OFFICE OF THE SECRETARY OF STATE
DENNIS RICHARDSON
SECRETARY OF STATE

LESLIE CUMMINGS
DEPUTY SECRETARY OF STATE

ARCHIVES DIVISION
MARY BETH HERKERT
DIRECTOR

800 SUMMER STREET NE
SALEM, OR 97310
503-373-0701

NOTICE OF PROPOSED RULEMAKING

INCLUDING STATEMENT OF NEED & FISCAL IMPACT

CHAPTER 340
DEPARTMENT OF ENVIRONMENTAL QUALITY

FILED
01/24/2019 9:52 AM
ARCHIVES DIVISION
SECRETARY OF STATE

FILING CAPTION: LRAPA Cleaner Air Oregon

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 03/14/2019 12:45 PM

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.

CONTACT: Emil Hnidey
503-229-5946
hnidey.emil@deq.state.or.us

700 NE Multnomah St
Suite 600
Portland ,OR 97232

Filed By:
Emil Hnidey
Rules Coordinator

HEARING(S)

Auxilary aids for persons with disabilities are available upon advance request. Notify the contact listed above.

DATE: 03/14/2019
TIME: 12:30 PM - 12:45 PM
OFFICER: LRAPA Staff
ADDRESS: Eugene Water and Electric Board
500 East 4th Avenue
Eugene, OR 97401
SPECIAL INSTRUCTIONS:
Meeting Room in the North Building

NEED FOR THE RULE(S):

Prior to adoption of OAR 340 division 245, DEQ and LRAPA air quality rules did not limit toxic air contaminant emissions based on health risks for people near industrial and commercial facilities. As a result there may have been regulatory gaps that resulted in significant localized health risks from facilities.

The draft rules would revise several existing titles in LRAPA's Rules and Regulations to integrate the new toxics rules into the existing LRAPA air permitting program. The draft rules clarify changes to LRAPA's definitions, enforcement procedures, public participation requirements, and permitting requirements and fees for ACDPs as they all relate to the newly-adopted OAR 340 division 245.

LRAPA is not proposing any changes to OAR 340 division 245, and plans to rely on the authority provided in the EQC-adopted rules to implement that main part of the new health-based air toxics program in Lane County. Similarly, LRAPA is not proposing any changes to the Oregon Title V Operating Permit program rules or fees in OAR 340 division 218 and 220, respectively. LRAPA will continue to rely on the authority provided to the Agency in OAR 340 division 218 and 220

to implement the Title V program in Lane County.

The rules that are proposed in this rulemaking are intended to clarify requirements as they relate to existing LRAPA air quality permitting rules.

DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE:

DEQ Air Contaminant Discharge Permits – OAR 340-216-8010 Table 1
https://secure.sos.state.or.us/oard/view.action?ruleNumber=340-216-8010

DEQ Staff Report to the EQC for the Cleaner Air Oregon rulemaking dated November 15, 2018
https://www.oregon.gov/deq/EQCdocs/11152018_ItemG_CAOReport.pdf

LRAPA Air Contaminant Discharge Permits – Title 37, Section 37-8010 Table 1: Activities and Sources http://or-lanerapa.civicplus.com/DocumentCenter/View/264/Title-37---Table-1-PDF?bidId=

Air & Waste Management Association Fact Sheet: Air Pollution Emission Control Devices for Stationary Sources, April 2007
http://events.awma.org/files_original/ControlDevicesFactSheet07.pdf

EPA Air Pollution Control Cost Manual, Report No. 452/B-02-001, December 1995, Section 5, Chapter 1, SO2 and Acid Gas Cont
http://www.epa.gov/ttn/catc/dir1/cost_toc.pdf

EPA Air Pollution Control Cost Manual, Report No. 452/B-02-001, January 2002, Section 6, Chapter 1, Baghouses and Filters
http://www.epa.gov/ttn/catc/dir1/cost_toc.pdf

EPA Air Pollution Control Cost Manual, Report No. 452/B-02-001, September 1999, Section 6, Chapter 3, Electrostatic Precipita
https://www3.epa.gov/ttn/ecas/docs/cs6ch3.pdf

EPA Health and Environmental Effects of Hazardous Air Pollutants https://www.epa.gov/haps/health-and-environmental-effect hazardous-air-pollutants

EPA Technical Bulletin Choosing an Adsorption System for VOC: Carbon, Zeolite, or Polymers? May 1999
https://www3.epa.gov/ttncatc1/cica/files/fadsorb.pdf

EPA Pollution Control Technology Fact Sheet Spray-Chamber/Spray-Tower Wet Scrubber, EPA-452/F-03-016
https://www3.epa.gov/ttncatc1/cica/files/fsprytwr.pdf

EPA Air Pollution Control Technology Fact Sheet Catalytic Incinerator, EPA-452/F-03- 018
https://www3.epa.gov/ttncatc1/cica/files/fcataly.pdf

EPA Air Pollution Control Technology Fact Sheet Regenerative Incinerator, EPA- 452/F-03-021
https://www3.epa.gov/ttncatc1/cica/files/fregen.pdf

EPA Air Pollution Control Technology Fact Sheet Thermal Incinerator, EPA-452/F-03- 022
https://www3.epa.gov/ttncatc1/cica/files/fthermal.pdf

EPA Air Pollution Control Technology Fact Sheet, Paper/Nonwoven Filter – High Efficiency Particle Air (HEPA) Filter, EPA-452/F
https://www3.epa.gov/ttncatc1/cica/files/ff-hepa.pdf

EPA Pollution Control Technology Fact Sheet Fabric Filter – Mechanical Shaker Cleaned Type, EPA-452/F-03-024
https://www3.epa.gov/ttncatc1/cica/files/ff-shaker.pdf

EPA Air Pollution Control Technology Fact Sheet Dry Electrostatic Precipitator (ESP) – Wire-Plate Type, EPA-452/F-03-028
https://www3.epa.gov/ttncatc1/cica/files/fdespwpl.pdf

EPA Air Pollution Control Technology Fact Sheet Permanent Total Enclosures (PTEs), EPA-452/F-03-033
https://www3.epa.gov/ttncatc1/cica/files/fpte.pdf

EPA The Clean Air Act and the Economy https://www.epa.gov/clean-air-act-overview/clean-air-act-and-economy#economy

Analytical Components of the Benefits and Costs of the Clean Air Act 1990-2020, the Second Prospective Study
https://www.epa.gov/clean-air-act-overview/analytical-components-benefits-and-costs- clean-air-act-1990-2020-second

