

**Advisory Committee Meeting 1** 

# **Summary**

Under Section 177 of the federal Clean Air Act, states that choose to adopt vehicle standards that are more stringent than the federal standards for new vehicles may only adopt California's vehicle emission standards (if California has adopted more stringent standards). Oregon has previously opted-in to standards for medium- and heavy-duty trucks including the Heavy-Duty Engine and Vehicle Omnibus rules (HD Omnibus)<sup>1</sup>. The HD Omnibus standards apply to new on-highway heavy-duty engines sold in Oregon beginning with engine model year 2024 and vehicle model year 2025 (temporarily delayed by one model year). Broadly, the HD Omnibus rules require lower NOx and PM2.5 standards for these new internal combustion engines, longer warranty periods and updated engine and vehicle testing procedures.

The current proposed rule would update the existing HD Omnibus rules to match revisions adopted by California in 2023. Those changes include increased flexibilities under the legacy engine provisions to: 1) allow for the sale of a larger volume of legacy engines and 2) allow for legacy engine certification prior to an Omnibus compliant engine certification. The proposed rule would also delay implementation of OAR Chapter 340, Division 261 (Emission Standards for New Heavy-Duty Trucks), by one year as the Environmental Quality Council (EQC) previously did under temporary rules on Nov. 16, 2023. Those temporary rules are set to expire on June 28, 2024. Finally, the proposed rules would adopt new definitions that will provide more guidance for manufacturers that carry out emission offset projects associated with legacy engine sales. Additional minor changes include clarifying engine labelling requirements and grammatical or spelling corrections.

## **Affected parties**

The parties likely affected by these rules are:

- Vehicle manufacturers.
  - Under the rules, businesses that manufacture medium and heavy-duty vehicles must comply with the amended standards.

<sup>&</sup>lt;sup>1</sup> 417<sup>th</sup> Meeting of the Oregon Environmental Quality Commission. Clean Truck Rules DEQ Staff Report, accessed on 3/13/2024. Available at: https://www.oregon.gov/deg/EQCdocs/111721 C CleanTrucks.pdf



- Engine manufacturers.
  - Under the rules, businesses that manufacture internal combustion engines used in medium- and heavy-duty vehicles must comply with the amended standards.
- Medium- and heavy-duty vehicle dealerships.
  - Dealerships that sell new medium-and heavy-duty vehicles with internal combustion engines and/or conduct warranty repairs on those vehicles would be indirectly impacted by these amendments. With an increase in the allowed proportion of legacy engine sales that manufacturers are allowed to make would come a likely decrease in the demand for warranty repairs. In contrast, when more legacy engines are available for sale, dealerships are expected to see some benefit from having that increase in vehicles available for sale with legacy engines. Finally, the proposed rules will result in a reduction of market disruptions due to changes in manufacturer product offerings which should benefit dealerships.
- Purchasers of new medium- and heavy-duty vehicles.
  - Fleets or individuals seeking to purchase new medium- and heavy-duty vehicles with internal combustion engines are expected to experience fewer market disruptions due to changes in manufacturer product offerings. Reduced market disruption will be the result of the proposed 1year implementation delay and adoption of California amendments that provide additional flexibilities for legacy engine sales.
- State agencies and local governments.
  - State agencies and local governments seeking to purchase new mediumand heavy-duty vehicles with internal combustion engines are expected to experience fewer market disruptions due to changes in manufacturer product offerings. Reduced market disruption will be the result of the proposed 1-year implementation delay and adoption of California amendments that provide additional flexibilities for legacy engine sales.
- The public.
  - Increases in legacy engine sales means that initially predicted emissions reductions may initially be less than expected along all routes where these vehicles travel. However, all excess emissions associated with legacy engine sales must be offset either by applying previously generated zero emission/NOx credits or through manufacturer-initiated emissions reduction offset projects that are required to be carried out in disadvantaged communities.

