

Oregon Department of Environmental Quality

**July 15, 2013**

Notice of Proposed Rulemaking

**Updates to Ambient Air Quality Standards SIP for**

**Nitrogen Dioxide, Sulfur Dioxide and Lead**

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| **Overview** |

Updates to the Oregon Clean Air Act State Implementation Plan (SIP) are needed to ensure that Oregon DEQ has the authority to implement the current National Ambient Air Quality Standards for nitrogen dioxide (NO2), sulfur dioxide (SO2) and lead (Pb) under the Clean Air Act. The proposed rule amendments update the infrastructure elements of Oregon’s State Implementation Plan and allow for approval by the U.S. Environmental Protection Agency of the revised SIP.

Short summary

The proposed rule amendments would incorporate new and revised NAAQS for NO2, SO2 and Pb into Oregon Administrative Rule as necessary to revise the Oregon SIP for approval by EPA.

The proposal includes the following actions:

* Amend OAR 340-200-0040 to update the Oregon Clean Air Act State Implementation Plan
* Amend OAR 340-200-0020 Table 1 to add 1-hour Significant Air Quality Impact Levels for NO2 and SO2
* Amend OAR 340-202-0070 to incorporate the primary 1-hour National Ambient Air Quality Standard for sulfur dioxide, adopted by the EPA June 22, 2010 and effective on August 23, 2010.
* Amend OAR 340-202-0100to incorporate the primary 1-hour National Ambient Air Quality Standard for nitrogen dioxide, adopted by the EPA February 9, 2010 and effective on April 12, 2010.
* Amend OAR 340-202-0130 to incorporate the primary and secondary National Ambient Air Quality Standard for lead, adopted by the EPA November 12, 2008 and effective on January 12, 2009.

In addition to the rule amendments outlined above, three “crosswalk” documents titled “Infrastructure SIP Submittal documents for Purposes of Clean Air Act Sections 110(a)(1) and (2)” are included as attachments to this proposal. These crosswalks identify the existing Oregon Administrative Rules and corresponding Oregon Revised Statutes that demonstrate DEQ has the necessary authorities in place to implement requirements of Sections 110(a)(1) and (a)(2) of the Clean Air Act with respect to the current NAAQS for NO2, SO2 and Pb. They are included for EQC approval and submittal to EPA to document that the infrastructure elements of the Oregon SIP meet the requirements of the Clean Air Act as they relate to the NO2, SO and Pb NAAQS.

Brief history

Section 110 of the Clean Air Act, 42 USC § 7410, requires state and local air pollution control agencies to adopt federally approved control strategies to minimize air pollution. The resulting body of regulations is known as the State Implementation Plan, or more commonly called a “SIP”.

State Implementation Plans serve two main purposes:

1. To demonstrate that the state has the basic air quality management program components in place to implement new or revised NAAQS; and
2. To identify the emissions control requirements the state will rely upon to attain and/or maintain the primary and secondary NAAQS.

SIPs generally establish limits or work practice standards to minimize emissions of the air pollutants (and their precursors) for which EPA has issued air quality criteria (the “criteria pollutants”). The six current criteria pollutants are sulfur oxides (sulfur dioxide as indicator), particulate matter, oxides of nitrogen (nitrogen dioxide as indicator), lead, carbon monoxide, and ozone. EPA has established NAAQS for these pollutants and has updated these standards over time.

All states are required to submit SIPs with general infrastructure elements showing the state has the capacity to implement new or revised NAAQS. Infrastructure SIP submittals must include the basic programrequirements for managing air quality required in Section 110(a)(2) of the Clean Air Act (CAA), as listed in Figure 1 below.

**Figure 1: Required Infrastructure Elements Tracked for Each State**

Section 110(a)(2)(A) Emission limits and other control measures  
Section 110(a)(2)(B) Ambient air quality monitoring/data system  
Section 110(a)(2)(C) Program for enforcement of control measures  
Section 110(a)(2)(D)(i) - I Prong 1: Interstate transport - significant contribution  
Section 110(a)(2)(D)(i) - I Prong 2: Interstate transport - interfere with maintenance  
Section 110(a)(2)(D)(i) - II Prong 3: Interstate transport - prevention of significant deterioration  
Section 110(a)(2)(D)(i) - II Prong 4: Interstate transport - protect visibility  
Section 110(a)(2)(D)(ii) - Interstate and international pollution abatement  
Section 110(a)(2)(E) Adequate authority and resources  
Section 110(a)(2)(F) Stationary source monitoring system  
Section 110(a)(2)(G) Emergency power  
Section 110(a)(2)(H) Future SIP revisions  
Section 110(a)(2)(J) Consultation with government officials; Public notification; PSD and visibility protection  
Section 110(a)(2)(K) Air quality modeling/data  
Section 110(a)(2)(L) Permitting fees  
Section 110(a)(2)(M) Consultation/participation by affected local entities

There are three overarching activities that occur when a National Ambient Air Quality Standard is added or revised, as summarized below:

* Within two years of revising the NAAQS for a criteria pollutant, EPA is required to identify or “designate” areas as meeting (attainment areas) or not meeting (nonattainment areas) the standard. Designations are based on the most recent set of air monitoring data. *(see* CAA Section 107(d)(1)(B), 42 USC § 7407(d)(1)(B).*)*
* Within three years of EPA designations, all states must submit revisions to their state implementation plans to show they have the basic air quality management program components in place to implement a new or revised NAAQS, as specified in Clean Air Act section 110. These plans are often called "infrastructure SIPs”. *(see* CAA Section 110(a)(1), 42 USC § 7410(a)(1)*)*.
* Within three years of area designations, states are required to submit nonattainment area SIPs to EPA for any criteria pollutant for which the standard is not met. Each nonattainment area SIP must outline the strategies and emissions control measures that show how the area will improve air quality and meet the NAAQS. *(see* CAA Section 172, 42 USC § 7502.*)*

As the NAAQS change, states must submit revisions to the infrastructure elements of their SIP to reflect these changes. EPA has revised the NO2, SO2 and Pb NAAQS to protect the public from adverse health effects, as appropriate under CAA Section 109, by:

* Replacing the annual and 24-hour primary SO2 standards with a new 1-hour standard (*see* 75 Federal Register 35520);
* Adding a new 1-hour primary NO2 standard, to supplement the existing annual standard (*see* 75 Federal Register 6474); and
* Revising the level of the primary and secondary Pb standards (*see* 73 Federal Register 66964).

Table 1 displays EPA planned and completed actions with regard to area designations for the revised NO2, SO2 and Pb NAAQS in Oregon:



This proposal addresses the requirement that states must submit infrastructure SIPs within three years of a NAAQS revision to demonstrate that they have the basic air quality program components in place to implement the revised NAAQS. The proposed rule amendments would revise the existing Ambient Air Quality Standards for NO2 and SO2 under Oregon Administrative Rule chapter 340, division 202 to reflect the new primary 1-hour NAAQS adopted by the EPA for these criteria pollutants. Revisions to Table 1 of Oregon Administrative Rule chapter 340, division 200 are needed to add 1-hour Significant Impact Levels in Class II areas for NO2 and SO2. The addition of 1-hour Significant Air Quality Impact Levels for NO2 and SO2 are necessary to implement the 1-hour primary NAAQS for NO2 and SO2 requirements in air quality permitting actions carried out by DEQ.

This proposal also amends Oregon Administrative Rule chapter 340, division 202 to provide better consistency with the language of the federal NAAQS for Pb and will also be submitted to EPA for approval as a revision to Oregon’s infrastructure SIP. The Oregon Environmental Quality Commission adopted the revised National Ambient Air Quality Standards for lead on May 5, 2010. On May 21, 2010, the amended lead standard was included in the submittal to EPA as part of a larger revision to the Oregon SIP. EPA approved the May 5, 2011 revisions (NSR, PM2.5 and GHG permitting rule updates) on December 27, 2011 (76 FR 80747), however, this approved revision to the lead standard did not meet the requirements for an infrastructure SIP . EPA issued findings that seven states (including Oregon) missed Clean Air Act deadlines for submitting plans, or infrastructure elements of plans, for implementing EPA's 2008 national air quality standards for lead on February 15, 2013. The Finding of Failure to submit did not include infrastructure requirements related to CAA Section 110(a)(2)(D)(i)(I), addressing interstate transport as is related to significant contribution to nonattainment and interference with maintenance of the Pb NAAQS in other states as discussed in further detail below.

Due to existing workload and other air quality planning priorities and obligations, Oregon DEQ’s Air Quality Division made the decision to postpone submittal of these infrastructure SIPs until EPA Guidance was available for reference. Nationally, states and EPA have agreed that infrastructure SIPs will be a higher priority in the future. To date, EPA has issued a draft multi-pollutant guidance document addressing requirements for the infrastructure elements of a State Implementation Plan. In consultation with EPA Region 10, DEQ has used this guidance as the primary resource for developing this proposal. In order to streamline the infrastructure SIP submittal process, DEQ has bundled the necessary rule amendments for updating the NO2, SO2 and Pb ambient air quality standards in Oregon rule into one submittal for EPA approval as revisions to the Oregon SIP.

In addition to the rule amendments described above, DEQ is submitting three documents referred to as “crosswalks” (see Attachments X-X) for EQC approval and submittal to EPA. The crosswalks were developed in collaboration with EPA Region 10 and are included with this proposal for EQC approval and DEQ submittal to EPA as reference documents to demonstrate that the Oregon SIP has the required infrastructure elements to implement the NAAQS for NO2, SO2 and Pb as specified in Section 110 of the Clean Air Act. The crosswalks address the required infrastructure elements of Section 110(a)(1) and 110(a)(2), with some exceptions, as discussed in more detail below. While the crosswalks are not considered part of the official record of Oregon’s SIP, they are proposed for submittal to EPA as reference tools to illustrate how applicable Oregon Administrative Rules and authorizing Oregon Revised Statutes correspond to federal Clean Air Act Section 110(a)(1) and (a)(2) requirements for the purpose of Infrastructure SIP submittals. DEQ has made an effort to include the relevant OARs in the crosswalks for ease of reference, however, it should be noted that the official record of Oregon Administrative Rules that constitute the Oregon Clean Air Act State Implementation Plan can be located in the Federal Register. DEQ wishes to improve these crosswalks over time for use in future infrastructure SIP submittals to EPA for approval, and welcomes suggestions as to how these crosswalks could be further improved during the public comment period of this rulemaking.