Air Toxics Case Study – Health Benefits of Benzene Reduction in Houston, 1990-2020
https://www.epa.gov/sites/production/files/2015-07/documents/812caaa_benzene_houston_final_report_july_2009.pdf

EPA AP-42, Chapter 12.20 Electroplating 07/1996 https://www3.epa.gov/ttnchie1/ap42/ch12/final/c12s20.pdf

EPA Integrated Risk Information System https://www.epa.gov/iris

ATSDR Toxics Substances Portal https://www.atsdr.cdc.gov/toxprofiles/index.asp

California Office of Environmental Health Hazard Assessment. Air Toxics Hot Spots Program Technical Support Document for th
Derivation of Noncancer Reference Exposure Levels. Dec, 2008 https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-sp
program-technical-support-document-derivation

OHA. 2016. Leading Causes of Death
http://public.health.oregon.gov/ProviderPartnerResources/PublicHealthAccreditation/Documents/indicators/leadingcausesofd

OHA, 2010. Estimated medical treatment costs of chronic diseases, Oregon 2010.
http://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/DATAREPORTS/Documents/datatables/CDCC_2

Oregon Vital Records http://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/VITALSTATISTICS/Pages/index.aspx

National Birth Defects Prevention Network, 2016 https://www.nbdpn.org/ar.php

Landrigan PJ, Schechter CB, Lipton JM, Fahs MC, Schwartz J. Environmental pollutants and disease in American children: estimat
morbidity, mortality, and costs for lead poisoning, asthma, cancer, and developmental disabilities. Environ Health Perspect. 2002
Jul;110(7):721-8
Weiland K, Neidell M, Rauh V, Perera F. Cost of developmental delay from prenatal exposure to airborne polycyclic aromatic
hydrocarbons. J Health Care Poor Underserved. 2011 Feb;22(1):320-9. doi: 10.1353/hpu.2011.0012
Hendryx M, Fedorko E. The relationship between toxics release inventory discharges and mortality rates in rural and urban areas
United States J Rural Health. 2011 Winter;27(4):358-66. doi: 10.1111/j.1748-0361.2011.00367.x
Hendryx M, Luo J, Chen BC. Total and cardiovascular mortality rates in relation to discharges from Toxics Release Inventory sites
United States. Environ Res. 2014 Aug;133:36-41. doi: 10.1016/j.envres.2014.05.010.
Dickerson AS, Rahbar MH, Han I, Bakian AV, Bilder DA, Harrington RA, Pettygrove S, Durkin M, Kirby RS, Wingate MS, Tian LH,
Zahorodny WM, Pearson DA, Moyé LA 3rd, Baio J. Autism spectrum disorder prevalence and proximity to industrial facilities rele
arsenic, lead or mercury. Sci Total Environ. 2015 Dec 1;536:245- 51. doi: 10.1016/j.scitotenv.2015.07.024.
deCastro BR. Acrolein and asthma attack prevalence in a representative sample of the United States adult population 2000-2009
One. 2014 May 9;9(5):e96926. doi: 10.1371/journal.pone.0096926. eCollection 2014.
Hendryx M, Luo J. Cancer hospitalizations in rural-urban areas in relation to carcinogenic discharges from Toxics Release Invento
facilities. Int J Environ Health Res. 2013;23(2):155-69. doi: 10.1080/09603123.2012.708919
Gauderman WJ, Urman R, Avol E, Berhane K, McConnell R, Rappaport E, Chang R, Lurmann F, Gilliland F. Association of improved
quality with lung development in children. N Engl J Med. 2015 Mar 5;372(10):905-13. doi: 10.1056/NEJMoa1414123
Berhane K, Chang CC, McConnell R, Gauderman WJ, Avol E, Rapapport E, Urman R, Lurmann F, Gilliland F. Association of Change
Quality With Bronchitic Symptoms in Children in California, 1993-2012. JAMA. 2016 Apr 12;315(14):1491-501. doi:
10.1001/jama.2016.3444.
Parker JD, Mendola P, Woodruff TJ. Preterm birth after the Utah Valley Steel Mill closure: a natural experiment. Epidemiology. 2
Nov;19(6):820-3. doi: 10.1097/EDE.0b013e3181883d5d.
Pope CA 3rd.Respiratory disease associated with community air pollution and a steel mill, Utah Valley. Am J Public Health. 1989
May;79(5):623-8.

EPA, History of Reducing Air Pollution from Transportation in the United States
https://www.epa.gov/transportation-air-pollution-and-climate-change/accomplishments-and-success-air-pollution-transportati

Berman E, T.M. Bui L, Environmental regulation and labor demand: evidence from the South Coast Air Basin
http://econweb.ucsd.edu/~elib/berman_bui2001

The Clean Air Act and the Economy https://www.epa.gov/clean-air-act-overview/clean-air-act-and-economy

---

FISCAL AND ECONOMIC IMPACT:

Background
DEQ held a public comment period on an earlier draft of the Cleaner Air Oregon rules between October 2017 and January 2018. In March 2018, the Oregon Legislature passed SB 1541, which provided fee authorization and set certain program requirements. The agencies updated the proposed rules as a result of the earlier public comments and SB 1541. This fiscal impact statement describes the fiscal and economic impacts of the Cleaner Air Oregon rules, and references input received during two fiscal impact review advisory committee processes and the 2017 and 2018 public comment periods.

SB 1541 set benchmarks for excess lifetime cancer risk and noncancer risk, defined as Risk Action Levels in the Cleaner Air Oregon proposed rules, in statute at levels higher than what DEQ and OHA originally proposed. Based on those higher risk levels, there would be potentially less fiscal impact on regulated businesses and potentially greater costs related to public health since not as much risk reduction would be realized. In addition, the SB 1541 requirement that a source complying with federal NESHAPs would presumptively meet TBACT requirements would be expected to further limit Cleaner Air Oregon fiscal impacts at many facilities. As stated below, DEQ used best available information to estimate potential fiscal impacts, but specifically quantifying fiscal impacts was not possible because of the lack of detailed facility-specific data and risk analyses, which have not been completed, and data on health effects in specific populations near specific facilities which is not available.

DEQ determined and most CAO rules advisory committee members believed that Cleaner Air Oregon could cause a significant fiscal impact for small businesses. LRAPA agrees with this determination. As is the case for businesses generally, the extent of the small business fiscal impact is unknown and cannot be accurately quantified because it depends on future analysis of source emissions and risk, and any required emission controls. In addition to the fiscal mitigation measures initially proposed in Cleaner Air Oregon, DEQ has proposed and/or the EQC has adopted additional significant small business fiscal impact mitigation measures to lower cost, streamline procedural requirements, and provide flexibility for both small and large businesses.

