



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor  
John H. Tippetts, Director

September 27, 2018

Chris Hladick, Regional Administrator  
USEPA, Region 10  
Mail Code RA-140  
1200 Sixth Avenue  
Seattle, WA 98101

RE: SIP Elements for 2015 O<sub>3</sub> NAAQS under Clean Air Act Sections 110(a)(1)-(2)

Dear Mr.Hladick:

The Idaho Department of Environmental Quality is submitting documentation that Idaho's SIP contains provisions addressing all the requirements of the CAA Section 110(a)(1) and Section 110(a)(2) for the 2015 Ozone NAAQS.

A public comment period was held as required by 40 CFR 51.102 beginning August 22, 2018 through September 21, 2018. The public hearing was held on September 21, 2018 which no member of the public attended. Several written comments were received on this SIP and the response to comments is included in Appendix C. As a result, several changes were made to this submittal. The state followed all of Idaho's procedural requirements for this SIP submission.

Attached is a document entitled "State Implementation Plan Update to the 2015 ozone National Ambient Air Quality Standard," that demonstrates how Idaho's statutory and regulatory authorities satisfy Section 110(a) specific infrastructure elements. This plan also demonstrates that Idaho does not impact the maintenance or attainment of the 2015 ozone NAAQS in surrounding states. Also included as appendices are copies of the "Certificate of Hearing" certifying no members of the public attended the hearing, copies of the public notice published in the Idaho Statesman and on DEQ's website.

If you or your staff have questions concerning Idaho's submittal, please contact Tiffany Floyd, Air Division Administrator, at (208) 373-0552. For any questions of legal nature, please contact Lisa Carlson, Deputy Attorney General at (208) 373-0494.

Sincerely,

A handwritten signature in blue ink that reads "John H. Tippetts".

John H. Tippetts  
Director

Electronic attachment (1)

# **State Implementation Plan Update to the 2015 Ozone National Ambient Air Quality Standard**

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Addressing Clean Air Act Sections 110(a)(1) and (a)(2)



**State of Idaho  
Department of Environmental Quality  
Air Quality Division  
1410 North Hilton  
Boise, Idaho 83706**

**September 2018**



Printed on recycled paper, DEQ, September 2018,  
PID AIR.MASP.0405.SSIP, CA code 81992. Costs  
associated with this publication are available from the  
State of Idaho Department of Environmental Quality  
in accordance with Section 60-202, Idaho Code.

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## Background

This document certifies to the US Environmental Protection Agency (EPA) that Idaho's State Implementation Plan (SIP) for air quality adequately meets the *infrastructure* requirements of 42 USC §7410 (Clean Air Act [CAA] sections 110(a)(1) and (a)(2)).

To comply with CAA §110(a)(1), each state must adopt and submit a plan to EPA that provides for implementation, maintenance, and enforcement of any newly promulgated national primary ambient air quality standard. This plan is due within 3 years of promulgation of the standard or a shorter period if required by the final rule. The state must provide reasonable notice and a public hearing before submitting the plan to EPA.

The revised national ambient air quality standard (NAAQS) for ozone (O<sub>3</sub>) was promulgated on October 26, 2015 (80 FR 65291). In accordance with CAA §110(a)(1), Idaho is submitting this SIP update to meet the infrastructure requirements of CAA §§110(a)(1) and (a)(2) and demonstrate how Idaho meets each of the applicable requirements of CAA §110(a)(2).

Idaho's air quality laws are provided in the Idaho Environmental Protection and Health Act (EPHA), Idaho Code §39-101 through §39-130 and the "Rules for the Control of Air Pollution in Idaho" (IDAPA 58.01.01). The CAA §110(a)(2) SIP requirements listed below include brief explanations of how Idaho's EPHA and IDAPA rules satisfy those requirements for the 2015 O<sub>3</sub> NAAQS.

The appendices provide the following: Appendix A—Idaho's Ambient Air Monitoring Network Plan approval letter; Appendix B—interstate transport SIP for 2015 O<sub>3</sub>; and Appendix C—public involvement process. The SIP was made available for public comment from August 22 to September 21, 2018. DEQ received several written comments from the Idaho Conservation League on September 19, 2018. After the 30-day advance notice, a public hearing was held on September 21, 2018, which no member of the public attended. In response to comments received, DEQ made several changes to the draft submitted for public comment:

- Updated Figure B1 to clarify the lowering of the Ozone NAAQS in 2015
- Emphasized emissions reporting for O<sub>3</sub> under the Air Emissions Reporting requirements in Section 3.1
- Modified Section 4 to clarify that no O<sub>3</sub> control measures are currently mandated since the area is attainment/unclassifiable for the 2015 O<sub>3</sub> NAAQS and removed the vehicle inspection and maintenance program as a control strategy

The legal proof of publication in the *Idaho Statesman*, the hearing notice, and a copy of the Idaho Department of Environmental Quality's news release are provided in Appendix C, as well as DEQ's response to comments and the original comments received.

## Explanation of SIP Adequacy

Clean Air Act section (SIP requirements)	How Idaho addressed the §110(a)(2) requirements
<p><b>§110(a)(2)(A)</b></p> <p>Include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this act;</p>	<ul style="list-style-type: none"> <li>• Idaho Code §39-105(3)(d) provides the Idaho Department of Environmental Quality (DEQ) broad power to supervise and administer a system to safeguard air quality.</li> <li>• Idaho Code §39-115 provides authority for issuing air quality permits.</li> <li>• Idaho Code §39-116 provides authority to establish compliance schedules.</li> </ul> <p><b>Rules relating to air quality permits and fees:</b></p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.200–228 addresses permits to construct.</li> <li>• IDAPA 58.01.01.300–399 addresses Tier I operating permits.</li> <li>• IDAPA 58.01.01.400–410 addresses operating permits predating Title V (i.e., Tier II operating permits).</li> </ul> <p><b>Rules for open burning, fugitive emissions, visible emissions, and sulfur content of fuel requirements:</b></p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.600–624 includes the rules for the control of open burning. IDAPA 58.01.01.625 includes specific visible emission requirements and testing.</li> <li>• IDAPA 58.01.01.725 applies to fuel burning sources to prevent excessive ground-level concentrations of sulfur dioxide.</li> </ul> <p><b>Rules addressing other economic incentives:</b></p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.460–461 addresses banking of emissions.</li> </ul> <p>Together these statutes and rules provide DEQ with the authority to regulate the discharge of air pollutants and to promulgate rules to establish standards for emissions for ambient air quality.</p>

<p><b>§110(a)(2)(B)</b></p> <p>Provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to—</p> <p>(i) monitor, compile, and analyze data on ambient air quality, and</p> <p>(ii) upon request, make such data available to the Administrator;</p>	<ul style="list-style-type: none"> <li>• IDAPA 58.01.01.107 incorporates 40 CFR 50, 53, and 58 Appendix B.</li> <li>• IDAPA 58.01.01.576.05 incorporates 40 CFR 50 and 53 defining ambient air monitoring methods.</li> </ul> <p>These rules give Idaho the authority to implement ambient air monitoring surveillance systems according to the requirements of referenced sections of the CAA. The collected information is analyzed and submitted to EPA.</p> <p>EPA approved the 2017 Idaho <i>Annual Ambient Air Monitoring Network Plan</i> in a letter from Debra Suzuki on November 8, 2017 (Appendix A). DEQ’s annual air network monitoring plan, air quality monitoring summaries, a map of the state’s air monitoring network, and a link to real-time air monitoring are available at <a href="http://www.deq.idaho.gov/air-quality/monitoring/monitoring-network">www.deq.idaho.gov/air-quality/monitoring/monitoring-network</a>.</p>
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**§110(a)(2)(C)**

Include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure the national ambient air quality standards are achieved, including a permit program as required in parts C and D;

- Idaho Code §39-108 (Administrative and Civil Enforcement) provides DEQ the authority to administratively and civilly enforce the EPHA or any rule, permit, or order pursuant to EPHA.
- Idaho Code §39-109 contains criminal enforcement authority.
- Idaho Code §39-112 provides for emergency orders.
- IDAPA 58.01.01.200–228 contains the procedures and requirements for permits to construct.

See §110(a)(2)(A) discussion and sections relating to air quality permits (page 2).

Initial prevention of significant deterioration (PSD) delegation was provided in a memorandum of understanding from Gary L. O’Neal, Region 10 Air and Toxics Division Director, on November 28, 1986. DEQ’s PSD program is federally approved and covers all regulated pollutants. The regulations for 40 CFR 52.683 are available at [www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=657f35928d6029edee7ac574997a8ffd&ty=HTML&h=L&r=PART&n=40y3.0.1.1.1](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=657f35928d6029edee7ac574997a8ffd&ty=HTML&h=L&r=PART&n=40y3.0.1.1.1).

DEQ updates ambient air quality standards and changes to the PSD program (e.g., increments, significant impact levels, significant monitoring concentrations, and definitions of major source) as part of the annual incorporation-by-reference (IBR) rulemaking. These IBR updates, along with IDAPA 58.01.01.200–228, cover both minor and major permitting requirements for new and modified sources, and IDAPA 58.01.01.575–587 (Air Quality Standards and Area Classification) provide DEQ with the authority to implement the PSD and new source review (NSR) programs.

<p><b>§110(a)(2)(D)</b></p> <p>Contain adequate provisions—</p> <p>(i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—</p> <p>(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or</p> <p>(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility,</p> <p>(ii) insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement);</p>	<p><b>(D)(i)(I):</b></p> <p>This section is addressed in Appendix B.</p> <p><b>(D)(i)(II) regarding part C (PSD):</b></p> <p>DEQ received delegation of the PSD program on November 28, 1986, from Gary L. O’Neal, Region 10 Air and Toxics Division Director. DEQ’s PSD program is federally approved and covers all regulated pollutants. The regulations for 40 CFR 52.683 are available at <a href="http://www.gpo.gov/fdsys/granule/CFR-2011-title40-vol3/CFR-2011-title40-vol3-sec52-683/content-detail">www.gpo.gov/fdsys/granule/CFR-2011-title40-vol3/CFR-2011-title40-vol3-sec52-683/content-detail</a>.</p> <p>On December 27, 2010, EPA approved numerous revisions to Idaho’s SIP. Many of these revisions related to Idaho’s permitting and PSD program. See §110(a)(2)(C) requirements (page 4).</p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.209 provides notice and comment procedures for various permit actions with regard to the public and to appropriate federal, state, international, and local agencies.</li> </ul> <p><b>(D)(i)(II) regarding visibility:</b></p> <p>The DEQ regional haze SIP (submitted October 25, 2010) was approved in the following Federal Registers: June 9, 2011 (76 FR 33651); June 22, 2011 (76 FR 36329); and November 8, 2012 (77 FR 66929). Idaho submitted a 5-year regional haze progress report on June 24, 2016, as required by 40 CFR 51.308 to address §110(a)(2)(D)(i)(II) requirements and determine that current strategies are meeting the progress goals.</p> <p><b>(D)(ii):</b></p> <p>DEQ received delegation of the PSD program on November 28, 1986, from Gary L. O’Neal, Region 10 Air and Toxics Division Director. DEQ’s PSD program is federally approved and covers all regulated pollutants. The regulations for 40 CFR 52.683 are available at <a href="http://www.gpo.gov/fdsys/granule/CFR-2011-title40-vol3/CFR-2011-title40-vol3-sec52-683/content-detail">www.gpo.gov/fdsys/granule/CFR-2011-title40-vol3/CFR-2011-title40-vol3-sec52-683/content-detail</a>.</p> <p>IDAPA 58.01.01.209 provides the procedures for issuing permits to construct including notice and comment procedures for new or modified sources with regard to the public and to appropriate federal, state, international, and local agencies.</p> <p>Idaho has no pending obligations under CAA §115 or §126(b).</p>
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<p><b>§110(a)(2)(E)</b></p> <p>Provide</p> <p>(i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof),</p> <p>(ii) requirements that the State comply with the requirements respecting State boards under section 128, and</p> <p>(iii) necessary assurances that, where the State has relied on local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;</p>	<p><b>(E)(i):</b></p> <ul style="list-style-type: none"> <li>Idaho Code §39-106 provides DEQ with the authority to hire personnel to carry out the duties of the department.</li> </ul> <p><b>(E)(ii):</b></p> <ul style="list-style-type: none"> <li>Idaho Code §39-107 meets the requirements of CAA §128. See the Governor’s Executive Order 2016-07 addressing the DEQ board’s composition. Specifically, “the appointment of members to the Idaho board of environmental quality shall be made in conformance with the requirements of Idaho Code section 39-107(1)(a), and section 128 of the Clean Air Act.”</li> </ul> <p><b>(E)(iii):</b></p> <ul style="list-style-type: none"> <li>Idaho Code §39-129 provides DEQ with the authority to enter into binding agreements with local governments that are enforceable as orders.</li> </ul> <p>These statutes ensure DEQ has adequate funding, personnel, and legal authority to implement Idaho’s SIPs.</p>
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<p><b>§110(a)(2)(F)</b></p> <p>Require, as may be prescribed by the Administrator—</p> <p>(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,</p> <p>(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and</p> <p>(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection;</p>	<p><b>Rules relating to installation, maintenance, replacement, and operation of monitoring equipment and record keeping:</b></p> <p><b>(F)(i):</b></p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.157 includes source testing methods and procedures.</li> <li>• IDAPA 58.01.01.211 contains conditions for permits to construct, including sampling ports, instrumentation to monitor and record, and performance testing to ensure compliance with NAAQS.</li> <li>• IDAPA 58.01.01.405 contains conditions for Tier II operating permits, including sampling ports, instrumentation to monitor and record, and performance testing to ensure compliance with NAAQS.</li> </ul> <p><b>(F)(ii):</b></p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.122 provides authority for information orders.</li> </ul> <p>See above citations for permits to construct and Tier II operating permits relating to record keeping and reporting.</p> <p><b>(F)(iii):</b></p> <ul style="list-style-type: none"> <li>• Idaho Code §9-342A (Idaho’s Public Records Act) addresses public records.</li> <li>• IDAPA 58.01.21 includes the rules for protection and disclosure of records.</li> <li>• IDAPA 58.01.01.209 contains provisions for procedures for issuing permits, including public comment timing and process for permits to construct.</li> <li>• IDAPA 58.01.01.404 contains provisions for procedures for issuing permits, including public comment timing and process for Tier II operating permits.</li> </ul> <p>Idaho reports emissions data for the six criteria pollutants to EPA’s National Emission Inventory. The NEI is updated every 3 years and is available at <a href="https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei">https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei</a></p> <p>These statutes and rules provide DEQ with the ability to monitor stationary source emissions for compliance purposes and make data available to the public.</p>
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<p><b>§110(a)(2)(G)</b></p> <p>Provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;</p>	<ul style="list-style-type: none"> <li>• Idaho Code §39-112 provides the DEQ director with broad authorities to reduce or discontinue air pollution activities that create imminent and substantial endangerment to the public welfare and is comparable to CAA §303.</li> <li>• IDAPA 58.01.01.550–562 contains air pollution emergency rules.</li> </ul> <p>These statutes and rules identify air pollution emergency episode contingency plans and abatement strategies.</p>
<p><b>§110(a)(2)(H)</b></p> <p>Provide for revision of such plan—</p> <p>(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and</p> <p>(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this Act;</p>	<ul style="list-style-type: none"> <li>• Idaho Code §39-105(2) and (3)(d) provide broad authority to revise rules according to IDAPA 58.01.23.808–860 to meet NAAQS.</li> <li>• IDAPA 58.01.01.107 incorporates by reference the NAAQS (40 CFR 50).</li> <li>• IDAPA 58.01.01.575–587 establishes and defines acceptable ambient concentrations consistent with established criteria.</li> </ul> <p>These statutes and rules provide DEQ with the ability to adopt NAAQS and revise SIPs as needed to attain and maintain the standards.</p>