# **Fiscal and Economic Impact**

On Nov. 17, 2021, the Oregon EQC adopted the California Clean Truck Rules (CTR) to reduce emissions from new medium- and heavy-duty trucks sold in Oregon.<sup>2</sup> Adoption of the California Air Resources Board (CARB) HD Omnibus rules were a large part of that rulemaking. The HD Omnibus rules anticipated that CARB-certified compliant engines would be available in the marketplace starting with engine model year 2024. Broadly, engine model year 2024-2026 certified compliant engines are engines that meet the 75% lower oxides of nitrogen, or NOx, emission standard and 50% lower particulate matter, or PM, standard.

The HD Omnibus rules include transition flexibilities that allow for the sale of legacy engines. Legacy engines are those that meet the less restrictive federal emission standards starting in 2024. These engines would emit up to 75% more NOx than a similar CARB certified compliant engine. The rules allow for the sale of a certain percentage of manufacturer total engine sales in the state to be legacy engines. Manufacturers must offset all associated excess emissions that result from such legacy engine sales. The excess emissions, or deficits, can be offset in one of three ways and apply sequentially. First, zero emission credits acquired by the manufacturer can be applied to outstanding deficits. Second, NOx emission credits acquired by the manufacturer can be applied to remaining deficits. If these two methods are exhausted the manufacturer must offset all remaining deficits associated with legacy engines by planning and enacting NOx reduction projects. Projects carried out under this third method must benefit a disadvantaged community. As Oregon makes the transition to a zero-tailpipe emissions future, additional flexibilities to the legacy engine provisions are needed to ensure that the supply of medium- and heavy-duty conventionally fueled vehicles is not restricted.

# **General Assumptions**

Proposed adoption of recent CARB amendments: The fiscal and economic impacts of the California amendments were developed by CARB as part of its routine rulemaking analysis<sup>3</sup>. DEQ closely reviewed CARB's analysis and DEQ agrees with that analysis. Since DEQ is proposing to adopt the California amendments identically, DEQ concludes that the fiscal and economic impacts described by CARB for California also describe the relative effect of the likely fiscal and economic impacts that will occur in Oregon if identical regulations are adopted. More specifically, DEQ is relying on the analysis done by CARB that indicates that the rule amendments are emissions-neutral in California and DEQ has concluded that the amendments will also be emissions-neutral in Oregon.

<sup>&</sup>lt;sup>2</sup> 417<sup>th</sup> Meeting of the Oregon Environmental Quality Commission. Clean Truck Rules DEQ Staff Report, accessed on 3/13/2024. Available at: https://www.oregon.gov/deg/EQCdocs/111721 C CleanTrucks.pdf

<sup>&</sup>lt;sup>3</sup> Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation, Initial Statement of Reasons, CARB 2023, accessed on 3/13/2024. Available at:

https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2023/hdomnibus2023/isor.pdf

**Proposed adoption of delayed implementation by one engine and vehicle model year:** The EQC adopted a temporary rule on Nov. 16, 2023, to delay implementation of the HD Omnibus rules such that they would go into effect with engine model year 2025 and/or vehicle model year 2026 depending on the specific rule section. This temporary action provided more time to consider and permanently adopt the CARB amendments which were adopted on Dec. 28, 2023. The temporary rule adoption avoided potentially severe supply constraints to the new medium- and heavy-duty vehicle market. Adoption of the proposed permanent rule would permanently avoid those same supply constraints while providing manufacturer certainty for 2024.

The fiscal and economic impact of the permanent adoption of this proposed rule will likely mean continued widespread availability of vehicles with 2024 engine model year or 2025 vehicle model year due to reduced risk of temporary sales stoppages. The adoption of this proposed delay also means that new, conventionally fueled mediumand heavy-duty vehicles sold in Oregon in 2024 will not be 75% lower NOx emitting as originally intended in the rules. DEQ acknowledges that some communities are disproportionately impacted by that outcome. However, failing to adopt this proposed delay may put the rules at risk of not meeting the identicality requirements described in Section 177 of the Federal Clean Air Act. The risk of losing one year of implementation (2024) was determined to be preferable to putting the entire rule at risk to being challenged (2025 and beyond).

