

This package contains the following documents:

- Notice of Rulemaking
- Draft Rules Edits Highlighted
- Draft Rules Edits Included (final clean version)

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Introduction

DEQ invites public input on proposed permanent rule amendments to Chapter 340, Divisions 257 and 261 of the Oregon Administrative Rules.

Request for other options

During the public comment period, DEQ asks for public comment on whether there are other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business.

DEQ is also seeking specific comment on whether to:

- Delay implementation of Heavy-Duty Engine and Vehicle Omnibus Rules to 2027
- Consider a different Oregon Optional Credit Program percentage allocation for Class 2b-3 and Class 4-8 straight trucks

Overview

Short summary of proposed rule changes

DEQ is proposing rule changes to two regulations - the Advanced Clean Trucks Rule in OAR Chapter 340, Division 257 and the Emission Standards for New Heavy-Duty Trucks in OAR Chapter 340, Division 261. These changes would:

- Adopt by reference recent California amendments to the Advanced Clean Trucks Rule and Heavy-Duty Engine and Vehicle Omnibus Rules; and
- Delay the start of the Heavy-Duty Engine and Vehicle Omnibus Rules implementation from engine model year 2025 to engine model year 2026.

On Nov. 17, 2021, the Oregon Environmental Quality Commission acted to reduce emissions from new medium- and heavy-duty trucks sold in the state by adopting the Clean Truck Rules (CTR).¹ 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). California's Advanced Clean Trucks Rules and Heavy-Duty Engine and Vehicle Omnibus Rules were two of the rules adopted under that 2021 rulemaking.

Advanced Clean Trucks Rule

The Advanced Clean Trucks Rule is being revised to incorporate commitments made between the California Air Resources Board (CARB) and the truck manufacturers in the Clean Truck Partnership.² The proposed changes include:

- Increased Deficit Makeup Period Manufacturers now have three years instead of one year to balance their zero emission vehicle (ZEV) deficits (deficits accrued due to insufficient sales of ZEVs under the rules).
- New definition for how credits are generated Manufacturers can now generate a credit based on a vehicle delivered for sale, rather than to the ultimate purchaser in Oregon.
- Additional flexibility in 2026 for the cleanest Heavy Heavy-Duty (HHD) Engines Specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule, easing compliance for manufacturers of the subject heavy heavy-duty internal combustion engine (ICE) trucks.

¹ <u>417th Meeting of the Oregon Environmental Quality Commission. Clean Truck Rules DEQ Staff Report</u>, accessed on 3/20/2025.

² <u>CARB and the Truck and Engine Manufacturers Association Agreement (Clean Truck Partnership), July 2023, accessed on 3/4/2025.</u>

Oregon Optional Credit Program

Oregon is considering the following additional proposal to support effective implementation of the Advanced Clean Trucks Rule: DEQ would provide optional credits to truck manufacturers, these credits would be available to manufacturers who agree to allow the unrestricted sale of internal combustion engines without first requiring a ZEV sale.

- DEQ would provide optional credits to satisfy 100% of manufacturers' Class 7-8 tractor truck deficit generation in 2025 and 2026.
- DEQ would provide optional credits to satisfy 50% of a manufacturer's Class 2b-3 and Class 4-8 straight truck deficit generation in 2025 and 2026.
- DEQ would provide optional credits to manufacturers who have sold Class 2b-3 and Class 4-8 straight trucks but not incurred any deficits in 2025 and 2026. These credits are allocated based on 50% of that manufacturer's deficits generated through the total sale of Class 2b-3 and Class 4-8 straight trucks.

DEQ would consider additional optional credit allocations in 2027 and beyond based on emissions, public health, and truck market conditions.

Heavy-Duty Low NOx Omnibus Rule

The proposed HD Omnibus rule amendments replace expiring temporary rules, adopted by the EQC in November 2024³, with permanent rules. If the proposed amendments are adopted, the temporary rule to delay implementation would become permanent and the Omnibus rules would go into effect with engine model year 2026. Even though DEQ is proposing to delay the HD Omnibus rule until 2026, DEQ is also proposing to incorporate other minor changes including additional zero emission powertrain flexibilities that CARB recently updated which directly connect to the ACT rule. Further changes would eliminate rule provisions related to trailers that were previously overturned in a court challenge.

Background of reasons for doing this rulemaking

ACT amendments

The ACT rule requires manufacturers of medium and heavy-duty vehicles to produce and deliver ZEVs as a percentage of their overall sales. These requirements begin with the 2025 model year in Oregon. The sales percentages begin with a 7% sales requirement for Class 2b-3 and Class 7-8 trucks and an 11% sales requirement for Class 4-8 straight trucks, increasing in percentages to 2035. In October 2024, CARB adopted amendments to the ACT rule incorporating additional flexibilities for manufacturers.

Oregon DEQ is proposing these changes and the Oregon Optional Credit Program based in part on the agency's understanding that vehicle manufacturers need more flexible compliance options under Advanced Clean Trucks rule. Manufacturers face ongoing challenges with ACT compliance in 2025 and 2026 in the Class 7 and 8 tractor classes. DEQ is proposing solutions that consider the current circumstances while still maintaining the integrity of the ACT program. This is proposed to be accomplished through increased compliance flexibilities and additional credit allocations in the short term. Adopting these rules would harmonize the already existing Oregon rules with recent amendments made by California, maintaining identicality as required.

HD Omnibus Amendments

The HD Omnibus Rules require manufacturers to deliver lower emitting conventionally fueled engines for sale in Oregon. During the transition period (2024-2026) certified compliant engines would be required to reduce oxides of nitrogen, or NOx, emissions by 75% and to reduce particulate matter emissions by 50%. The HD

³ 434th meeting of the Oregon Environmental Quality Commission. Temporary Clean Truck Rules Amendments DEQ Staff Report, accessed on 3/20/2025.

Omnibus rules require further reductions in emissions from new medium- and heavy-duty engines starting in 2027.

The HD Omnibus Rules were originally intended to be implemented in Oregon beginning with engine model year 2024. A one-year delay was adopted by the EQC in November 2023. An additional year delay was temporarily adopted by the EQC in November 2024 due to concerns about availability of HD Omnibus compliant engines, manufacturers placing sales restrictions on vehicle dealers that order new vehicles, manufacturers expressed intention to limit their use of available HD Omnibus compliance flexibilities and delayed federal action on the CARB's waiver request to EPA that would allow enforcement of the rules in Oregon. The temporary rules expire on June 30, 2025. In addition, recent CARB amendments to these rules that allow more manufacturer flexibility to certify "complete" medium-duty vehicles will need to be adopted in order to remain identical with California rules.

How this rulemaking addresses the reasons for doing the rulemaking

ACT rule

The current proposed rule would update Oregon's existing Advanced Clean Trucks Regulation to match revisions adopted by the California Air Resources Board, maintaining identical rules. The proposed Increased Deficit Makeup Period providing manufacturers with three years instead of one year to balance their ZEV deficits will add needed flexibility for manufacturers, supporting their compliance with the rules. The proposed new definition for how credits are generated, allowing that manufacturers can generate a credit based on a vehicle delivered for sale in Oregon, rather than to the ultimate purchaser, will further increase compliance flexibility. Oregon DEQ's understanding from manufacturers is that they lack visibility into the end user, registration of vehicles they make available for sale with Oregon vehicle dealers. This proposed amendment ensures that the point of compliance remains under the control of the regulated entity. Proposed rules also provide additional flexibility in 2026 for the cleanest Heavy Heavy-Duty (HHD) Engines, allowing that specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule, easing compliance for manufacturers of the subject heavy heavy-duty internal combustion engine (ICE) trucks.

HD Omnibus Amendments

The proposed HD Omnibus amendments would delay implementation of OAR Chapter 340, Division 261 (Emission Standards for New Heavy-Duty Trucks), by one year. This one-year delay would make the temporary rules previously adopted by the EQC permanent. The proposed rule amendments would also update the existing HD Omnibus rules to match revisions adopted by California in 2024 to increase zero emission powertrain certification flexibilities for medium-duty vehicles by allowing complete medium-duty ZEVs to be certified under the zero-emission powertrain certification (ZEP-CERT) program. Adoption of the ZEP-CERT amendments ensures that Oregon's rules remain identical to California.

Affected parties

The proposed rulemaking applies statewide. Affected parties include:

- Medium- and heavy-duty vehicle and engine manufacturers
- Medium- and heavy-duty vehicle dealerships
- Medium- and heavy-duty vehicle purchasers
- The public

Outreach efforts and public and stakeholder involvement

DEQ announced the rulemaking and advisory committee process via GovDelivery. Through that announcement DEQ invited the public to attend each of its three virtual advisory committee meetings. DEQ added advisory committee meeting information to DEQ's public meetings calendar and rulemaking webpage.

DEQ has continued to engage with a variety of stakeholders about these rule updates. Following the EQC's adoption of temporary rules in November 2024 to adopt recent CARB ACT amendments and delay implementation of the HD Omnibus rules for one year, DEQ has met with multiple interested parties. DEQ has convened meetings with and delivered presentations to interested parties including:

- Fleet representatives
- A variety of trade associations
- Vehicle dealer and repair service representatives
- Vehicle and engine manufacturers
- Environmental advocacy groups

Brief summary of fiscal impact ⁴

Advanced Clean Trucks Amendments

The amendments providing additional flexibilities could lead to lower costs for manufacturers, fleets, and dealers. Manufacturers could experience a reduction in short-term financial pressures by having additional time to comply with the rules. That extended time could lead to fewer financial penalties for noncompliance, reduced administrative costs through only needing to track sales based on delivery, rather than final purchase, and additional options to certify complete medium duty trucks. With a longer deficit makeup period, truck manufacturers can distribute compliance costs more evenly over three years rather than making steep, immediate price increases on ZEVs. Manufacturers may also experience financial relief by not having HHD Omnibus certified engines count toward their deficits in 2026, easing compliance concerns. Fleets and dealers could see reduced costs and additional availability of trucks due to manufacturers not having to make price adjustments or restrictions in the conventional vehicle market to offset deficits.

Oregon Optional Credit Program

The proposed amendments create an Oregon optional credit program where manufacturers are gifted half of the credits they need to meet their deficits for Class 2b-3 and Class 4-8 straight trucks and all of the credits they need for Class 7-8 tractor trucks in 2025 and 2026. This provides manufacturers many of the credits they need to meet their compliance obligations in the early years of the program. It also includes provisions for ZEV-only OEMs to receive optional credits and for DEQ to evaluate extending the program in 2027 and beyond.

These new Optional Credits may lead to lower costs for fleets, manufacturers, and dealers. Manufacturers may not have to purchase credits to satisfy any compliance obligation and could pass these costs savings to dealers and fleets. Fleets purchasing new medium- and heavy-duty trucks in 2025 may face less volatility in pricing, as manufacturers can better manage their credit balances without artificially restricting availability of diesel vehicles in Oregon. Increased credit availability also benefits dealers as it allows manufacturers to continue the sale of diesel-powered trucks without the risk of temporary market disruptions. Overall, these amendments ease compliance burdens, prevent abrupt cost increases, and ensure Oregon fleets have access to a stable, diverse truck market while transitioning to zero-emission technology. Quantifying the specific aspects of these optional credits is difficult to assess because it depends upon how many manufacturers choose to opt in to the optional credit program.

⁴ A full fiscal impact analysis is provided below in this notice.