Methodology for this analysis
The following analysis describes fiscal impacts to business, government and the public. For regulated businesses, the analysis focuses on the fiscal impacts associated with performing risk assessments at different levels, reducing risk, and paying fees for Cleaner Air Oregon permitting. For government, the analysis describes potential impacts on government-owned facilities and fiscal impacts to the agencies administering the new regulations. For the public, the

analysis describes potential benefits to the service and consulting sector and, using example pollutants and associated illnesses, potential general fiscal benefits from decreasing health risks. All estimates in this analysis are bounded by important caveats and limitations.

DEQ used EPA Air Pollution Control Technology Fact Sheets to estimate ranges of costs for pollution control equipment that facilities may need to install if required to control toxic air contaminant emissions under CAO. DEQ contacted several pollution control equipment suppliers but they were not able to provide more detailed cost estimates without site-specific data (i.e., toxic air contaminant emitted, exhaust airflow and temperature, and space availability). Throughout the rulemaking process, DEQ also requested specific information on fiscal impacts from regulated sources who have cost information relevant to the proposed rules. During the two fiscal impact review processes and public comment periods, DEQ received a limited amount of information from committee members and commenters on costs of purchasing, installing and operating specific pollution control equipment. DEQ incorporated those estimates in the fiscal impact statement.

In November 2016 DEQ and LRAPA sent a request to permitted facilities that may be subject to Cleaner Air Oregon rules to report on their toxic air contaminant emissions. Facilities have submitted emissions data and the Agencies worked with facilities to check the quality of their information. While this level of emissions inventory is sufficient to begin the prioritization and call-in process, the more detailed data and analysis necessary to calculate a facility's risk is not available yet. Each affected facility will need to go through the proposed risk screening and assessment process to gain accurate knowledge about risk posed and regulatory requirements. Some businesses will not be called in to demonstrate compliance and will experience little fiscal impact, some will "screen out" at more simple assessment levels and will experience relatively low fiscal impact, while others will be required to implement more complex and costly steps to assess and reduce risk from their toxic air contaminant emissions. Without a facility proceeding through the full steps of risk screening and assessment, it is not possible to predict with accuracy how much a particular business would have to spend to comply with risk reduction requirements, or how much benefit from reduction of associated toxic air contaminant risk could occur for people living nearby.

Because of the high level of uncertainty about precisely who will be affected and how, this fiscal analysis estimates potential ranges of impacts for business, government and the public, rather than developing speculative scenarios for hypothetical facilities or for each of the approximately 300 facilities that could be affected by Cleaner Air Oregon rules in Lane County. Generating scenarios for each potentially affected facility would have required additional research and modeling work for which resources were not available.

Who would experience fiscal and economic impacts?
The proposed rules would have fiscal and economic impacts on businesses, state and federal agencies, units of local governments and the public. Fiscal impacts can be positive or negative to those affected. As examples, reducing health costs to the public would be a positive impact, and increasing costs of regulatory compliance for businesses would be a negative impact.
Owners and operators of facilities that currently require an air quality permit would incur costs of program permit fees, described above, and be required to analyze whether emissions from their operations are below Risk Action Levels set under the Cleaner Air Oregon rules. This includes public entities who manage facilities or operations requiring an air quality permit. Cost estimates for these analyses are included in Table 7 in the staff report, Cost to Facilities for Emissions Analysis and Risk Assessment. Some facilities with emissions resulting in health risks above Risk Action

Levels would incur additional costs to participate in community engagement and/or to reduce emissions.
People who are exposed to toxic air contaminants at sufficient concentrations and durations have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental (e.g., birth defects), respiratory and other health problems. In addition to exposure from breathing toxic air contaminants, some toxic air contaminants, such as mercury, can deposit onto soils or surface waters, where they are taken up by plants or ingested by animals and are eventually magnified up through the food chain to human consumption. The proposed rules may result in reduced toxic air contaminant emissions and less exposure to toxic air contaminants for people who live and work in proximity to facilities that emit toxic air contaminants. Less exposure to toxic air contaminants will result in fewer premature deaths and illnesses allowing Oregonians to experience longer lives, better quality of life, lower medical expenses, fewer work and school absences, and better worker productivity.

Reporting

All currently permitted sources report to LRAPA annually, so their reporting requirements for Cleaner Air Oregon will be in addition to existing reporting requirements. Some facilities that aren't required to have air permits under current regulations may still be required to report, and in that case annual reporting would be new. Some facilities already report emissions of Hazardous Air Pollutants (187 pollutants out of approximately 600 toxic air contaminants) annually. Under the adopted regulations, all permitted facilities that emit toxic air contaminants must submit an emissions inventory to LRAPA every three years. Facilities that have permit requirements to limit toxic air contaminant emissions must report compliance annually or semi-annually.

Since facilities with current air permits were already required to submit an initial toxic air contaminant emissions inventory, future updates of their emissions inventory should involve lower costs. DEQ anticipated that the additional reporting requirements for Cleaner Air Oregon would cost facilities approximately $120 to $1,200 per year.

Source testing

Source testing is currently not required as a part of Cleaner Air Oregon, but some facilities may choose to do source testing to more accurately estimate emissions. Source testing may be required to determine compliance with Cleaner Air Oregon permit conditions but DEQ and LRAPA anticipate that will not be the case for very many sources. Cost for source testing depends on the toxic air contaminant to be tested, the length of the test, and other factors. Source testing for some toxic air contaminants, such as hexavalent chromium, is relatively complex and therefore expensive. Source test costs range from $7,500 for a single toxic air contaminant that is easy to test to $35,000 for multiple toxic air contaminants that are more difficult to test. Businesses already required to perform periodic compliance source testing could limit some of these additional costs if toxic air contaminant and criteria pollutant tests could be aligned.

Monitoring

The adopted Cleaner Air Oregon regulations allow facilities to conduct ambient air monitoring and to use that data to supplement their risk assessments if they choose. DEQ and LRAPA expect that the cost of monitoring would vary based on equipment and analysis needed for different pollutants to be monitored and the number of monitors needed. Depending on the topography, meteorology, land use and exposure locations, a facility may need to run multiple monitor locations to accurately characterize concentrations resulting from its emissions.
DEQ estimated that the lower end cost for a year of monitoring including equipment, deployment and pollutant analysis could be $50,000 per monitoring location. Assuming a site would require four monitor locations, this total lower end

cost could be $200,000. DEQ estimated that the higher end cost for more complex equipment, analysis or multiple pollutants could be $200,000 per monitor. If a facility needed four such locations, the total upper end cost could be $800,000. DEQ deleted an earlier proposal allowing it to require that a facility undertake monitoring and it is now a voluntary action that a facility may employ.