<p><b>§110(a)(2)(J)</b></p> <p>Meet the applicable requirements of section 121 (relating to consultation), section 127 (relating to public notification), and part C (relating to prevention of significant deterioration of air quality and visibility protection);</p>	<ul style="list-style-type: none"> <li>• IDAPA 58.01.01.209, .01.364, and .01.404 provide the public process for the SIP and permitting under IDAPA 58.01.01.200–223.</li> <li>• Idaho Code §39-129 provides DEQ with the authority to enter into agreements with local governments. DEQ consults with other state agencies, local agencies, nongovernmental organizations, and other state natural resource agencies regarding air quality issues.</li> <li>• Idaho Code §39-105(3)(c) promotes outreach with local governments.</li> <li>• IDAPA 58.01.01.563–574 addresses transportation conformity.</li> <li>• IDAPA 58.01.01.667 provides for long-term strategies and the consultation process for regional haze SIPs.</li> </ul> <p>These statutes and rules provide the authority to carry out the PSD part C requirements and describe the consultation process and notifications to the public, EPA, and federal land managers.</p> <p>To satisfy CAA §127 requirements, DEQ submits information to EPA’s AIRNow program and provides daily air quality index forecasts for many locations throughout the state. Interested parties can sign up to receive this daily information online at <a href="http://www.deq.idaho.gov/air-quality/monitoring/daily-reports-and-forecasts">www.deq.idaho.gov/air-quality/monitoring/daily-reports-and-forecasts</a>.</p>
<p><b>§110(a)(2)(K)</b></p> <p>Provide for—</p> <p>(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and</p> <p>(ii) the submission, upon request, of data related to such air quality modeling to the Administrator;</p>	<ul style="list-style-type: none"> <li>• IDAPA 58.01.01.107 incorporates by reference 40 CFR 51 Appendix W (Guideline on Air Quality Models).</li> </ul> <p>Air quality modeling is conducted during development of SIP revisions, as appropriate, for the state to demonstrate attainment with required air quality standards.</p> <ul style="list-style-type: none"> <li>• IDAPA 58.01.01.202.02 addresses permit-to-construct application procedures and modeling requirements for estimating ambient concentrations.</li> <li>• IDAPA 58.01.01.402.03 addresses Tier II operating permit application procedures and modeling requirements for estimating ambient concentrations.</li> </ul> <p>Modeling is also addressed in the permitting process. See discussion for CAA §110(a)(2)(A) (page 2).</p>

<p><b>§110(a)(2)(L)</b></p> <p>Require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover—</p> <p>(i) the reasonable costs of reviewing and acting upon any application for such a permit, and</p> <p>(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),</p> <p>until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title V;</p>	<ul style="list-style-type: none"> <li>• IDAPA 58.01.01.387–397 sets the requirements for the annual registration of Tier I sources and the annual assessment and payment of fees to support the Tier I permitting program. The program was approved October 4, 2001 (66 FR 50575).</li> <li>• IDAPA 58.01.01.407–409 sets the requirements for Tier II operating permit processing fees and usage.</li> </ul>
<p><b>§110(a)(2)(M)</b></p> <p>Provide for consultation and participation by local political subdivisions affected by the plan.</p>	<ul style="list-style-type: none"> <li>• IDAPA 58.01.01.209, .01.364, and .01.404 provide the public process for developing and issuing air quality permits.</li> <li>• IDAPA 58.01.01.563–574 defines the transportation conformity consultation and public process for nonattainment and maintenance areas.</li> </ul> <p>DEQ also follows the consultation and participation process outlined in 40 CFR 51.102 and incorporated by reference at IDAPA 58.01.01.107.</p>

## Appendix A. Letter of Approval for Idaho's Ambient Air Monitoring Network Plan



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

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DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE AIR PROGRAM

Mr. Steve Miller  
Air Quality Monitoring Coordinator  
Idaho Department of Environmental Quality  
1445 North Orchard  
Boise, Idaho 83706

Dear Mr. Miller:

The EPA Region 10 office of the U.S. Environmental Protection Agency (EPA Region 10) evaluated the Idaho Department of Environmental Quality (IDEQ) 2017 Annual Monitoring Network Plan (ANP) received on June 29, 2017, and addendum received on October 31, 2017. This approval letter documents the EPA Region 10's findings from the review of this ANP and identifies instances in which Idaho's monitoring network did not satisfy federal requirements, as well as recommendations to address the issues identified.

The following monitoring network deficiencies should be addressed as soon as possible:

1. The Idaho Falls Metropolitan Statistical Area (MSA) lacks an approved State or Local Air Monitoring Station (SLAMS) ozone monitoring network as required by Section 4.1 of 40 CFR Part 58, Appendix D. Based on the latest US Census MSA population for Idaho Falls and the 2016-2014 ozone design value in AQS, this MSA is required to operate one SLAMS ozone ambient air monitor in the MSA because the design value for the monitor exceeded 85% of the NAAQS and the 2016 MSA population is greater than 50,000 people. To be eligible for SLAMS approval, the monitoring network must include monitoring in the location of expected maximum ozone concentrations and we recommend considering the EPA site selection guidance, "*Guideline on Ozone Monitoring Site Selection*" (August, 1998) for determining the location of the ozone monitoring site. Ozone monitoring in the Idaho Falls MSA is currently performed by the National Park Service (NPS) at the Craters of the Moon National Park (AQS ID 16-023-0101). However, this ambient air monitoring station is not designated as an approved SLAMS site and it is currently unknown whether this station coincides with the location for the expected maximum ozone concentrations for this MSA.

EPA Region 10 recommends that IDEQ apply for and receive SLAMS approval from the EPA Region 10 for the proposed monitoring location prior to establishing the ozone monitoring site in Idaho Falls. IDEQ could also choose to pursue using the NPS site to meet minimum ozone monitoring requirements for the Idaho Falls MSA so long as IDEQ and the NPS can agree to terms of a Memorandum of Understanding (MOU) for maintaining minimum monitoring requirements and IDEQ can demonstrate that the NPS ozone monitoring station is located where the maximum ozone concentrations are expected to occur in the MSA. The EPA Region 10 is

aware that both the site selection analysis, EPA Region 10 SLAMS approval, as well as establishing a new ozone monitoring site will require time. Please notify EPA Region 10 if you anticipate that the establishment of the Idaho Falls SLAMS ozone station will not be completed before the beginning of the 2018 ozone season. Based on our review of preliminary data, it is possible that the 2017-2015 design value may be below the 85% NAAQS criteria requiring monitoring for the Idaho Falls MSA. EPA Region 10 will continue coordinating with IDEQ before the beginning of the 2018 ozone season to assess whether a SLAMS site continues to be required. In the meantime, the EPA Region 10 recommends that IDEQ continue to investigate options for ozone monitoring for the Idaho Falls MSA.

2. Ozone monitoring is required in the Logan, UT-ID MSA. Full monitoring requirements apply separately to all agencies in the MSA in the absence of an agreement between the state or local agencies and their respective the EPA Regional Office (See 40 CFR Part 58, Appendix D, Section 2(e)). The EPA Region 10's understanding of this situation is that no interagency agreement exists, such as a MOU, between IDEQ and the Utah Department of Environmental Quality (UT-DEQ) for maintaining minimum monitoring requirements. Also, no agreement formally exists between IDEQ and EPA Region 10 for allowing minimum ozone monitoring requirements to be met solely by UT-DEQ. In lieu of IDEQ establishing a SLAMS ozone monitoring station in the Logan, UT-ID MSA, EPA Region 10 recommends that IDEQ and UT-DEQ develop an interagency agreement for the required ozone monitoring for this MSA. After this agreement is in place, IDEQ can formally request from EPA Region 10 that minimum ozone monitoring requirements will be fulfilled by the ozone monitor operated by UT-DEQ.

EPA Region 10 notes the following ANP deficiencies and recommends they be addressed in next year's ANP submission:

3. The ANP does not provide a statement of purpose for each SPM monitor as required by 40 CFR 58.20(a). EPA Region 10 recommends that a statement of purpose exist for all monitors in the Idaho ambient air monitoring network. However, a statement of purpose is required for all monitors designated as SPM.
4. 40 CFR 58.10(b)(8) requires an ANP to include a summary of MSA, Core Based Statistical Area (CBSA), or Combined Statistical Areas (CSA) represented by a monitor. Minimum monitoring requirements cannot be accurately evaluated without both current CBSA populations and current design values. The 2017 ANP should include 2016 Census population estimates and 2016 design values certified by the agency. Additionally, the ANP would be improved by including a more comprehensive listing of CBSAs in Idaho so that CBSAs where monitoring is not required can be readily distinguished from those CBSAs where monitoring is required.
5. The EPA Region 10 recommends that monitoring objectives for the monitors included in the ANP (as required by 40 CFR 58.10(b)(6)) clarify which 40 CFR Part 58, Appendix D monitoring objectives are met by the required monitors. The EPA Region 10 also recommends that IDEQ use monitoring objective definitions consistent with those identified in 40 CFR Part 58, Appendix D, 1.1.1 (a-f).

Finally, the EPA Region 10 notes the following observation from its review of the ANP and provides this for your consideration.

6. All monitoring waivers (if any exist) should be attached as an appendix to the ANP. Additionally, any MOUs used by agencies that share CBSAs where minimum monitoring requirements are met by a single agency should be included as an appendix to the ANP. This information supports the site histories for the ambient air monitoring and provides context for the chosen network design. As such, this information should be retained and updated periodically (Section 5.2 of QA-Handbook). EPA Region 10 recommends that these documents be revisited and renegotiated between agencies at a frequency of at least every 5 years.

