



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**Response to Comments:  
Washington State Implementation Plan  
Revision**

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*Removal of Vehicle Inspection and  
Maintenance Program*

May 2019

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## Publication and Contact Information

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**Response to Comments:  
Washington State Implementation Plan Revision**

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*Removal of Vehicle Inspection and  
Maintenance Program*

Air Quality Program

Washington State Department of Ecology

Olympia, Washington

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# Table of Contents

	<u>Page</u>
List of Tables .....	vi
Tables .....	vi
Introduction.....	1
Purpose of SIP revision.....	1
Differences between the proposed and adopted State Implementation Plan .....	1
Summary of public involvement process.....	1
Response to comments.....	1
Appendices.....	10
Appendix A. Copies Of All Written Comments.....	10
Appendix B. Copies Of Public Involvement Notices .....	14

# List of Tables

Page

## Tables

Table 1: Written Comments.....	2
--------------------------------	---

# Introduction

This document provides Ecology's response to public comments received on Ecology's State Implementation Plan (SIP) Revision: Removal of the Vehicle Inspection and Maintenance Program. The purpose of a Response to Comments document is to:

- Meet EPA's requirement to prepare a response to comments.
- Provide reasons to adopt the State Implementation Plan (SIP) revision.
- Describe differences between the proposed and the adopted SIP revision.
- Collect public comment and Ecology's response to those comments into one document.

To read more about this SIP revision or other Ecology SIP revisions, go to:

- <https://ecology.wa.gov/Regulations-Permits/Plans-policies/State-implementation-plans>

## Purpose of SIP revision

Under state law, RCW 70.120.170, the vehicle inspection and maintenance program ends on January 1, 2020. Ecology is removing the vehicle inspection and maintenance rule from Washington's SIP to align with the legal end of the program.

## Differences between the proposed and adopted State Implementation Plan

Under state law, RCW 70.120.170, the vehicle inspection and maintenance program ends on January 1, 2020. Ecology is removing the vehicle inspection and maintenance rule from Washington's SIP to align with the legal end of the program.

## Summary of public involvement process

Ecology accepted comments from December 17, 2018 to January 28, 2019. We published notice of the public comment period and opportunity to request a hearing on Ecology's website. We did not hold a hearing because we did not receive a request for one.

## Response to comments

Ecology received two written comments about this State Implementation Plan revision.

**Table 1: Written Comments**

Name and Affiliation
Patricia Davis, Seattle, Washington
Ali Mirzakhilili, Air Quality Division Administrator, Oregon Department of Environmental Quality

**Comments from: Patricia Davis**

**Comment I-1-1:**

I believe that this program should be extended, despite lower emission.

**Response:**

Thank you for your comment. Ecology was directed by the Legislature under state law, RCW 70.120.170, to end the vehicle inspection and maintenance program by January 1, 2020. Under current state law, Ecology cannot extend the program.

Ecology’s analysis shows that cars and trucks are getting cleaner, and that people are replacing older vehicles with lower-polluting vehicles. Even with expected population growth and increases in vehicle travel, emissions from cars and trucks are projected to continue to decline after the vehicle inspection program ends.

Ecology and local clean air agencies in Washington operate an extensive air quality monitoring network. We monitor air quality statewide to make sure that Washington continues to meet the health-based National Ambient Air Quality Standards (NAAQS). If air pollution from vehicles increases and there is a risk of a violation of the air quality standards, we will evaluate and consider implementing additional measures to keep our air clean.

**Comment I-1-2:**

In addition TRUCK AND SEMI TRUCKS USED AT THE PORTS should have regular emission testing and be in compliance. The truck emissions here are disgusting! Also I notice a bus line called: Bolt for a Buck from out of State (plates are not Washington) and their diesel particulate is beyond black and nasty! Why are they allowed to operate here? We need regulations that require buses/trucks/subcontractors for City of Seattle like Infrasource) comply with OUR emission standards and do not avoid licensing, emissions, etc as they obviously do. Please take this email seriously ☺ .....as in seriously please. Why have air quality efforts that are undermined (above) and allowed. Thank you :) Patricia Davis, Seattle, WA



**Response:**

Ecology agrees that heavy-duty vehicles are a significant source of diesel exhaust, a toxic air pollutant that harms public health. Ecology is actively working with other states and pressing EPA to adopt more stringent emission standards for new trucks, buses and other heavy duty diesel vehicles.

We continue to partner with the Northwest Seaport Alliance and other agencies to implement the Northwest Ports Clean Air Strategy. Between 2005 and 2016, total diesel particulate matter emissions from maritime-related heavy duty trucks and cruise-related passenger buses declined by 45 percent.<sup>1</sup> The Northwest Seaport Alliance's Clean Trucks Program requires all trucks serving the Puget Sound's international container terminals to have a 2007 or newer engine, or a certified equivalent emission control system. This requirement went into effect on January 1, 2019. The 2007 and newer model diesel truck engines must meet strict emission standards. Under the state vehicle inspection and maintenance program rule (WAC 173-422A-060), diesel-powered vehicles that are certified as meeting the EPA 2007 emission standards are exempt from the vehicle emission testing requirements.