Community engagement

SB 1541 requires that LRAPA (rather than facilities, as proposed in an earlier draft of the rules), provide community engagement. This decreases direct community engagement costs for facilities, but fees assessed to facilities support this activity performed by LRAPA staff. If the risk from a facility is greater than the Community Engagement Risk Action Level, the Agency will provide Community Engagement and other outreach activities near that facility. As part of community engagement, LRAPA will notify the community within the area of impact when a permit addendum application is submitted, and may hold one or more public meetings to describe the risks, and solicit input on ways to reduce the risks. If LRAPA holds a required public meeting, facilities would be required to attend and to pay a fee to LRAPA.

COST OF COMPLIANCE:

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

State agencies

The majority of state agencies and local governments should be minimally or not directly impacted by the proposed rules because the rules predominantly regulate process emission sources that are not government owned. However, state agencies and local government facilities that emit toxic air contaminants may be required to reduce toxic air contaminant emissions if the predicted risk exceeds Risk Action Levels. If owners or operators choose to install pollution control equipment, Table 8 in the staff report shows what the range of estimated costs could be for both government-owned and business facilities. As of August 31, 2017 DEQ estimated that state agencies own 23 permitted facilities, federal agencies own five (5) permitted facilities, and local governments own 62 permitted facilities. In Lane County, as of December 31, 2018, state agencies own two (2) permitted facilities, federal agencies own zero (0) permitted facilities, and local governments own nine (9) permitted facilities. Currently there are no tribally owned permitted facilities. Cleaner Air Oregon base and activity fees affect these permit holders directly. Changes to fees could affect these agencies indirectly if businesses change the price of goods and services to offset any increased costs from paying a permit fee. Local government may also be consulted in land use issues related to commercial facilities emitting toxic air contaminants.

LRAPA will see an increase in workload as a result of the proposed rules. Implementation of program requirements will require additional resources. LRAPA has completed a workload analysis to estimate the cost of different levels of risk assessment and the additional resources needed. LRAPA will permit facilities subject to Cleaner Air Oregon with the aid of DEQ and possibly OHA staff in areas of health risk assessment, community engagement, and risk communication. LRAPA workloads would initially increase as staff become familiar with the proposed rules and a new program and could level off after the first years of implementation.

Having the Cleaner Air Oregon toxic air contaminant program in place may also reduce LRAPA and OHA's workload in some instances, by reducing the need for the agencies to respond on a facility by facility basis to public concerns about toxic air contaminant emissions and health effects that are not currently covered by a regulatory structure.
As an alternative to or in addition to the controls above, facilities may be able to use pollution prevention to meet CAO risk reduction requirements. In EPA's, DEQ's, and LRAPA's hierarchy of pollution management strategies (acceptable ways to reduce pollution), pollution prevention, also known as source reduction, is preferred over the addition of pollution controls and treatment whenever feasible (see Pollution Prevention Act of 1990, https://www.epa.gov/p2/pollution-prevention-act-1990). Pollution prevention has been implemented successfully for cleaning operations (e.g., metal parts), coating and painting (e.g., marine anti-fouling, wood preservation), lubricants and process fluids (e.g., loss lubrication, mold release agents), and dry cleaning of clothes. In evaluating the costs of pollution prevention, DEQ considered not only the cost of replacing one production method with another, but also capital costs, energy differences, labor costs, waste disposal and quality control considerations. In many instances involving both large and small businesses, DEQ found that pollution prevention can decrease costs for a facility owner, rather than increase them. Short-term investments in pollution prevention measures can result in savings that may pay for the initial investments over time.

Local governments

As noted above, local governments own or operate 9 facilities currently requiring an air quality permit in Lane County. Minimally, those local government agencies would be impacted by the proposed fee structure for Cleaner Air Oregon which includes an annual base fee assessed on all current air quality permit holders. In addition, local governments who operate facilities that are called in to Cleaner Air Oregon would be required to assess the risk that the facility's emissions pose and in some cases may be required to reduce that risk.

Local government representatives, such as city or county health or planning staff and elected officials may also be impacted by the need to participate in public meetings, including time to research and understand potential toxic air contaminant health concerns and risk assessment and permitting issues, and time spent preparing communications and attending meetings. DEQ and LRAPA are not able to quantify the time and fiscal impact on public process participants, but recognizes that time spent may impact local government budgets for travel or other expenses.

Large businesses

LRAPA anticipates the proposed rules, when fully implemented, could have fiscal and economic impacts on approximately 150 existing large businesses holding air quality permits and an unknown number of new large businesses and businesses that do not have air permits. If the cancer or noncancer risk from a facility exceeds the Risk Action Levels, the facility would be required to take action to reduce toxic air contaminant emissions or show that TLAER or TBACT is already being achieved. The proposed rules would allow facilities flexibility in choosing a method to reduce emissions through the application of pollution prevention or pollution control equipment. If owners or operators choose to install pollution control equipment, Table 8 in the staff report shows what the range of estimated costs could be. Small businesses may also incur these costs if required to install pollution control equipment.
As required by SB 1541, the draft proposed rules allow that existing facilities (major sources of hazardous air pollutants that emit 10 tons/year of one hazardous air pollutant or 25 tons/year of combined hazardous air pollutants) complying with federal toxic air contaminant standards known as National Emission Standards for Hazardous Air Pollutants (NESHAPs) will under certain conditions be presumed to meet TBACT requirements. Although specific numbers will not

be known until sources proceed through the screening and analysis process, this requirement will likely decrease fiscal and economic impacts for many sources of toxic air contaminants. Many facilities already complying with a NESHAP would not need to reduce their risk unless they exceed a risk level of 200 in a million excess cancer risk or an HI of 10. This is higher than the originally proposed levels of 25 in a million and an HI of 1, and is expected to result in a lower fiscal impact than the October 2017 proposed rules.

Included in public comments DEQ received was a cost benefit analysis performed by Maul Foster Alongi (MFA) on behalf of Oregonians for Fair Air Regulations (OFAR), a business interest group. The MFA analysis submitted by OFAR during the first public comment period concluded that CAO would cost facilities between $44 million and $8.4 billion over the first 20 years of the program. An updated analysis submitted during the second public comment period concluded that CAO would cost facilities between $44 million and $34 billion over the first 20 years of the program. DEQ reviewed MFA's analysis, but the information submitted with the public comment was not sufficient to fully reconstruct it. However, DEQ can comment on the assumptions that were listed.