Except for the deficiencies discussed above, the EPA Region 10 approves the Idaho 2017 ANP. The EPA Region 10 appreciates the thoroughness and detail provided in the 2017 ANP. The attention provided to the comments received from the 30-day public comment is also commendable. If you have any questions about our approval of the Idaho 2017 Annual Monitoring Network Plan, please contact Doug Jager at (206) 553-2961.

Sincerely,



Debra Suzuki, Manager  
Air Planning Unit

## Appendix B. Interstate Transport State Implementation Plan for 2015 Ozone

### 1 Introduction

The interstate transport provision in the Clean Air Act (CAA) §110(a)(2)(D)(i) (i.e., the *good neighbor* provision) requires each state to submit a state implementation plan (SIP) prohibiting emissions that will have certain adverse air quality effects on other states due to interstate transport of pollution. This SIP submittal, along with other components of an infrastructure SIP, is due within 3 years of the US Environmental Protection Agency (EPA) promulgating a new or revised National Ambient Air Quality Standard (NAAQS). In October 2015, the EPA promulgated a revision to the ozone (O<sub>3</sub>) NAAQS, lowering the level of both the primary and secondary standards to 0.070 parts per million (ppm). This appendix addresses Idaho's infrastructure SIP obligations under CAA §110(a)(2)(D)(i)(I) for the revised O<sub>3</sub> NAAQS.

O<sub>3</sub> is not directly emitted into the air; rather photochemical reactions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) trigger the formation of O<sub>3</sub>, a secondary air pollutant that contributes to the deterioration of air quality in urban areas and adversely affects human health. Exposure to O<sub>3</sub> damages cells and the linings of human lungs, which aggravates asthma and decreases lung function.

O<sub>3</sub> is formed in the atmosphere from oxygen (O<sub>2</sub>) and nitrogen dioxide (NO<sub>2</sub>) in the presence of ultraviolet radiation. In the absence of other chemicals, O<sub>3</sub> reacts with the nitrogen oxide (NO) formed in the previous reaction to produce NO<sub>2</sub> and O<sub>2</sub>. The presence of other chemicals, particularly VOCs, interrupts this steady-state process and allows O<sub>3</sub> concentrations to build. This buildup continues until there is lack of sufficient light, NO<sub>x</sub> (NO and NO<sub>2</sub> combined), or VOCs to continue O<sub>3</sub> production.

### 2 Ozone Monitoring in Idaho

O<sub>3</sub> is typically a summertime air pollution problem that forms when pollutants from internal combustion engines and industrial sources (e.g., paints, solvents, and gas vapors) react with sunlight. It can also be formed by materials that are released into the air from wildfires. Generally speaking, the hotter and drier the summer, the higher the O<sub>3</sub> concentrations will be because the O<sub>3</sub>-forming reaction occurs faster and additional precursor materials are often present from wildfires throughout the western United States.

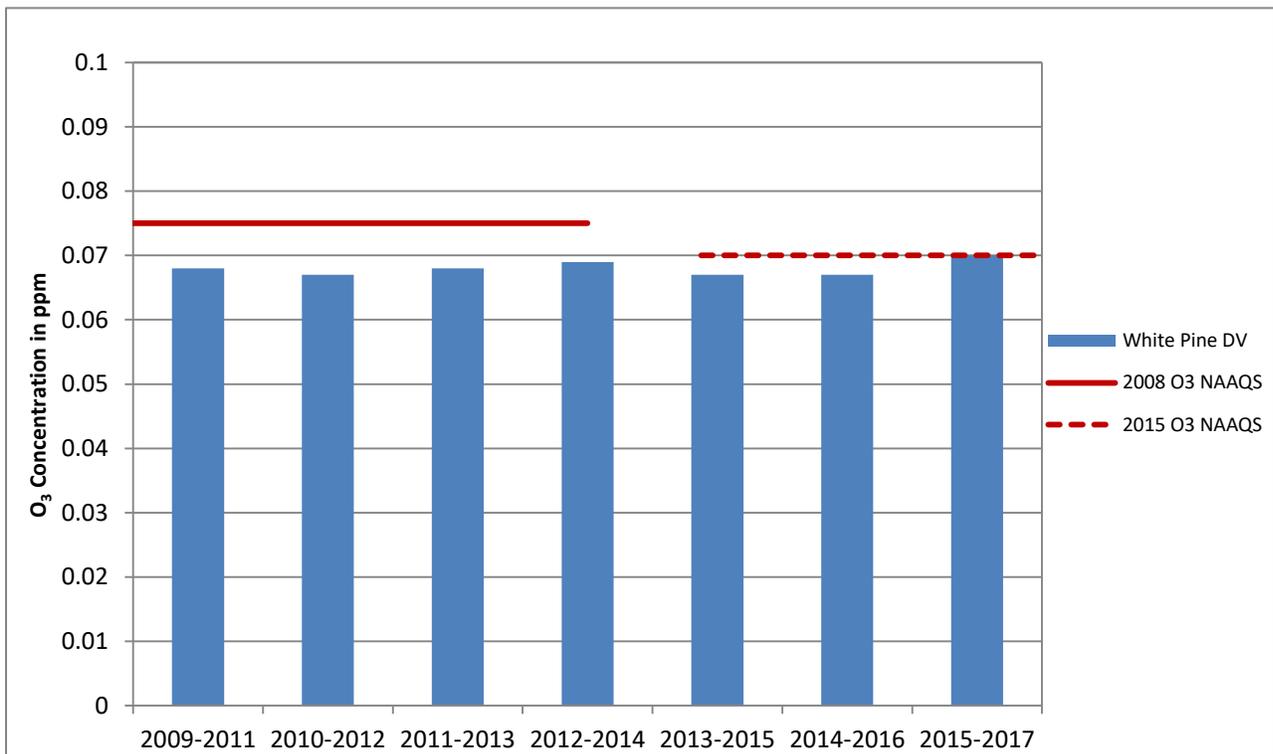
The O<sub>3</sub> NAAQS is defined so the three highest daily maximum 8-hour average (MDA8) O<sub>3</sub> concentrations in any particular year can exceed the level of the standard without violating the standard. However, if the 3-year average of the annual 4th-highest daily MDA8 O<sub>3</sub> concentration exceeds the level of the standard (0.070 ppm), the area is in violation of the standard.

The Idaho Department of Environmental Quality (DEQ) currently operates two O<sub>3</sub> monitors in the Treasure Valley. Federal regulations require two O<sub>3</sub> monitors in an urban area or metropolitan statistical area (MSA) the size of the Boise City-Nampa MSA. One site must be

designed to record the maximum concentration for the MSA. O<sub>3</sub> is monitored during the O<sub>3</sub> season as prescribed in 40 CFR 58 Appendix D. For 2017, per the recent O<sub>3</sub> NAAQS review and revision, the O<sub>3</sub> season in Idaho is now April 1 through September 30. The Treasure Valley O<sub>3</sub> monitors are located at the following sites:

- Meridian—St. Luke’s near the Meridian St. Luke’s Hospital
- White Pine Elementary site in southeast Boise

DEQ began monitoring at the White Pine Elementary site in 2009 after the Whitney Elementary School site was demolished in 2008. The White Pine Elementary site was chosen based on evidence that it would represent the maximum O<sub>3</sub> concentration for the Boise City-Nampa MSA. Since monitoring began in 2009, O<sub>3</sub> design values at the White Pine Elementary site have been below the federal standard of 0.070 ppm despite the impact of multiple days of wildfire smoke (Figure B1). Although several monitoring days during that period were influenced by exceptional events, DEQ did not seek concurrence from EPA in excluding them because they do not have a regulatory significance.



**Figure B1. O<sub>3</sub> design value concentrations at the White Pine Elementary monitor between 2011 and 2017. Data reflects all monitoring days.**

The three most recent complete years of Federal Reference Method O<sub>3</sub> monitoring data from 2015 through 2017 were also evaluated for three monitors in Idaho: Meridian—St. Luke’s, White Pine Elementary, and Craters of the Moon National Monument, operated by the National Park Service. The highest 3-year average design value is 0.070 ppm, which indicates attainment of the O<sub>3</sub> NAAQS (Table B1).

**Table B1. O<sub>3</sub> design values, 2015–2017.**

Site	County/AQS ID	4th-Highest Daily Maximum 8-Hour Average (ppm)			2015–2017 3-Year Design Value (ppm)
		2015	2016	2017	
Boise–White Pine	Ada/160010017	0.064	0.072	0.076	0.070
Meridian–St. Luke's	Ada/160010010	0.066	0.062	0.071	0.066
Craters of the Moon National Monument	Butte/160120101	0.061	0.058	0.063	0.060

### 3 Ozone Precursor Emissions and Emissions Inventory

#### 3.1 Background

The most current emissions inventory (EI) data were analyzed as part of the weight-of-evidence approach to this O<sub>3</sub> transport SIP revision. Under the Air Emissions Reporting Requirements (AERR) codified in 40 CFR Part 51.15, EPA does not include emissions reporting requirements for ozone. Instead, sources of emissions of VOCs and NO<sub>x</sub> that contribute to ground-level ozone formation are of primary importance and required to be reported. The calendar year 2014 periodic inventory was the most recent periodic inventory available to develop this SIP revision's EI. The total anthropogenic inventory of NO<sub>x</sub> and VOC emissions for an area is derived from estimates developed for three general categories of emissions sources: point, area, and mobile (both nonroad and on-road). This section discusses trends in O<sub>3</sub> and O<sub>3</sub> precursor emissions in Idaho to demonstrate the progress the state has made towards achieving the NAAQS.

#### 3.2 Ozone Formation and Precursors in Idaho

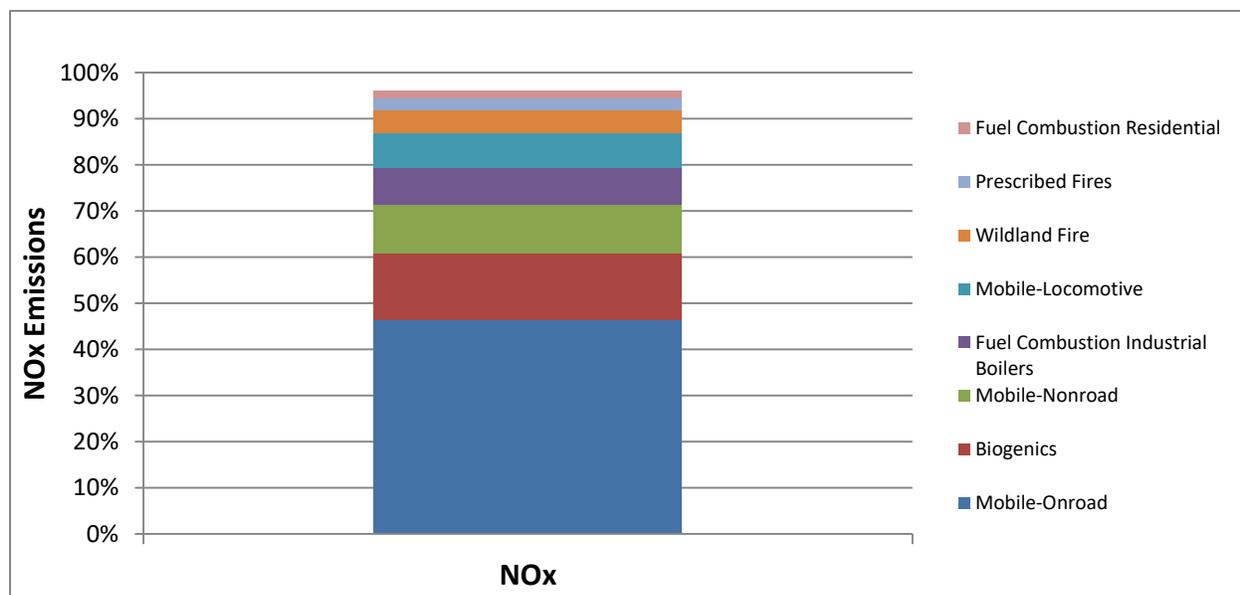
Table B2 summarizes the total precursor emissions taken from the 2014 National Emissions Inventory (NEI) in order of increasing total O<sub>3</sub> precursor emissions. According to the 2014 NEI data, Idaho's total NO<sub>x</sub> and VOC emissions are the second lowest of all the western states.