Regulated parties

Parties affected by this proposal include newly constructed and expanding existing permitted industrial sources undergoing modifications that are above the Significant Air Quality Impact Level and are required to conduct modeling for a Prevention of Significant Deterioration (PSD) determination. PSD modeling is required when a source exceeds the Significant Emission Rate (SER) for a criteria pollutant. Examples of affected sources of SO2 may include but are not limited to natural gas electrical generating facilities or landfills that generate sulfur dioxide emissions when combusting hydrogen sulfide to generate electricity. Facilities such as data storage and processing server farm centers with multiple back-up diesel generators may find themselves at risk of violating the new 1-hour primary NO2 standard, and may need to purchase monitoring equipment necessary to demonstrate compliance with the NAAQS. More information on the parties potentially affected by this proposal is included under the section titled “Statement of fiscal and economic impact”.

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| **Crosswalk Submittals, Interstates Transport** |

Crosswalks

As mentioned previously, this report is accompanied by three documents referred to as “crosswalks” (see Attachments X-X) identifying DEQ authorities, rules, programs and agreements in place which provide the necessary infrastructure elements of the Oregon SIP to implement Sections 110(a)(1) and (a)(2) of the Clean Air Act. A separate crosswalk is provided for each pollutant included in this rulemaking proposal, each addressing the required infrastructure SIP elements (CAA Section 110(a)(2)(A) - 110(a)(2)(M)), with the exception of the sub-elements noted below.

The attached crosswalks do not include references to Oregon Administrative Rules or Oregon Revised Statutes relating to Clean Air Act Section 110(a)(2)(C) to the extent it refers to nonattainment New Source Review permit programs required under the Section 110(a)(2)(I) of the Clean Air Act. These elements have different due dates for submission and are not required to be submitted as part of an infrastructure SIP. Additionally, one sub-element of the infrastructure SIP requirement related to interstate transport has also been omitted from this proposal. Section 110(a)(2)(D)(i)(I) prohibits the emissions from sources in one state to significantly contribute to nonattainment and interference with maintenance of attainment areas with respect to the NAAQS in other states. EPA has requested that states exclude Section 110(a)(2)(D)(i)(I) from their infrastructure SIP submittals at this time in light of the recent decision by the U.S. Court of Appeals for the District of Columbia Circuit vacating the 2011 Cross-State Air Pollution Rule (*see EME Homer City generation, L.P. v. EPA, 696 F .3d 7* (D.C. Cir. 2010)*).*  EPA Administrator Gina McCarthy released a memorandum November 19, 2012, describing EPA’s interpretation of the decision’s affect on states’ obligation to submit this portion of the interstate transport element as part of their infrastructure SIP submittals.

Unless the EME Homer City decision is reversed or otherwise modified by the Supreme Court, states are not required to submit 110(a)(2)(D)(i)(I) SIPs until the EPA has quantified their contribution to violations of the NAAQS in neighboring states. As a result of this decision, EPA has further clarified that it will not issue a Finding of Failure to Submit for infrastructure SIPs with respect to the portion of interstate transport requirements related to one state causing or contributing to violations of the lead NAAQS in neighboring states at this time. Therefore, this element of interstate transport is not included in this proposal.

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| **Statement of need** |

What problem is DEQ trying to solve?

States have a legal obligation to amend their administrative rules to adopt new or revised National Ambient Air Quality Standards and incorporate these standards into their State Clean Air Act Implementation Plans. Amendments to Oregon Administrative Rule are needed to incorporate the 1-hour NAAQS for nitrogen dioxide and sulfur dioxide into the Oregon SIP, as well as to revise the rule language for the existing Pb standard in OAR 340-200-0020 to make it consistent with the wording of the Pb NAAQS in the Code of Federal Regulations. Incorporating these changes into the Oregon SIP will allow DEQ to submit the revised infrastructure SIP elements to EPA for approval. Once approved, DEQ will have the authority to implement the current NAAQS for NO2, SO2 and Pb in Oregon, in compliance with the Clean Air Act.

How would the proposed rule solve the problem?

The proposed rule amendments will update Oregon Administrative Rules to incorporate the current National Ambient Air Quality Standards for nitrogen dioxide, sulfur dioxide and lead as required by the Clean Air Act and allow DEQ to submit required updates to the Oregon Infrastructure SIP to the U.S. Environmental Protection Agency for approval.

How will DEQ know the problem has been solved?