HD Omnibus Amendments

The proposed rule amendments delay implementation of the HD Omnibus rules for one year to 2026 and adopt recent CARB amendments for zero emission powertrains by reference. This action would have a fiscal and economic impact. Compared to the status quo, manufacturers and dealers would continue to be able to sell federally certified engine model year 2025 vehicles through the end of 2025. Vehicle and engine purchasers should see lower costs for new vehicles and engines compared to the status quo. Manufacturers and dealers would reduce the risk of manufacturer temporary holds and excessive restriction on medium- and heavy-duty vehicle sales in Oregon. Expected fiscal impacts include impacts associated with increased sales volumes of medium- and heavy-duty conventionally fueled trucks and decreased demand for warranty repair services on vehicles with 2025 engines.

Both the ACT and HD Omnibus proposed amendments may result in less emissions reductions than expected along all routes where medium- and heavy-duty vehicles travel and will impact members of the public – especially those living, working, and recreating close to major traffic corridors.

Procedural Summary

More information

Information about this rulemaking is on this rulemaking's web page: Clean Truck Rules 2025 Updates

Public Hearings

DEQ plans to hold one public hearing. Anyone can attend by webinar or teleconference.

Date: Thursday, April 17, 2025 Start time: 6 p.m.

Join via Zoom

(**NOTE:** If this link does not work, you can type in this web address: https://deq-oregongov.zoom.us/j/86363330868?pwd=gu8exCigKoJvY6VRmakmgYsS8fxb5G.1)

Join by phone: Teleconference phone number: 888 475 4499 US Toll-free Meeting ID: 863 6333 0868 Passcode: 993906

Instructions on how to join webinar or teleconference

How to comment on this rulemaking proposal

DEQ is asking for public comment on the proposed rules. Anyone can submit comments and questions about this rulemaking. A person can submit comments through an online web page, by email, regular mail or at the public hearing.

- Online web page: <u>Clean Truck Rules 2025 Updates</u>
- Email: Send comments by email to: <u>CTR.2025@DEQ.oregon.gov</u>
- Postal mail:

 Oregon DEQ Attn: Gerik Kransky
700 NE Multnomah St., Room 600 Portland, OR 97232-4100

• At public hearing: 6 p.m., Thursday, April 17, 2025

Comment deadline

DEQ will only consider comments on the proposed rules that DEQ receives by **4 p.m., on Wednesday April 23**, **2025**.

Note for public university students:

ORS 192.345(29) allows Oregon public university and OHSU students to protect their university email addresses from disclosure under Oregon's public records law. If you are an Oregon public university or OHSU student, notify DEQ that you wish to keep your email address confidential.

Sign up for rulemaking notices

Get email or text updates about this rulemaking by either:

- Signing up through this link: <u>Clean Truck Rules 2025 Updates GovDelivery</u>;
- Signing up on the rulemaking web site: Clean Truck Rules 2025 Updates

What will happen next?

Following the close of the public comment period, DEQ will include a written response to comments in a staff report DEQ will submit to the Environmental Quality Commission. DEQ may modify the rule proposal based on the comments.

These proposed rules only become effective if the Environmental Quality Commission adopts them. DEQ's intended action is to present the proposed rule changes to the commission as soon as possible after the earliest date on which the rule changes could take effect. DEQ intends to submit the proposed rule changes to the commission or before May 17, 2025.

Statement of need

Advanced Clean Trucks

Proposed Rule or Topic	Discussion		
Advanced Clea	Advanced Clean Trucks Rule Amendments		
What need would the proposed rule address?	Oregon DEQ understands that vehicle manufacturers need more flexible compliance options under Advanced Clean Trucks rule. Adopting these rules would harmonize the already existing Oregon rules with recent amendments made by California, maintaining identicality as required.		
How would the proposed rule address the need?	The proposed rule would incorporate California's recent amendments providing additional flexibilities for manufacturers.		
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need when manufacturers avail themselves of the new flexibility provisions.		
Oregon	Optional Credit Program		
What need would the proposed rule address?	There are significant concerns from manufacturers and dealers that Oregon's Class 4-8 truck market, in addition to issues in the Class 7-8 tractor market, regarding sufficient ZEV sales to meet the requirements. The limited number of ZEV sales in addition to the lack of available credits across the program, will make it challenging for some manufacturers to meet compliance requirements beginning in 2025.		
How would the proposed rule address the need?	The proposed rule creates a new, short-term compliance mechanism, called the Oregon Optional Credit Program. This program will allow DEQ to provide free credits directly to medium and heavy-duty vehicle manufacturers for vehicle Model Years 2025 and 2026 without first requiring ZEV sales to earn credits. The Optional Credit Program, if adopted, will help manufacturers with meeting their compliance obligation in 2025 and 2026.		
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need if participating manufacturers open up the availability of ZEV and ICE trucks in Oregon. The proposed rule, if adopted will ensure compliance in 2025 and 2026 for Class 7-8 tractor trucks and significantly address compliance and truck availability for Class 4-8 straight trucks as well.		

HD Omnibus

Proposed Rule or Topic	Discussion
Delay Implementation of HD Omnibus Rules for one year	

Proposed Rule or Topic	Discussion
What need would the proposed rule address?	The proposed rule addresses the need to make permanent the previously adopted temporary rule for the remainder of 2025. In 2024 the EQC temporarily delayed implementation of the HD Omnibus rules due to uncertainty related to supply of Omnibus-certified compliant engine availability. Not adopting a delay risked creating significant restrictions to the supply of new medium- and heavy-duty conventionally fueled vehicles.
How would the proposed rule address the need?	The proposed rule would delay the implementation of the HD Omnibus rules for one full year. It will provide manufacturers and buyers with compliance certainty for the remainder of 2025. If the proposed rules are adopted, the HD Omnibus rules go into effect with engine model year 2026 and/or vehicle model year 2027 depending on the specific rule section and context. The proposed rules provide more time for manufacturers to produce and deliver California Omnibus- certified compliant engines to the market.
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need by monitoring the number of new conventionally fueled vehicles that are sold and registered in Oregon.
Adopt re	ecent CARB amendments
What need would the proposed rule address?	Oregon adopted the CARB HD Omnibus rules by reference in 2021. Under section 177 of the Clean Air Act, Oregon can only adopt California emission standards if those standards are adopted identically. Periodically Oregon must adopt California amendments to remain identical. The recent California amendments increase the transition flexibilities available to manufacturers of complete medium-duty zero emission powertrains.
How would the proposed rule address the need?	The proposed rule would bring Oregon's rules into agreement with California's rules by adopting the California amendments by reference.
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need once the updated rules are published and manufacturers are notified about this additional available certification flexibility.

Federal relationship

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so. Adopting these rules would harmonize the already existing Oregon rules with recent amendments made by California. Under section 177 of the Clean Air Act Oregon can adopt and enforce California's more stringent new engine and vehicle emission standards if those standards are identical to the California standards.

ACT Amendments

The ACT rules that were adopted by the EQC in 2021 require medium and heavy-duty vehicle manufacturers to sell gradually increasing numbers of new plug-in hybrid and zero emission trucks as a percentage of their overall sales. This is unique to California's regulations and exceeds federal emissions standards as allowed under Section 177 of the 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's proposed rules to increase flexibility and compliance options match recent amendments from California, will improve program implementation in Oregon, and maintain identicality of Oregon's rules.

Starting in 2027 the new federal regulation, "Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3" require heavy-duty vocational vehicles to meet stricter emission standards. The federal regulations are structurally different from Oregon's Advanced Clean Trucks regulation yet begin to align in terms of emissions standards over time. The ACT specifically requires ZEV sales whereas the GHG Phase 3 rule establishes fleet emissions standards which are technology-neutral but likely include the increasing deployment of ZEV vehicles. Oregon's ACT regulations and proposed amendments can be understood as slightly more stringent than the federal standards in 2025 and 2026 with greater alignment between Oregon and federal standard beginning in 2027 and beyond.

HD Omnibus

The HD Omnibus rules that were adopted by the EQC in 2021 are more stringent than the current 2024-2026 federal standards for NOx and PM as well as several other provisions including a low load testing cycle and longer warranty requirements. The rules are designed to reduce the primary and secondary impacts of NOx emissions including ozone and secondary particulate formation, address the low speed and light load phases of the truck duty cycle and reduce the impact of engine deterioration. New federal medium- and heavy-duty engine and vehicle emission standards were adopted in December 2022.⁵ California has announced its intention to adopt future amendments that would mostly align with these new federal rules beginning with engine model year 2027.⁶ DEQ plans to continue to recommend that the EQC adopt all future California HD Omnibus amendments to ensure that Oregon rules remains identical to the California rules and therefore expects to be mostly aligned with federal rules for medium- and heavy-duty engine and vehicle standards for engine model year 2027.

The current proposed rules will continue to impose requirements that will be different from or in addition to federal requirements. DEQ recommends that the commission approve adoption of the proposed amendments which delay the implementation of the HD Omnibus rules in Oregon for one year and adopt recent California zero emission powertrain certification amendments. While these proposed amendments are more stringent than current 2024-2026 federal rules DEQ recommends that the commission approve adopting these amendments. Doing so ensures that Oregon rules continue to be identical to California rules, as is required under Section 177 of the Clean Air Act. Adoption also preserves the public health and environmental benefits of these rules as described and

⁵ Final EPA Standards for Heavy-Duty Vehicles to Slash Dangerous Pollution and Take Key Step Toward Accelerating Zero-Emissions Future, December 2022, accessed on 3/20/2025. Also see: Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards – Final Rule, December 2022, accessed on 3/20/2025 and U.S. heavy-duty vehicle NOx standards: Updates to emission limits, testing requirements, and compliance procedures, July 2023, accessed on 3/20/2025.

⁶ <u>CARB and the Truck and Engine Manufacturers Association Agreement (Clean Truck Partnership), July 2023, accessed on 3/20/2025.</u>

referenced in this notice based on the scientific, economic and technological analyses as described and referenced elsewhere in this notice.

Reasons for differing from applicable federal requirements

As mentioned elsewhere in this section, these proposed rules will ensure Oregon maintains rules that are identical to California, which is a requirement of Section 177 of the Clean Air Act for states that choose to implement more stringent California standards.

Oregon's existing emissions standards, in the form of both Heavy-Duty Low NOx Omnibus and Advanced Clean Trucks Rule, are more stringent than similar federal standards. The Environmental Quality Commission adopted these rules in 2021 in order to reduce emissions from medium- and heavy-duty trucks in Oregon at a faster pace than would be expected under the existing federal rules. The reasons for taking this approach are detailed in the original rulemaking materials and are related to improving public health and environmental outcomes for Oregonians due to decreased exposure to harmful diesel and climate pollution.

ACT Amendments

Oregon law requires reductions in climate emissions and is a key reason why DEQ is implementing the Advanced Clean Trucks Rule and proposing amendments to the program. Oregon Revised Statute 468A.205 requires that by 2050 Oregon must achieve greenhouse gas levels that are at least 75 percent below 1990 levels. As of today, Oregon is forecast to reach only a 60% climate emissions reduction by 2050 as opposed to the statutory target. This forecast takes current state programs, policies and laws into account according to multi-agency emissions reduction information available on the <u>State of Oregon's website</u>.

The proposed rules include the creation of a new Oregon Optional Credit Program which is not included California's regulations. The Oregon Optional Credit Program will support Oregon DEQ's implementation of the Advanced Clean Truck Rules due to unique circumstances in the Oregon truck market. For these reasons the proposed rules are more stringent than applicable federal requirements in order to create additional public health and environmental benefits.