Ecology also provides funding through the Clean Diesel grant program and through the Volkswagen settlement to replace and retrofit older dirtier heavy duty diesel vehicles to reduce diesel pollution, including school buses, transit buses, public port vehicles, and state fleets.

**Comments from: Ali Mirzakhali****Comment I-2-1:**

The Oregon Department of Environmental Quality appreciates the opportunity to provide comments on the State of Washington's proposed revisions to its State Implementation Plan (SIP). Specifically, Oregon DEQ has concerns about the potential adverse air quality effects in Oregon when Washington State's vehicle inspection and maintenance program ends as proposed on December 31, 2019. Oregon and Washington have a history of cooperative planning to achieve regional air quality improvement. The Environmental Protection Agency considered the Portland-Vancouver region as one designated ozone nonattainment area in 1978. Oregon DEQ and the Southwest Washington Clean Air Agency jointly planned the 1996 and 2007 Portland-Vancouver Air Quality Maintenance Area Plans. Both states have historically recognized that their respective emission control programs benefit a bi-state airshed.

EPA considers nine factors when designating an area's nonattainment boundaries, including demographic information such as population, traffic and commuting patterns, and expected growth. Physical factors EPA considers are jurisdictional boundaries, meteorology, emissions, air quality data, pollution controls and geography. Air quality data, geography, traffic patterns and expected growth factors drive Oregon DEQ's concerns about Washington's I/M program

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<sup>1</sup> Puget Sound Maritime Air Forum, Revised Oct. 2018, Puget Sound Maritime Air Emissions Inventory, <https://pugetsoundmaritimeairforum.files.wordpress.com/2018/10/final-2016-psei-report-19-oct-2018-scg.pdf>.

sunset. The factors that linked our respective metropolitan airsheds in 1978 have only strengthened since that time.

Oregon DEQ's primary concern is the potential failure to meet the ozone National Ambient Air Quality Standard. In 2017, the Portland area ozone design value exceeded 70 parts per billion. Wildfire smoke carrying ozone precursors, coupled with high air temperature, likely influenced the exceedance, and EPA still considers the Portland area in attainment with the ozone NAAQS. However, Oregon DEQ is concerned that hotter summer temperatures and upward trending vehicle miles traveled may erase the few ppb margin below the NAAQS that the region has achieved over the last decade.

**Response:**

Thank you for your comment. Ecology recognizes the important history of cooperative planning between Washington and Oregon. The Vancouver-Portland area was designated as a marginal nonattainment area for ozone in 1978, and was re-designated as in attainment in 1996. The region has been in attainment with the ozone NAAQS since that time and also for the stricter ozone NAAQS set in 1997, 2008, and 2015. Onroad vehicle emissions have declined significantly since the area was re-designated as in attainment in 1996.

The Legislature directed Ecology to end the vehicle inspection and maintenance program by January 1, 2020. Ecology's analysis shows that ozone precursor emissions from onroad vehicles will continue the long-term decline in Clark County (as well as other counties) after the vehicle inspection and maintenance program ends, even with projected increases in vehicle miles traveled. Ecology's analysis also shows that wildfire smoke contributed significantly to the 2017 ozone exceedances in King County, and likely across the Pacific Northwest region.

If the Portland-Vancouver area violates the ozone NAAQS in the future, and emissions from the Vancouver area contribute to the NAAQS violation, then Ecology will work with the community, Oregon DEQ, EPA, and other partners to evaluate and implement the control strategies necessary to bring the area back into attainment, including, if appropriate, a reinstatement of a vehicle inspection and maintenance program. If wildfire smoke or other sources outside of our control contribute to the violation, then Ecology will collaborate with Oregon DEQ to develop exceptional event demonstrations that can be submitted to EPA as appropriate.

**Comment I-2-2:**

Washington's King County 2015 - 2017 monitoring data also shows 8-hour ozone measurements- at or exceeding 70 ppb (Table 3, SIP Revision). In its design value analysis of 2017 data (p. 12, SIP Revision), Washington Department of Ecology subtracted measurements on 9 of the 13 days that experienced ozone NAAQS exceedances based on likely wildfire influence and high air temperatures. Those exceedances ranged from 3 to 33 ppb and Oregon DEQ finds the assumption that the entire exceedance on those days resulted from wildfire smoke needing more analysis.