Once adopted by the EQC, the proposed rule amendments will be filed with the Secretary of State and submitted to the EPA along with the crosswalks for approval as documentation of the updates made to the Oregon SIP. DEQ will know the problem has been solved when the updated infrastructure elements of Oregon’s SIP are approved by the EPA and published in the Federal Register.

Request for other options

Because the proposed rule amendments are required to update Oregon’s SIP to incorporate the revised NAAQS for NO2, SO2 and Pb in order to comply with the requirements of the Clean Air Act, DEQ has not requested input for other options. DEQ must adopt the proposed rule amendments to enable DEQ’s implementation of the NAAQS for these pollutants.

DEQ welcomes public comments on any aspect of this proposed rulemaking during the public comment period, but specifically requests public comment regarding the accuracy of the attached crosswalk documents (Attachments X-X).

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| Rules affected, authorities, supporting documents |

Lead divisionProgram or activity

Air Quality Planning

Chapter 340 action

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| Amend | OAR 340-200-0020 Table 1, 340-200-0040, 340-202-0070, 340-202-0100, 340-202-0130 |

Statutory authority

ORS chapters 468.020, 468A.025, and 468A

Statute implemented

ORS 468A.025

Documents relied on for rulemaking [ORS 183.335(2)(b)(C)](http://www.leg.state.or.us/ors/183.html)