HD Omnibus Amendments

The HD Omnibus rules are expected to yield environmental and public health benefits that begin with the year of implementation and continue into the future. One study by the Manufacturers of Emission Controls Association predicted a 17.5% (2,570 tons/year) annual reduction in annual on-highway NOx emissions and a 4% (29 tons/year) annual reduction in particulate matter by 2035. Another study by MJ Bradley concluded that Oregon fleet NOx emissions reductions associated with the HD Omnibus rules are expected to be approximately 1,300 metric tons per year in the early years of rule implementation and 5,000 metric tons/year by 2040. The same MJ Bradley study reports the cumulative modeled incremental public health benefits of Oregon adopting the HD Omnibus rules are 77 avoided premature deaths, 55 avoided hospital visits, and 40,168 avoided cases of acute respiratory symptoms and restricted activity days through 2050.⁷ In addition, Oregon Revised

⁷ Oregon Clean Trucks Program, MJ Bradley and Associates, 2022

Statutes 468A.793 directs the EQC to develop goals to reduce lifetime risk of cancer in Oregon to no more than one case per million.

The predicted benefits of the HD Omnibus rules described above as well as state goals to reduce exposure to diesel emissions justified the original adoption of the HD Omnibus rules by the EQC and justified going beyond the federal medium- and heavy-duty engine standards. The current proposed amendments to delay the HD Omnibus rules for an additional year are a reasonable balance when the economic and technological issues described in the fiscal and economic impact section of this notice are considered. Without an adequate supply of new 2025 HD Omnibus certified compliant engines available in the market, there is a high risk of severe supply restrictions for new medium- and heavy-duty vehicles. Preserving the HD Omnibus rules for 2026 and beyond is justified given the additional benefits that these rules are expected to deliver.

What alternatives did DEQ consider and why are you not pursuing them?

ACT Amendments

DEQ did not consider an option different from proposing California's recent amendment to expand compliance flexibilities for manufactures. DEQ did consider delaying ACT regulations until 2027 instead of proposing the new Oregon Optional Credit Program. DEQ decided that the short-term credit program is better suited to incentivizing ZEV sales in Oregon in 2025 and 2026, establishing a more gradual transition from early year ZEV delivery targets into higher targets which take effect beginning in 2027.

HD Omnibus Amendments

DEQ did not consider other options because of the need to adopt permanent rules that would codify temporary rules previously adopted by the EQC. The proposed rules delay implementation of the HD Omnibus rules for one year and increase manufacturer flexibilities for zero emission powertrain certifications. The one-year delay would mean that Oregon loses one model year of emissions reduction benefits, however, DEQ determined that the loss of one year of benefits was less harmful than losing benefits from the rule over the long term.

Rules affected, authorities, supporting documents

Lead division

Air Quality

Program or activity

Standards for medium- and heavy-duty engines and vehicles

Chapter 340 action

Adopt OAR				
340-257-0300				
Amend OAR				
340-257-0050	340-261-0020	340-261-0040	340-261-0050	

Statutory Authority - ORS				
468.020	468A.025	468A.360		

Statutes Implemented - ORS				
468A.010	468A.015	468A.025	468A.360	

Documents relied on for rulemaking

Document title	Document location
2020 OGWC Biennial Report to Legislature	https://static1.squarespace.com/static/59c554e0f09ca406 55ea6eb0/t/5fe137fac70e3835b6e8f58e/1608595458463/ 2020-OGWC-Biennial-Report-Legislature.pdf
Energy Innovation and UC Berkley's 2035 Report: Transportation	Download The 2035 2.0 Report from UC Berkeley 2035 The Report (2035report.com)
2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure Staff Report: Initial Statement of Reasons	https://ww2.arb.ca.gov/sites/default/files/barcu/regact /2024/actzepcert/isor.pdf
Second 15-Day Changes to the 2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure, Appendix A-1	https://ww2.arb.ca.gov//sites/default/files/barcu/regac t/2024/actzepcert/2nd15daya1.pdf

CARB Heavy-Duty Engine and Vehicle Omnibus	https://ww2.arb.ca.gov/sites/default/files/barcu/regact
Rule Staff Report: Initial Statement of Reasons	/2020/hdomnibuslownox/isor.pdf
(ISOR)	
CARB Heavy-Duty Engine and Vehicle Omnibus	https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/ap
Rule Staff Report: Initial Statement of Reasons	pc3.pdf
(ISOR), Appendix C-3: Further Detail on Costs	
and Economic Analysis	
CARB Initial Statement of Reasons for the	https://ww2.arb.ca.gov/sites/default/files/classic/regact/20
Advanced Clean Trucks rule	<u>19/act2019/isor.pdf</u>
Updated Costs and Benefits Analysis for the	https://ww2.arb.ca.gov/sites/default/files/classic/regact/20
Proposed Advanced Clean Trucks Regulation	19/act2019/30dayattc.pdf
Clean Trucks Analysis, Costs & Benefits of	https://www.erm.com/globalassets/documents/mjba-
State-Level Policies to Require No- and Low-	archive/reports/2021/clean-trucks-technical-report-final-
Emission Trucks (MJ Bradley & Associates	<u>09jun21.pdf</u>
study), 2021	
Oregon Clean Trucks Program: An Analysis of	https://www.erm.com/contentassets/f3d6061dd8a04
the Impacts of Zero-Emission Medium- and	147a3f38b7db256ae44/or-clean-trucks-report.pdf
Heavy-Duty Trucks on the Environment, Public	
Health, Industry, and the Economy (MJ Bradley	
& Associates study), 2022	
California's Advanced Clean Trucks regulation:	https://theicct.org/sites/default/files/publications/CA-HDV-
Sales requirements for zero-emission heavy-	EV-policy-update-jul212020.pdf
duty trucks (ICCT study)	
Zero-Emission Class 8 Truck Pricing	https://ww2.arb.ca.gov/sites/default/files/2024-
Comparisons – EU & US, CARB 2024	12/Zero%20Emission%20Class%208%20Tractor%20Pric
An churic of the control (chicle Octor house of	ing%20Comparisons_ADA.pdf
Analysis of Heavy-Duty Vehicle Sales Impacts	https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101246N .pdf
Due to New Regulation (EPA 2021)	
The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015	<u>Report - The Concerns About Diesel Engine Exhaust,</u> Oregon DEQ
Portland Air Toxics Solutions Committee Report	https://www.oregon.gov/deg/FilterDocs/PATS2012.pdf
and Recommendations, Oregon DEQ, 2012	https://www.oregon.gov/deg/FilterDocs/FATS2012.pdf
California State Motor Vehicle and Engine and	https://www.gov/pfo.gov/content/pkg/EP.2025.01
Nonroad Engine Pollution Control Standards;	https://www.govinfo.gov/content/pkg/FR-2025-01- 06/pdf/2024-31125.pdf
The "Omnibus" Low NOx Regulation; Waiver of	<u>00/pul/2024-51125.pul</u>
Preemption, Decision Document (EPA 2024)	
A Report on Actions for Medium- and Heavy-	https://www.energy.gov/sites/default/files/2025-01/MHDV-
Duty Vehicle Energy and Emissions Innovation,	Report-Actions-2024-12-19.pdf
(EPA & DOE 2024)	
	https://www.oregon.gov/deg/EQCdocs/111721 C Clean
Clean Truck Rules - Staff Report to Oregon's	Trucks.pdf
Environmental Quality Commission, Nov 2021	<u></u>
CARB Initial Statement of Reasons (ISOR) for	
Proposed Amendments to the Heavy-Duty	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/202
Engine and Vehicle Omnibus Regulation	<u>3/hdomnibus2023/isor.pdf</u>
California's Heavy-duty omnibus regulation:	
Updates to emission standards, testing	
requirements, and compliance procedures,	https://theicct.org/wp-content/uploads/2022/01/california-
International Council on Clean Transportation	us-hdv-omnibus-reg-jan22.pdf
(ICCT), 2022	

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/rule making/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/2023- 07/Final%20Agreement%20between%20CARB%20and% 20EMA%202023_06_27.pdf
Clean Truck Partnership Commitments – Status and Outcome	https://ww2.arb.ca.gov/clean-truck-partnership
Advanced Clean Trucks Memo to Board Re: California Truck Availability Analysis, CARB Executive Officer Steven Cliff (September 2024)	https://ww2.arb.ca.gov/sites/default/files/2024- 09/240925 actmemo ADA 0.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.2023.168188
Ecommerce and environmental justice in metro Seattle	https://www.sciencedirect.com/science/article/pii/S07398 85923001221

Rules summary

OAR chapter 340, Division 257 and 261

Rule Number	Rule Title	Explanation
340-257-0050	Incorporation by Reference and Program Review	Increased Deficit Makeup Period, New definition for how manufacturers can generate a credit based on a vehicle delivered for sale, and providing that specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule.
340-257-0300	Oregon Optional Credit Program	Create a new, short-term compliance mechanism, called the Oregon Optional Credit Program. This program will allow DEQ to provide free credits directly to medium and heavy-duty vehicle manufacturers for vehicle Model Years 2025 and 2026 without first requiring ZEV sales to earn credits.
340-261-0020	Applicability	Permanently delays rule implementation by 1 year; removes references to trailers
340-261-0040	Requirement to Meet California Vehicle Emission Standards	Updates the rules to reflect delayed implementation until the 2026 engine model year and the 2027 vehicle model year; removes references to trailers
340-261-0050	Incorporation by Reference	Includes revision to California Code of Regulations Section 1956.8, clarifying the certification options for medium-duty vehicles so that complete medium-duty ZEVs can now be certified under the zero-emission powertrain certification program; removes references to trailers

Fee analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact Overview

DEQ anticipates that the proposed rulemaking will have a fiscal and economic impact.

ACT Amendments

The proposed amendments to the Advanced Clean Trucks (ACT) rule introduce key flexibilities designed to reduce compliance burdens on vehicle manufacturers and ensure a smoother transition to zero-emission vehicles (ZEVs) in Oregon.

The amendments providing additional flexibilities could lead to lower costs for manufacturers, fleets, and dealers. Manufacturers could experience a reduction in short-term financial pressures by having additional time to comply with the rules. That extended time could lead to fewer financial penalties for noncompliance, reduced administrative costs through only needing to track sales based on delivery, rather than final purchase, and additional options to certify complete medium duty trucks. With a longer deficit makeup period, truck manufacturers can distribute compliance costs more evenly over three years rather than making steep, immediate price increases on ZEVs. Manufacturers may also experience financial relief by not having HHD Omnibus certified engines count toward their deficits in 2026, easing compliance concerns. Fleets and dealers could see reduced costs and additional availability of trucks due to manufacturers not having to make price adjustments or restrictions in the conventional vehicle market to offset deficits.

HD Omnibus Amendments

Medium- and heavy-duty vehicle and engine manufacturers, dealers and purchasers would continue to supply and be able to sell and purchase federally certified 2025 engines if the proposal to start implementation with engine model year 2026 and vehicle model year 2027 is permanently adopted. The effect is likely to be experienced as lower costs for new vehicle or engine purchasers and/or increased vehicle and engine manufacturer and dealer revenue when compared to the status quo. The fiscal and economic impacts of all other elements of the proposed HD Omnibus amendments, including the adoption of the recent CARB amendments that increase manufacturer zero emission powertrain flexibilities and the elimination of trailer language that was overturned in a court challenge, are expected to be cost neutral to both manufacturers and purchasers.

General Assumptions

ACT Amendments

The proposed amendments to the Advanced Clean Trucks (ACT) rule introduce key flexibilities designed to reduce compliance burdens on vehicle manufacturers and ensure a smoother transition to zero-emission vehicles (ZEVs) in Oregon.

The amendments providing additional flexibilities could lead to lower costs for manufacturers, fleets, and dealers. Manufacturers could experience a reduction in short-term financial pressures by having additional time to comply with the rules. That extended time could lead to fewer financial penalties for noncompliance, reduced administrative costs through only needing to track sales based on delivery, rather than final purchase, and additional options to certify complete medium duty trucks. With a longer deficit makeup period, truck manufacturers can distribute compliance costs more evenly over three years rather than making steep, immediate price increases on ZEVs. Manufacturers may also experience financial relief by not having HHD Omnibus certified engines count toward their deficits in 2026, easing compliance concerns. Fleets and dealers

could see reduced costs and additional availability of trucks due to manufacturers not having to make price adjustments or restrictions in the conventional vehicle market to offset deficits.