**Table B2. 2014 NEI data for 11 western states.**

State	NO <sub>x</sub>	VOCs
	Tons/year	
WY	177,330.0	814,310.6
ID	104,736.1	953,215.5
UT	181,843.9	957,968.1
MT	158,701.7	1,081,722.8
NV	94,480.8	1,163,238.5
CO	283,053.5	977,873.3
WA	264,440.4	1,270,258.4
NM	217,079.2	1,528,602.4
OR	156,590.7	1,619,634.0

State	NO <sub>x</sub>	VOCs
	Tons/year	
AZ	234,397.0	2,089,372.5
CA	617,089.1	4,159,436.2
<b>Total</b>	<b>2,489,742.5</b>	<b>16,615,632.2</b>

Figure B2 shows the top contributing sectors to Idaho's annual NO<sub>x</sub> emissions. NO<sub>x</sub> and VOCs are emitted from anthropogenic activities as well as from natural sources. Natural sources of NO<sub>x</sub> account for very little compared to anthropogenic emissions, with NO<sub>x</sub> production from lightning as the most important natural source. Anthropogenic sources include emissions from on-road vehicles, nonroad vehicles and combustion engines, fuel combustion from power plants and other industrial activities, solvent use, and storage and transport of fuels and chemicals. Biogenic sources dominate VOC emissions and include emissions of isoprene and terpenes (e.g., pinene and limonene) from terrestrial plants and vegetation. These emissions depend on ambient temperature and incoming solar radiation. Large amounts of VOCs are also released during biomass burning (i.e., wildfires, prescribed burning, and woodsmoke). Primary sources of human-made VOC emissions include consumer products, such as household cleaners, paints and solvents, motor vehicles, lawn and garden equipment, and gasoline stations.



**Figure B2. Top contributing NO<sub>x</sub>-emitting sectors in Idaho for 2014.**

Over 75% of the annual NO<sub>x</sub> emissions in Idaho are anthropogenic and dominated by mobile sources (on-road and nonroad combined; Figure B2). Natural sources (biogenic, wildland, and prescribed fires) account for 22% of annual NO<sub>x</sub> emissions. VOC emissions show a different pattern and are dominated by natural sources; over 90% of annual emissions are from biogenic sources, wildland fires, and prescribed fires (Figure B3). Chemical solvents and mobile sources represent about 7% of the anthropogenic contribution; all other sectors account for less than 1% of total emissions.

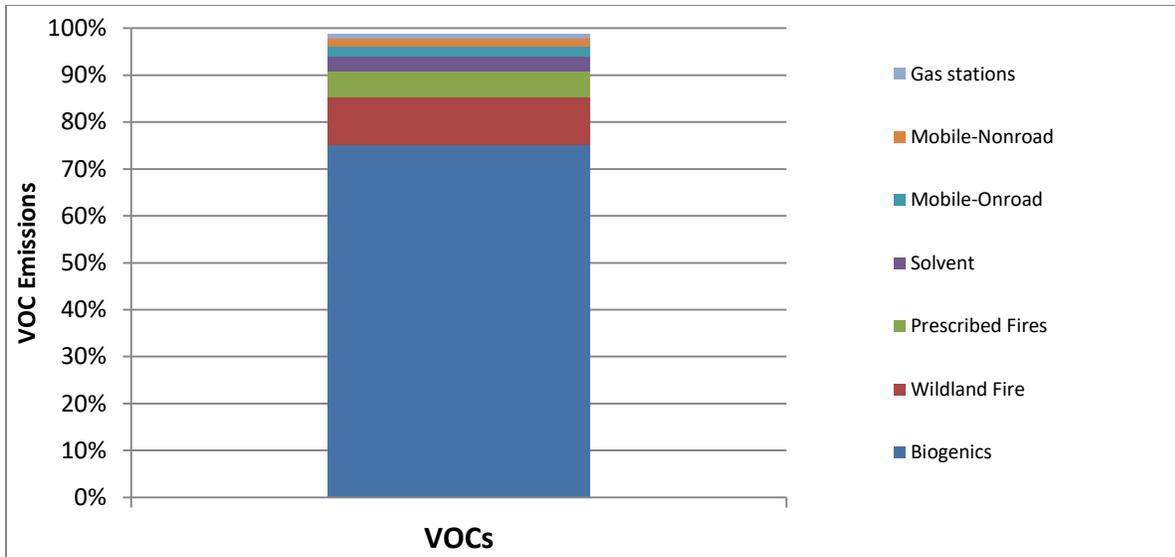
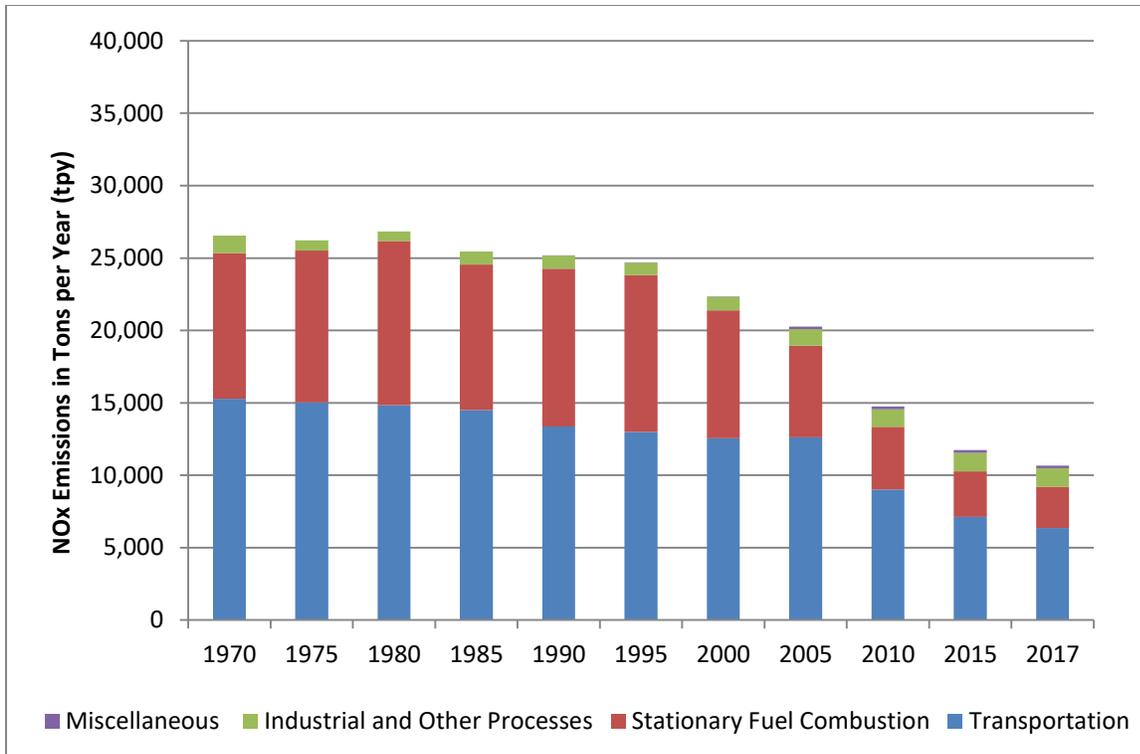


Figure B3. Top contributing sectors for VOCs in Idaho for 2014.

### 3.3 Trends in Ozone Precursor Emissions

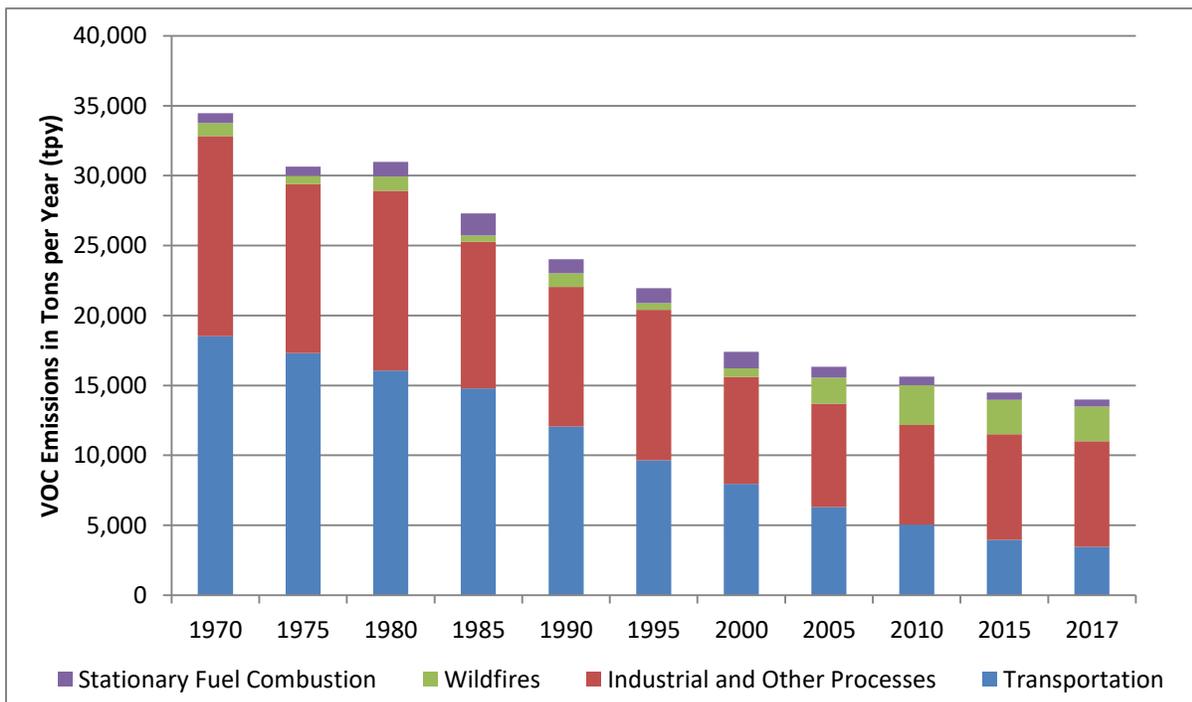
O<sub>3</sub> occurs on a regional scale with elevated concentrations occurring in rural as well as metropolitan areas; however, in urban environments, the contribution of natural VOCs is usually minimal. To reduce this regional-scale O<sub>3</sub> transport, assessments of O<sub>3</sub> control approaches have concluded that NO<sub>x</sub> control strategies are most effective because anthropogenic sources account for the majority of NO<sub>x</sub> emissions both nationally and in Idaho.

Since 1970, federal regulations have greatly reduced NO<sub>x</sub> emissions from the transportation sector on a national level with new vehicle and fuel emissions standards. According to the NEI data, estimated nationwide anthropogenic emissions of NO<sub>x</sub> decreased by over 40% since 1990. This downward trend results primarily from emissions reductions at electric utilities and among on-road mobile sources (Figure B4) and is expected to continue in the on-road sector due to motor vehicle fleet turnover and recent national and state low emissions vehicle programs (section 4.2).



**Figure B4. National anthropogenic NO<sub>x</sub> emissions by source category (1970–2017).**

National total estimated VOC emissions from anthropogenic sources also decreased in the same time period. The overwhelming majority of anthropogenic emissions reductions were observed among on-road mobile sources and other industrial processes (Figure B5).



**Figure B5. National anthropogenic VOC emissions by source category (1970–2017).**

Additionally, 12 years of Idaho anthropogenic emissions data (2002–2014) were analyzed to develop historical trend data. During this time, the EI for Idaho showed a decrease in O<sub>3</sub> precursor emissions from all but one source category; reductions range from 21% to 67% (Figure B6 and Figure B7) and have contributed to the continuous attainment of the O<sub>3</sub> NAAQS. The increase in Idaho NO<sub>x</sub> emissions in 2011 from the on-road sector is partly explained by the switch from Mobile 6.2 to the MOVES model and using local data because Idaho has an older vehicle fleet and a higher truck fraction than the national default. Overall, NO<sub>x</sub> reductions were accomplished through a variety of federal, state, and local regulations that tightened fuel and tailpipe standards, which have gradually been phased in over the last decade (section 4).