**Response:**

The Puget Sound region is currently in attainment with the ozone NAAQS. Ecology conducted a detailed and comprehensive analysis demonstrating that nine of the thirteen ozone exceedances at the Enumclaw monitor in 2017 were influenced by wildfire smoke. Ecology's analysis closely followed the requirements in the Exceptional Events rule and EPA's "Guidance on Preparation of Exceptional Events Demonstrations for Wildfire Events that may Influence Ozone Concentration."<sup>2</sup>

When estimating the 2017 ozone design value excluding the influence from wildfires, we think it is appropriate to remove the entire ozone exceedance on days when wildfires influenced ozone concentrations. This is the same approach that EPA follows when they remove exceedances from the monitoring data for approved exceptional event demonstrations. Since the ozone exceedances did not have regulatory significance, Ecology did not conduct and was not required to submit an official exceptional event demonstration to EPA. However, our detailed analysis did show that wildfires significantly contributed to high ozone values on 9 of the 13 days in question.

**Comment I-2-3:**

In a year without substantial wildfires, according to EPA's Ozone Designations Mapping Tool, the large majority of volatile organic compound emissions in Clark County, Washington, originate with onroad and nonpoint sources. For example, in 2014, Clark County total volatile organic compound (VOC) emissions from onroad sources were 3,440 tons, nonpoint sources were 13,908 tons, and events (wildfires) were 266 tons. Since 2017, National Emissions Inventory data are not yet available through EPA's mapping tool, Oregon DEQ considers VOC source attribution premature.

As well, Figure 12 in Ecology's SIP Revision illustrates model results showing a nearly 6% VOC reduction in Clark County onroad emissions in 2019 from Washington's I/M program. Ecology also provided Oregon DEQ the absolute values associated with this scenario, which equate to 416 kg VOCs/day prevented in Clark County. Oregon DEQ has not modeled the potential effects on Portland area ozone concentrations from this emission increase, but is concerned that consistent additional precursor loading on hot summer days will contribute significantly to ozone formation and may cause NAAQS exceedances. Current NAAQS aside, Oregon DEQ is concerned that future revisions may lower the standard below 70 ppb because of data suggesting harmful effects below this level.

**Response:**

Ecology's analysis shows that onroad vehicle emissions of ozone precursors declined significantly since 2000 (after the area attained the ozone NAAQS) and will continue to decline significantly from 2020 to 2040 (after the vehicle inspection and maintenance program ends). The vehicle inspection and maintenance program is less effective at reducing emissions over

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<sup>2</sup> EPA, Sept. 2016, Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone Concentrations, [https://www.epa.gov/sites/production/files/2018-10/documents/exceptional\\_events\\_guidance\\_9-16-16\\_final.pdf](https://www.epa.gov/sites/production/files/2018-10/documents/exceptional_events_guidance_9-16-16_final.pdf).

time. Emissions reductions from vehicle emission standards and fleet turnover exceed the reductions from the vehicle inspection and maintenance program.

The program is also becoming less effective over time because of how Washington's program is structured. Many vehicles are exempt from the emission testing requirement, including vehicles 25 years or older, or model year 2009 or newer (vehicles certified to the more stringent California emissions requirements). Washington's program includes a waiver process that allows some vehicle owners to register their vehicles even if they don't pass their final test. The owners must show they spent at least \$150 on diagnosis and/or appropriate emissions repairs by an Authorized Emission Specialist after the initial test failure. This requirement and the \$150 limit is in state law, and Ecology does not have the direct ability to increase the limit. The vehicle waiver rate is increasing over time. This is likely because the cost to repair a vehicle is increasing over time, and the requirement to spend at least \$150 on repairs in order to receive a waiver has stayed the same.

Ecology's MOVES modeling predicts that onroad mobile volatile organic compounds (VOC) emissions on a hot summer day declined by 63 percent from 2000 to 2019, and will decline by an additional 58 percent below 2020 levels by 2040 (after the vehicle inspection and maintenance program ends). Between 2019 (the last year of vehicle inspection and maintenance program) and 2020 (without vehicle inspection and maintenance), VOC emissions are projected to increase by 20 kilograms per day, which is a 0.3 percent increase. Ecology thinks this small increase will not contribute significantly to a violation of the ozone NAAQS.

If the Portland-Vancouver region violates the ozone NAAQS in the future and onroad VOC emissions from Vancouver contribute to the violation, then Ecology will work with the community, Oregon DEQ, EPA, and other partners to evaluate and implement emissions controls strategies to bring the area back into attainment; including, if appropriate, a reinstatement of a vehicle inspection and maintenance program.

**Comment I-2-4:**

Oregon DEQ's experience and data analysis indicates that one out of five vehicles that come through our inspection lanes 'have performed some level of repair or maintenance within ninety days of the inspection date. Vehicle inspection programs work and they ensure that vehicles on the road perform as intended. Given traffic patterns between Washington and Oregon, as well as expected population growth, Oregon DEQ is interested in identifying ways to mitigate onroad emission increase after January 2020, when Washington no longer verifies that vehicles' pollution control systems are functioning as designed. The 2018 Regional Transportation Plan for Clark County references significant population growth over three decades in Clark County to reach the 2010 population of 425,363. The plan also cites a projected 2040 population of approximately 640,000. The Oregon Department of Revenue reports that in 2014, approximately 65,500 Clark County residents filed Oregon income taxes. This, coupled with Clark County Journey-to-Work data (2018 RTP p. 30) showing that in 2016, approximately 79% of commuters drove alone to work, leads Oregon DEQ to expect an increase in vehicle commuter traffic from Washington in the coming years. The 2016 Washington Department of Transportation Traffic

Report cites 70,625 average weekday southbound trips across the Interstate 5 bridge and 81,691 average weekday southbound trips across the Interstate 205 bridge.

