure funding for the installation of a second near-road NO₂ monitoring site in the Portland Metropolitan area.

III. GENERAL ROLES

ODEQ and WDOE formally agree to collectively provide adequate criteria pollutant monitoring as required by 40 C.F.R § 58 Appendix D. Each agency shall inform the other agency at its earliest convenience via telephone or email of any monitoring changes within the Portland-Vancouver-Hillsboro, OR-WA MSA that impact the minimum monitoring requirements. In the event that new minimum monitoring requirements are imposed after the execution of this MOU, ODEQ and WDOE agree to consult and jointly determine how to meet the new requirements.

IV. IT IS MUTUALLY AGREED AND UNDERSTOOD BY AND BETWEEN THE SAID PARTIES THAT:

- A. This instrument is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures, including those for government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties, and shall be independently authorized by appropriate statutory authority. This instrument does not provide such authority.
- B. This instrument in no way restricts ODEQ or WDOE from participating in similar activities with other public or private agencies, organizations, and individuals.
- C. Pursuant to Section 22, Title 41, United States Code, no Member of, or Delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise therefrom.
- D. Nothing in this MOU shall be construed as obligating either party to expend funds or to make any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively allocated for this purpose.
- E. Modifications within the scope of this instrument shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by both parties.
- F. Either party(s), in writing, may terminate the MOU in whole, or in part, at any time before the date of expiration provided that written notice is sent to the other party at least 120 calendar days prior to the termination date.
- G. This MOU shall be effective upon execution by both parties and shall remain in effect for a period of 5 years unless otherwise modified. This agreement can be extended if mutually agreed to by both parties.

H. The principal contacts for this instrument are:

Oregon Department of Environmental Quality
Anthony Barnack, Ambient Monitoring Coordinator
7202 NE Evergreen Parkway, Suite 150
Hillsboro, OR 97124-6166
(971) 806-2223

Washington Department of Ecology
Jill Schulte, Air Monitoring Coordinator
PO Box 47600
Olympia, WA 98504-7600
(360) 790-6538

In Witness whereof, the parties hereto have executed this MOU as of the last date written below:

4/5/2024 DocuSigned by:
Matthew R. Shrensel
4BA13B50BBA44F8...
Date Matthew Shrensel
Interim Air Quality Monitoring Manager
Oregon Department of Environmental Quality

4/5/2024 DocuSigned by:
Sean Lundblad
1F4206C199A24A6...
Date Sean Lundblad
Technical Services Section Manager, Air Quality Program
Washington Department of Ecology

Appendix G. Review of Violating monitor changes.

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 H. Waiver to continue to use two PM10 monitors for the Eugene CBSA.

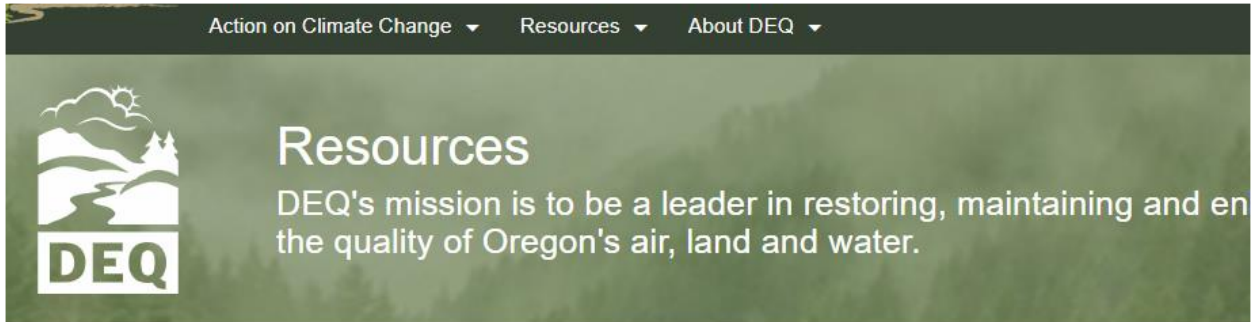
See Attachment

Appendix I. Waiver to use the PM2.5 monitor as a surrogate for PM10 monitoring in Oakridge.


See Attachment


Appendix J. Public Notice

The Annual Network Plan was put out for public comment on May 31st for 30 days. The public was informed by Public Notice on the DEQ public notice page <https://www.oregon.gov/deq/Get-Involved/Pages/Public-Notices.aspx> below which has many subscribers. The page provides a link to subscribe for notices.