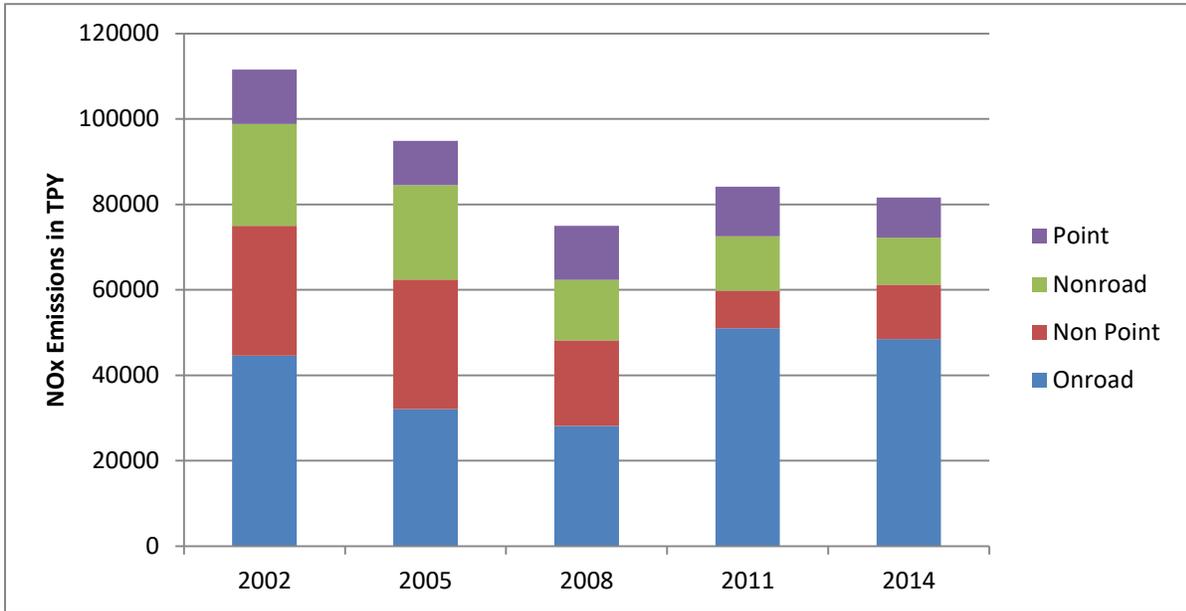


Figure B6. Idaho anthropogenic NO<sub>x</sub> emissions from NEI (2002–2014).

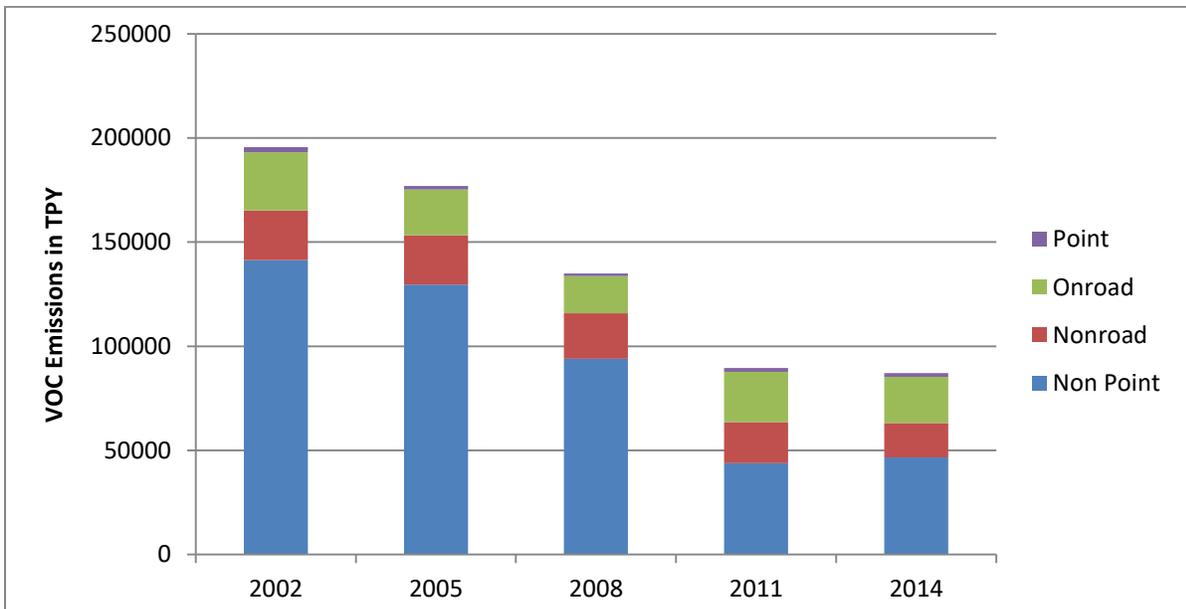


Figure B7. Idaho anthropogenic VOCs emissions from NEI (2002–2014).

## 4 Strategies Limiting O<sub>3</sub> Precursors Emissions

The state of Idaho is currently designated as attainment/unclassifiable for the 2015 O<sub>3</sub> NAAQS (82 FR 54232) and is not mandated to have any measures to reduce O<sub>3</sub> emissions. However, several federal rules are in place addressing O<sub>3</sub> precursor emissions that have contributed to the continuous attainment of the O<sub>3</sub> NAAQS. Idaho's SIP contains adequate provisions prohibiting any source or type of emissions activity within the state from emitting any air pollutant in any amounts that will interfere with the maintenance of any other state's O<sub>3</sub> NAAQS. The following sections describe ongoing programs and regulations that directly reduce O<sub>3</sub> precursor emissions in Idaho.

### 4.1 Prevention of Significant Deterioration/New Source Review Rules

Idaho has a federally approved New Source Review (NSR) Program, including prevention of significant deterioration (PSD). Sources that are new or are undergoing major modifications will continue to be required to undergo PSD review, which includes requirements for best available control technology. New minor sources or sources undergoing minor modifications must obtain a permit to construct, which includes provisions to ensure protection of the NAAQS. The PSD NSR permitting program is described at IDAPA 58.01.01.200–228 (i.e., 202.01.b.v, 202.01.c.vi, 40 CFR 52.670, and annual updates at IDAPA 58.01.01.107) and establishes the baseline dates and the maximum allowable increases in pollutant concentrations.

### 4.2 State and Federal Mobile Source Regulations

- The Federal Motor Vehicle Control Program has already produced large emissions reductions in NO<sub>x</sub>, sulfur oxides, VOCs, and particulate matter. Additional programs include the following:
  - For on-road sources
    - Tier II vehicle emissions standards and federal low-sulfur gasoline
    - National low-emissions vehicle standards
    - Heavy-duty diesel standards
    - Tier III vehicle and fuel standards for passenger cars and trucks
  - Federal nonroad measures
    - Lawn and garden equipment
    - Tier II heavy-duty diesel equipment
    - Locomotive engine standards
    - Compression ignition standards for vehicles and equipment
    - Recreational marine engine standards
- The CAA regional haze rule requires each state's regional haze SIP to contain emissions limitations representing best available retrofit technology (BART) and schedules for compliance with BART for each source subject to BART (40 CFR 51.308). On November 8, 2012, EPA approved the remaining elements in the 2010 regional haze SIP including the BART-related provisions of Idaho's 2010 regional haze SIP for The Amalgamated Sugar Company, LLC (TASCO) facility (76 FR 36329). On June 29, 2012,

Idaho submitted revisions to the 2010 regional haze SIP addressing BART for the fossil fuel-fired Riley boiler at the TASC0 facility. The 2012 regional haze SIP included a revised NO<sub>x</sub> BART determination with a more stringent NO<sub>x</sub> emissions limit; a more stringent particulate matter BART emissions limit; and a BART alternative to replace the federally approved sulfur dioxide BART determination. In addition to the more stringent NO<sub>x</sub> and particulate matter emissions limits for the Riley boiler, the BART alternative relies on controlling NO<sub>x</sub> emissions from two non-BART-eligible boilers at the TASC0 facility; these changes are all contained in a revised Tier II Operating Permit, T2–2009.0105, issued to TASC0 on December 23, 2011 (2011 TASC0 Tier II Operating Permit). Idaho included the permit as part of the 2012 regional haze SIP. On April 28, 2014, EPA approved the revised NO<sub>x</sub> BART determination and emissions limitation and BART alternative in 79 FR 23273.

## **5 Transport Assessment to Nonattainment and Maintenance Receptors in Nearby States**

CAA §110(a)(2)(D)(i)(I) identifies two distinct *prongs* related to the impacts of air pollutants transported across state lines. For a new or revised NAAQS, the CAA requires each SIP contain adequate provisions prohibiting any source or other type of emissions activity within the state from emitting air pollutants that do the following:

1. Contribute significantly to nonattainment of the applicable NAAQS in any other state.
2. Interfere with maintenance of the applicable NAAQS in any other state.

EPA first promulgated the Cross-State Air Pollution Rule (CSAPR) in 2011 to address the 1997 O<sub>3</sub> NAAQS and recently updated the CSAPR to address interstate emissions transport for the 2008 O<sub>3</sub> NAAQS. These actions only addressed interstate transport in the eastern United States and did not address the 2015 O<sub>3</sub> NAAQS. Through CSAPR, the CSAPR update, and previous rulemakings pursuant to the good neighbor provision, the EPA established a framework to address the requirements of the CAA's good neighbor provision.

To facilitate states in completing their interstate transport submissions, in January 2017, EPA completed modeling that estimates each state's current and future O<sub>3</sub> contribution to downwind receptors that are projected to have problems attaining or maintaining the NAAQS in 2023. In memoranda released in October 2017 (EPA 2017) and March 2018 (EPA 2018), EPA provided states guidance on applying the modeling results and referenced a threshold of 0.7 parts per billion (ppb) (1% of the O<sub>3</sub> NAAQS) over which a state, in prior EPA rulemakings, had been deemed to be contributing significantly to a downwind state's nonattainment or maintenance problems. EPA historically found that the 1% threshold is appropriate for identifying interstate transport linkages for states collectively contributing to downwind O<sub>3</sub> nonattainment or maintenance problems because that threshold captures a high percentage of the total pollution transport affecting downwind receptors (EPA 2016). The EPA (2018) memorandum also references EPA's four-step framework to address the requirements of the good neighbor provision:

1. Identify downwind air quality problems.

2. Identify upwind states that contribute enough to those downwind air quality problems to warrant further review and analysis.
3. Identify the emissions reductions necessary (if any), considering cost and air quality factors, to prevent an identified upwind state from contributing significantly to those downwind air quality problems.
4. Adopt permanent and enforceable measures needed to achieve those emissions reductions.

## 5.1 Idaho's Approach

DEQ reviewed EPA's modeling presented in the EPA (2018) memorandum to identify downwind nonattainment and maintenance receptors that may be impacted by emissions from sources in Idaho. Idaho concurs with the projected emissions for 2023 that EPA used for Idaho, including EPA's methodology, emissions reductions, and underlying assumptions including using 2023 as the analytic year.

At downwind nonattainment and maintenance receptor sites, Idaho-modeled contributions in 2023 range from 0.01 to 0.19 ppb. The nonattainment and maintenance receptors with the highest contributions from Idaho are included in Table B3. As stated above, EPA referenced 0.70 ppb as a threshold to indicate significant contribution to downwind states' nonattainment or maintenance receptors. EPA's modeling shows that Idaho is not projected to contribute significantly to nonattainment and maintenance areas downwind, with the greatest contribution being 0.19 ppb to any nonattainment or maintenance receptor. Because Idaho's projected emissions are not deemed to contribute significantly to downwind receptors, DEQ finds that no further analysis is warranted.

**Table B3. Largest 2023 contribution from Idaho to downwind 8-hour O<sub>3</sub> nonattainment and maintenance receptors.**

Site ID	State	County	Receptor Type <sup>a</sup>	2023 O <sub>3</sub> Concentration from Idaho (ppb)
80050002	Colorado	Arapahoe	Maintenance	0.19
80350004	Colorado	Douglas	Nonattainment	0.18

a. Mary Anderson, DEQ, email communication with Claudia Vaupel, EPA Region 10, August 20, 2018.

The Shoshone-Bannock Tribes of the Fort Hall Reservation are a federally recognized tribe located in southeastern Idaho. On January 19, 2017, EPA approved the Tribes' application to be treated as an affected downwind state for certain CAA interstate transport provisions, specifically, CAA §110(a)(2)(D) and §126. As a result of this approval, DEQ is required to assess how much Idaho may be contributing to nonattainment issues on tribal lands. The Tribes do not operate an O<sub>3</sub> monitor; consequently, Idaho's impact to the Tribes' nonattainment could not be evaluated through the EPA (2018) memorandum.

DEQ reviewed recent design values at the regulatory monitor nearest to the Fort Hall Reservation in Butte County, Idaho, near Idaho Falls. Past and present design values for O<sub>3</sub> are complete, valid, and below the O<sub>3</sub> NAAQS at this monitor (Table B4). Additionally, DEQ used a

recent photochemical modeling study performed to support the September 22, 2017, agricultural crop residue burning SIP revision, which EPA approved on June 13, 2018, to show that the Fort Hall Reservation is not expected to have problems attaining or maintaining the O<sub>3</sub> NAAQS.