Oregon Optional Credits

The proposed amendments create an Oregon optional credit program where manufacturers are gifted half of the credits they need to meet their deficits for Class 4-8 trucks and all of the credits they need for Class 7-8 tractor trucks in 2025 and 2026. This provides manufacturers many of the credits they need to meet their compliance obligations in the early years of the program. It also includes provisions for ZEV-only OEMs to receive optional credits and for DEQ to evaluate extending the program in 2027 and beyond.

These new Optional Credits may lead to lower costs for fleets, manufacturers, and dealers. Manufacturers may not have to purchase credits to satisfy any compliance obligation and could pass these costs savings to dealers and fleets. Fleets purchasing new medium- and heavy-duty trucks in 2025 may face less volatility in pricing, as manufacturers can better manage their credit balances without artificially restricting availability of diesel vehicles in Oregon. Increased credit availability also benefits dealers as it allows manufacturers to continue the sale of diesel-powered trucks without the risk of temporary market disruptions. Overall, these amendments ease compliance burdens, prevent abrupt cost increases, and ensure Oregon fleets have access to a stable, diverse truck market while transitioning to zero-emission technology. Quantifying the specific aspects of these optional credits is difficult to assess because it depends upon how many manufacturers choose to opt in to the optional credit program.

HD Omnibus Amendments

DEQ anticipates that the proposed rulemaking will have a fiscal and economic impact. Under the proposed HD Omnibus amendments medium- and heavy-duty vehicle and engine manufacturers and dealers would continue to be able to sell federally certified engine model year 2025 vehicles through the end of 2025. Vehicle and engine purchasers should see lower costs for new vehicles and engines compared to the status quo. Manufacturers and dealers should experience increased revenue compared to the status quo. Quantifying the specific fiscal impacts of delayed implementation on the affected parties was not possible given uncertainties about the extent of medium- and heavy-duty vehicle supply constraints.

The fiscal and economic impact of providing additional manufacturer flexibility to certify complete medium-duty ZEVs using the ZEP-CERT program is considered to be zero since the certification pathway remains optional for complete medium-duty ZEVs. Non-quantifiable manufacturer cost savings could be realized if manufacturers decide to utilize the additional certification pathway.

Impacts of greenhouse gas emissions

The overwhelming scientific consensus is that global warming is primarily caused by human activity, and that major reductions in GHG emissions are urgently needed across all sectors in order to avert the worst effects of climate change. In Oregon, the transportation sector accounts for 35% of GHG emissions.

Higher temperatures, changing precipitation patterns, reduced snowpack, drier summers, and more frequent and damaging fires are being experienced in Oregon. Increased GHG emissions exacerbates drought, tree mortality and the frequency and magnitude of wildfire events. In 2019 alone, Oregon experienced 2,000 wildfires that burned roughly 665,000 acres of forest and rangeland. It cost the state nearly half a billion dollars to suppress these fires. Depending on the extent of GHG emissions released, average temperatures in Oregon are expected to increase by 4°F to 9°F (2.2°C to 5°C) over the course of the century. Within the next three decades, most locations in Oregon are likely to have more frequent heatwaves, often measured as consecutive days above a particular high temperature threshold. (OGWC Biennial Report, 2020). With the higher temperatures, it can result in reduced snowpack thereby limiting the amount of hydropower available when demand for electricity is high in the summertime and causing reduced streamflow that could threaten commercial and tribal fisheries. Without actions to mitigate these effects, human health and safety, infrastructure, economic growth, crop production, water supplies, and fish and wildlife populations will continue to be at risk.

Impacts of truck and vehicle engine emissions

Gasoline- and diesel-powered vehicles harm human health and the environment via emissions of pollutants such as fine particulate matter, air toxics, sulfur oxides and oxides of nitrogen, a precursor to the formation of ground level ozone. These emissions disproportionately impact low-income communities and communities of color. Communities across Oregon, including the Portland-metropolitan area and the Rogue Valley have experienced increasing levels of ozone in recent years. Increasing levels of ozone - or smog - leads to a wide variety of health effects including aggravated asthma, decreased lung function and chronic obstruction pulmonary disease. Exposure to diesel engine exhaust is associated with a variety of effects, including increased risk of certain cancers, including lung and bladder cancers, cardiovascular effects including an increased risk of heart attacks, and pulmonary effects, such as upper respiratory system irritation and decreased lung functions. DEQ estimates 176 premature deaths, 24,910 lost workdays, and annual costs from exposure to diesel engine exhaust costs Oregonians \$3.5 billion every year.⁸ The ACT and HD Omnibus Rules reduce NOx and PM emission associated with diesel emissions. As a result of these reductions, a 2021 analysis done by MJ Bradley estimates Oregon can expect to see fewer premature deaths, reduced mortality, fewer hospital and emergency room visits and fewer missed days of work and school, resulting in over \$1.8 billion in reduced health costs by 2050.9 Proposed amendments to delay HD Omnibus Rule implementation and provide additional flexibility under the ACT Rule will negatively impact this estimate in the early years of the program.

Overall, and for the reasons described above, the fiscal impact of Oregon adopting these proposed amendments to the ACT, the Oregon Optional Credits, and HD Omnibus Rules is expected to have a direct impact on truck manufacturers, fleet owners, dealers and indirect impact on the public.

Statement of cost of compliance

State agencies

ACT Amendments

The ACT rule requires vehicle manufacturers that supply trucks for sale in Oregon to deliver ZEV trucks for sale in Oregon, including flexibilities for how they meet their ZEV sales requirements. There is no direct impact on State agencies associated with these rules or proposed amendments.

Oregon Optional Credits

Currently, State agencies may experience indirect impacts of the rule, through the reduced ability to purchase available trucks. To date, vehicle manufacturers are not providing adequate supply of medium- and heavy-duty vehicles, either internal combustion engine or zero emissions, to the Oregon market. This may result in Oregon state agencies with these vehicle types in their fleets to need to hold onto older vehicles longer than their planned retirement schedule. The proposed amendments and optional credit program will alleviate this situation by opening up more vehicle availability in the Oregon market, lessening any potential indirect impact. Under the Oregon Optional Crediting program, state agencies could experience positive impacts due to potentially increased volumes of available trucks to purchase.

⁸ The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015

⁹ Oregon Clean Trucks Program, MJ Bradley and Associates, 2021

HD Omnibus Amendments

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 amendments will result in the elimination of any concerns over new vehicle supply associated with the HD Omnibus rules through the remainder of 2025. There are also indirect benefits that will likely be realized as cost savings on the purchase of each new medium- and heavy-duty vehicle in 2025 due to lower lifecycle DEF usage, lower warranty costs, reduced likelihood of vehicle surcharges and avoided 2025 market disruptions such as temporary sales stoppages of medium- and heavy-duty vehicles.

Local governments

ACT Amendments and Oregon Optional Credits

Impacts on local governments are expected to be the same as the impacts on state agencies.

HD Omnibus Amendments

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

Public

Benefits of the regulations

ACT Amendments

The ACT regulation will result in more medium- and heavy-duty ZEVs in use in Oregon. With more ZEVs on the road replacing conventional trucks, it will reduce emissions of greenhouse gases and other air quality pollutants. Overall, the increased ZEV availability and use furthers Oregon's goals to reduce greenhouse gas emissions to 45 percent below 1990 levels in 2035 and to an 80 percent reduction below 1990 levels in 2050.

The benefits of the proposed ACT amendments through providing more options for manufacturers to meet compliance could reduce the overall cost of ZEV adoption, leading to lower prices for businesses and, ultimately, consumers.

The Oregon Optional Credits could provide benefits for the public by increasing the availability of diesel trucks for Oregon freight haulers and fleets to maintain their operations. This may result in reduced or limited changes in the costs for businesses and consumers. Other benefits for the public are likely to include reduced disruption in local economies that include medium and heavy-duty diesel vehicle dealers facing the damaging practice of ratioed sales.

Sales ratios, where manufacturers do not make diesel vehicles available for sale unless dealers first buy zero emissions vehicles, are not required in the ACT rules. DEQ is proposing this new program to support effective implementation of the Advanced Clean Trucks Rule in Oregon, in part due to the assertion from vehicle dealers that their livelihoods are at stake if they cannot sell diesel trucks.

HD Omnibus Amendments

The proposed amendments ensure the stability of the new medium- and heavy-duty vehicle market in 2025 by permanently adopting a one-year delayed implementation of the HD Omnibus rule. The amendments would reduce the risk of temporary sales stoppages and additional market disruptions that may have broader economic impacts.

CO2 emissions reductions

One of the key benefits to these rules is the anticipated reduction in CO₂ emissions. As discussed earlier, impacts as a result of greenhouse gas emissions are significant and these rules will address some of the threats posed by increased GHG emissions. Overall, the estimated cumulative emissions reductions in Oregon as a result of the ACT rule is expected to be between 1.8 MMT and 2.4 MMT by 2040. This is based on CARB's analysis and other studies looking at the effects of the ACT rule in Oregon.¹⁰ DEQ estimates the cumulative CO2 reductions from 2024 through 2040 to be 2.4 MMT. An International Council on Clean Transportation (ICCT) study looked at modeling results for Oregon and determined it would result in avoided CO2 emissions of 1.8 million tons total for the period of 2020-2040. This analysis also applied Oregon specific numbers on the anticipated sales of ZEV trucks in Oregon and the resulting benefits.

A study by MJ Bradley and Associates looked at the combined effects of adopting the ACT and HD Omnibus in Oregon. It estimated Oregon's reduction of GHG emissions would be 49.7 million metric tons ("MMT") amounting to a monetized value of \$8.1 billion over the next 30 years.¹¹ While these assumptions are higher than other analyses included in this fiscal analysis, the differences are likely due to the models used to run the assumptions including the how Oregon's electric grid mix was characterized and whether it factored in Oregon's decarbonization efforts as a result of HB 2021(2021).

Proposed amendments to provide increased flexibilities under the ACT rule and delay of the HD Omnibus rule until 2026 may result in deployment of fewer of the cleanest diesel engines in 2025 and potentially fewer deployed ZEVs due to the increased deficit makeup period. This will erode the emissions benefits of the Clean Truck Rules in total, with the largest impact during the early years of the program. Indirect impacts associated with the adoption of the ACT amendments that increase the certification pathways for medium-duty zero emission vehicles are expected to be emissions neutral based on the CARB analysis.

With Oregon Optional Credits, ZEV deployment for Class 7-8 tractors may not reach 7% or 9% of overall truck sales per manufacturer in 2025 and 2026, depending upon who opts into the program. In fact, some manufacturers may not deliver any ZEV vehicles in Oregon leading to additional decrease in emissions benefits. The Optional Credit Program will also likely result in a reduction in ZEV deployment for Class 4-8 trucks and additional reduced emission benefits. As discussed above, the ACT rule phases in slowly over time, allowing manufacturers, dealers, and fleets time to adjust to the transition. With early ZEV deployment targets ranging between 7% and 13% during this time frame, DEQ estimates an equivalent decrease in emissions benefits.

Criteria air pollutant emissions reductions

For these rules, DEQ utilized CARB's analysis and methodology to estimate the emissions reductions and scaled them to fit Oregon's demographics and vehicle usage. Analyzing the impacts of the ACT rule only, DEQ estimates the NOx reductions in 2040 to be 3.9 tpd and 0.12 tpd in PM2.5 reductions. Based on Clean Fuels Program scenario modeling on the effects of the ACT rule, DEQ estimates the reduction from 2025 to 2035 is a PM reduction of 180 metric tons, reduction in NOx of 699 metric tons, based on the Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies model (GREET) tailpipe emission factors. ICCT study estimates the reduction in NOx emissions from 2020-2040 is 12,506 tons per year and for PM2.5 is 130 tons per year.