Additional proposed changes to labeling requirements and definitions: The fiscal and economic impacts of the proposed labeling amendments are predicted to be minimal. The responsibility of label compliance lies exclusively with engine manufacturers. The proposal requires that certain diesel engine labels be Oregon specific in a similar way that California requires. DEQ agrees with CARB's analysis that engine labels are already an existing requirement and therefore, there is no likely increase in manufacturer costs for materials, staff time, or workload.

DEQ determined that there was no direct fiscal and economic impact of adopting a definition of "disadvantaged community" applicable in Oregon, to ensure that Oregon's implementation is effectively identical to California's. Indirect impacts could include increased investment in emission reduction projects within the areas identified under the new definition. This investment would be made by manufacturers who need to offset excess legacy engine emissions. However, it is not possible to know in advance the number of projects, the amount of investment per project and what type of offset projects will be carried out. That uncertainty is because emission offset projects are only one way that manufacturers can choose to reduce deficits accrued from the sale of legacy engines.

## **Overall Impact of the Rules**

DEQ anticipates that the proposed rulemaking will have a fiscal and economic impact. Medium- and heavy-duty vehicle and engine manufacturers, dealers and purchasers would continue to supply and be able to sell and purchase federally certified engine model year 2024 vehicles through the end of 2024, if the proposal to start

implementation with engine model year 2025 and vehicle model year 2026 is permanently adopted. The effect is likely to be experienced as lower costs for new vehicles for engine purchasers and/or increased vehicle and engine manufacturer and dealer revenue when compared to the status quo. Quantifying the specific fiscal impacts of delayed implementation on the affected parties was not possible given that DEQ was uncertain about the extent of medium- and heavy-duty vehicle supply constraints.

The fiscal and economic impacts of all other elements of these proposed rules including the proposed adoption of the recent CARB amendments and the proposed labeling and definition updates are expected to be cost neutral to both manufacturers and purchasers. CARB anticipated that expected cost savings gained from manufacturer sale of legacy engines "will be offset by the cost for the credits or projects needed to offset the legacy engine excess emissions deficits." CARB also determined that vehicle and fleets owners and operators would realize cost savings due to reduced consumption of diesel exhaust fluid (DEF) associated with legacy engines compared with CARB Omnibus compliant engines. CARB looked at lifecycle cost savings associated with reduced DEF consumption and determined that the price premium that purchasers of vehicles with legacy engines would likely pay would be offset by that DEF cost savings during the period from 2024 through 2035.

# **Statement of Cost of Compliance**

#### State agencies

DEQ anticipates that the impact to state agencies that purchase new medium- and heavy-duty vehicles will be similar to other local governments and businesses that purchase new medium- and heavy-duty vehicles. The proposed rules will result in a higher number of legacy engines available over the 2025-2026 period. They also will result in the elimination of any concerns over new vehicle supply through the remainder of 2024. These are all indirect impacts and will likely be realized as 1) cost savings on the purchase of each new medium- and heavy-duty vehicle in 2024 due to lower lifecycle DEF usage and 2) cost savings related to avoided 2024 market disruptions such as temporary sales stoppages of medium- and heavy-duty vehicles.

DEQ anticipates that it may experience an increase in the amount of staff time needed to carry out project oversight activities. This is more likely if engine manufacturers end up relying more heavily on excess legacy engine emission offset projects rather than relying exclusively on credit acquisition to offset their deficits. The projects would involve DEQ staff approval of offset projects and ensuring that manufacturers are fulfilling their obligations under those provisions over the life of the projects. Due to the uncertainty of the increase in volume of offset projects DEQ is unable to provide an accurate estimate of the amount of staff time needed.

<sup>&</sup>lt;sup>4</sup> Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation, Initial Statement of Reasons, CARB 2023, accessed on 3/13/2024. Available at:

https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2023/hdomnibus2023/isor.pdf

#### Local governments

There are no direct costs of compliance for local governments, however, local governments who purchase new medium- and heavy-duty vehicles, may experience indirect costs identical to costs described for non-DEQ state agencies on a per-vehicle basis.