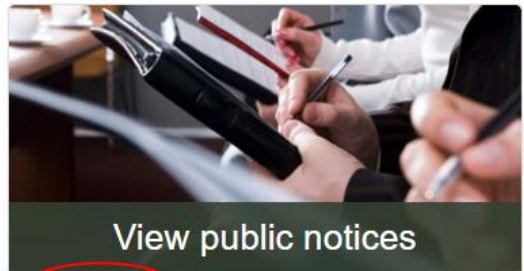


Resources


Vehicles
+


Compliance and enforcement
+

Get involved



[Public notices](#)

Quality	Recycling and Waste Prevention	Action on Climate Change	Resources	About DEQ
written comments on the conditions of Wastequip Manufacturing Company LLC's Proposed Air Quality Permit		Comments	written comments on the conditions of Wastequip Manufacturing Company's proposed Standard Air Contaminant Discharge Permit.	
2024 Ambient Air Quality Criteria Pollutant Annual Network Plan	Statewide	Request for Comments	EPA requires DEQ to submit an annual criteria pollutant, air quality monitoring plan which outlines the upcoming changes. The public is welcome to comment on the plan.	7/1/2024 5:00 PM
DEQ Requests Comments on	Multnomah	Request for	DEQ invites the public to	7/1/2024 5:00 PM

The ANP link on the public notice page opens the Public Notice fact sheet. The ANP public notice has a link to the ANP posted on the DEQ Air Quality Monitoring website. <https://www.oregon.gov/deq/aq/pages/air-quality-monitoring.aspx>



PUBLIC NOTICE

Date posted: 5/31/24

DEQ Requests Comments on the 2024 Annual Ambient Criteria Air Quality Monitoring Network Plan

HOW TO PROVIDE PUBLIC COMMENT

Network name: DEQ and LRAPA Ambient Air Quality Criteria Pollutant Monitoring Network

Document type: Annual Air Quality Network Plan

Comments due by: July 1, 2024 at 5 p.m.

Submit written comments:

By mail: Air Quality Monitoring Coordinator, Oregon DEQ, 7202 NW Evergreen Pkwy #150, Hillsboro, OR 97124

By email: Anthony.barnack@deq.oregon.gov

DEQ invites the public to submit comments on the 2024 Annual Air Quality Criteria Monitoring Network Plan.

Summary

DEQ is required to submit an annual ambient air quality criteria pollutant monitoring network plan for public comment. The plan is sent to EPA for approval.

What is the purpose of our network?

This network measures ambient air quality criteria pollutants to:

1. Compare to the EPA's health standards for regulatory purposes.
2. Provide hourly air quality health information through the AQI.
3. Provide Air Quality trending information in the Air Quality Monitoring Annual Report.
4. Support residential wood burning, forestry burning, and agricultural burning health impact programs.

What Air pollutants are monitored?

Criteria Air Pollutants

1. PM_{2.5}- Particulate matter 2.5 microns in diameter
2. PM₁₀ - Particulate matter 10 microns in diameter,
3. Ozone
4. Carbon monoxide
5. Nitrogen dioxide
6. Sulfur dioxide

What happens after the public comment period ends?

Comments will be reviewed by DEQ and forwarded to EPA. The comments will be considered in planning as factors along with the budget, EPA requirements, pollution levels, unmonitored populations, and EJ needs.

Where can I go to review the plan?

The plan is posted on the [Oregon DEQ Air Quality Monitoring](#) Web page.

Translation or other formats

[Español](#) | [한국어](#) | [繁體中文](#) | [Русский](#) | [Tiếng Việt](#) | [العربية](#)
800-452-4011 | TTY: 711 | deqinfo@deq.oregon.gov



In addition to the public notice, DEQ reached out to Portland Public Schools (PPS) to inform them of the proposed near road site between Interstate-5 and Tubman School and sent them this fact sheet that we also posted on the air quality monitoring web site.

Fact Sheet:

Page 1 of 2



Air Quality Monitoring next to I-5 near Tubman School and Lillis Albina Park

Where will we monitor?

DEQ is planning on installing an air quality monitoring site between Interstate 5 and Lillis Albina Park. The monitoring station will be near the intersection of N. Commercial Avenue and N. Russell Street and will be 15 meters (or 50 feet) from the edge of the northbound lane. The maps below show the proposed site.



Translation or other formats

[Español](#) | [한국어](#) | [繁體中文](#) | [Русский](#) | [Tiếng Việt](#) | [العربية](#)
800-452-4011 | TTY: 711 | deqinfo@deq.oregon.gov



What is the monitoring purpose?