The HD Omnibus regulation could result in a 17.5% reduction (2,570 tons/year) of on-highway NOx emissions and a 4% reduction (29 tons/year) in on-highway PM2.5 by 2035 in Oregon according to a report from the

¹⁰ DEQ utilized CARB's extensive analysis, research and methodology to estimate emissions reductions when the rules were originally adopted in 2021. While CARB's information is California specific, DEQ determined a scaled approach to fit Oregon's demographics and vehicle usage was appropriate in characterizing the potential impacts in Oregon. Additional studies that evaluated Oregon-specific scenarios were used in combination with the CARB analysis to provide a range of potential anticipated reductions.

¹¹Oregon Clean Trucks Program, MJ Bradley and Associates, 2021

Manufacturers of Emission Controls Association. One model (Alpine Geophysics) predicted ozone in the Portland metropolitan area would be reduced by as much 3 parts per billion in 2028 if these rules were implemented.

The MJ Bradley and Associates study looked at the combined effects of adopting the ACT and HD Omnibus in Oregon. The study estimated it would reduce NOx emission by 223,200 metric tons and PM2.5 by 1,290 metric tons. It could result in potentially avoiding 156 premature deaths, 118 hospital visits, and 83,579 minor health complications, such as acute bronchitis and exacerbated asthma, by 2050.

As described in the CO2 emissions reductions section above, the proposed amendments will erode the criteria pollutant reductions and public health benefits associated with ACT and HD Omnibus by the degree to which vehicle manufactures fail to hit ZEV deployment targets in 2025 and 2026 and to not deliver Omnibus-compliant engines in 2025. These reductions in benefits are likely to occur and will hinge on the scope of vehicle manufacturers utilization of expanded flexibilities.

With Oregon Optional Credits, ZEV deployment for Class 7-8 tractors may not reach 7% or 9% of overall truck sales per manufacturer in 2025 and 2026, depending upon who opts into the program. In fact, those manufacturers who opt in may not deliver any ZEV vehicles in Oregon leading to an additional decrease in emissions benefits. This will also likely result in a reduction in ZEV deployment for Class 4-8 trucks and additional reduced emission benefits. As discussed above, the ACT rule phases in slowly over time, allowing manufacturers, dealers, and fleets time to adjust to the transition. With early ZEV deployment targets ranging between 7% and 13% during this time frame, DEQ estimates some potential decrease in emissions benefits associated with lower ZEV deployment rates if OEMs do not achieve these goals.

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 2025, 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 2026. 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. However, due to manufacturer delays in delivering HD Omnibus compliant engines available for sale in both 2024 and 2025, Omnibus rule implementation in either of those years would not have brought significant tailpipe emission reductions.

DEQ also determined that delaying the HD Omnibus Rule and the risk of losing an additional year of implementation was preferable to having little to no new engines available for purchase and instead forcing fleets to retain older, dirtier engines for longer. DEQ determined that the pollution reduction benefits to be gained from the implementation of the rules starting with model year 2026 and beyond outweighed the loss of the 2025 engine model year alone. The risk of losing the emissions benefit to environmental justice communities and the public as a whole beginning in 2026 and beyond was not a preferred outcome. DEQ determined that these proposed rule amendments represent the option that posed the least harm to communities suffering from disproportionate impacts associated with medium- and heavy-duty vehicle pollution.

The Advanced Clean Trucks Rule is designed to increase the penetration of lower emitting, zero emission heavy-duty technology and achieve NOx and GHG emissions reductions through advanced clean technology. The proposed amendments would still preserve these goals while also providing manufacturers additional flexibility in offsetting incurred deficits for a given model year as well as other proposed changes that would

assist with credit availability, reporting, and rule implementation. DEQ determined that failing to act to incorporate the Advanced Clean Truck amendments put these rules at risk of not meeting the identicality requirements described in Section 177 of the Federal Clean Air Act.

Based on proposed Oregon Optional Credits DEQ anticipates fewer ZEV deployments in the early years of the program, reducing the environmental justice benefits of the program initially. These early-year impacts are cumulative and ongoing due to the urgency of reducing climate and criteria emissions as soon as possible to realize the most benefits. This provision, which is designed to support effective implementation of ACT, will help secure the long-term delivery of ZEV trucks in future years and provide emissions and public health benefits for impacted communities.

DEQ sought input from representatives of environmental justice and clean air advocacy groups as participants on the rulemaking advisory committee as it developed these proposed amendments.

Other considerations

The ACT rule is expected to result in more ZEV trucks in Oregon. Because ZEV trucks require less maintenance than their diesel counterparts, there may be some associated job losses as diesel engine mechanics are less in demand over the long term, 10+ year time horizon. However, these job changes will be mitigated by the significant increase in new job opportunities in the clean technology sector. This includes the need for electric charging infrastructure providers and ZEV maintenance electricians.

Anticipated costs of the regulation

ACT Amendments

Under the ACT rule, there are no direct costs to the public, since the requirement is only on medium- and heavy-duty vehicle manufacturers to sell ZEV vehicles. However, there may be indirect costs on purchasers, dealers, and the public. Manufacturers could pass on the costs to truck purchasers who could pass those costs on to customers and costs of goods being transported. There may be some manufacturers who choose not to sell in Oregon as a result of the regulations. For truck purchasers the upfront purchase costs of ZEVs are higher than those of conventional vehicles due to the higher battery costs and the need to install charging infrastructure. These costs are described in more detail in the "Large businesses" section below. It is anticipated that the initial purchase price of medium- and heavy-duty ZEVs will fall over time as technology advances, battery costs decline and an economy of scale is achieved. While the ACT regulation will result in more medium- and heavy-duty ZEVs in use in Oregon, these amendments incorporating additional compliance flexibilities and the potential optional credit program may result in fewer ZEVs deployed in Oregon. These proposed amendments may result in a smaller reduction of air quality pollutants and greenhouse gas emissions than anticipated at the time DEQ implemented the original rule.

Oregon's Optional Credit were designed to limit the manufacturer ratioing of new medium- and heavy-duty vehicle sales in Oregon, opening up the market. The anticipated costs associated with proposed ACT amendments are primarily associated with decreased emissions benefits in the early years of the program, in 2025 and 2026, to the extent that vehicle manufacturers utilize increased flexibilities and compliance options being proposed.

HD Omnibus Amendments

There are no direct costs to the public associated with the proposed amendments because they 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. It is possible that adoption of these proposed amendments could lead to increased tailpipe emissions compared to the status quo. Any increase in tailpipe emissions would be directly connected to the volume of HD Omnibus compliant engines that are made available for sale in 2025. With a limited volume of HD Omnibus compliant engines available for sale on the market in 2025, manufacturers would have only been able to comply with the rules in Oregon in 2025 by limiting their sales of new conventionally fueled medium- and heavy-duty vehicles and engines. Because of the limited number of available HD Omnibus compliant engines, any increased emissions associated with the proposed amendments would not necessarily be expected to occur along vehicle travel routes.

Large businesses - businesses with more than 50 employees

ACT Amendments

Large businesses, specifically truck manufacturers and truck dealers selling new vehicles, are affected by ACT rules. Per CARB's analysis on the effect of the ACT rules on large businesses, it is anticipated Oregon's rules would affect the same entities. CARB estimates ten large truck manufacturers sell vehicles affected by the rules, and DEQ concludes that is also true for Oregon. Other businesses that could be affected include electric utilities, vehicle dealers, and fleets. Under the ACT rule there will be more electric vehicle deployment resulting in an increased demand for electricity and ultimately increased revenue for electric utilities.

Medium and Heavy-Duty Vehicle Manufacturers

The impacts outlined below reflect the costs of complying in Oregon as a result of adopting proposed ACT amendments and Oregon's Optional Credits. The proposed amendments providing additional flexibilities for manufacturers allow for additional compliance options, potentially resulting in an increase in credit availability, and will improve overall market conditions in the short term. The Oregon Optional Credits are expected to reduce or eliminate new medium- and heavy-duty vehicle manufacturers sales restrictions in Oregon. Manufacturers are currently misinterpreting the rules to require that they not sell diesel vehicles until dealers sell an equivalent zero emissions vehicle. This is artificially restricting the truck market in Oregon by impacting the ability of Oregon vehicle dealers and fleets to purchase new vehicles.

For medium and heavy-duty vehicle manufacturers the proposed amendments and Oregon Optional Credits will reduce costs of compliance with the Advanced Clean Trucks rule in at least 2025 and 2026, with a potential to reduce costs in 2027 and beyond. Manufacturers will still be required to deliver zero emission vehicles over time. While they will bear the cost of developing the technology, supporting the market, and changing their business model to help Oregon move towards a zero-carbon transportation future, manufacturers will have significantly more time for this transition. Additionally, manufacturers will be able to earn more credits from ZEV sales if they choose to opt in to the Oregon Optional Credits in 2025 and 2026, and this may translate into financial benefits for them later on during the program.

There is some risk to vehicle manufacturers in the event that they have to sell vehicles below cost to purchasers to meet the requirements of the regulation. Those costs could be passed on to conventional diesel or gasoline powered trucks in their manufacturing line and in effect result in higher costs to purchasers of those vehicles. Alternatively, manufacturers may not be able to pass on the costs to other vehicles or choose to absorb the costs themselves.

Medium and Heavy-Duty Vehicle Dealers

Oregon Medium and Heavy-Duty Vehicle Dealers could see immediate relief from the practice of manufacturers limiting the sale of diesel vehicles in Oregon. This means that the amendments and new program will reduce costs associated with lost or delayed sales right away. Longer term, dealers should not face additional costs associated with the increasing zero emissions vehicle delivery requirements that manufacturers face because the marketing, sale, and service of ZEVs can be a profitable business model. Incorporating ZEV sales alongside sales of traditional diesel vehicles will allow for a long and stable transition period, made longer and more gradual by amendments and optional credits, for Oregon vehicle dealers to participate and profit from the zero-emissions vehicle industry in the future.

Businesses with Medium and Heavy-Duty Vehicle Fleets

Oregon businesses with fleets of medium and heavy-duty vehicles will not face increased costs as a result of proposed amendments and optional credits. The ACT rule requires vehicle manufacturers to deliver ZEV trucks for sale in Oregon, including flexibilities for how they meet their ZEV sales requirements. There is no direct impact associated with these rules or proposed amendments on large businesses with fleets.

Fleets can purchase the vehicles that best suit their business needs which may or may not include ZEVs. However, the ACT regulation will result in an increased number of ZEVs for purchase and provide additional options for purchasers and fleets. Additionally, businesses that can transition to ZEV fleets more easily may want to take advantage of savings through the lower total cost of ownership for ZEVs or accumulating credits under Oregon's Clean Fuels Program as mentioned above.

Currently, medium- and heavy-duty ZEVs are more expensive to purchase than gasoline or diesel trucks, however, the overall total cost of ownership is less than conventional trucks due to reduced fuel and maintenance costs. According to CARB's analysis, model year 2024 ZEV trucks are approximately twice the price of a conventional vehicle.¹² There are a number of costs included besides the vehicle and battery costs, but also costs to build out and install the infrastructure necessary to charge the vehicles, upgrade existing charging infrastructure to ensure it can meet charging capacity needs, fueling, workforce training, and maintenance.