**Response:**

Ecology's experience with our inspection and maintenance program reflects Oregon's. Even so, Ecology's analysis indicates that the emissions from onroad mobile sources in Vancouver will decline between 2020 and 2040 after the vehicle inspection and maintenance program ends, and that the emissions reductions from cleaner vehicles and fleet turnover will continue to exceed emissions reductions from the vehicle inspection and maintenance program. Ecology's analysis took into account the expected growth in population and increase in vehicles miles traveled in the Vancouver area. We think it is reasonable to assume that we will see a similar trend of overall declines in onroad vehicle emissions from vehicles traveling from Washington into Oregon.

**Comment I-2-5:**

Finally, because ozone is a regional issue, Oregon DEQ has concerns about interstate transport. EPA defines a state as a significant contributor to another state's air quality should their contribution to a nonattainment or maintenance monitor exceed 1% of a NAAQS (0.70 ppb for ozone). EPA modeled interstate ozone transport nationwide to help states complete their plans to achieve the revised 2015 ozone standard. EPA's model predicts that in 2023, 9.49 ppb of the ozone measured at a monitor in Clackamas County, Oregon would have originated in Washington State. Oregon DEQ is concerned about additional ozone contributions that may result when Washington's I/M program sunsets, consuming the small buffer from ozone NAAQS in Portland area.

**Response:**

To demonstrate compliance with the 2015 ozone NAAQS, Ecology evaluated Washington's contribution of ozone to Oregon and other states.<sup>3</sup> Ecology's evaluation relied on modeling data provided by EPA in December 2016, which showed that Washington's contribution to other states was minimal and below EPA's screening threshold of 1 percent (or 0.70 parts per billion, ppb) of the 70 ppb ozone NAAQS.<sup>4</sup> EPA's modeling also projected that Oregon (and Washington) would not have any areas violating the 70 ppb ozone NAAQS in 2023.

EPA approved Washington's ozone interstate transport State Implementation Plan in 2018 and determined that Washington's State Implementation Plan had adequate provisions to prohibit

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<sup>3</sup> Washington State Department of Ecology, Feb. 2018, Washington State Implementation Plan Revision: Interstate Transport of Sulfur Dioxide and Ozone, <https://fortress.wa.gov/ecy/publications/SummaryPages/1802005.html>.

<sup>4</sup> EPA, Dec. 2016, Air Quality Modeling Technical Support Document for the 2015 Ozone NAAQS Preliminary Interstate Transport Assessment, <https://www.epa.gov/airmarkets/air-quality-modeling-technical-support-document-2015-ozone-naaqs-preliminary-interstate>.

emissions that will contribute significantly to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state.<sup>5</sup>

EPA released supplemental information with updated modeling on interstate transport for the 2015 ozone NAAQS in March 2018.<sup>6</sup> EPA's updated modeling projected that Washington would contribute 9.49 ppb of ozone, over 1% of the NAAQS, to the Carus ozone monitor (Site 410050004) in Clackamas County, Oregon in 2023.<sup>7</sup> Ecology would like to further evaluate the difference in EPA's 2016 and 2018 modeling results to understand the modeled contribution to the Carus monitor and the discrepancy in the findings.

EPA's initial and updated modeling for the 2015 ozone NAAQS projected that Oregon (and Washington) would not have any ozone nonattainment areas in 2023 und the 70 ppb standard. The Carus ozone design value for 2016 was 65 ppb, and is projected to be 55 ppb on average in 2023 or a maximum of 56.8 ppb in 2023.<sup>8</sup>

EPA's modeling also showed significant declines in total human-caused nitrogen oxide (NO<sub>x</sub>) and VOC emissions and in onroad mobile NO<sub>x</sub> and VOC emissions in Oregon and Washington between 2011 and 2017. EPA's modeling projected that this trend would continue and that there would be significant declines in total human-caused and onroad mobile NO<sub>x</sub>, and VOC emissions from 2017 to 2023.<sup>9</sup>

Ecology has reviewed the supplemental modeling and concludes that Washington's emissions are not projected to contribute to nonattainment or interfere with maintenance of the ozone NAAQS in Oregon. Ecology is willing to meet with and work cooperatively with Oregon DEQ to explore this issue further.