#### **Public**

#### Benefits of the regulations

The proposed amendments will ensure that additional manufacturer flexibilities for the sale of legacy engines are made available during the 2025-2026 transition period as we move toward diesel engines that emit 90% lower NOx with model year 2027. These flexibilities reduce the risk of temporary sales stoppages and market disruptions that may have had broader impacts. The proposed amendments also ensure that any emission offset projects that are carried out in Oregon will happen in areas that have historically been exposed to larger concentrations of diesel pollution and in areas with high densities of vulnerable populations. The proposed rules also ensure the stability of the new medium- and heavy-duty vehicle market in 2024 by permanently adopting a one-year delayed implementation of the HD Omnibus rule.

#### **Environmental Justice**

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. DEQ is committed to incorporating environmental justice best practices into its programs and decision-making, to ensure all people in Oregon have equitable environmental and public health protections.

If adopted, the proposal to delay implementation of the HD Omnibus rules mean that new, conventionally fueled trucks sold in Oregon in 2024, will not be 75% lower NOx emitting as originally intended in the rules. Instead, the requirements for lower emitting medium- and heavy-duty vehicles would be delayed until engine model year 2025. DEQ recognizes that emissions from medium- and heavy-duty vehicles disproportionately impact some communities more than others. Those communities are typically lower income and have more people that identify as black, indigenous and people of color.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, April 2012, accessed on 8/30/2021, available at: <a href="https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf">https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf</a>. See also "Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure", Tessum et al., March 2019, accessed on 3/13/2024, available at: <a href="https://www.pnas.org/content/pnas/116/13/6001.full.pdf">https://www.pnas.org/content/pnas/116/13/6001.full.pdf</a>; "Space-Based Observational Constraints on NO2 Air Pollution Inequality From Diesel Traffic in Major US Cities", Demetillo et al., Aug 2021, accessed on 3/13/2024, available at:

https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021GL094333; "In-use NOx and black carbon emissions from heavy-duty freight diesel vehicles and near-zero emissions natural gas vehicles in California's San Joaquin Air Basin", Ma et al., Jan 2024, accessed on 3/13/2024, available at:

https://www.sciencedirect.com/science/article/abs/pii/S0048969723068158; "Ecommerce and environmental justice in metro Seattle", Fried et al., Mar 2024, accessed on 3/13/2024, available at: https://www.sciencedirect.com/science/article/pii/S0739885923001221

DEQ sought input from specific environmental justice communities and clean air advocacy organizations as it developed this rule proposal as part of its advisory committee process.

DEQ determined that failure to adopt a one-year delay to the HD Omnibus rule implementation put the original rule at risk of not meeting the identicality requirements described in Section 177 of the Federal Clean Air Act. DEQ determined that the risk of losing a year of implementation is preferable to putting the entire rule at risk to being challenged. DEQ determined that the pollution reduction benefits to be gained from the implementation of the rules starting with model year 2025 and beyond outweighs the loss of the 2024 engine model year alone. The risk of losing the emissions benefit to environmental justice communities beginning in 2025 and beyond is not a preferred outcome. DEQ determined that the proposed rules related to delayed implementation pose the least harm to communities suffering from disproportionate impacts associated with medium- and heavy-duty vehicle pollution.

#### Anticipated costs of the regulation

There are no direct costs to the public under this regulation. The proposed rules are focused on new medium- and heavy-duty engine and vehicle manufacturers. However, there may be indirect costs associated with the one-year delayed implementation as described in the environmental justice section above. Those increased emissions would be expected to occur along all routes where vehicles these vehicles travel. Indirect impacts associated with the adoption of the CARB amendments are expected to be both cost neutral and emissions neutral based on the CARB analysis. All excess emissions associated with legacy engine sales must be offset either by applying previously generated zero emission/NOx credits or through manufacturer-initiated emissions reduction offset projects that are required to be carried out in disadvantaged communities.