The proposed amendments and the Oregon Optional Credits provide increased flexibilities, compliance options, credit availability, and other provisions easing the transition to zero emissions vehicles. Currently, vehicle manufacturers are not providing adequate supply of medium- and heavy-duty vehicles, either internal combustion engine or zero emissions, to the Oregon market. This may result in Oregon businesses with these vehicle types in their fleets to need to hold onto older vehicles longer than their useful life or planned retirement schedule. The proposed amendments and optional credit program will alleviate this situation by opening up more vehicle availability in the Oregon market, lessening any potential indirect impact. Under the Oregon Optional Credits, Oregon businesses could experience positive impacts due to potentially increased volumes of available trucks to purchase.

HD Omnibus Amendments

Under the proposed rules, large businesses that manufacture medium- and heavy-duty engines are expected to experience increased sales compared to status quo. The predicted increase in sales would be due to avoided 2025 market disruptions such as potential temporary sales stoppages of medium- and heavy-duty engines.

There are no direct costs of compliance for large businesses who are exclusively purchasers of new mediumand heavy-duty vehicles. However, these businesses may experience the indirect benefit of reduced costs under the proposed rules identical to those 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 increased sales compared to the status quo directly related to avoided 2025 market disruptions. That is because adoption of the proposed rule amendments reduces the risks of potential temporary manufacturer sales stoppages of medium- and heavy-duty vehicles associated with the HD Omnibus rules in 2025.

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, if the proposed amendments are adopted, there could be indirect costs on these businesses associated with the increased number of federally certified engine sales that manufacturers would be permitted to sell in 2025. An increase in federally certified engine sales would likely

¹² Zero-Emission Class 8 Truck Pricing Comparisons – EU & US, CARB, 2024, accessed on 3/15/2025.

decrease the demand for warranty repairs over time since federally certified 2025 engines would have shorter warranties.

Small businesses – businesses with 50 or fewer employees

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

ACT Amendments

Under the proposed ACT rules, no small businesses would incur compliance costs to sell MHD ZEV trucks because they are exempt from the requirements if they sell fewer than 500 vehicles in a year. Small businesses may see indirect impacts as a result of the rule if they choose to purchase ZEV trucks. DEQ estimates the same impacts as described for large businesses related to Oregon vehicle dealers and Oregon businesses with fleets. These impacts are described in the large businesses section above.

HD Omnibus Amendments

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 if the proposed amendments are adopted.

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 benefits are primarily associated with 1) cost savings related to avoided 2025 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 vehicles available to be sold in 2025.

For small businesses that are involved in warranty repairs for new medium- and heavy-duty 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 ACT rules, no activities are required of small businesses to comply with the proposed rules, unless they are a manufacturer with more than 500 sales per year.

Under the HD Omnibus proposed rule amendments 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.

ACT Amendments

Under the proposed ACT rules, no additional activities are required of small businesses to comply with the proposed rules unless they are a manufacturer with more than 500 sales per year.

HD Omnibus Amendments

Under the HD Omnibus proposed rule amendments 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 Clean Truck Rules 2025 Updates Advisory Committee. The committee advised DEQ on the cost of compliance for small businesses.

Documents relied on for fiscal and economic impact

Document title	Document location
2020 OGWC Biennial Report to Legislature	https://static1.squarespace.com/static/59c554e0f09ca40655ea6 eb0/t/5fe137fac70e3835b6e8f58e/1608595458463/2020- OGWC-Biennial-Report-Legislature.pdf
Energy Innovation and UC Berkley's 2035 Report: Transportation	Download The 2035 2.0 Report from UC Berkeley 2035 The Report (2035report.com)
2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure Staff Report: Initial Statement of Reasons	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/actz epcert/isor.pdf
Second 15-Day Changes to the 2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero- Emission Powertrain Certification Test Procedure, Appendix A-1	https://ww2.arb.ca.gov//sites/default/files/barcu/regact/2024/actz epcert/2nd15daya1.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020 /hdomnibuslownox/isor.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR), Appendix C-3: Further Detail on Costs and Economic Analysis	https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/appc3.pdf
CARB Initial Statement of Reasons for the Advanced Clean Trucks rule	https://ww2.arb.ca.gov/sites/default/files/classic/regact/2019/act 2019/isor.pdf
Updated Costs and Benefits Analysis for the Proposed Advanced Clean Trucks Regulation	https://ww2.arb.ca.gov/sites/default/files/classic/regact/2019/act 2019/30dayattc.pdf
Clean Trucks Analysis, Costs & Benefits of State-Level Policies to Require No- and Low-Emission Trucks (MJ Bradley & Associates study), 2021	https://www.erm.com/globalassets/documents/mjba- archive/reports/2021/clean-trucks-technical-report-final- 09jun21.pdf
Oregon Clean Trucks Program: An Analysis of the Impacts of Zero-Emission	https://www.erm.com/contentassets/f3d6061dd8a04147a3f 38b7db256ae44/or-clean-trucks-report.pdf

Document title	Document location
Medium- and Heavy-Duty Trucks on the Environment, Public Health, Industry, and the Economy (MJ Bradley & Associates study), 2022	
California's Advanced Clean Trucks regulation: Sales requirements for zero- emission heavy-duty trucks (ICCT study)	https://theicct.org/sites/default/files/publications/CA-HDV-EV- policy-update-jul212020.pdf
Zero-Emission Class 8 Truck Pricing Comparisons – EU & US, CARB 2024	https://ww2.arb.ca.gov/sites/default/files/2024- 12/Zero%20Emission%20Class%208%20Tractor%20Pricing%2 0Comparisons_ADA.pdf
Analysis of Heavy-Duty Vehicle Sales Impacts Due to New Regulation (EPA 2021)	https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101246N.pdf
The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015	Report - The Concerns About Diesel Engine Exhaust, Oregon DEQ
Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, 2012	https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf
California State Motor Vehicle and Engine and Nonroad Engine Pollution Control Standards; The "Omnibus" Low NOx Regulation; Waiver of Preemption, Decision Document (EPA 2024)	https://www.govinfo.gov/content/pkg/FR-2025-01-06/pdf/2024- 31125.pdf
A Report on Actions for Medium- and Heavy-Duty Vehicle Energy and Emissions Innovation, (EPA & DOE 2024)	https://www.energy.gov/sites/default/files/2025-01/MHDV- Report-Actions-2024-12-19.pdf
Clean Truck Rules - Staff Report to Oregon's Environmental Quality Commission, Nov 2021	https://www.oregon.gov/deq/EQCdocs/111721 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/hdo mnibus2023/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 Regulation and Associated Amendments: Final Statement of Reasons (FSOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking /hdomnibuslownox/fsor.pdf

Document title	Document location
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/2023- 07/Final%20Agreement%20between%20CARB%20and%20EM A%202023_06_27.pdf
Clean Truck Partnership Commitments – Status and Outcome	https://ww2.arb.ca.gov/clean-truck-partnership
Advanced Clean Trucks Memo to Board Re: California Truck Availability Analysis, CARB Executive Officer Steven Cliff (September 2024)	https://ww2.arb.ca.gov/sites/default/files/2024- 09/240925 actmemo ADA 0.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.2023.168188
Ecommerce and environmental justice in metro Seattle	https://www.sciencedirect.com/science/article/pii/S07398859230 01221

Advisory committee fiscal review

DEQ appointed an advisory committee.

As ORS 183.333 requires, DEQ asked 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 reduce that impact.

ACT Amendments

Committee members agreed with Oregon DEQ's analysis that proposed rules could result in indirect costs to the public and Oregon public and private fleets. Committee members expressed concern about potential reductions in air quality benefits associated with the proposed Oregon Optional Credit Program. Others indicated a preference for delaying the Advanced Clean Trucks rule implementation date to 2027. Some committee members pointed out that zero emissions vehicle technology does not meet the needs of specific sectors such as logging and heavy-duty tow trucks. Committee members broadly supported the adoption of California amendments to the Advanced Clean Trucks rule.

HD Omnibus Amendments

The committee provided feedback on the overall draft fiscal and economic impact analysis provided by DEQ. Committee member concerns included interest in delaying the rules until 2027 to align with the federal requirements, the complexity of the rules, and the lack of vehicle availability for specific parts of the new medium- and heavy-duty vehicle market – specifically in the medium-duty engine sector since those products will not be available in 2026. There was a discussion about the meaning of both direct and indirect impacts as described in the draft fiscal impact document. Other concerns raised were about the new Oregon specific optional credit program under the ACT rules which would likely reduce NOx and particulate matter credits available to offset sales of engines under the HD Omnibus rules. As a result, Oregon should consider a similar Oregon specific credit allocation program under the HD Omnibus rules, especially if California amends their rules to allow additional sales of legacy engines (those meeting federal emission standards) in 2026. Another committee member requested DEQ perform a specific analysis of how many Omnibus certified compliant vehicles would be delivered to Oregon in 2026 versus how many new federally certified diesel vehicles would not come into the state in order to quantify the specific emission reduction benefits from a 2026 implementation.

Housing cost

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.

ACT Amendments

The Advanced Clean Trucks Rule is being revised to incorporate commitments made between the California Air Resources Board (CARB) and the truck manufacturers in the Clean Truck Partnership.¹³ The proposed changes include:

- Increased Deficit Makeup Period Manufacturers now have three years instead of one year to balance their ZEV deficits.
- New definition for how credits are generated Manufacturers can now generate a credit based on a vehicle delivered for sale, rather than to the ultimate purchaser in Oregon.
- Additional flexibility in 2026 for the cleanest Heavy Heavy-Duty (HHD) Engines Specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule, easing compliance for manufacturers of the subject heavy heavy-duty internal combustion engine (ICE) trucks.

Oregon Optional Credit Program

Oregon is proposing an optional credit program to support effective implementation of the Advanced Clean Trucks Rule: DEQ would provide optional credits to truck manufacturers, these credits would be available to manufacturers who agree to allow the unrestricted sale of internal combustion engines without first requiring a ZEV sale.

- DEQ would provide optional credits to satisfy 100% of manufacturers' Class 7-8 tractor truck deficit generation in 2025 and 2026.
- DEQ would provide optional credits to satisfy 50% of a manufacturer's Class 2b-3 and Class 4-8 straight truck deficit generation in 2025 and 2026.

¹³ <u>CARB and the Truck and Engine Manufacturers Association Agreement (Clean Truck Partnership), July 2023,</u> accessed on 3/4/2025.

• DEQ would provide optional credits to manufacturers who have sold Class 2b-3 and Class 4-8 straight trucks but not incurred any deficits in 2025 and 2026. These credits are allocated based on 50% of that manufacturer's deficits generated through the total sale of Class 2b-3 and Class 4-8 straight trucks.

DEQ may consider additional optional credit allocations in 2027 and beyond based on emissions, public health, and truck market conditions.

These proposed amendments will increase compliance options and flexibility in addition to providing additional credits for manufacturers, reducing the total short-term delivery of zero emissions vehicles for sale in Oregon as required by the existing Advanced Clean Trucks Rule.

Any discussion of potential housing cost increases or impacts is necessarily focused on the indirect impacts on the cost of transporting of housing construction materials from the existing Advanced Clean Trucks Rule requirements to deliver and make increasing percentages of zero emissions vehicles available for sale in Oregon. And while the Advanced Clean Trucks Rule may in fact increase these indirect transportation costs and impacts, the proposed amendments and Optional Credit program will decrease these impacts in at least 2025 and 2026 and perhaps for longer. For these reasons DEQ estimates no increase in housing costs in Oregon associated with these proposed rules.

HD Omnibus Amendments

The proposed rule amendments would:

- 1) Delay implementation of the Emission Standards for New Heavy-Duty Trucks (HD Omnibus) in OAR Chapter 340, Division 261 by one year. The proposed rule would delay the start of these new regulations from engine model year 2025 to engine model year 2026.
- 2) Update the existing HD Omnibus rules to match revisions adopted by California in 2024 that allow complete MD ZEVs to be certified under the zero-emission powertrain certification program.
- 3) Eliminate certain rule references to trailers that were overturned in a court challenge.