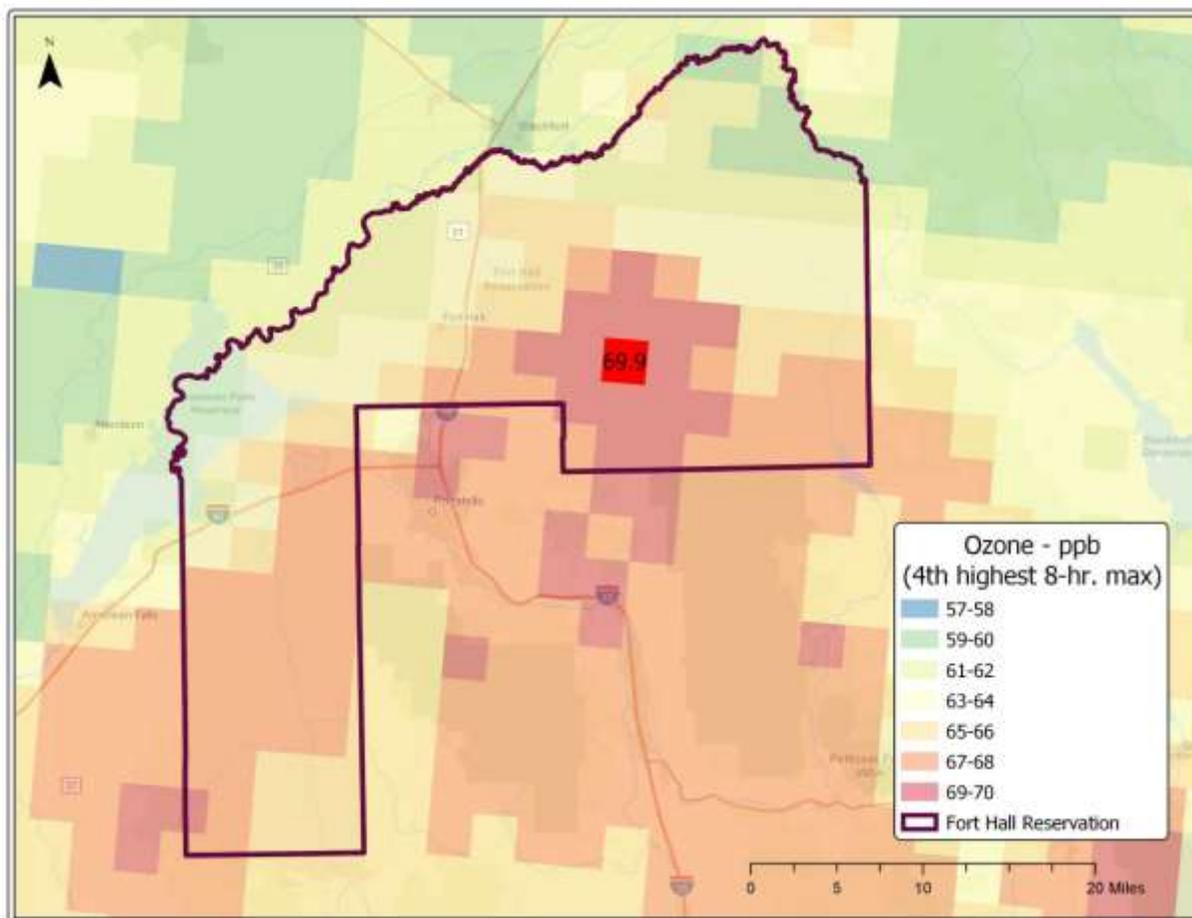
**Table B4. O<sub>3</sub> monitoring data near the Fort Hall Reservation.**

AQS Site ID	Site Area (Name)	2013–2015	2014–2016	2015–2017
		Design Value	Design Value	Design Value
		(ppm)		
160230101	Idaho Falls (Craters of the Moon)	0.061	0.060	0.060

The Fort Hall Reservation encompasses approximately 2,100 kilometers (km) of the Eastern Snake River Plain near Pocatello, Idaho. The reservation is sparsely populated, with less than 8,000 inhabitants (2010 census) and includes no significant urban areas. As with most rural areas, O<sub>3</sub> concentrations are expected to be relatively low due to a lack of anthropogenic sources of O<sub>3</sub> precursors resulting in little local O<sub>3</sub> production. This study evaluated O<sub>3</sub> production throughout Idaho during summer 2013 when monitored O<sub>3</sub> concentrations were unusually high due to a persistent high-pressure ridge over the region creating ideal conditions for O<sub>3</sub> production. DEQ used EPA’s Community Model for Air Quality (CMAQ) photochemical model to determine the historical O<sub>3</sub> concentrations across Idaho during this 81-day episode including the Fort Hall Reservation. Overall, the model—Washington State University’s AIRPACT5 modeling platform with improved key emissions inventories, such as on-road and fire emissions—performed very well and was useful for investigating O<sub>3</sub> concentrations in Idaho during this period. Detailed information about this modeling study are in Docket ID No. EPA-R10-OAR-2017-0566 at [www.regulations.gov](http://www.regulations.gov).

Figure B8 depicts the 4th-highest MDA8 O<sub>3</sub> concentration as modeled by DEQ on the Fort Hall Reservation during the high O<sub>3</sub> episode and fire season between July 8 and September 26, 2013. The O<sub>3</sub> NAAQS is defined so the three highest MDA8 O<sub>3</sub> concentrations in any particular year can exceed the level of the standard without violating the standard. As shown, the highest modeled value remained below the NAAQS of 70 ppb with most areas of the reservation much lower.

The modeling results are supported by the nearest O<sub>3</sub> monitor at the Craters of the Moon National Monument operated by the National Park Service. This monitor is just 85 km northwest of the reservation in a similarly rural portion of the Eastern Snake River Plain. The most recent 3-year average (2015–2017) of the 4th-highest MDA8 O<sub>3</sub> concentration at this monitor is 60 ppb.



**Figure B8. The 4th-highest MDA8 O<sub>3</sub>-modeled concentration on the Fort Hall Reservation during 2013 high O<sub>3</sub> episode and fire season.**

## 6 Conclusion

Idaho has numerous control measures to address O<sub>3</sub> precursor emissions, and these measures have resulted in attaining the O<sub>3</sub> NAAQS in the state. Statewide trend analysis of O<sub>3</sub> precursor emissions shows a 55% reduction in VOCs and a 27% reduction in NO<sub>x</sub> from 2002 to 2014, which have assisted the state in maintaining the O<sub>3</sub> NAAQS. EPA's photochemical modeling analysis provided in this SIP update, supplemented by Idaho's recent photochemical modeling study, demonstrates that Idaho emissions do not contribute significantly to nonattainment or interfere with maintenance of the O<sub>3</sub> NAAQS at any downwind monitors or on the Fort Hall Reservation.

Additionally, Idaho has a SIP-approved NSR permitting program and has met the CAA infrastructure requirements relating to PSD. This SIP update demonstrates that Idaho meets the interstate transport requirements of CAA §110(a)(2)(D)(i)(I).

## 7 References Cited

- EPA (United States Environmental Protection Agency). 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>.
- EPA (United States Environmental Protection Agency). 2017. *Supplemental Information on the Interstate Transport State Implementation Plan Submissions for the 2008 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)*. October. <https://www.epa.gov/airmarkets/memo-supplemental-information-interstate-transport-sips-2008-ozone-naaqs>.
- EPA (United States Environmental Protection Agency). 2018. *Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)*. [https://www.epa.gov/sites/production/files/2018-03/documents/transport\\_memo\\_03\\_27\\_18\\_1.pdf](https://www.epa.gov/sites/production/files/2018-03/documents/transport_memo_03_27_18_1.pdf).

## **Appendix C. Public Participation and Public Comments**

**Idaho Statesman**  
 The Newspaper of the Treasure Valley  
 IDAHOSTATESMAN.COM  
 PO Box 40, Boise, ID 83707-0040

**LEGAL PROOF OF PUBLICATION**

Account #	Ad Number	Identification	RD	Amount	Cols	Lines
263916	0003810771	LEGAL NOTICE NOTICE OF PUBLIC COMMEN	Ozone Standard	\$118.28	2	63

**Attention: TANYA CHIN**  
 IDAHO DEPT OF ENVIRONMENTAL QUALITY  
 1410 N HILTON ST  
 BOISE, ID 837061253

**LEGAL NOTICE**

**NOTICE OF PUBLIC COMMENT PERIOD AND PUBLIC HEARING REGARDING THE INFRASTRUCTURE AND INTERSTATE TRANSPORT STATE IMPLEMENTATION PLAN FOR THE 2015 8-HOUR OZONE STANDARD.**

**PROPOSED ACTION:** The Idaho Department of Environmental Quality (DEQ) is proposing to submit a State Implementation Plan (SIP) to the US Environmental Protection Agency (EPA). The SIP demonstrates that Idaho meets the requirements of Sections 110(a)(1) and 112(a)(7) of the Clean Air Act for the 2015 8-hour Ozone (O3) National Ambient Air Quality Standard (NAAQS). Idaho is required to adopt and submit to EPA a plan that provides for implementing, maintaining, and enforcing any newly promulgated primary NAAQS. This SIP also demonstrates that interstate transport of emissions from Idaho will not interfere with any other state efforts to attain or maintain the 2015 8-hour O3 standard.

**PUBLIC COMMENT AND HEARING:** The public comment period will last from August 22 to September 21, 2018. A public hearing will be held on September 21, 2018 at 3:00 pm MST at the DEQ State Office, Conference Room A, 1410 N. Hilton, Boise, Idaho. Comments, requests or comments regarding the public comment process should be directed to:

Tanya Chin, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706, tanya.chin@deq.idaho.gov, or www.deq.idaho.gov. The meeting location will be accessible to persons with disabilities, and language translators will be made available upon request. Requests for these accommodations must be made no later than five (5) days prior to the meeting date. For arrangements, contact Tanya Chin.

**AVAILABILITY OF MATERIALS:** The document "Infrastructure and Interstate Transport State Implementation Plan for the 2015 Ozone National Ambient Air Quality Standard" is available for public review on DEQ's website at <http://www.deq.idaho.gov/news-public-comments-events/>.

Printed materials will be made available upon request at the DEQ State Office in Boise.

**SUBMISSION OF WRITTEN COMMENTS--ASSISTANCE ON TECHNICAL QUESTIONS:** Anyone may submit written comment regarding the document. To be most effective, comments should address air quality considerations and include support materials where available. Please reference the document title listed above when sending comments or requesting information.

For technical assistance on questions concerning this document, please contact Pascale Warren at (208) 373-0586 or pascale.warren@deq.idaho.gov.

All written comments concerning this document must be directed to and received by the undersigned on or before 5:00 p.m., MST/MDT, September 21, 2018.

DATED this 22nd day of August, 2018.  
 Tanya Chin  
 Air Quality Division

Pub. Aug. 22, 2018 \_\_\_\_\_0003810771-01

JANICE HILDRETH, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein, and which said newspaper has been continuously and uninterrupted published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in The Idaho Statesman, in conformity with Section 60-106, Idaho Code, as amended, for:

1 Insertions

Beginning issue of: 08/22/2018

Ending issue of: 08/22/2018

*Janice Hildreth*  
 (Legal Clerk)

STATE OF IDAHO )  
 ) SS  
 COUNTY OF ADA )

On this 22nd day of August in the year of 2018 before me, a Notary Public, personally appeared before me Janice Hildreth known or identified to me to be the person whose name subscribed to the within instrument, and being by first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

*Anna Gomm*  
 Notary Public FOR Idaho  
 Residing at: Boise, Idaho

My Commission expires: 08/17/2022



**CERTIFICATE OF HEARING**

**SUBJECT:** Infrastructure and Interstate Transport State Implementation Plan for the 2015 Ozone National Ambient Air Quality Standard

**LOCATION:** DEQ State Office, Boise, Idaho

**HEARING DATE:** September 21, 2018

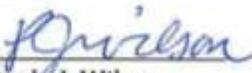
The undersigned designated hearing facilitator hereby certifies the following.

1. In accordance with 40 CFR 51.102(a) and (d), the Idaho Department of Environmental Quality (DEQ) held a public hearing on the proposed revisions to the Infrastructure and Interstate Transport State Implementation Plan for the 2015 Ozone National Ambient Air Quality Standard. The hearing was held on the 21<sup>st</sup> day of September, 2018, at the DEQ conference center in Boise, Idaho.

2. Notice of this hearing appeared in the Idaho Statesman on August 22, 2018.

3. The hearing commenced at 3 p.m. and was adjourned at 4 p.m. No members of the public attended the hearing.

DATED this 21<sup>st</sup> day of September, 2018

  
Paula J. Wilson  
Hearing Facilitator

CERTIFICATE OF HEARING

# IDAHO Department of Environmental Quality

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## DEQ seeks comment on draft air quality implementation plan for ozone

Wednesday, August 22, 2018

BOISE — The Idaho Department of Environmental Quality (DEQ) is seeking public comment on an air quality state implementation plan (SIP) update to certify that the state meets the requirements of the Clean Air Act regarding the ozone national ambient air quality standard (NAAQS).