#### **Comment I-2-6:**

In conclusion, Oregon DEQ considers onroad emissions from Washington a significant contributor to ozone measured in the Portland area. We appreciate and encourage Washington Ecology's implementation of other measures that reduce ozone precursor emissions from the onroad sector. Further, Oregon DEQ asks that Washington Ecology continue to work cooperatively to identify cost- effective and reasonable measures that Washington could quickly adopt to maintain NAAQS and, should EPA designate the Portland-Vancouver area

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<sup>5</sup> 83 Federal Register 47568, Sept. 20 2018, Air Plan Approval; Washington Interstate Transport Requirements for the 2015 Ozone NAAQS, <https://www.govinfo.gov/content/pkg/FR-2018-09-20/pdf/2018-20389.pdf#page=1>.

<sup>6</sup> EPA, Memo and Supplemental Information Regarding Interstate Transport SIPs for the 2015 Ozone NAAQS, <https://www.epa.gov/airmarkets/memo-and-supplemental-information-regarding-interstate-transport-sips-2015-ozone-naaqs>.

<sup>7</sup> EPA, 2015 Ozone NAAQS Interstate Transport Assessment Design Values and Contributions, [https://www.epa.gov/sites/production/files/2018-05/updated\\_2023\\_modeling\\_dvs\\_collective\\_contributions.xlsx](https://www.epa.gov/sites/production/files/2018-05/updated_2023_modeling_dvs_collective_contributions.xlsx).

<sup>8</sup> EPA, Ozone Monitoring Site Design Values for 2008 through 2017 and for 2023, [https://www.epa.gov/sites/production/files/2018-10/ozone\\_design\\_value\\_data\\_2.xlsx](https://www.epa.gov/sites/production/files/2018-10/ozone_design_value_data_2.xlsx).

<sup>9</sup> EPA, State-Level Annual Anthropogenic NO<sub>x</sub> and VOC Emissions for 2011 through 2018 and for 2023, [https://www.epa.gov/sites/production/files/2018-11/state-sector\\_annual\\_emissions\\_data\\_1.xlsx](https://www.epa.gov/sites/production/files/2018-11/state-sector_annual_emissions_data_1.xlsx).

nonattainment, bring the bi-state area back into attainment. Oregon DEQ considers reinstating Washington's inspection and maintenance program a reasonable and cost-effective measure.

Oregon DEQ appreciates Washington Ecology's consideration of these comments and looks forward to our continued cooperation and partnership.

**Response:**

Ecology's analysis and EPA's interstate transport modeling indicate that onroad emissions will continue to decline in Washington and Oregon, and that no areas in Washington or Oregon are projected to be in nonattainment for ozone in 2023.

Even so, Ecology is committed to continuing to work cooperatively with Oregon DEQ to ensure that the region continues to stay in attainment with the ozone NAAQS and to re-evaluate and identify cost-effective and reasonable measures in the future if emissions from Washington contribute to an ozone violation in the Portland-Vancouver area.

# Appendices

## Appendix A. Copies Of All Written Comments

### Patricia Davis

I believe that this program should be extended, despite lower emission. In addition TRUCK AND SEMI TRUCKS USED AT THE PORTS should have regular emission testing and be in compliance.

The truck emissions here are disgusting! Also I notice a bus line called: Bolt for a Buck from out of State (plates are not Washington) and their diesel particulate is beyond black and nasty! Why are they allowed to operate here? We need regulations that require buses/trucks/subcontractors for City of Seattle like Infrasource) comply with OUR emission standards and do not avoid licensing, emissions, etc as they obviously do. Please take this email seriously :) .....as in seriously please. Why have air quality efforts that are undermined (above) and allowed. Thank you :) Patricia Davis, Seattle, WA





# Oregon

Kate Brown, Governor

Department of Environmental Quality

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TTY 711

January 28, 2019

Joanna Ekrem  
Washington Dept. of Ecology  
P. O. Box 47600  
Olympia, WA 98504-7600

Re: Removal of Vehicle Inspection and Maintenance Program Comment Period

The Oregon Department of Environmental Quality appreciates the opportunity to provide comments on the State of Washington's proposed revisions to its State Implementation Plan (SIP). Specifically, Oregon DEQ has concerns about the potential adverse air quality effects in Oregon when Washington State's vehicle inspection and maintenance program ends as proposed on December 31, 2019. Oregon and Washington have a history of cooperative planning to achieve regional air quality improvement. The Environmental Protection Agency considered the Portland-Vancouver region as one designated ozone nonattainment area in 1978. Oregon DEQ and the Southwest Washington Clean Air Agency jointly planned the 1996 and 2007 Portland-Vancouver Air Quality Maintenance Area Plans. Both states have historically recognized that their respective emission control programs benefit a bi-state airshed.

EPA considers nine factors<sup>1</sup> when designating an area's nonattainment boundaries, including demographic information such as population, traffic and commuting patterns, and expected growth. Physical factors EPA considers are jurisdictional boundaries, meteorology, emissions, air quality data, pollution controls and geography. Air quality data, geography, traffic patterns and expected growth factors drive Oregon DEQ's concerns about Washington's I/M program sunset. The factors that linked our respective metropolitan airsheds in 1978 have only strengthened since that time.