DEQ determined that there was no direct fiscal and economic impact on the public with adopting a definition for "disadvantaged community" applicable in Oregon, to ensure that Oregon's implementation is effectively identical to California's. Indirect impacts, as described earlier, could include increased community investment in emission reduction projects within the areas identified under the new definition. There are uncertainties associated with the extent of this investment since these are individual engine manufacturer business decisions.

#### Large businesses - businesses with more than 50 employees

Under the proposed rules, large businesses that manufacture medium- and heavy-duty engines are expected to experience 1) increased sales related to avoided 2024-2026 market disruptions such as potential temporary sales stoppages of medium- and heavy-duty engines and 2) increased sales due to larger volumes of legacy engines available to be sold in 2025 and 2026.

There are no direct costs of compliance for large businesses who are exclusively purchasers and/or sellers of new medium- and heavy-duty vehicles. However, large businesses that are exclusively purchasers of these vehicles may experience indirect costs identical to costs described for non-DEQ state agencies on a per-vehicle basis.

For large businesses that sell new medium- and heavy-duty vehicles, indirect benefits are primarily associated with 1) increased sales related to avoided 2024-2026 market disruptions such as potential temporary manufacturer sales stoppages of medium- and heavy-duty vehicles and 2) an increase in expected sales due to larger volumes of legacy engines available to be sold in 2025 and 2026.

There are no direct costs of compliance for large businesses who are involved in carrying out warranty repairs on medium- and heavy-duty vehicles. However, there could be indirect costs associated with the increased proportion of legacy engine sales that manufacturers are allowed to make. The increase in legacy engine sales would likely decrease the demand for warranty repairs.

#### Small businesses – businesses with 50 or fewer employees

#### **ORS 183.336 - Cost of Compliance for Small Businesses**

# a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

Under the proposed HD Omnibus rule amendments, there are no small businesses directly affected, therefore no estimated number is provided. All the vehicle manufacturers subject to the requirements have more than 50 employees. However, small businesses that purchase new medium- and heavy-duty vehicles and vehicle dealers who sell these new vehicles may experience indirect cost savings because of the proposed rule.

For small businesses who purchase new medium- and heavy-duty vehicles, indirect costs are identical to costs described for non-DEQ state agencies on a per-vehicle basis.

For small businesses that sell new medium- and heavy-duty vehicles, indirect costs are primarily associated with 1) cost savings related to avoided 2024-2026 market disruptions such as potential temporary manufacturer sales stoppages of medium- and heavy-duty vehicles and 2) increase in expected sales due to increased number of legacy engines available to be sold in 2025 and 2026.

For small businesses that are involved in warranty repairs for new medium- and heavyduty vehicles the indirect costs would be similar to those described for large businesses engaged in similar warranty repair work.

# b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

Under the proposed rules there are no anticipated direct increased costs to small businesses associated with reporting, recordkeeping and other administrative activities.

# c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

Under the proposed rules there are no anticipated direct increased costs to small businesses associated with equipment, supplies, labor and increased administration.

# d. Describe how DEQ involved small businesses in developing this proposed rule.

DEQ included organizations that represented small businesses on the Heavy-Duty Engine and Vehicle Omnibus Rule Update 2024 Advisory Committee that advised DEQ on the cost of compliance for small businesses.

## Documents relied on for fiscal and economic impact

The requirement to list the documents relied on to determine fiscal impact is separate from and in addition to the similar list in the Rules affected, authorities, supporting documents section above

Document title	Document location
Clean Truck Rules - Staff Report to Oregon's Environmental Quality Commission, Nov 2021	https://www.oregon.gov/deq/EQCdocs/1117 21 C CleanTrucks.pdf
CARB Initial Statement of Reasons (ISOR) for Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2023/hdomnibus2023/isor.pdf
California's Heavy-duty omnibus regulation: Updates to emission standards, testing requirements, and compliance procedures, International Council on Clean Transportation (ICCT), 2022	https://theicct.org/wp- content/uploads/2022/01/california-us-hdv- omnibus-reg-jan22.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR), Appendix C-3:	https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/appc3.pdf