The MFA analysis was designed to "bracket" potential CAO compliance costs between a low and high scenario, with a medium scenario in between. The low scenario is based on an assumption that all facilities will screen out of CAO requirements with a Level 1 risk assessment, which does appear to represent a lower bound to what CAO compliance costs could be for facilities. DEQ analyzed the medium and high scenarios proposed by MFA and believes that they include several factors that tend to significantly overestimate the total costs.

MFA assumed that all facilities with air permits will be called in to CAO during the first 20 years of the program, which would overestimate costs because DEQ will likely not call in facilities that screen out as de minimis based on emissions inventory data.

MFA also appeared to assume that all facilities that are above the TBACT level after a Level 3 risk assessment will proceed to Level 4, though DEQ anticipates that few facilities will have the unusual exposure scenarios under which it would benefit them to perform a Level 4 risk assessment.

MFA also assumed that all facilities that proceed to Level 4 will ultimately install pollution controls. This is likely an overestimate because many facilities above the TBACT level may qualify as having presumptive TBACT, based on the new rule provisions brought in from SB 1541. Also, the increase in the RALs between the first and second public comment periods should reduce the number of facilities that will be required to install pollution controls, but did not reduce MFA's estimate of that parameter.

MFA's estimate of the cost of installing and operating pollution controls for CAO is also likely to be an overestimate, particularly for their most recent submittal, because they used an average of installation and operation costs from a list of pollution controls that included controls that would be necessary only for a coal-fired power plant, which are very high cost. That is likely to be an overestimate because Oregon's only coal-fired power plant is mandated by rule to close in 2020, and Oregon statutes phasing out coal-fired power mean that new coal-fired power plants in Oregon (with attendant high pollution control costs) are unlikely.

Finally, MFA acknowledged that their analysis, "does not reflect any specific Oregon facility, and the information available to MFA is insufficient to allow estimation of whether any specific facility will incur increased costs or the value of those costs." DEQ concluded that the MFA medium- and high-cost scenarios both likely significantly overstate the fiscal impacts on businesses.

The ultimate compliance costs of the program would depend on many factors, including facility risk assessments and TBACT analyses that are not yet complete. DEQ has concluded that the overall cost to business over a 20 year period is likely at least $44 million, and will likely be higher than that. LRAPA estimates based upon relative numbers of permitted facilities that the overall cost to business over a 20 year period is likely at least $6 million. But any determination of how much higher would be purely speculative. That said, DEQ provided, in Tables 7 and 8 in the staff report, the ranges of costs that individual facilities will encounter when they are "called in" and are required to demonstrate compliance with the CAO rules.

Impacts on the public

The adopted Cleaner Air Oregon rules are intended to assess and decrease risk above Risk Action Levels for people living near industrial and commercial facilities that emit toxic air contaminants. Risk analyses will be based on many factors, including the best available science regarding toxicity of regulated toxic air contaminants, as in the Risk-Based Concentrations. Cleaner Air Oregon toxic air contaminant reductions that decrease cancer risk, chronic noncancer risk or acute noncancer risk could create positive economic benefits and improvements in public health and welfare statewide. The rules could also have negative economic effects on the public. In analyzing potential positive and negative effects on the public of the proposed Cleaner Air Oregon rules, DEQ consulted with OHA staff and relied upon information provided by them.

Positive impacts on the public

The adopted Cleaner Air Oregon rules have the potential to meaningfully impact public health in the state by reducing toxic air contaminant emissions. The toxic air contaminants that would be regulated by Cleaner Air Oregon rules are known to increase risk of a wide range of health outcomes including cardiovascular and respiratory illness, lung disease, cancers, birth defects, premature births, developmental disorders, central nervous system damage, intellectual disability, and premature death.

Based on a preliminary analysis of a subset of emissions inventory data using proposed screening tools and Risk Action Levels, DEQ and OHA have determined that a number of toxic air contaminants are most likely emitted at concentrations whose risk exceeds the proposed Risk Action Levels. Information from EPA's National Air Toxics Assessment supports this initial analysis. The impact of toxic air contaminants on health depends on people's exposure. DEQ, OHA and LRAPA do not currently have enough information about how many people are exposed to specific concentrations of industrial and commercial toxic air contaminant emissions or about the relative actual contribution of toxic air contaminants to disease to know how reducing emissions will translate to improved public health in quantitative terms. As Cleaner Air Oregon regulations are implemented, the emissions inventory and the permitting process will improve LRAPA, DEQ and OHA's understanding of Oregonians' toxic air contaminant exposures. This is especially true for public health risk from toxic air contaminants in neighborhoods close to industrial facilities, where risk may never have been specifically or accurately assessed.

National and local air toxics models and other states' estimates show that an array of emissions sources contribute significantly to public health risk. These include non-industrial emissions from vehicle engines, wood burning and atmospheric formation of toxic air contaminants, as well as industrial emissions. However this information cannot be used to estimate risk for people living nearby industrial facilities because the data are on too large a geographic scale, do not factor in where people are actually exposed, do not include all facilities, do not assess the number of pollutants proposed for Cleaner Air Oregon, and do not include risk from acute exposures. At the geographic level of neighborhoods that could be impacted by industrial toxic air contaminant emissions, the relative proportions of sources causing toxic air contaminant risk can be very different from those on a larger spatial scale, for example at the census tract, county or state level. In other air quality programs, DEQ and LRAPA continue to work on the larger scale exposure risks from ubiquitous non industrial sources. Cleaner Air Oregon gave LRAPA a regulatory tool to address localized health risks from toxic air contaminants, and industrial emissions reductions will also contribute to area-wide reductions in air toxics.

In this analysis it is not possible to predict the total reduced medical costs that would result from the proposed rules for the reasons noted above. However, it is possible to describe the range of health outcomes associated with toxic air contaminants currently emitted in Oregon and to describe the economic burden of medical treatment for a subset of those health effects. This section also points to national analyses that estimate the fraction of certain diseases that are due to environmental exposures.

Health effects caused by toxic air contaminants commonly emitted by facilities in Oregon

DEQ and OHA summarized the health effects associated with 15 of the toxic air contaminants to be regulated under Cleaner Air Oregon. This information is summarized in Table 9 in the staff report. This summary illustrates the range of health effects that may be caused by this small subset of 15 toxic air contaminants. Many more of the toxic air contaminants to be regulated under Cleaner Air Oregon are associated with these and other health effects.