EPA's near-road monitoring program defines two Tiers of required near-road monitoring. This new monitoring site fulfills Oregon's obligation to install a new Tier 2 site.

Tier 1 near road-monitoring is required at the maximum heavy duty diesel freeway segment (without retaining walls) in metropolitan areas of over one million people. The purpose of these sites is to measure maximum road exhaust concentrations in a Metro area. The Portland-Vancouver-Hillsboro Core-base Statistical Area has a Tier 1 site along I-5 in Tualatin, between the I-205 and Hwy 217 interchanges. Two freeways converge into one along this section.

Tier 2 near-road monitoring requires a second near road site when a metropolitan area's population exceeds 2.5 million people. The Portland-Vancouver-Hillsboro Core-base Statistical Area exceeded 2.5 million in the 2020 census, resulting in the requirement to install a new near-road monitoring site. The second site can be used to address public concerns or be used for research. DEQ is aware of public concerns around the impact of I-5 on Tubman School and the surrounding neighborhood. ODOT has plans to add a lane onto I-5 in this section of the road, and DEQ is interested in how this will affect emissions. Finally, this segment of freeway is between I-405 and I-84, and represents a good location to measure where the traffic of two freeways converges into one.

What pollutants will we monitor?

The site is required to monitor for [nitrogen dioxide](#), which is a component of diesel exhaust and is a criteria pollutant, and a precursor for [ozone](#) (smog) formation. DEQ may opt to monitor for other vehicle emission pollutants such as [carbon monoxide](#), ozone, [particulate matter](#), and [hazardous air pollutants](#) (air toxics), or supporting meteorological data. Additional monitoring will depend on available operational funding.

When do we start and how long do we monitor?

DEQ intends to install the monitor in the summer of 2025 and will operate the site at that location indefinitely or until enough data is collected to draw conclusions about the impact of I-5 and the planned I-5 expansion. In the future, the site may be relocated to address other near road concerns.

How do you get the results?

DEQ will provide hourly nitrogen dioxide concentrations on the [Air Quality Index](#) web site and the AQI app. DEQ will include trend reports in the Air Quality Monitoring Annual Report on the DEQ [Air Quality Monitoring](#) web page. If DEQ monitors for air toxics, the results will be on EPA's [Air Data](#) web page and in the DEQ Air Toxics Monitoring Annual Report on the DEQ Air Quality Monitoring web page. DEQ is also available to present any results to community groups or other organizations upon request.

Provide comments

If you have comment or questions about the new air quality monitoring site, contact Anthony Barnack, ODEQ Laboratory and Environmental Assessment Division at: Anthony.Barnack@deq.state.or.us. Please submit comments before July 1st at 5:00 pm for inclusion in the Annual Network Plan submitted to EPA. Later comments will also be considered, but not sent to EPA.

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities. Visit DEQ's [Civil Rights and Environmental Justice page](#).

700 NE Multnomah Street, Suite 600, Portland, Oregon 97230
Phone: 503-229-5696, Toll Free in Oregon: 800-452-4011



GovDelivery notification:

FOR IMMEDIATE DISTRIBUTION

Subject Line:

Oregon DEQ opens comment period for 2024 Oregon Annual Ambient Criteria Pollutant Air Monitoring Network Plan

Text:

Oregon DEQ is now receiving public comments on the [2024 Oregon Annual Ambient Criteria Pollutant Air Monitoring Network Plan](#).

NOTE: Section 4 of the plan outlines changes DEQ would like to make over the next year. One noteworthy addition is a new monitoring site in the Portland-Metro Area. It would be next to Interstate 5, between Interstate 84 and Fremont Bridge interchange, where we suspect pollution is high.

For additional information on DEQ's air quality monitoring, visit Oregon DEQ's [Ambient Air Quality Monitoring](#) web page.

DEQ is accepting comments through July 1, 2024. Please send them to Anthony.barnack@deq.oregon.gov.

Comments:

The Portland Public School District provided feedback on the new near road site. They thanked DEQ for the notice and suggested that we may want to locate the station closer to where the children spend most of their outdoor time at the north end of the playground.

We told them that we had previous discussions with the school district, and they discouraged us from placing a site on school property because they were not certain about the future of the school. We then told them PPS that we are working with the Oregon Department of Transportation on a site between I-5 and the north side of the playground where we are assured of a permanent residence. We also told them that for traffic, a distance of around 100 yards should have the same pollutant concentration because the cars and trucks and traffic flow will be the same.

We also reached out to the PTA for comment but did not receive any response.