**TABLE 2: Documents Relied on for Rulemaking**

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| **Document title** | **Document location** |
| **NAAQS – Primary and Secondary** |  |
| 40 CFR Part 50 – National Primary and Secondary Ambient Air Quality Standards | <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=40:2.0.1.1.1&idno=40> |
| **Nitrogen Dioxide NAAQS** |  |
| Federal Register Volume 75, Number 26 (Tuesday, February 9, 2010)] [Rules and Regulations]  [Pages 6473-6537] From the Federal Register  [FR Doc No: 2010-1990] [[Page 6473]] Part III  Environmental Protection Agency  40 CFR Parts 50 and 58 | <http://www.gpo.gov/fdsys/pkg/FR-2010-02-09/html/2010-1990.htm> |
| ENVIRONMENTAL PROTECTION AGENCY  40 CFR Part 81  [EPA–HQ–OAR–2011–0572; FRL–9624–3]  RIN–2060–AR06  Air Quality Designations for the 2010 Primary Nitrogen Dioxide (NO2) National Ambient Air Quality Standards | <http://www.gpo.gov/fdsys/pkg/FR-2012-02-17/pdf/2012-3150.pdf#page=1> |
| EPA Memorandum RE: Guidance Concerning the Implementation of the 1-hour NO2 NAAQS for the Prevention of Significant Deterioration Program (June 29, 2010) | <http://www.epa.gov/NSR/documents/20100629no2guidance.pdf> |
| EPA Memorandum RE: Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO2 National Ambient Air Quality Standards | <http://www.epa.gov/region7/air/nsr/nsrmemos/appwno2_2.pdf> |
| **Sulfur Dioxide NAAQS** |  |
| Sulfur Dioxide (SO2) Primary National Ambient Air Quality Standards (EPA) | <http://www.epa.gov/ttnnaaqs/standards/so2/s_so2_index.html> |
| 40 CFR Parts 50, 53, and 58  Primary National Ambient Air Quality  Standard for Sulfur Dioxide; Final Rule | <http://www.epa.gov/ttnnaaqs/standards/so2/fr/20100622.pdf> |
| Federal Register Volume 75, Number 119  (Tuesday, June 22, 2010)]  [Rules and Regulations]  [Pages 35519-35603]  [FR Doc No: 2010-13947] | <http://www.gpo.gov/fdsys/pkg/FR-2010-06-22/html/2010-13947.htm> |
| ENVIRONMENTAL PROTECTION AGENCY  40 CFR Part 81  [EPA–HQ–OAR–2012–0233; FRL–9781–3]  EPA Responses to State and Tribal  2010 Sulfur Dioxide Designation Recommendations: Notice of Availability and Public Comment Period | <http://www.gpo.gov/fdsys/pkg/FR-2013-02-15/pdf/2013-03593.pdf> |
| EPA Letter to ODEQ RE: Response to Recommendation dated July 27, 2011 on air quality designations for the State of Oregon for the 2010 revision to the primary National Ambient Air Quality Standard for sulfur dioxide (SO2). | Document available upon request from:  DEQ Headquarters  811 SW 6th Ave.  Portland, OR 97204 |
| EPA Memorandum RE: Guidance Concerning the Implementation of the 1-hour SO2 NAAQS for the Prevention of Significant Deterioration Program (August 23, 2010) | <http://www.epa.gov/region07/air/nsr/nsrmemos/appwso2.pdf> |
| **Lead NAAQS** |  |
| ENVIRONMENTAL PROTECTION AGENCY  40 CFR Part 81  [EPA–HQ–OAR–2009–0443; FRL–9492–3]  RIN 2060–AR17  Air Quality Designations for the 2008  Lead (Pb) National Ambient Air Quality Standards | <http://www.gpo.gov/fdsys/pkg/FR-2011-11-22/pdf/2011-29460.pdf#page=1> |
| ENVIRONMENTAL PROTECTION AGENCY  40 CFR Part 52  [EPA–HQ–OAR–2012–0943, FRL–9784–6]  Findings of Failure To Submit a  Complete State Implementation Plan  for Section 110(a) Pertaining to the  2008 Lead National Ambient Air Quality Standards | <http://www.gpo.gov/fdsys/pkg/FR-2013-02-26/pdf/2013-04293.pdf> |
| 2008 Lead Standards – Region 10 Final Designations (EPA) | <http://www.epa.gov/leaddesignations/2008standards/final/region10f.html> |
| Area Designations for 2008 Lead Standards (EPA) | <http://www.epa.gov/leaddesignations/2008standards/index.html> |
| Lead Implementation – Programs and Requirements for Reducing Lead (EPA) | <http://www.epa.gov/airquality/lead/implement.html> |
| Memorandum: Guidance on Infrastructure State Implementation Plan Elements Required Under Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards. (EPA) | <http://www.epa.gov/air/lead/pdfs/20111014infrastructure.pdf> |
| **SIP Elements NAAQS** |  |
| Infrastructure SIP Element Reports (EPA) | <http://www.epa.gov/airquality/urbanair/sipstatus/infrastructure.html> |
| SIP – General Page (EPA) | <http://yosemite.epa.gov/r10/airpage.nsf/283d45bd5bb068e68825650f0064cdc2/b2ce4780021daa07882569de007ba77f?OpenDocument> |
| State Implementation Plan Status and Information (EPA) | <http://www.epa.gov/airquality/urbanair/sipstatus/index.html> |
| Status of SIP Requirements for Designated areas, Oregon Infrastructure Requirements by Pollutant (As of 06/09/2013) (EPA) | <http://www.epa.gov/airquality/urbanair/sipstatus/reports/or_infrabypoll.html#x110_a__2__lead__2008_> |
| Appendix V to Part 51—Criteria for Determining the Completeness of Plan Submissions (CFR) | <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=9fe615d9103aedf220e736c5ea1ecde8&rgn=div9&view=text&node=40:2.0.1.1.2.23.11.5.36&idno=40> |
| **OREGON ADMINISTRATIVE RULES** |  |
| Oregon Secretary of State (website) | <http://www.sos.state.or.us/> |
| **OREGON REVISED STATUTES** |  |
| Oregon State Legislature (website) | <http://www.leg.state.or.us/ors/home.htm> |
| **INTERSTATE TRANSPORT** |  |
| EPA Memorandum from Gina McCarthy RE: Next Steps for Pending Redesignation Requests and State Implementation Plan Actions Affected by the Recent Court Decision Vacating the 2011 Cross-State Air Pollution Rule (November 19, 2012) | <http://www.epa.gov/airtransport/CSAPR/pdfs/CSAPR_Memo_to_Regions.pdf> |
| **DEQ DOCUMENTS** |  |
| 2011 Air Quality Annual Report and Data Summaries (DEQ) | <http://www.deq.state.or.us/aq/forms/annrpt.htm> |
| Intergovernmental Agreement between DEQ and LRAPA (DEQ Agreement # 003-12) | Document available upon request from  DEQ Headquarters  811 SW 6th Ave.  Portland, OR 97204 |
| Intergovernmental Agreement between DEQ and LRAPA (DEQ Agreement # 003-12). | Document available upon request from  DEQ Headquarters  811 SW 6th Ave.  Portland, OR 97204 |

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| Fee Analysis |

This rulemaking does not involve fees.

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| Statement of fiscal and economic impact [ORS 183.335 (2)(b)(E)](http://www.leg.state.or.us/ors/183.html) |

Fiscal and Economic Impact

States are routinely required to incorporate federal revisions to the NAAQS for criteria pollutants into their rules and subsequently revise their State Implementation Plans. DEQ anticipated the need to amend Oregon Administrative Rules to reflect the federal changes to the NO2, SO2 and Pb NAAQS for this rulemaking and has budgeted for the necessary resources to develop and conduct this rulemaking. Sources affected by these mandatory rule amendments may incur additional costs associated with modeling for purposes of Prevention of Significant Deterioration determinations prior to construction of a new air pollution source or as a result of modifying an existing facility. The Clean Air Act requires EPA to revise the NAAQS for a criteria pollutant when new information is available to suggest a lower (more protective) standard is necessary to protect public health and welfare, regardless of the costs of compliance with the new, lower standard.

Statement of Cost of Compliance

**Costs associated with PSD/NSR Modeling**

Upon adoption of the Federal NO2 and SO2 NAAQS into Oregon Administrative Rule, DEQ will be required to include the 1-hour NO2 and SO2 standards in the modeling protocol for Prevention of Significant Deterioration and New Source Review permit actions. Currently, modeling to meet the 1-hour NO2 and SO2 standards is only requested of sources by DEQ when deemed necessary. New facilities and existing facilities that undergo modifications may need to hire an environmental consulting firm to develop computer simulation modeling to demonstrate compliance with the new primary 1-hour NAAQS for NO2 and SO2.