Information needed to quantify economic impact of health improvements

Oregon currently lacks the data necessary to quantify total potential health cost savings from Cleaner Air Oregon because of the lack of information about how many people are exposed to specific concentrations of industrial and commercial toxic air contaminant emissions and the relative actual contribution of toxic air contaminants to disease. Just as a lack of information about individual facility risk assessment and emission reduction outcomes prevents LRAPA, DEQ and OHA from quantifying specific fiscal impacts to businesses, a lack of health information also prevents LRAPA and DEQ from quantifying specific positive fiscal impacts from potential Cleaner Air Oregon emission reductions. The health impact of reducing emissions depends on the specific chemicals that are being reduced, the health risks those chemicals influence, the relationship between exposure and health, and the extent to which emissions are reduced. Defining the economic impact of improved health further requires knowledge of the portion of cases that are related to toxic air contaminant exposures, prevalence of health outcomes in the state, and the cost of medical treatment for each case.

Included with the compliance cost analysis submitted by Oregonians for Fair Air Regulations was an analysis of the health benefits of CAO. The submittal during the first public comment period, prepared for OFAR by Maul Foster Alongi, attempted to quantify an upper bound for potential health benefits of CAO, using information about asthma, cancer and cardiovascular disease and assumptions about the proportion of those diseases caused by pollution from emissions sources that would be subject to CAO. DEQ and OHA reviewed and considered the methods and conclusions of their analysis. The agencies concluded that there was not sufficient evidence to support several of the fundamental assumptions of MFA's calculations. More information can be found in the response to the public comment category "Fiscal impacts – Sufficiency of fiscal impact statement". The updated MFA analysis submitted during the second public comment period did not attempt to quantify the potential health benefits.

As described above, DEQ and OHA believe that multiple data gaps would need to be filled in order to accurately quantify potential health benefits of CAO at this time. However, we have presented information about what is known, including known data gaps, in the sections below.

Table 10 in the staff report summarizes data limitations for the different types of information that would be necessary to assess health effects.

Costs of chronic diseases in Oregon

Toxic air contaminants included in Cleaner Air Oregon are associated with increased risk of four of the top five leading causes of death in Oregon (heart disease, stroke, respiratory disease, and cancer). LRAPA, DEQ and OHA don't know what portion of these may be attributable to industrial and commercial toxic air contaminants, but data clearly show that chronic diseases have a substantial social and economic impact in Oregon. OHA uses Center for Disease Control and Prevention data to estimate the cost of certain chronic diseases in Oregon. If even a small fraction of these chronic health outcomes is attributable to toxic air contaminants, reducing emissions could prevent substantial health costs in addition to human suffering. The total estimated costs of chronic diseases tracked in Oregon are summarized in Table 11 in the staff report.

Oregon Health Authority also tracks cases of pre-term birth, low birth weight, miscarriage, and some birth defects.

There are no existing estimates of the direct medical costs associated with these adverse birth outcomes in Oregon, but there is potential for substantial economic and social impact. The total incidence of selected adverse birth outcomes in Oregon are summarized in Table 12 in the staff report. While several toxic air contaminants are associated with increased risk for these adverse birth outcomes, the portion of cases attributable to exposure to toxic air contaminants is unknown.

Estimates of the portion of health effects caused by pollution

Several analyses have estimated the portion of a given disease that is attributable to environmental exposures. Because there is often uncertainty around the complex ways that genes, nutrition, social factors, behavior, and chemical exposures interact to influence health, the environmentally attributable fraction is often presented as a range rather than a specific number.

These estimates of the environmentally attributable fraction are not specific to the set of toxic air contaminants included in Cleaner Air Oregon. Therefore, these numbers cannot be directly applied to estimate the contribution of toxic air contaminants to health risks in Oregon. Rather, they provide an indication of the potential magnitude of the contribution of pollution to disease. The most comprehensive assessment of the contribution of pollution to disease is a 2002 study drawing on 1997 data (dollar figures are 1997 dollars). The findings are summarized below.

- Asthma. Researchers estimate that 10-30% of asthma is attributable to outdoor air pollution (including both industrial and non-industrial sources). The yearly fraction of asthma cases that could be attributed to environmental factors cost the US between $0.7 and $2.3 billion. These cost estimates account for direct medical costs and lost productivity due to asthma-related premature deaths.
- Cancer. Researchers estimate that between 2-10% of childhood cancer is attributable to environmental factors, accounting for nationwide costs ranging from $132-663 million a year. These cost estimates account for direct medical costs, costs associated with secondary cancers, lost productivity associated with treatments and premature death.5
- Neurodevelopmental disorders. Researchers estimate that 5-20% of neurodevelopmental disorders such as ADHD, autism, and mental retardation may be attributable to environmental factors (excluding lead which was considered separately), costing the US between $4.6-18.4 billion a year. Cost estimates in this study were based on direct costs of medical care, long-term care, and lost productivity.5 Another study estimated that developmental delays caused by exposure to polycyclic aromatic hydrocarbons in New York City alone cost $13.7 million.
- Lead Poisoning. Researchers estimated that the total cost of childhood lead poisoning in the US was 43.4 billion yearly. All cases of lead poisoning are attributed to lead exposure, but the relative contribution of different sources of exposure to lead is not well established.

Living near industrial and commercial sites is associated with increased risk of illness

Several national studies, most published in the past five years, have found that living near industrial and commercial sites increases risk for several health conditions that are common in Oregon. The specific health impacts that are observed depend on the kinds of chemicals industries are using. Taken together, these studies suggest that reducing industrial and commercial exposure to toxic air contaminants could improve health.

- Mortality. A national study found that counties with higher rates of toxic air and water emissions also had increased rates of adjusted mortality.
- Cardiovascular disease. A national study found that counties with higher emissions of carcinogens, metals, or hazardous air pollutants saw significantly higher rates of mortality from cardiovascular disease.
- Autism. A national study found that children living close to industrial and commercial facilities releasing arsenic, lead or mercury into the air are significantly more likely to be diagnosed with autism spectrum disorder.

• Asthma. A nationwide evaluation of National Air Toxics Assessment data performed by CDC scientists found a correlation between modeled acrolein exposure and prevalence of asthma attacks in census tracts across the US.
• Cancer. A national study found that living close to industrial and commercial facilities releasing chemicals known to cause cancer is associated with significantly higher rates of cancer hospitalizations. The authors estimated that in 2009, excess cancer risk associated with these industrial and commercial exposures cost an estimated $902.8 million in treatment costs.