Oregon DEQ's primary concern is the potential failure to meet the ozone National Ambient Air Quality Standard. In 2017, the Portland area ozone design value exceeded 70 parts per billion. Wildfire smoke carrying ozone precursors, coupled with high air temperature, likely influenced the exceedance, and EPA still considers the Portland area in attainment with the ozone NAAQS. However, Oregon DEQ is concerned that hotter summer temperatures and upward trending vehicle miles traveled may erase the few ppb margin below the NAAQS that the region has achieved over the last decade. Washington's King County 2015 – 2017 monitoring data also shows 8-hour ozone measurements at or exceeding 70 ppb (Table 3, SIP Revision). In its design value analysis of 2017 data (p. 12, SIP Revision), Washington Dept. of Ecology subtracted measurements on 9 of the 13 days that experienced ozone NAAQS exceedances based on likely wildfire influence and high air temperatures. Those exceedances ranged from 3 to 33 ppb and Oregon DEQ finds the assumption that the entire exceedance on those days resulted from wildfire smoke needing more analysis. In a

<sup>1</sup> <https://www3.epa.gov/pmdesignations/2006standards/documents/9factors2008.htm> and <https://www3.epa.gov/pmdesignations/1997standards/documents/final/TSD/Ch5.pdf>

year without substantial wildfires, according to EPA's Ozone Designations Mapping Tool,<sup>2</sup> the large majority of volatile organic compound emissions in Clark County, Washington, originate with onroad and nonpoint sources. For example, in 2014, Clark County total VOC emissions from onroad sources were 3,440 tons, nonpoint sources were 13,908 tons, and events (wildfires) were 266 tons. Since 2017, National Emissions Inventory data are not yet available through EPA's mapping tool, Oregon DEQ considers VOC source attribution premature.

As well, Figure 12 in Ecology's SIP Revision illustrates model results showing a nearly 6% VOC reduction in Clark County onroad emissions in 2019 from Washington's I/M program. Ecology also provided Oregon DEQ the absolute values associated with this scenario, which equate to 416 kg VOCs/day prevented in Clark County. Oregon DEQ has not modeled the potential effects on Portland area ozone concentrations from this emission increase, but is concerned that consistent additional precursor loading on hot summer days will contribute significantly to ozone formation and may cause NAAQS exceedances. Current NAAQS aside, Oregon DEQ is concerned that future revisions may lower the standard below 70 ppb because of data suggesting harmful effects below this level.

Oregon DEQ's experience and data analysis indicates that one out of five vehicles that come through our inspection lanes have performed some level of repair or maintenance within ninety days of the inspection date. Vehicle inspection programs work and they ensure that vehicles on the road perform as intended. Given traffic patterns between Washington and Oregon, as well as expected population growth, Oregon DEQ is interested in identifying ways to mitigate onroad emission increase after January 2020, when Washington no longer verifies that vehicles' pollution control systems are functioning as designed. The 2018 Regional Transportation Plan for Clark County<sup>3</sup> references significant population growth over three decades in Clark County to reach the 2010 population of 425,363. The plan also cites a projected 2040 population of approximately 640,000. The Oregon Department of Revenue reports<sup>4</sup> that in 2014, approximately 65,500 Clark County residents filed Oregon income taxes. This, coupled with Clark County Journey-to-Work data (2018 RTP p. 30) showing that in 2016, approximately 79% of commuters drove alone to work, leads Oregon DEQ to expect an increase in vehicle commuter traffic from Washington in the coming years. The 2016 Washington Department of Transportation Traffic Report<sup>5</sup> cites 70,625 average weekday southbound trips across the Interstate 5 bridge and 81,691 average weekday southbound trips across the Interstate 205 bridge.

Finally, because ozone is a regional issue, Oregon DEQ has concerns about interstate transport. EPA defines a state as a significant contributor to another state's air quality should their contribution to a nonattainment or maintenance monitor exceed 1% of a NAAQS (0.70 ppb for ozone). EPA modeled interstate ozone transport nationwide<sup>6</sup> to help states complete their plans to achieve the revised 2015 ozone standard. EPA's model predicts that in 2023, 9.49 ppb of the ozone measured at a monitor in Clackamas County, Oregon would have originated in Washington State. Oregon DEQ is concerned about additional ozone contributions that may result when Washington's I/M program sunsets, consuming the small buffer from ozone NAAQS in Portland area.