In October 2015, EPA lowered the ozone NAAQS. Idaho is required to adopt and submit to EPA a plan that provides for implementing, maintaining, and enforcing any newly promulgated primary air quality standard.

The *Infrastructure and Interstate Transport State Implementation Plan for the 2015 Ozone National Ambient Air Quality Standard* demonstrates that Idaho's SIP adequately meets the infrastructure requirements of the Clean Air Act. This SIP also demonstrates that interstate transport of emissions from Idaho will not interfere with any other state's efforts to attain or maintain the ozone standard.

The U.S. Environmental Protection Agency must review and approve SIP revisions before they take effect.

A public hearing on the SIP revision will be held September 21, 2018, at 3 p.m. MDT at DEQ's State Office, 1410 N. Hilton, Boise.

The SIP revision is available for review at DEQ's state office in Boise and on DEQ's website (download at right). For technical information, contact Pascale Warren, DEQ Air Quality Division, at (208) 373-0586 or [pascale.warren@deq.idaho.gov](mailto:pascale.warren@deq.idaho.gov).

Submit written comments by September 21, 2018, at 5 p.m. MDT, on DEQ's website or by mail, fax, or email to:

Tanya Chin  
Air Quality Division  
DEQ State Office  
1410 N. Hilton  
Boise, ID 83706  
Email: [tanya.chin@deq.idaho.gov](mailto:tanya.chin@deq.idaho.gov)

### Public Comment Form

Fields marked with \* are required.

Name \*

Email \*

### Media Contact

Airshed Management Analyst  
Pascale Warren  
DEQ State Office  
Air Quality Division  
1410 N. Hilton  
Boise, ID 83706  
(208) 373-0586  
[pascale.warren@deq.idaho.gov](mailto:pascale.warren@deq.idaho.gov)

### Related Documents

- » [Public Notice](#)
- » [State Implementation Plan Update](#)

### Related Pages

[Air Quality Planning in Idaho](#)

[Ozone](#)

DEQ's Response to Comments on the State Implementation Plan Update to the 2015 Ozone National Ambient Air Quality Standard

Commenter 1 - Idaho Conservation League (ICL)

Commenter	Comment	Response																
1	<p>Summary of comment:  <b>Preliminary Analysis of 2018 data</b>                      We request that DEQ describe their expectations for whether 2018 ozone values measured at this station will exceed the NAAQS, including any preliminary analyses that DEQ has performed, and how DEQ is preparing for a scenario in which the NAAQS is violated. Further, we ask the DEQ elaborate on what changes have been made to this SIP Update to mitigate increasing ozone concentrations that continue to approach the NAAQS.</p>	<p>When exceptional event-influenced days are removed from the White Pine data set, DEQ finds an overall downward trend in ozone (O<sub>3</sub>) concentrations in spite of increasingly more severe wildfires and population growth in the Treasure Valley:</p> <table border="1" data-bbox="1241 578 1625 857"> <thead> <tr> <th></th> <th>O<sub>3</sub> Design Value (ppm)</th> </tr> </thead> <tbody> <tr> <td>2009-2011</td> <td>0.068</td> </tr> <tr> <td>2010-2012</td> <td>0.067</td> </tr> <tr> <td>2011-2013</td> <td>0.067</td> </tr> <tr> <td>2012-2014</td> <td>0.068</td> </tr> <tr> <td>2013-2015</td> <td>0.066</td> </tr> <tr> <td>2014-2016</td> <td>0.064</td> </tr> <tr> <td>2015-2017</td> <td>0.065</td> </tr> </tbody> </table> <p>The White Pine O<sub>3</sub> monitor has been regularly impacted by smoke from wildfires since 2009. Under the Clean Air Act Exceptional Event Rule codified in 40 CFR 50.14, when “exceptional” events influence monitoring data and cause exceedances or violations of the National Ambient Air Quality Standards (NAAQS), air agencies can request the exclusion of event influenced data, and the US Environmental Protection Agency (EPA) can agree to exclude these data from the data set used for certain regulatory decisions. DEQ has flagged a number of monitoring days in 2013, 2015, 2016, and 2017 with a request exclusion flag for wildfire smoke. However, DEQ did not submit an exceptional event demonstration to address these exceedances because they had no regulatory impact on meeting the O<sub>3</sub> NAAQS.</p> <p>The ozone monitoring season lasts through the end of September, and DEQ has only performed preliminary analyses of the ozone monitoring data for the first quarter of 2018 to date. Preliminary analyses of the second and third quarters, which span the ozone monitoring season, are not yet available and are due to EPA by 9/30/18 and 12/31/18, respectively. However, the 2018 wildfire season</p>		O <sub>3</sub> Design Value (ppm)	2009-2011	0.068	2010-2012	0.067	2011-2013	0.067	2012-2014	0.068	2013-2015	0.066	2014-2016	0.064	2015-2017	0.065
	O <sub>3</sub> Design Value (ppm)																	
2009-2011	0.068																	
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2014-2016	0.064																	
2015-2017	0.065																	

Commenter	Comment	Response
		<p>has been an active one and DEQ anticipates there will be a number of smoke-impacted days to be flagged for exclusion.</p> <p>If all 2016 and 2017 flagged wildfire-impacted monitoring days were concurred with, the 4th-highest daily maximum 8-hour average O<sub>3</sub> concentration becomes 0.065 parts per million (ppm) for 2016 and 0.068 for 2017. To violate the NAAQS in 2018, the 4th-highest O<sub>3</sub> value, after excluding all flagged values, would need to be 0.080 ppm, an unlikely event based on past monitoring trends.</p> <p>DEQ consequently believes that the existing laws, rules, and regulations in place have allowed DEQ to meet and enforce the O<sub>3</sub> NAAQS as required by the Clean Air Act and documented in this O<sub>3</sub> State Implementation Plan (SIP).</p>
1	<p>Summary of comment:</p> <p><b>Deficiencies in Idaho's Air Monitoring Network</b></p> <p>The EPA's letter approving Idaho's Air Monitoring Network (Nov. 2017) noted a number of deficiencies that DEQ needs to address, including, but not limited to, the state lacking a state and local air monitoring station (SLAMS) for ozone in Idaho Falls and the lack of ozone monitoring in in the Logan, UT-ID MSA. We request that DEQ explain the status of all the deficiencies detailed in the EPA's approval letter and describe DEQ's efforts in addressing the deficiencies since the EPA's letter was received nearly a year ago.</p>	<p>DEQ acknowledged the content of EPA's 2017 Annual Network Plan (ANP) approval letter and responded in the 2018 ANP. EPA is currently reviewing the 2018 ANP and DEQ is awaiting their approval. In the meantime, as per EPA's suggestion in their 2017 ANP letter, DEQ has begun investigating options and requirements for ozone monitoring in eastern Idaho and continues to coordinate with EPA. Updates will be provided in the 2019 ANP.</p>
1	<p>Summary of comment</p> <p><b>Modeling for SIP Revision</b></p> <p>We request that DEQ state whether modeling was performed as part of developing this SIP, including an explanation as to why modeling ultimately was or was not utilized. Further, we request that DEQ explain their process for selecting input parameters for modeling. We are curious as to how DEQ has incorporated consideration of our current administration's efforts to roll back fuel economy standards, known as CAFE standards, and the effect this would ultimately have on this SIP Update and compliance with the</p>	<p>DEQ did not perform any modeling for this SIP revision. Instead, DEQ relied on EPA modeling done to assist states in completing their interstate transport submissions. EPA completed modeling to identify receptor sites that are projected to have problems attaining or maintaining the NAAQS in 2023. DEQ reviewed EPA's modeling presented in the EPA March 2018 memorandum (<a href="https://www.epa.gov/sites/production/files/2018-03/documents/transport_memo_03_27_18_1.pdf">https://www.epa.gov/sites/production/files/2018-03/documents/transport_memo_03_27_18_1.pdf</a>) to identify downwind nonattainment and maintenance receptors that may be impacted by emissions from sources in Idaho. Idaho concurred with the projected emissions for 2023 that EPA used for Idaho, including EPA's methodology, emissions reductions, and underlying assumptions including using 2023 as the analytic year.</p> <p>The Clean Air Act requires that SIP inventories and control measures be based</p>

Commenter	Comment	Response
	<p>NAAQS. The fuel economy of vehicles is directly related to their emissions of numerous harmful pollutants, including precursors to ozone such as NOx and VOCs. Our concern is that modeling efforts performed as part of SIP developments may be inaccurate if the input assumptions fail to consider projections of less-efficient fuel economy standards.</p>	<p>on the most current information and applicable models available when a SIP is developed. MOVES2014 is EPA’s latest motor vehicle emissions model for state and local agencies to estimate volatile organic compounds (VOCs), nitrogen oxides (NOx), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), carbon monoxide (CO), and other precursors from cars, trucks, buses, and motorcycles for SIP purposes and conformity determinations outside of California. Inventories of onroad mobile emissions were created for 2023 using MOVES2014a. The 2023 onroad emissions account for changes in activity data and the impact of current on-the-books rules including the Tier 3 Motor Vehicle Emission and Fuel Standards Rule, an approved and final federal rule.</p> <p>The 2011 and 2023 emissions used for the 2015 O<sub>3</sub> NAAQS transport assessment are described in the documents “Preparation of Emissions Inventories for the Version 6.3, 2011 Emissions Modeling Platform,” “Updates to Emissions Inventories for the Version 6.3 2011 Emissions Modeling Platform, Emission Inventories for the Year 2023,” and “EPA Base Case v.5.16 for 2023 Ozone Transport NODA Using IPM Incremental Documentation,” which can be found at <a href="https://www.epa.gov/air-emissions-modeling/2011-version-63-platform">https://www.epa.gov/air-emissions-modeling/2011-version-63-platform</a>.</p>
<p>1</p>	<p>Summary of comment  <b>Vehicle emission testing in the Treasure Valley</b>                      We request that DEQ explain the extent of consideration they have given to a scenario where vehicle emission testing was reduced or removed and the resulting impact that could have on ozone concentrations. We also request that DEQ explain what changes would need to be made to this SIP if vehicle emission testing requirements in the Treasure Valley were reduced or removed.</p>	<p>DEQ did not perform any modeling for this SIP revision and therefore could not evaluate impacts of reducing or eliminating the Vehicle Inspection and Maintenance Program (I&amp;M program) in the Treasure Valley on ozone concentrations. The I&amp;M program stems from a state rule and is only mandatory in Ada County as part of Idaho’s EPA-approved carbon monoxide maintenance plan.</p> <p>The entire state of Idaho is currently designated as attainment/unclassifiable for the 2015 O<sub>3</sub> NAAQS (82 FR 54232) and therefore is not mandated to have any O<sub>3</sub> control measures in place. If the I&amp;M program were eliminated and the area no longer attained the 2015 O<sub>3</sub> NAAQS, further evaluation would be required.</p> <p>To clarify this point, DEQ will remove the I&amp;M program as a control strategy and modify section 4 as follows:  <i>4. Strategies Limiting O<sub>3</sub> Precursor Emissions</i>  <i>The state of Idaho is currently designated as attainment/unclassifiable for the 2015 O<sub>3</sub> NAAQS (82 FR 54232) and is not mandated to have any measures to reduce O<sub>3</sub> emissions. However, several federal rules are in place addressing O<sub>3</sub> precursor emissions that have contributed to the continuous attainment of the O<sub>3</sub> NAAQS.</i></p>

Commenter	Comment	Response
1	<p>Summary of comment</p> <p><b>Statewide Ozone Monitoring</b></p> <p>Per the EPA's approval letter for DEQ's air monitoring network (Nov. 2017), it appears that DEQ will be required to install an ozone SLAMS in Idaho Falls based on 3-year design values and population. In addition to Idaho Falls, we wish to highlight the need for ozone monitors in other developing metropolitan areas throughout Idaho, including Pocatello (pop. 54,441) and Twin Falls (pop. 47,468).</p>	<p>As detailed in the preceding response, DEQ continues to work directly with EPA regarding ozone monitoring in the Idaho Falls Metropolitan Statistical Area. The Idaho Conservation League's request for additional ozone monitoring in Idaho has been addressed in the 2018 ANP. The following excerpt is taken from the 2018 ANP as the response to the request:</p> <p style="padding-left: 40px;">DEQ considers current population estimates when evaluating the state of the monitoring network. The current Census Bureau estimates have been provided in Appendix D of the ANP. Table D-2 does specify a requirement of one monitor for MSA's with a population between 50,000 and 350,000 when design values are <math>\geq 85\%</math> of the NAAQS, but it also specifies that zero monitors are required for these MSA's in the absence of a design value (see footnote 4).</p> <p style="padding-left: 40px;">Specific details regarding ozone monitoring in eastern Idaho are not available at this time as this work is still in the beginning stages. The initial process will include the review of potential sources of existing ozone data. Any changes to the network, such as additional monitors (including timelines and justification) or the determination of no additional monitoring would be subject to inclusion in the Annual Network Plan. These plans will continue to be made available for public comment and EPA approval.</p>