If the proposed HD Omnibus amendments are adopted indirect impacts to transportation costs that are related to the supply of new medium- and 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 2025.

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 or may offer more conventionally fueled vehicles for sale. Smaller price increases for and greater market availability of new medium- and heavy-duty vehicles could lead to housing related businesses that purchase these vehicles limiting price increases for their own products and services which may in turn moderate any associated housing development cost increases. 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.

Racial equity

ORS 183.335(2)(a)(F) requires agencies to provide a statement identifying how adoption of the rule will affect racial equity in this state.

Medium- and heavy-duty engine and vehicle emissions disproportionately impact some communities more than others. Increased exposures to these sources of pollution can be due to working and living in close proximity to major transportation corridors, distribution centers and/or industrial facilities that typically concentrate medium-and heavy-duty truck traffic. Those communities are typically lower income and have more people that identify as black, indigenous and people of color and exposure to diesel emissions contributes to higher rates of respiratory diseases, heart conditions, and other serious health impacts.

ACT amendments

DEQ's racial equity analysis focuses on how the proposed Advanced Clean Trucks rules impact racial equity. The adoption of California's recent amendments to the Advanced Clean Trucks Rule, which provide additional compliance flexibilities for manufacturers, could slow the transition to zero-emission vehicles and hinder progress toward racial equity in Oregon. While these flexibilities may ease regulatory burdens for manufacturers, they also risk delaying the deployment of clean trucks that would significantly reduce pollution in frontline communities. Given that communities of color and low-income neighborhoods are disproportionately affected by diesel emissions, any slowdown in the adoption of zero-emission vehicles prolongs their exposure to harmful pollutants. DEQ also determined that the pollution reduction benefits to be gained from the full implementation of the rules over the coming years outweighs the limited deployment of ZEVs in the early years of the program.

HD Omnibus amendments

A one-year delay in stronger emissions standards means continued exposure to elevated levels of NOx from new conventionally fueled medium- and heavy-duty vehicles, further exacerbating existing health disparities and environmental injustices. Action to delay implementation of the HD Omnibus rules until 2026 and incorporate recent CARB amendments are critical to ensuring that all communities, regardless of race or income, benefit from cleaner air and improved public health outcomes into the future. DEQ also determined that the pollution reduction benefits to be gained from the full implementation of the rules over the coming years outweighs the loss of the 2025 engine model year alone.

Environmental justice considerations

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.

Increased exposures to these sources of pollution can be due to working and living in close proximity to major transportation corridors, distribution centers and/or industrial facilities that typically concentrate medium-and heavy-duty truck traffic. People living, working, and playing near transportation infrastructure in Oregon experience disproportionate health and environmental impacts from exposure to diesel exhaust.

ACT amendments

The proposed amendments and optional credits program means communities will not experience the benefits of lower healthcare costs and improved health care in the near term due to potentially fewer ZEVs deployed in Oregon. Overall, the rule provides requirements for increasing ZEV targets ensuring long-term improvements. The pollution reduction benefits to be gained from the full implementation of the rules over the coming years can help outweigh the potentially fewer ZEVs deployed in the early years of the program.

HD Omnibus amendments

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.¹⁴ If adopted, the proposal to delay implementation of the HD Omnibus rules mean that new, conventionally fueled trucks sold in Oregon in 2025, will not be 75% lower NOx emitting as originally intended. Instead, the requirements for lower emitting medium- and heavy-duty vehicles would be delayed until engine model year 2026.

In addition, increased flexibilities for manufacturers to certify complete MD ZEVs under the CARB amendments are considered to be emissions neutral based on analysis by the CARB. 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:

- 1) Failure to adopt a one-year delay to the HD Omnibus rules and codifying the temporary rules risks creating significant challenges to implementation if the rules only end up applying for a portion of engine model year 2025.
- 2) Failure to adopt the recent CARB amendments to the ZEP-CERT program puts the original rule at risk of not meeting the identicality requirements described in Section 177 of the Federal Clean Air Act.
- 3) The pollution reduction benefits to be gained from the implementation of the rules starting with model year 2026 and beyond outweighs the loss of the 2025 engine model year alone.
- 4) The risk of losing the emissions benefit to environmental justice communities beginning in 2026 and beyond is not a preferred outcome.

¹⁴ Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, April 2012, accessed on 3/20/2025. 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 3/20/2025; "Space-Based Observational Constraints on NO2 Air Pollution Inequality From Diesel Traffic in Major US Cities", Demetillo et al., Aug 2021, accessed on 3/20/2025; "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 3/20/2025; "Ecommerce and environmental justice in metro Seattle", Fried et al., Mar 2024, accessed on 3/20/2025
5) 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.

Land use

Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with statewide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
- · Resources, objects, or areas identified in the statewide planning goals, or
- Present or future land uses identified in acknowledge comprehensive plans

DEQ determined whether the proposed rules involve programs or actions that affect land use by reviewing its Statewide Agency Coordination plan. The plan describes the programs that DEQ determined significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Natural Resources, Scenic and Historic Areas, and Open Spaces
6	Air, Water and Land Resources Quality
11	Public Facilities and Services
16	Estuarine Resources
19	Ocean Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program Goal 16
- Water quality and sewage disposal systems Goal 16
- Water quality permits and oil spill regulations Goal 19

Determination

DEQ determined that these proposed rules do not affect land use under OAR 340-018-0030 or DEQ's State Agency Coordination Program.

Advisory Committee

Background

DEQ convened the Clean Truck Rules 2025 Updates advisory committee. The committee included representatives from truck and engine manufacturers, environmental organizations, vehicle dealers, vehicle service providers, trade associations, and public fleets and met three times. The committee's web page is located at: <u>Clean Truck Rules 2025 Updates</u>

The committee members were:

Clean Truck Rules 2025 Updates Advisory Committee			
Name	Representing	Sector	
Carrie Nyssen	American Lung Association - NW	Public Health Advocates	
Ty Kelly	Beaver Coaches	Dealers – Heavy-Duty Vehicles	
Ray Clayton	City of Portland	Public Medium- and Heavy-Duty Fleets	
Brett Morgan	Climate Solutions	Environmental Advocates	
Michael Graham	Columbia-Willamette Clean Cities Coalition	Clean Transportation & Alternative Fuel Coalition	
Matthew Spears	Cummins	Engine Manufacturers	
Sean Waters	Daimler	Vehicle & Engine Manufacturers	
Don Emerson	FMI	Dealers – Medium-Duty Trucks	
Jeremy Butzlaff	MTR Western	Private Medium and Heavy-Duty Fleets	
Mary Peveto	Neighbors for Clean Air	Environmental Advocates	
Tim Miller	Oregon Business for Climate	Business and Environmental Advocates	
Jana Jarvis	Oregon Trucking Association	Trucking Industry Advocates	
Jason Muggy	Pape Group	Dealers – Heavy-Duty Vehicles	
Nancy Bennett	PGE	Utilities – Privately Owned	
Tom Van Heeke	Rivian	Vehicle Manufacturers	
John Barnes	TEC	Dealers – Heavy-Duty Vehicles	
Zach Kahn	Tesla	Vehicle Manufacturers	
Timothy French	Truck & Engine Manufacturers Association	Vehicle and Engine Manufacturers	
Sam Wilson	Union of Concerned Scientists	Environmental Advocates	
Xitlali Torres	Verde	Environmental Advocates, Low-Income and Minority Communities	
Michael Ganny	Watt EV	Electric Charging Infrastructure Providers	

Meeting notifications

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To notify people about the advisory committee's activities, DEQ:

- Sent GovDelivery bulletins, a free e-mail subscription service, to the following lists:
 - Climate Protection Program
 - o DEQ Public Notices
 - Diesel and Biodiesel
 - Greenhouse Gas Programs
 - Greenhouse Gas Reporting

- o Low Emission/Zero Emission Vehicle Program
- Oregon Clean Fuels Program
- o Oregon Clean Vehicle Rebate Program
- Rulemaking
- Third Party Verification Program
- Truck Efficiency/Reduced Idling
- Vehicle Inspection Program Updates
- Posted meeting information and materials on the rulemaking web page.
- Added advisory committee announcements to DEQ's calendar of public meetings at DEQ Calendar.

Committee discussions

In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee was informed about the impacts of diesel pollution in Oregon¹⁵, background and context for the initial adoption of the rule in 2021 and the subsequent temporary rule adopted in 2024. Committee members discussed the goals and challenges of the proposed rules during all three advisory committee meetings. These discussions included detailed analysis, opinions, and experiences among members and their personal and professional networks. The following topics were discussed in more detail:

- The importance of the ACT and HD Omnibus rules for improving air quality and reducing the public health impact of pollution from the transportation sector
- Availability of new conventionally fueled medium- and heavy-duty vehicles for sale in Oregon
- Suitability of new medium- and heavy-duty ZEVs for different end uses
- Availability of ZEV credits
- Sales of medium- and heavy-duty ZEVs
- Maintaining rules that are identical with California
- Exemption of additional specific vehicles sectors

In addition, committee members provided their perspective on the anticipated impact of the existing rules and proposed amendments. Their input ranged from support for maintaining the current rule implementation schedule to support for delaying implementation for both the ACT and HD Omnibus rules until 2027, with a handful of opinions that Oregon DEQ pursue options in between these two opposing benchmarks. DEQ requested any additional committee comments or feedback be submitted in writing within five days of each advisory committee meeting. DEQ is proposing to adopt rules that reflect our best understanding of the appropriate path forward given the circumstances.

ACT Amendments

The committee discussed the proposal to adopt CARB's recent amendments to the ACT rule as well as Oregon's Optional Credit Program, providing an additional compliance pathway for manufacturers who choose to participate. Committee members shared a wide variety of comments on these proposals. Some members had questions about the applicability of California rules in various states of review and adoption as they pertain to Oregon. Others understood Oregon's proposed rules as directly in unison with California's current ACT rule and amendments.

Committee members pointed out acute needs for truck availability across the Oregon medium and heavy-duty market. They largely disagreed with each other on the best and most effective strategies to achieve this goal. Some argued that increased delivery of zero emissions vehicles from manufacturers was the most appropriate next step. Others said that the new flexibilities and optional credits should be sufficient to meet the need. Another group pushed back at the notion that Oregon DEQ support the truck market by providing optional credits to manufacturers, preferring delayed implementation.

¹⁵ <u>The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015</u>, accessed on 3/20/2025.

The Rulemaking Advisory Committee spent a lot of time talking about the anticipated air quality and climate emissions impacts of the proposed rules. Committee members stated with equal confidence that emissions benefits would occur only if ACT rules were delayed and that they would only occur if ACT rules were fully implemented. Advocates for delay said new diesel vehicles are cleaner and would improve air quality outcomes. Advocates for zero emissions vehicles said that only zero emissions vehicles can address the air quality concerns in question. DEQ staff participated and listened to these divergent views and proposed rules accordingly.

HD Omnibus Amendments

The committee discussed the HD Omnibus proposed draft rules to permanently delay rule implementation by one year (codifying the previously adopted temporary rule). Some committee members expressed concern that further postponement of these rules would delay needed diesel emission reductions for front line communities that experience disproportionate harm. Some committee members expressed concern about a lack of available 2026 HD Omnibus compliant engines and vehicles especially for specific sectors which could lead to temporary new vehicle sales stoppages. Concerns were also raised about the increased vehicle costs associated with the improved technology that is required for Omnibus-certified compliant engines.