In conclusion, Oregon DEQ considers onroad emissions from Washington a significant contributor to

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<sup>2</sup> <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=6a89e7170dd147b1852ec11ccb3880e8>

<sup>3</sup> <https://www.rtc.wa.gov/reports/rtp/Rtp2018Clark-draft.pdf>

<sup>4</sup> <https://www.oregon.gov/DOR/programs/gov-research/Documents/Oregon-personal-income-tax-statistics-2016.pdf>

<sup>5</sup> [https://www.wsdot.wa.gov/mapsdata/travel/pdf/Annual\\_Traffic\\_Report\\_2016.pdf](https://www.wsdot.wa.gov/mapsdata/travel/pdf/Annual_Traffic_Report_2016.pdf)

<sup>6</sup> Notice of Data Availability – Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone NAAQS (January 2017).

ozone measured in the Portland area. We appreciate and encourage Washington Ecology's implementation of other measures that reduce ozone precursor emissions from the onroad sector. Further, Oregon DEQ asks that Washington Ecology continue to work cooperatively to identify cost-effective and reasonable measures that Washington could quickly adopt to maintain NAAQS and, should EPA designate the Portland-Vancouver area nonattainment, bring the bi-state area back into attainment. Oregon DEQ considers reinstating Washington's inspection and maintenance program a reasonable and cost-effective measure.

Oregon DEQ appreciates Washington Ecology's consideration of these comments and looks forward to our continued cooperation and partnership.

Sincerely,

 for ALI MIRZAKHALILI

Ali Mirzakhali  
Air Quality Division Administrator

## **Appendix B. Copies Of Public Involvement Notices**



## Menu

[< Events listing homepage](#)



COMMENT PERIOD

# State Implementation Plan Revision: Removal of Vehicle Inspection and Maintenance Program

## State implementation plans (SIP)


### December 17, 2018 - January 28, 2019

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Ecology is proposing to submit a revision to Washington's State Implementation Plan (SIP) to EPA. Under state law, the vehicle inspection and maintenance (also called the vehicle I/M or emission check) program ends on December 31, 2019. This revision would update Washington's SIP to remove the emission check program as a control measure.

[Draft SIP Revision: Removal of Vehicle Inspection and Maintenance Program](#)

## Español

Bajo la ley del estado, el programa de chequeo de emisiones de vehículos terminara el 31 de diciembre de 2019. Este plan actualiza el Plan de Implementación del estado de Washington para remocionar el programa de chequeo de emisiones. El plan muestra que la remoción del programa no resultara en calidad de aire malsano. Para más información sobre el plan, comuníquese con Joanna Ekrem, Programa de Calidad de Aire, al 360-407-6826 .

The public hearings have been **CANCELLED** since no one requested a public hearing by January 15, 2019.


### 1. In person

Tuesday, January 22, 2019 at 10 a.m.

Tacoma-Pierce County Health Department auditorium  
3629 South "D" Street, Tacoma, WA 98418

### 2. Webinar

Wednesday, January 23, 2019 at 9:30 a.m.

[Register for the webinar](#)  to get instructions about how to join.

To request a hearing, contact [Joanna Ekrem](#) at 360-407-6826 .

## Background

A [State Implementation Plan \(SIP\)](#) is a master plan to keep the air clean. it describes how Washington implements, maintains, and enforces national air quality standards.

The State Implementation Plan is an overarching guidance that outlines the process for reducing air pollution from sources including transportation, wood smoke, and industry. The plans are tailored and implemented to meet regional air quality needs.

A [program state implementation plan](#) describes specific programs to protect air quality and meet national air quality standards.



### Comment online

- Use our [online comment form](#) 



## Comment by mail

Joanna Ekrem  
Washington Dept. of Ecology  
Air Quality Program  
P.O. Box 47600  
Olympia, WA 98504-7600



## Questions

**Joanna Ekrem**  
Environmental Planner  
[joanna.ekrem@ecy.wa.gov](mailto:joanna.ekrem@ecy.wa.gov)  
360-407-6826

To request ADA accommodation, call Ecology at 360-407-7285 , 711 (relay service), or 877-833-6341 (TTY). More about our [accessibility services](#).



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**From:** [ECY RE AQComments](#)  
**To:** [ECY-AQ-RULE-AND-SIP-UPDATES@LISTSERV.ECOLOGY.WA.GOV](mailto:ECY-AQ-RULE-AND-SIP-UPDATES@LISTSERV.ECOLOGY.WA.GOV)  
**Subject:** Washington SIP Notice: Remove Vehicle I/M Program - Opportunity to comment & request a hearing  
**Date:** Monday, December 17, 2018 1:24:42 PM

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Ecology is proposing to submit a revision to Washington's State Implementation Plan (SIP) to EPA. This revision would update Washington's SIP to remove the vehicle inspection and maintenance (vehicle I/M, or emission check) program. You can find the SIP revision on [Ecology's webpage](#).

The vehicle I/M program was included in the SIP in 1995 to help Puget Sound and Vancouver meet the National Ambient Air Quality Standards (NAAQS) for ozone and carbon monoxide, and to help Spokane meet the carbon monoxide NAAQS.

All of Washington State currently meets the NAAQS, and air quality is vastly improved. Under state law, the vehicle I/M program ends on December 31, 2019. With advances in vehicle technology and fleet turnover, motor vehicle emissions are projected to continue to decline after the vehicle I/M program ends.