Further Detail on Costs and	
Economic Analysis	
CARB Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments: Final Statement of Reasons (FSOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/hdomnibuslownox/fsor.pdf
Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards – Final Rule, December, 2022	https://www.epa.gov/system/files/documents/2023-01/new-motor-veh-air-poll-control-hd-eng-veh-stnd-frm-2022-12-20.pdf
U.S. heavy-duty vehicle NOx standards: Updates to emission limits, testing requirements, and compliance procedures, ICCT, July 2023	https://theicct.org/wp- content/uploads/2023/07/us-nox-standards- update-jul23.pdf
CARB and the Truck and Engine Manufacturers Association Agreement (Clean Truck Partnership), July 2023	https://ww2.arb.ca.gov/sites/default/files/202 3- 07/Final%20Agreement%20between%20CA RB%20and%20EMA%202023 06 27.pdf
Clean Truck Partnership Commitments – Status and Outcome	https://ww2.arb.ca.gov/clean-truck-partnership
Public workshop to discuss projects targeted in disadvantaged communities to offset legacy engine emissions per the Omnibus Regulation, CARB Staff Presentation, Oct. 2023	https://ww2.arb.ca.gov/sites/default/files/classic/MSCD/Workshop Presentation-Projects Targeted at DAC Oct 24 FINAL.pdf
In-use NOx and black carbon emissions from heavy-duty freight diesel vehicles and near-zero emissions natural gas vehicles in California's San Joaquin Air Basin	https://doi.org/10.1016/j.scitotenv.2023.1681 88
Ecommerce and environmental justice in metro Seattle	https://www.sciencedirect.com/science/article/pii/S0739885923001221
The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015	Report Template - from HQ (oregon.gov)
Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, 2012	https://www.oregon.gov/deq/FilterDocs/PAT S2012.pdf

# Advisory committee fiscal review

DEQ appointed an advisory committee.

As ORS 183.33 requires, DEQ will ask for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 to reduce that impact.

The committee will review the draft fiscal and economic impact statement and provide feedback on the overall analysis provided by DEQ.

# **Housing cost**

The proposed rule amendments would:

- 1) Update the existing HD Omnibus rules to match revisions adopted by California in 2023. Those changes include increased flexibilities under the legacy engine provisions to allow for the sale of a larger volume of legacy engines and allow for legacy engine certification prior to an Omnibus compliant engine certification.
- 2) Delay implementation of the Emission Standards for New Heavy-Duty Trucks (HD Omnibus) in OAR Chapter 340, Division 261 by one year. The temporary proposed rule would delay the start of these new regulations from engine model year 2024 to engine model year 2025.
- 3) Clarify definitions related to manufacturers that carry out emission offset projects associated with legacy engine sales.

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would 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. DEQ determined the proposed rules would have no direct effect on development costs because they only affect manufacturers of new medium- and heavy-duty vehicles and engines. While indirect impacts to transportation costs that are related to the supply of new mediumand heavy-duty vehicles are possible, DEQ is unable to estimate the extent of such an impact. However, that impact would likely be to avoid an increase in the price of new vehicles associated with supply restrictions and lack of market availability of HD Omnibus compliant engines for model year 2024. Adoption would likely also avoid larger price increases that would have been associated with engine model year 2025 and 2026 since larger legacy engine volumes will be available for sale. These indirect impacts to transportation costs could lead to an indirect effect on housing development costs because the rules could influence the price of materials and/or services used in housing construction. For example, manufacturers subject to the proposed amendments may not increase new medium- and heavy-duty truck prices as much. Housing related

businesses that purchase these trucks may then decrease the price they charge for products and services which may in turn decrease housing development costs. Because these impacts are indirect and depend on the individual decisions of multiple businesses before resulting in housing cost fluctuations, DEQ is unable to estimate the amount of these indirect costs.

### **Non-discrimination statement**

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

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