Improved air quality can improve public health

There are several examples of clear public health improvements observed in response to improvements in air quality:
• In Southern California, air pollution control efforts were accompanied by meaningful improvements in children's respiratory health. As air quality improved, the percent of children with decreased lung function was cut in half, and children with asthma were 30% less likely to experience symptoms of bronchitis.
• The temporary closure of a steel mill in Utah Valley was linked to temporary improvements in birth outcomes and respiratory health. One study found that rates of premature birth were significantly lower among women who were pregnant while the mill was closed than among women who were pregnant before or after the closure. Another study found that children's hospital admissions for pneumonia, bronchitis and asthma were two to three times higher when the mill was opened than when it was closed.
• Federal regulations on leaded gasoline resulted in a dramatic decrease in blood lead levels in children across the country. The Center for Disease Control and Prevention has concluded that there is no safe level of lead exposure due to its impacts on brain development. Because lead exposure comes from many sources, scientists were not sure of the extent to which lead from paint and gasoline were responsible for high blood lead levels in children until they were able to observe the effect of these regulations.

Other considerations

In attempting to estimate the economic and health burden of toxic air contaminant emissions in Oregon, there are several additional points worth considering:
• A portion of the health costs of toxic air contaminant emissions are currently externalized. People who are not employed by a facility, but who live, go to school, or work near a facility emitting pollutants above proposed Risk Action Levels may bear the health burden of pollution exposure without experiencing the economic benefit a facility may have from exceeding Risk Action Levels.
• Many of the broader social costs of disease are particularly difficult to quantify. For example, indirect costs of asthma hospitalization include missed days of work and school; indirect costs of neurodevelopmental delays include lost lifetime earning potential, social isolation, and caregiver time; indirect costs of fetal heart malformation often include increased risk of secondary health effects.
• Risk-based toxic air contaminant permitting regulations could also significantly improve the health of workers, resulting in lower health care costs and more productive workers. Workplace exposure standards are typically not entirely health-based.

Negative impacts on the public

The proposed rules could have negative economic effects on the public if facilities providing jobs and contributing to local economies were to curtail production or close in response to regulatory requirements. LRAPA, DEQ and OHA recognize that employment plays a key role in public health, and that negative economic impacts through job loss could occur despite proposed provisions to allow business flexibility and decrease the chances of business closures or employee layoffs in direct response to regulations.

Some of the same provisions that mitigate impacts on small businesses can potentially mitigate public impacts from lower employment. Under the draft rules, facilities above Risk Action Levels may wait for effective control technologies to develop if none are available at the time of permitting, unless their risk is above the Risk Reduction Level. Facilities demonstrating a lack of financial ability to install the needed controls at the time required could postpone installation of controls to reduce risk. The proposed tiered implementation will delay potential impacts to many facilities. However, business decisions are influenced by many factors, and LRAPA therefore lacks information to predict specific potential impacts to employment that would adversely affect the public.

The proposed rules could affect the public indirectly if businesses alter the price of goods and services in response to increased base or activity permit fees or the cost to comply with Cleaner Air Oregon rules. DEQ and LRAPA expect any such price increases to be small, but lacks available information to estimate potential increases accurately.

Citizens may also be impacted by the need to participate in public meetings, including time to research and understand potential toxic air contaminant health concerns and risk assessment and permitting issues, and time spent preparing communications and attending meetings. LRAPA is not able to quantify the time and fiscal impact on public process participants, but recognizes that time spent may impact members of the public and require time away from work, childcare, travel or other expenses.

Impacts on the environmental services sector

The direct cost of complying with regulations can result in increased employment in the environmental services sector. For example, an environmental regulation could mean more jobs for those engaged in environmental consulting and pollution abatement. Further, it is possible that regulations may produce more labor-intensive production processes. Studies of national air quality regulations have shown positive effects on overall economic health. The Clean Air Act's public health safeguards encourage technology investments that can have positive economic effects on the public.

General impacts to businesses from environmental regulations

Although in the short term new environmental regulations can have some positive and negative impacts on employment in different sectors, studies indicate that those impacts are limited and that the overall effect of environmental regulations on reported job shift events are extremely minor compared to other factors, such as overall economic growth, business cycles, and changes in technology.

A peer-reviewed study by economists at Resources for the Future, a nonpartisan Washington, D.C. think tank, examined the impact of environmental compliance costs on employment in four regulated industries (pulp and paper, refining, iron and steel, and plastics). They concluded that increased environmental spending generally does not cause a significant change in employment. Another peer-reviewed study published in the Journal of Public Economics found no evidence that stringent local air quality regulation substantially reduced employment in the Los Angeles basin over a 13-year period of "sharply increased" regulation.

Small businesses

Similar to the requirements for large businesses, the proposed rules would require that the facility owner or operator of a small business demonstrate that the risk posed by the facility's air emissions would not exceed the proposed Risk Action Levels. This compliance demonstration can be accomplished using any of the levels of risk assessment, 1 through 4.
In addition to the fiscal and economic impact described in the large business section above, the proposed rules could have the following impacts on small business:

Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule
The proposed rules could affect approximately 130 small businesses in Lane County. These businesses include asphalt plants, auto body shops, chromium electroplaters, ethylene oxide sterilizers, grain elevators, lumber mills, metal fabricators, metal foundries, and surface coaters. If any of these businesses are called in to Cleaner Air Oregon and receive CAO permit conditions, they would have additional compliance requirements in addition to existing permit requirements. In addition there may be an unknown number of additional facilities that are currently not required to get permits under the existing air quality permitting program but may be required to submit emissions inventories, perform risk assessment and pay fees because of the Cleaner Air Oregon rules. Facilities that are not required to get air permits under existing rules could not be required to reduce risk under Cleaner Air Oregon.

Many of the small businesses subject to the Cleaner Air Oregon rules would only be required to submit triennial reports of toxic air contaminant emissions. Some small businesses may be required to reduce toxic air contaminant emissions through either permit limits, pollution prevention or pollution control equipment if cancer risk, chronic noncancer risk or acute noncancer risk is above Risk Action Levels.

Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule
Small businesses that must meet Cleaner Air Oregon permit requirements would have increased recordkeeping and reporting requirements. Administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule may increase in a range from $100 to $500,000 above current costs if the small business is required to perform computer modeling or a health risk assessment if cancer risk, chronic noncancer risk or acute noncancer risk is above Risk Action Levels.

Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule
Depending on the size and nature of a small business's operation, pollution control costs could be much less than, or in some cases the same as, the cost ranges for different types of control equipment found in Table 8, in the staff report. Summarizing from Table 8, if a small business's cancer risk, chronic noncancer risk or acute noncancer risk were above Risk Action Levels, the proposed rules could result in additional costs ranging from approximately $13,000 to $18,500,000 for initial equipment including purchase and labor, and ranging from approximately $400 to $7,600,000 in annual operating costs . The same decrease in costs that apply to large businesses resulting from higher risk action levels required in SB 1541 will apply to smaller businesses. Smaller businesses are even more likely to screen out of more costly Cleaner Air Oregon requirements at risk levels of 50 in a million and an HI of 5.

Because of existing regulatory coverage and generally low risk estimates for gas stations and dry cleaners, DEQ proposed not to require these facilities to perform risk assessments. If DEQ and LRAPA determine that risk may need to be reduced from these types of facilities, DEQ would change the existing rules that would apply to all gas stations and dry cleaners. These facilities would need to pay small fees to be tracked and evaluated by DEQ and LRAPA, but generally would not bear the costs of risk analysis or emission reductions.

Mitigation measures for small businesses

DEQ determined and most fiscal advisory committee members indicated that Cleaner Air Oregon could cause a significant fiscal impact for small businesses. LRAPA agrees with that determination. As is the case for businesses in general, the extent of the small business fiscal impact is unknown and cannot be accurately quantified because it depends on future analysis of source emissions and risk, and any required emission controls. As a result of public comment and discussion with the fiscal advisory committee in two meetings, DEQ developed a final proposal of small business fiscal impact mitigation measures in Cleaner Air Oregon to lower cost, streamline procedural requirements, and provide flexibility for small business. DEQ lacked specific information to provide estimates of cost decreased from these measures. Mitigation measures include:

Cleaner Air Oregon base fees are a percentage of existing permit base fees. Many smaller facilities are on General or Basic Air Contaminant Discharge Permits, which have lower base fees and whose CAO base fees would also be low. This is consistent with fiscal advisory committee small business mitigation recommendations on providing lower fees for small businesses.

Smaller sources on General and Basic Air Contaminant Discharge Permits (approximately 250 Lane County sources, including gas stations and dry cleaners) are not be required to prepare and submit an emissions inventory, as was required for all other permitted sources. These businesses are not required to perform Level 1 risk assessment either. LRAPA will do both the emissions inventory and the Level 1 risk assessment for these sources. Only sources on General and Basic Air Contaminant Discharge Permits that calculate emissions using material balance methods (less than 11 sources) would be required to prepare and submit their own emissions inventories. This is consistent with fiscal advisory committee small business mitigation recommendations on providing technical assistance.

Given the lower potential for higher risk emissions, smaller businesses are likely to be called in later in program implementation, after the higher risk facilities, delaying regulatory costs for some smaller businesses. These businesses would be able to use screening tools to determine whether they could undertake emission reductions or process changes to avoid more costly assessment measures like modeling or monitoring.

Fiscal impacts to businesses, including small businesses, generally decreased between the 2017 and 2018 draft regulations because risk action levels became less stringent or allowed more risk as required by SB 1541.

The SB 1541 requirement that sources, including small businesses, complying with federal NESHAPs would presumptively meet TBACT requirements would be expected to further limit Cleaner Air Oregon fiscal impacts for many sources.

Sources that are de minimis or exempt would not need to take action to obtain a permit or reduce risk under Cleaner Air Oregon. DEQ proposed an increase to the Source Permit Level for existing facility cancer risk, which will raise the de minimis risk level for facilities. This should further mitigate impacts on small businesses, by lessening the burdens

associated with permitting for facilities that pose low risk.

The adopted change to the significant TEU level would reduce the burden on businesses that exceed the TBACT or TLAER levels, by ensuring that they don't have to conduct TBACT/TLAER analyses or install TBACT/TLAER on TEUs that only pose a very small part of their total risk.

Businesses, including small businesses, can apply to delay or postpone risk reduction based on financial hardship.

Air monitoring, which can be very expensive, would be optional for all sources including small businesses. No source would be required to undertake air monitoring.

The program would include a technical assistance staff person to help sources explore and analyze emission reduction options if they are required. DEQ and LRAPA anticipate that technical assistance to small businesses will be prioritized, consistent with fiscal advisory committee small business mitigation recommendations on providing technical assistance.

DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

DEQ notified Lane County small businesses during rule development by email, announcements on the DEQ and LRAPA website, advisory committee meetings, and through Twitter and Facebook. Small business representatives were on the Rules Advisory Committee during rule development. At the onset of the first public comment period, DEQ notified small businesses, including those in Lane County, by email, and notices in the Secretary of State Bulletin.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? YES

HOUSING IMPACT STATEMENT:

To comply with ORS 183.534, DEQ and LRAPA determined the then-proposed rules may have an 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 costs of additional permits, pollution control or process equipment, and compliance could be passed through by businesses providing products and services for such development and construction. The possible impact of these proposed changes appears to be minimal. LRAPA cannot quantify the impact at this time because the available information does not indicate whether the costs would be passed on to consumers and any such estimate would be speculative.

NOTE: Additional PDF filed with this filing not included in this document. Please contact Department of Environmental Quality for a copy of this document.

AMEND: 340-200-0040

RULE SUMMARY: Updating the date the State Implementation Plan was last amended. The SIP is being amended to incorporate Lane Regional Air Protection Agency's Cleaner Air Oregon SIP related rule changes.

CHANGES TO RULE:

340-200-0040
State of Oregon Clean Air Act Implementation Plan ¶

(1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by DEQ and is adopted as the State Implementation Plan (SIP) of the State of Oregon under the FCAA, 42 U.S.C.A 7401 to 7671q.¶
(2) Except as provided in section (3), revisions to the SIP will be made under the EQC's rulemaking procedures in OAR 340 division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the EPA for approval. The SIP was last modified by the EQC on ~~November 15~~May 16-17, 201~~8~~9.¶
(3) Notwithstanding any other requirement contained in the SIP, DEQ may:¶
(a) Submit to the EPA any permit condition implementing a rule that is part of the federally-approved SIP as a source-specific SIP revision after DEQ has complied with the public hearings provisions of 40 C.F.R. 51.102; and¶
(b) Approve the standards submitted by LRAPA if LRAPA adopts verbatim, other than non-substantive differences, any standard that the EQC has adopted, and submit the standards to EPA for approval as a SIP revision.¶
(4) Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the EPA. If any provision of the federally approved State Implementation Plan conflicts with any provision adopted by the EQC, DEQ must enforce the more stringent provision.
Statutory/Other Authority: ORS 468.020, 468A
Statutes/Other Implemented: ORS 468A.035, 468A.135