Ecology invites **public comment through January 28, 2019**, and provides an opportunity to **request a public hearing by January 15, 2019**.

**To comment:**

- [Submit online](#)
- Mail to:  
Joanna Ekrem  
Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600
- Provide your comments at a public hearing, if one is held.

**Public hearings, if requested:**

If requested by January 15, Ecology will hold two public hearings.

**1. In person**

Tuesday January 22, 2019 at 10 am  
Auditorium of the Tacoma Pierce County Health Department  
3629 South D Street, Tacoma, WA 98418

**2. Webinar**

Wednesday January 23, 2019 at 9:30 am  
[Register for the webinar](#) to receive instructions on how to join.

To request a hearing, contact Joanna Ekrem by e-mail at [Joanna.ekrem@ecy.wa.gov](mailto:Joanna.ekrem@ecy.wa.gov) or phone at (360) 407-6826.

If no hearing is requested, Ecology will cancel the public hearings. The cancellation will be posted on Ecology's [Public Input & Events Calendar](#).

**Español (Spanish)**

Bajo la ley del estado, el programa de chequeo de emisiones de vehículos terminara el 31 de




diciembre de 2019. Este plan actualiza el Plan de Implementación del estado de Washington para remocionar el programa de chequeo de emisiones. El plan muestra que la remoción del programa no resultara en calidad de aire malsano. Para más información sobre el plan, comuníquese con Joanna Ekrem, Programa de Calidad de Aire, al 360-407-6826.

# Infrastructure, rule, & program plans

We submit plans as well as state and local rules to EPA that demonstrate Washington has the tools in place to meet [National Ambient Air Quality Standards](#). Once approved by EPA, these infrastructure and program plans and rules become part of Washington's State Implementation Plan (SIP) for air quality. Plans and rules in Washington's SIP are enforceable by EPA and the public.

## I want to...



- [Sign up for email updates about current projects](#) 
- [Learn about Washington's regional haze state implementation plan](#)

## Open for public comment

Ecology is proposing to submit to EPA a revision to Washington's SIP. Under state law, the vehicle inspection and maintenance (also known as vehicle I/M or emission check) program ends on December 31, 2019. This revision would update Washington's SIP to remove the emission check program as a control measure.

### Español

Bajo la ley del estado, el programa de chequeo de emisiones de vehículos terminara el 31 de diciembre de 2019. Este plan actualiza el Plan de Implementación del estado de Washington para remocionar el programa de chequeo de emisiones. El plan muestra que la remoción del programa no resultara en calidad de aire malsano. Para más información sobre el plan, comuníquese con Joanna Ekrem, Programa de Calidad de Aire, al 360-407-6826.

SIP document	How to comment
<p><a href="#">Draft SIP Revision: Removal of Vehicle Inspection and Maintenance Program</a> </p>	<p><b>Public comment period:</b> Dec. 17, 2018 to Jan. 28, 2019</p> <ul style="list-style-type: none"> <li>• Send comments <a href="#">online</a> </li> <li>• Mail comments to: Joanna Ekrem, Air Quality Program Washington State Department of Ecology P.O. Box 47600; Olympia, WA 98501-7600</li> </ul> <p>For more information, contact <a href="#">Joanna Ekrem</a> at 360-407-6826.</p>

If requested by January 15, 2019, Ecology will hold two public hearings:

- **In person**

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To request a hearing, contact [Joanna Ekrem](#) at 360-407-6826.

To request ADA accommodations, contact [Teresa Reno](#) by January 15, 2019 at:

- 360-407-7285
- 877-833-6341 (TTY)
- 711 (Washington Relay Service)
- [teresa.reno@ecy.wa.gov](mailto:teresa.reno@ecy.wa.gov)

## Infrastructure State Implementation Plans

When EPA revises or issues a new [National Ambient Air Quality Standard](#),  the federal Clean Air Act requires each state to adopt and submit to EPA a plan, called an Infrastructure State Implementation Plan. An infrastructure plan shows how the state will implement, meet, and enforce federal standards for a variety of parameters, such as nitrogen dioxide, particulate matter, lead, and ozone. The plan describes the infrastructure Washington has in place to protect air quality, such as:

- Legal authority to implement federal standards.
- Rules adopted in the plan to meet federal standards.
- Air monitors to measure air pollution and determine compliance with the federal standards.
- Funding and resources.
- Permitting and other programs.
- Studies about how air pollution travels to neighboring states.

[Recent projects](#)

## Rule State Implementation Plans

Washington's plan includes current state and local rules to reduce air pollution and meet the National Ambient Air Quality Standards. When state and local agencies revise or add new rules in the plan, those updates are submitted to EPA.

[Recent projects](#)

## Program State Implementation Plans

A program state implementation plan describes specific programs to protect air quality and meet federal standards.

[Recent projects](#)

## Related links

- [Washington's air quality targets](#)
- [Air quality standards](#)
- [Business and industry requirements](#)

## Contact information

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Rules & Planning Unit

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360-407-6082