The addition of the 1-hr NO2 and SO2 NAAQS may increase the cost of modeling analyses for sources that emit these pollutants.  Currently, these analyses are conducted on an as-requested basis. The modeling results could potentially require a source to add controls to meet the new 1-hr NAAQS. The costs associated with modeling analyses and any additional controls triggered by compliance with the 1-hr NO2 and SO2 NAAQS are dependent on the source being analyzed and will need to be determined on a case-by-case basis. If a source can demonstrate that the planned modification will result in an emissions increase that is less than the Significant Emission Rate (SER), no additional modeling is required.For sources with modifications that result in emissions increases above the SER, additional PSD modeling is needed. Some sources will be able to conduct modeling efforts internally, while others may need to contract for those services. Cost estimates for this type of PSD modeling could range from a few thousand dollars to quantify emissions to over $100,000 for modeling efforts if emissions rates exceed the SER.

The data provided in Table 3 quantifies the number of small and large businesses that emit SO2, NO2 or Pb as required by [ORS 183.336](http://www.leg.state.or.us/ors/183.html). The information provided in this table is an estimate based on available 2011 data. The distinction between small and large businesses is made at the parent company level and not at the individual facility level here in Oregon. Some facilities may have 50 or fewer employees but are owned by a company that as a whole employs more than 50 staff.

**TABLE 3: Number of small and large businesses affected**

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| --- | --- | --- | --- | --- |
| **Permit Type** | **Number of Small Businesses** | **Number of Large Businesses** | **Unknown Number of Employees** | **Total Number of Facilities Per Permit Type** |
| **Under 50 Employees** | **Over 50 Employees** |
| Air Contaminant Discharge Permit | 337 | 500 | 2 | **839** |
| Title V Operating Permit | 10 | 91 | 0 | **101** |
| **Total Per Size:** | **346** | **589** | **5** | **940** |
|  |  |  |  |  |
| ***Resource:*** | ODEQ TRAACS Database | |  |  |

It is important to note that this proposal has the potential to affect large and small businesses that emit NO2 and SO2 similarly. This is because the size of a business may not correlate well with the emissions rates associated with its activities. Emission rates are what trigger additional costs associated with PSD modeling, rather than the number of employees a business has on staff.

Impacts on general public

This rulemaking provides a health benefit to the general public by lowering (thereby making them more stringent) the ambient air quality standards in Oregon for nitrogen dioxide and sulfur dioxide. Although the monetary value of these health benefits have not been quantified by DEQ, it is generally expected that because the NAAQS are an area-wide standard, adopting the revised standards will result in air quality that is healthier to breathe than if the standards were not implemented.

Impact on other government entities other than DEQ

1. Local governments The proposed rule amendments could have implications for Metro’s regional transportation planning efforts as they pertain to the 1-hour NO2 NAAQS with respect to near-roadway vehicle exhaust**.** DEQ will begin air quality monitoring near heavily-used roadways in the Portland area in 2014. If the NO2 NAAQS is violated as a result of this monitoring, DEQ will be required to develop an attainment plan to bring the area into attainment with the 1-hr NO2 standard. When Metro adopts future transportation plans, Metro will be required to demonstrate that emissions from future transportation systems will be within the amount anticipated by DEQ’s NO2 attainment plan.
2. State agencies State government agencies engaged in activities which emit NO2 or SO2 in quantities that could contribute to a violation of the primary 1-hour NAAQS for these pollutants could be required to conduct modeling and/or monitoring as described above to demonstrate compliance with the standards.

Impact on DEQ [ORS 183.335](http://www.leg.state.or.us/ors/183.html)

Updates to DEQ rules are needed to ensure the department has the necessary authority to enforce and implement the NAAQS for nitrogen dioxide, sulfur dioxide and lead. Rulemaking will be conducted by existing DEQ staff. As a result of adopting the new 1-hour primary standard for NO2 and SO2, DEQ may be required to conduct a review of PSD Modeling submittals for sources that must submit a competing source analysis. It is unknown at this time the number of sources that may require a review of PSD modeling submittals by DEQ. Additionally, DEQ will need to purchase new monitoring equipment to measure near-roadway levels of NO2 for the new 1-hour primary standard. Monitors used for measuring ambient levels of NO2 range on average from $6,000-$13,000. DEQ’s Air Quality Division is in the process of developing a monitoring plan for approval by EPA to determine the number and location of monitors needed. Pending final EPA national guidance or rule. DEQ may also need to purchase monitoring equipment to measure ambient air concentrations of SO2 for comparison against the 1-hour SO2 NAAQS.