Commenter	Comment	Response
1	<p>Summary of comment</p> <p><b>National Emissions Inventory</b></p> <p>ICL accessed the EPA's National Emissions Inventory (NEI) and was unable to see any reported data related to ozone. In fact, the most recently available NEI report (2014) only references ozone once when the report states, "VOCs and NO<sub>x</sub> play a key role in ozone formation." If the NEI only tracks the precursors to ozone, rather than ozone itself, then the DEQ should explicitly state this fact whenever it discusses using the NEI.</p>	<p>O<sub>3</sub> is typically not directly emitted into the air. It is a secondary air pollutant formed from NO<sub>x</sub> and VOCs in the presence of ultraviolet radiation. Under the Air Emissions Reporting Requirements (AERR) codified in 40 CFR Part 51.15, EPA does not include emissions reporting requirements for ozone. Instead, sources of emissions of VOCs and NO<sub>x</sub> that contribute to ground-level ozone formation are of primary importance and required to be reported.</p> <p>DEQ will modify paragraph 1 in section 3.1 of Appendix B when emissions reporting is first discussed to clarify this point as follows:</p> <p><i>The most current emissions inventory (EI) data were analyzed as part of the weight-of-evidence approach to this O<sub>3</sub> transport SIP revision. Under the Air Emissions Reporting Requirements (AERR) codified in 40 CFR Part 51.15, EPA does not include emissions reporting requirements for ozone. Instead, sources of emissions of VOCs and NO<sub>x</sub> that contribute to ground-level ozone formation are of primary importance and required to be reported. The calendar year 2014 periodic inventory was the most recent periodic inventory available to develop this SIP revision's EI.</i></p>



208.345.6933 • PO Box 844, Boise, ID 83702 • [www.idahoconservation.org](http://www.idahoconservation.org)

9/19/18

Tanya Chin  
DEQ State Office  
Air Quality Division  
1410 N. Hilton  
Boise, ID 83706

Pascale Warren  
DEQ State Office  
Air Quality Division  
1410 N. Hilton  
Boise, ID 83706

Submitted via email: [tanya.chin@deq.idaho.gov](mailto:tanya.chin@deq.idaho.gov) and [pascale.warren@deq.idaho.gov](mailto:pascale.warren@deq.idaho.gov)

**RE: Draft Air Quality Implementation Plan for Ozone**

Dear Ms. Chin and Ms. Warren:

Thank you for the opportunity to comment on DEQ's draft Air Quality Implementation Plan for Ozone (henceforth referred to as the "SIP" or "SIP Update").

Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 30,000 supporters, many of whom have a deep personal interest in protecting Idaho's air quality and public health.

Our detailed comments are provided following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or [ahopkins@idahoconservation.org](mailto:ahopkins@idahoconservation.org) if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

A handwritten signature in black ink that reads "Austin Hopkins".

Austin Hopkins  
Conservation Associate

CC:

Matthew Jentgen  
EPA Region 10 – Idaho SIP  
[jentgen.matthew@epa.gov](mailto:jentgen.matthew@epa.gov)

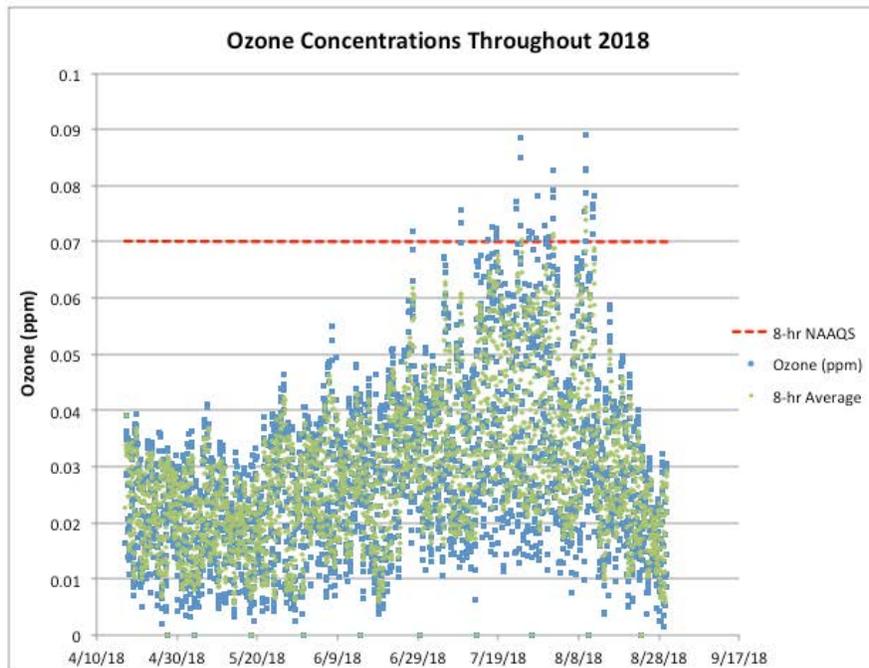
Claudia Vaupel  
EPA Region 10 – Idaho SIP  
[vaupel.claudia@epa.gov](mailto:vaupel.claudia@epa.gov)

*RE: Idaho Conservation League comments on Draft Air Quality Implementation Plan for Ozone*

*Page 1 of 5*

### Preliminary Analysis of 2018 Data

According to Table B-1 in Appendix B, the 2015-2017 3-year design value for ozone measured at the Boise - White Pine station was 0.070 ppm, equal to the 2015 national ambient air quality standard (NAAQS) for ozone. ICL downloaded and analyzed ozone data collected throughout 2018 by DEQ at the White Pine air monitoring station to discern current concentrations of ozone (Figure 1). ICL followed the procedures laid out in 40 CFR 50 Appendix U to process this data. As Figure 1 illustrates, the 0.070 ppm NAAQS for ozone has been exceeded on multiple occasions by the 8-hr average values.



**Figure 1: Ozone concentrations (ppm) measured at White Pine Elementary station in Boise, ID. Data downloaded on August 30<sup>th</sup>, 2018 from DEQ's real-time air monitoring webpage: <http://airquality.deq.idaho.gov/>**

Based on our review of current data, we are concerned about the increasing trend of ozone concentrations, and that the 2015 ozone NAAQS will likely be violated once the 3-year average is calculated for the 2016-2018 time period. Throughout the SIP, DEQ cites existing laws, rules and regulations as demonstration of SIP adequacy and compliance with requirements set forth in the Clean Air Act. However, these same laws, rules and regulations referenced by DEQ have allowed ozone to increase to our current levels and thus do not appear to be adequate.

*RE: Idaho Conservation League comments on Draft Air Quality Implementation Plan for Ozone*

*Page 2 of 5*

We request that DEQ describe their expectations for whether 2018 ozone values measured at this station will exceed the NAAQS, including any preliminary analyses that DEQ has performed, and how DEQ is preparing for a scenario in which the NAAQS is violated. Further, we ask the DEQ elaborate on what changes have been made to this SIP Update to mitigate increasing ozone concentrations that continue to approach the NAAQS.

#### **Deficiencies in Idaho's Air Monitoring Network**

The EPA's letter approving Idaho's Air Monitoring Network (Nov. 2017) noted a number of deficiencies that DEQ needs to address, including, but not limited to, the state lacking a state and local air monitoring station (SLAMS) for ozone in Idaho Falls and the lack of ozone monitoring in in the Logan, UT-ID MSA. We request that DEQ explain the status of all the deficiencies detailed in the EPA's approval letter and describe DEQ's efforts in addressing the deficiencies since the EPA's letter was received nearly a year ago.

#### **Modeling for SIP Revision**

DEQ states "air quality modeling is conducted during development of SIP revisions, as appropriate, for the state to demonstrate attainment with required air quality standards." See SIP Update pg. 9. We request that DEQ state whether modeling was performed as part of developing this SIP, including an explanation as to why modeling ultimately was or was not utilized.

Further, we request that DEQ explain their process for selecting input parameters for modeling. We are curious as to how DEQ has incorporated consideration of our current administration's efforts to roll back fuel economy standards, known as CAFE standards, and the effect this would ultimately have on this SIP Update and compliance with the NAAQS. The fuel economy of vehicles is directly related to their emissions of numerous harmful pollutants, including precursors to ozone such as NO<sub>x</sub> and VOCs. Our concern is that modeling efforts performed as part of SIP developments may be inaccurate if the input assumptions fail to consider projections of less-efficient fuel economy standards.

In addition, the 2018 Idaho Legislative Session included efforts to significantly reduce vehicle emission testing in the Treasure Valley. This effort was ultimately unsuccessful; however, as DEQ notes in the SIP Update, the Idaho Legislative retains authority to require or abolish vehicle emission testing. In light of this, we request that DEQ explain the extent of consideration they have given to a scenario where vehicle emission testing was reduced or removed and the resulting impact that could have on ozone concentrations. We also request that DEQ explain what changes would need to be made to this SIP if vehicle emission testing requirements in the Treasure Valley were reduced or removed.

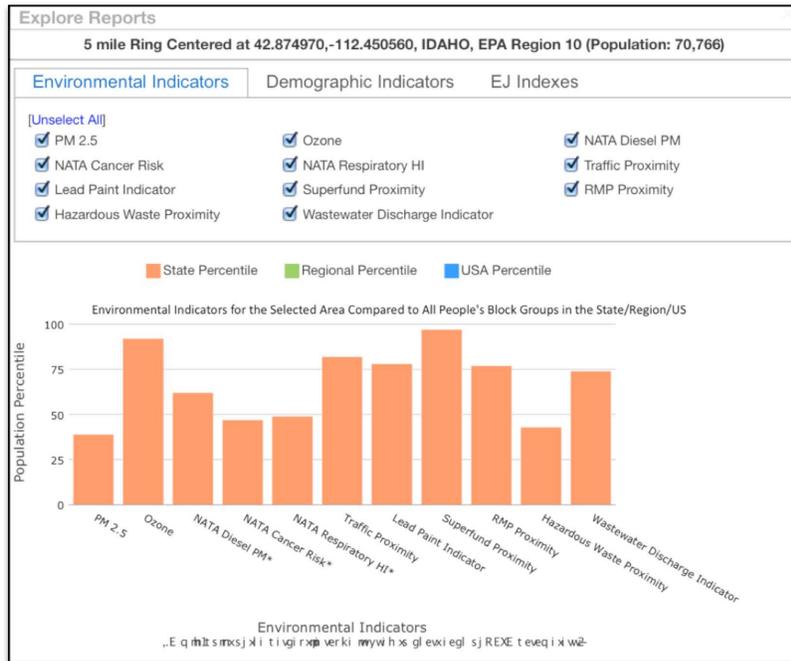
*RE: Idaho Conservation League comments on Draft Air Quality Implementation Plan for Ozone*

*Page 3 of 5*

**Statewide Ozone Monitoring**

Table D-2 of Appendix D in 40 CFR 58 outlines the minimum requirements for where ozone monitors should be located based on population size and 3-year design value concentrations for ozone. Pursuant to Table D-2, cities with a population greater than 50,000 where 3-year average ozone concentrations exceed 85 percent of the NAAQS are required to have, at a minimum, one ozone monitor.

Per the EPA’s approval letter for DEQ’s air monitoring network (Nov. 2017), it appears that DEQ will be required to install an ozone SLAMS in Idaho Falls based on 3-year design values and population. In addition to Idaho Falls, we wish to highlight the need for ozone monitors in other developing metropolitan areas throughout Idaho, including Pocatello (pop. 54,441) and Twin Falls (pop. 47,468). Pocatello is in particular need of a dedicated ozone monitor as the EPA’s Environmental Justice Screening and Mapping tool, EJSCREEN, shows that the city of Pocatello is in the 90<sup>th</sup> percentile for ozone concentrations relative to the rest of the state (Figure 2).



**Figure 2: EJSCREEN Environmental Indicators for Pocatello, ID.**

*RE: Idaho Conservation League comments on Draft Air Quality Implementation Plan for Ozone*

**National Emissions Inventory**

ICL accessed the EPA’s National Emissions Inventory (NEI) and was unable to see any reported data related to ozone. In fact, the most recently available NEI report (2014)<sup>1</sup> only references ozone once when the report states, “VOCs and NO<sub>x</sub> play a key role in ozone formation.” If the NEI only tracks the precursors to ozone, rather than ozone itself, then the DEQ should explicitly state this fact whenever it discusses using the NEI.

---

<sup>1</sup> Report downloaded on August 29<sup>th</sup>, 2018 from: <https://www.epa.gov/air-emissions-inventories/2014-national-emission-inventory-nei-report>