Once Oregon’s rules are updated to reflect the current NAAQS for NO2, SO2 and Pb, DEQ will begin conducting near-roadway monitoring at select locations to evaluate whether ambient air concentrations of NO2 are in exceedance of the 1-hour standard. EPA is in the process of developing national guidance for modeling and monitoring of SO2 for comparison against the 1-hour standard, and DEQ will need to address related requirements when they are finalized.

In addition to adopting the 1-hour primary standards for NO2 and SO2, DEQ is adopting the interim Significant Impact Levels (SILs) for the primary 1-hour NO2 and SO2 standards as provided in EPA Guidance. SILs are used as a screening step to exempt sources from additional modeling requirements, and can reduce the workload of an air quality analysis. For sources with modeled concentrations of NO2 or SO2 over the 1-hour Significant Air Quality Impact Levels for these pollutants, a competing source analysis is required, for which an Emissions Inventory is developed by DEQ and provided to the source. The resources needed by DEQ to assist with such analyses will vary on a case-by-case basis. When final SILs have been promulgated by EPA, DEQ will need to conduct a future rulemaking to amend the 1-hour NO2 and SO2 SILs in OAR 340-200-0020 Table 1 to reflect the final 1-hour SILs as adopted by EPA. EPA has indicated its intent to adopt final SILs in the future, but has not indicated a specific timeline for doing so as of the time this staff report was developed.

Impact on large businesses (all businesses that are not small businesses below)

Major new or modified sources such as natural gas electrical generating facilities and data storage and processing server farm centers with multiple back-up diesel generators may need to conduct a PSD analysis to determine whether they exceed the new 1-hour primary NO2 and SO2 standards, and may need to purchase monitoring equipment necessary to demonstrate compliance with the NAAQS. Existing facilities that are currently subject monitoring requirements for these may be able to use existing monitoring equipment for demonstration of compliance with the new primary 1-hour NO2 and SO2 NAAQS.

Impact on small businesses (those with 50 or fewer employees) [ORS 183.336](http://www.leg.state.or.us/ors/183.html)

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| a) Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule. | New or modified small businesses with NO2 or SO2 emissions increases high enough to trigger PSD analysis would be required to demonstrate compliance with the standards and/or install controls. See Table 3 for an estimate of the number of small businesses that generate NO2, SO2 or Pb emissions. |
| b) Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule. | New or existing expanding facilities will likely need to hire a consultant to demonstrate compliance with the new primary 1-hour NO2 and SO2 NAAQS. The costs associated with consultation are expected to be in the low range of cost estimates provided above for large businesses. |
| c) Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule. | Please see the section above titled: “Statement of Cost of Compliance”. Equipment requirements for small businesses to comply with the new NAAQS are expected to be similar to those of large businesses. |
| d) Describe how DEQ involved small businesses in developing this proposed rule. | DEQ did not involve small businesses in the development of this rulemaking. The proposed rule amendments are required in order to align state rules with federal Clean Air Act requirements and provide DEQ with the necessary authority to implement the NO2, SO2 and Pb NAAQS in Oregon. Due to this requirement, there was no policy choice to be made. |

Documents relied on for fiscal and economic impact

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| **Document title** | **Document location** |
| TRAACS database query performed June 07, 2013 | Document available upon request from:  DEQ Headquarters  811 SW 6th Ave.  Portland, OR 97204 |
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Advisory committee

DEQ did not appoint an advisory committee for the proposed permanent rule amendments. This rulemaking proposal is necessary to align Oregon Administrative Rules with federally revised National Ambient Air Quality Standards under the Clean Air Act. The proposed changes are required to demonstrate that Oregon DEQ has the appropriate rules, programs and agreements in place to implement the Clean Air Act. As such, there was no policy choice to be made which would necessitate input from an advisory committee.

Housing cost

To comply with [ORS 183.534](http://www.leg.state.or.us/ors/183.html), DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rules only affect sources which are subject to the National Ambient Air Quality Standards for nitrogen dioxide, sulfur dioxide and lead.

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| **Federal relationship** |

*"It is the policy of this state that agencies shall seek to retain and promote the unique identity of Oregon by considering local conditions when an agency adopts policies and rules. However, since there are many federal laws and regulations that apply to activities that are also regulated by the state, it is also the policy of this state that agencies attempt to adopt rules that correspond with equivalent federal laws and rules..."*

Relationship to federal requirements

This rulemaking does not result in any differences from or additions to federal requirements. The proposed rule amendments align state rules with federal requirements under Sections 110(a)(1) and (a)(2) of the Clean Air Act. Chapter 340, division 202 of Oregon Administrative Rules currently contains ambient air quality standards for sulfur dioxide that are lower than the current SO2 NAAQS. These standards were adopted in 1972 and were equivalent to the federal standards at that time. Although the federal standards were repealed in 1973, Oregon rules have not been amended to reflect the changes made to the levels of teh federal standards since that time. As proposed, this rulemaking will automatically retain the annual and 24-hour SO2 ambient air quality standards for one year after adoption of this proposal until EPA develops sulfur dioxide area designations for Oregon. In addition to adopting the new, primary 1-hour standard, this proposal would also retain the existing federal 3-hour secondary standard for sulfur dioxide until future revisions are made by EPA, should the agency propose any such changes in the future.

The proposed rule changes comply with and implement the following federal requirements verbatim:

* 40 CFR Section 50.4, National primary ambient air quality standards for sulfur oxides (sulfur dioxide).
* 40 CFR Section 50.11, National primary and secondary ambient air quality standards for oxides of nitrogen (with nitrogen dioxide as the indicator). 40 CFR Section 50.16 National primary and secondary ambient air quality standards for lead.
* 40 CFR Section 50.17 National primary ambient air quality standards for sulfur oxides (sulfur dioxide).

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| Land use |

*“It is the Commission's policy to coordinate the Department's programs, rules and actions that affect land use with local acknowledged plans to the fullest degree possible.”*

[ORS 197.180](http://www.leg.state.or.us/ors/197.html), [OAR 660-030](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_tofc.html)

Land-use considerations

To determine whether the proposed rules involve programs or actions that are considered a *land-use action*, DEQ considered:

* Statewide planning goals for specific references. Section III, subsection 2 of the DEQ State Agency Coordination Program[🞂](http://deq05/intranet/working/guidance/stateAgencyCoordinationProgram10-MSD-009.pdf) document identifies the following statewide goal relating to DEQ's authority:

**Goal Title**

5 Open Spaces, Scenic and Historic Areas, and Natural Resources

6 Air, Water and Land Resources Quality

11 Public Facilities and Services

16 Estuarial resources

19 Ocean Resources

* [OAR 340-018-0030](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_018.html) for EQC rules on land-use coordination. Division 18 requires DEQ to determine whether proposed rules will significantly affect land use. If yes, how will DEQ:
  + Comply with statewide land-use goals, and
  + Ensure compatibility with acknowledged comprehensive plans, which DEQ most commonly achieves by requiring a [Land Use Compatibility Statement](http://www.deq.state.or.us/pubs/permithandbook/lucs.htm).
* DEQ’s mandate to protect public health and safety and the environment.
* Whether DEQ is the primary authority that is responsible for land-use programs or actions in the proposed rules.
* Present or future land uses identified in acknowledged comprehensive plans.

Determination

DEQ determined that the proposed rules listed under the Chapter 340 Action section above **do not affect** existing rules, programs or activities that are considered land-use programs and actions in OAR 340-018-0030 or in the DEQ State Agency Coordination Program.

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| Stakeholder and public involvement |

Advisory committee

DEQ did not convene an advisory committee. This rulemaking proposal makes necessary amendments to Oregon Administrative Rules which are part of the Oregon Clean Air Act State Implementation Plan. The proposed changes correspond with revisions to the NAAQS for nitrogen dioxide, sulfur dioxide and lead, and are required by the Clean Air Act to provide DEQ the authority to implement the current NAAQS for these pollutants.

 EQC prior involvement

DEQ shares general rulemaking information with EQC through the annual DEQ Rulemaking Plan review and monthly status report. DEQ did not present additional information specific to this proposed rule revision beyond the annual rulemaking plan and the monthly rulemaking report.

Public notice

The August 2013[*Oregon Bulletin*](http://arcweb.sos.state.or.us/pages/rules/bulletin/past.html) will publish the Notice of Proposed Rulemaking with Hearing DEQ also:

* Posted notice on DEQ’s webpage [http://www.deq.state.or.us/regulations/proposedrules.htm](http://www.deq.state.or.us/regulations/proposedrules.htm )  on July 15, 2013.
* E-mailed notice on July 15, 2013 to:
* Approximately #### interested parties through GovDelivery on July 15, 2013.
* #### stakeholders on the Enter other mailing lists here.
* The following key legislators required under [ORS 183.335](http://www.leg.state.or.us/ors/183.html):
  + Enter name, title, committee here.
  + Enter name, title, committee here.
  + Enter name, title, committee here.
* Mailed the notice by U.S. Postal Service to ## interested parties on July 15, 2013.
* Sent notice to EPA on mmm dd, yyyy.
* Enter other notices here on mmm dd, yyyy.

Public hearings

DEQ plans to hold one public hearing. The table below includes information about how to participate in the public hearing.

Before taking public comment and according to [Oregon Administrative Rule 137-001-0030](http://arcweb.sos.state.or.us/pages/rules/oars_100/oar_137/137_001.html), [OPTION 1]the presiding officer [OPTION 2]staff presenter will summarize the content of the notice given under [Oregon Revised Statute 183.335](http://www.leg.state.or.us/ors/183.html) and respond to any questions about the rulemaking.

DEQ will add the names, addresses and affiliations of all hearing attendees to the interested parties list for this rule if provided on a registration form or the attendee list. DEQ will consider all oral and written comments received at the hearings listed below before finalizing the proposed rules. All comments will be summarized and DEQ will respond to comments on the Environmental Quality Commission staff report.

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Close of public comment period

The comment period will close on Monday, August 19, 2013 at 5:00 p.m.