Public engagement

Public notice

DEQ provided notice of the proposed rulemaking and rulemaking hearing by:

- On March 28, 2025, Filing notice with the Oregon Secretary of State for publication in the April 2025 Oregon Bulletin;
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: <u>Clean Truck Rules 2025 Updates;</u>
- Emailing approximately 28,288 interested parties on the following DEQ lists through GovDelivery:
 - Rulemaking
 - DEQ Public Notices
 - Diesel and Biodiesel
 - o Low Emission/Zero Emission Vehicle Program
 - Truck Efficiency/Reduced Idling
- Emailing the following key legislators required under <u>ORS 183.335</u>:
 - o Representative John Lively, Chair, House Committee on Climate, Energy, and Environment
 - o Senator Janeen Sollman, Chair, Senate Committee on Energy and Environment
 - House Speaker Julie Fahey
 - Senate President Rob Wagner
- Emailing advisory committee members,
- Posting on the DEQ event calendar: <u>DEQ Calendar</u>

Draft rules – edits highlighted

Key to Identifying Changed Text:

Deleted Text New/inserted text

Division 257 OREGON LOW EMISSION VEHICLES

340-257-0050 Incorporation by Reference and Program Review

(1) For purposes of applying the incorporated sections of the California Code of Regulations in sections (2) and (3), unless otherwise specified in this division or the application is clearly inappropriate, "California" means "Oregon," "Air Resources Board (ARB)" or "California Air Resources Board (CARB)" means "Department of Environmental Quality" or "Environmental Quality Commission," depending on context, and "Executive Officer" means the DEQ director or director's designee. Where such incorporated sections of the California Code of Regulations refer to states that have also adopted California's regulations under Clean Air Act section 177, such references shall be interpreted to include both California and any other such states. Where such incorporated sections of the California Code of Regulations refer to enforcement and civil penalty authority under the California Health and Safety Code for violation of those regulations, such references shall be interpreted to pursue enforcement of such violations under ORS chapters 468 and 468A and OAR chapter 340, division 12.

(2) Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer of new 2009 and subsequent model year passenger cars, light-duty trucks, and medium-duty vehicles must comply with each applicable standard specified in the following sections of the California Code of Regulations (CCR), Title 13, which are incorporated by reference herein. References to provisions of CCR, Title 13 in this division are to such provisions effective on the California effective dates listed in this section:

(a) Section 1900: Definitions. California adopted date 8/25/22.

(b) Section 1956.8(g) and (h): Exhaust Emission Standards and Test Procedures — 1985 and Subsequent Model Heavy Duty Engines and Vehicles. California effective date 12/5/14.

(c) Section 1960.1: Exhaust Emission Standards and Test Procedures — 1981 and through 2006 Model Passenger Cars, Light-Duty and Medium-Duty Vehicles. California effective date 12/31/12.

(d) Section 1961: Exhaust Emission Standards and Test Procedures — 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 12/31/12.

(e) Section 1961.1: Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 8/7/12.

(f) Section 1961.2: Exhaust Emission Standards and Test Procedures — 2015 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22.

(g) Section 1961.3: Greenhouse Gas Emission Standards and Test Procedures — 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective adopted date 8/25/22.

(h) Section 1961.4: Exhaust Emission Standards and Test Procedures — 2026 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22 except that subsection 1961.4(g)(1) is not adopted by reference.

(i) Section 1962: Zero-Emission Vehicle Standards for 2005 through 2008 Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles. California effective date 2/13/2010.

(j) Section 1962.1: Zero-Emission Vehicle Standards for 2009 through 2017 Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 1/1/16.

(k) Section 1962.2: Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22.

(I) Section 1962.3: Electric Vehicle Charging Requirements. California adopted date 8/25/22.

(m) Section 1962.4: Zero Emission Vehicle Standards for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks. California adopted date 8/25/22; except that subsection 1962.4(e)(2)(A)3 is not adopted by reference.

(n) Section 1962.5: Data Standardization Requirements for 2026 and Subsequent Model Year Light-Duty Zero Emission Vehicles and Plug-in Hybrid Electric Vehicles. California adopted date 8/25/22.

(o) Section 1962.6: Battery Labeling Requirements. California adopted date 8/25/22.

(p) Section 1962.7: In-Use Compliance, Corrective Action and Recall Protocols for Zero Emission for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks. California adopted date 8/25/22.

(q) Section 1962.8: Warranty Requirements for Zero Emission and Batteries in Plug-in Hybrid Electric 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks. California adopted date 8/25/22.

(r) Section 1965: Emission Control and Smog Index Labels - 1979 and Subsequent Model Year Vehicles. California adopted date 8/25/22.

(s) Section 1968.2: Malfunction and Diagnostic System Requirements — 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22.

(t) Section 1968.5: Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines. California effective date 7/25/16.

(u) Section 1976: Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions. California adopted date 8/25/22.

(v) Section 1978: Standards and Test Procedures for Vehicle Refueling Emissions. California adopted date 8/25/22.

(w) Section 2035: Purpose, Applicability and Definitions. California adopted date 9/9/21.

(x) Section 2036: Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles; and 2020 and Subsequent Model Year Trailers. California adopted effective date 9/9/214/1/22 [Anticipated California Approval Date 04/30/2025].

(y) Section 2037: Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles. California adopted date 8/25/22.

(z) Section 2038: Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such. California adopted date 8/25/22.

(aa) Section 2039: Emission Control System Warranty Statement. California effective date 12/26/90.

- (bb) Section 2040: Vehicle Owner Obligations. California effective date 12/26/90.
- (cc) Section 2046: Defective Catalyst. California effective date 2/15/79.
- (dd) Section 2109: New Vehicle Recall Provisions. California effective date 12/30/83.
- (ee) Section 2111: Applicability. California adopted date 9/9/21.
- (ff) Section 2112: Definitions. California adopted date 8/25/22.
- (gg) Appendix A to Article 2.1. California effective date 8/16/2009.
- (hh) Section 2113: Initiation and Approval of Voluntary and Influenced Recalls. California adopted date 9/9/21.
- (ii) Section 2114: Voluntary and Influenced Recall Plans. California adopted date 9/9/21.
- (jj) Section 2115: Eligibility for Repair. California adopted date 9/9/21.
- (kk) Section 2116: Repair Label. California adopted date 9/9/21.
- (II) Section 2117: Proof of Correction Certificate. California adopted date 9/9/21.
- (mm) Section 2118: Notification. California adopted date 9/9/21.
- (nn) Section 2119: Record keeping and Reporting Requirements. California adopted date 9/9/21.
- (oo) Section 2120: Other Requirements Not Waived. California effective date 1/26/95.
- (pp) Section 2122: General Provisions. California effective date 12/8/2010.

(qq) Section 2123: Initiation and Notification of Ordered Emission-Related Recalls. California adopted date 9/9/21.

- (rr) Section 2124: Availability of Public Hearing. California effective date 1/26/95.
- (ss) Section 2125: Ordered Recall Plan. California adopted date 9/9/21.
- (tt) Section 2126: Approval and Implementation of Recall Plan. California adopted date 9/9/21.
- (uu) Section 2127: Notification of Owners. California adopted date 9/9/21.
- (vv) Section 2128: Repair Label. California adopted date 9/9/21.

- (ww) Section 2129: Proof of Correction Certificate. California adopted date 9/9/21.
- (xx) Section 2130: Capture Rates and Alternative Measures. California adopted date 9/9/21.
- (yy) Section 2131: Preliminary Tests. California adopted date 9/9/21.
- (zz) Section 2132: Communication with Repair Personnel. California effective date 1/26/95.
- (aaa) Section 2133: Record keeping and Reporting Requirements. California adopted date 9/9/21.
- (bbb) Section 2135: Extension of Time. California effective date 1/26/95.
- (ccc) Section 2141: General Provisions. California adopted date 9/9/21.
- (ddd) Section 2142: Alternative Procedures. California adopted date 9/9/21.
- (eee) Section 2143: Failure Levels Triggering Recall. California adopted date 9/9/21.
- (fff) Section 2144: Emission Warranty Information Report. California adopted date 9/9/21.
- (ggg) Section 2145: Field Information Report. California adopted date 9/9/21.
- (hhh) Section 2146: Emissions Information Report. California adopted date 9/9/21.
- (iii) Section 2147: Demonstration of Compliance with Emission Standards. California adopted date 8/25/22.
- (jjj) Section 2148: Evaluation of Need for Recall. California adopted date 9/9/21.
- (kkk) Section 2149: Notification of Subsequent Action. California adopted date 9/9/21.
- (III) Section 2235: Requirements. California effective date 8/8/12.
- (3) Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer of new 2025 and subsequent model year medium-duty and heavy-duty vehicles must comply with each applicable standard specified in the following sections of the California Code of Regulations (CCR), Title 13, which are incorporated by reference herein. References to provisions of CCR, Title 13 in this division are to such provisions effective on the California effective dates listed in this section:
- (a) Section 1963 Advanced Clean Trucks Purpose, Applicability, Definitions, and General Requirements. California effective adopted date 3/15/2110/24/24 [Anticipated California Approval Date 04/30/2025].
- (b) Section 1963.1 Advanced Clean Trucks Deficits Section. California effective adopted date 3/15/2110/24/24 [Anticipated California Approval Date 04/30/2025].
- (c) 1963.2 Advanced Clean Trucks Credit Generation, Banking, and Trading Section. California effective adopted date 3/15/2110/24/24_[Anticipated California Approval Date 04/30/2025].
- (d) 1963.3 Advanced Clean Trucks Compliance Determination Section. California effective adopted date 3/15/2110/24/24_[Anticipated California Approval Date 04/30/2025].
- (e) 1963.4 Advanced Clean Trucks Reporting and Recordkeeping Section. California effective adopted date 3/15/2110/24/24_[Anticipated California Approval Date 04/30/2025].

(4) Program Review. Beginning in 2028 and every two years through 2034, DEQ will provide a review of program implementation in Oregon including but not limited to:

(a) An evaluation of vehicle manufacturer compliance;

(b) A Summary of publicly available information on vehicle and battery costs;

(c) An assessment of the deployment of ZEVs in low-income and disadvantaged communities;

(d) A description of the geographic distribution of new and used ZEVs and PHEVs by registration;

(e) An evaluation of the electrical grid and its current capacity to meet the charging needs related to ZEV lightduty vehicles; and

(f) A Summary of infrastructure deployment.

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468.010, 468A.015, 468A.025 & 468A.360 History: DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 23-2022, amend filed 12/19/2022, effective 12/19/2022 DEQ 17-2021, amend filed 11/17/2021, effective 11/17/2021 DEQ 196-2018, amend filed 11/15/2018, effective 11/15/2018 DEQ 13-2013, f. & cert. ef. 12-19-13 DEQ 6-2011, f. & cert. ef. 4-29-11 DEQ 6-2006, f. & cert. ef. 6-29-06 DEQ 10-2005(Temp), f. 12-27-05, cert. ef. 1-1-06 thru 6-30-06

OAR 340-257-0300

Oregon Optional Credit Program

The Oregon Optional Credit Program ("Program") is established to provide medium- and heavy-duty truck manufacturers ("Manufacturers") with supplemental compliance flexibility under the Advanced Clean Trucks regulation in Oregon.

(1) Eligibility. To qualify for Oregon Optional Credits, a Manufacturer must enter into an agreement with DEQ in which the Manufacturer agrees to:

(a) Register with DEQ to participate in the Optional Credits Program;

(b) Make zero emissions trucks available to Oregon dealerships;

(c) Commit to put forth their best efforts to make internal combustion engine (ICE) trucks available to Oregon dealerships;

(d) Report their number of vehicle sales in Oregon for Optional Credit calculation;

(e) Maintain transparency in all ZEV credit transactions as the initial step to DEQ making these credits available to manufacturers; and

(f) Other related provisions as determined by DEQ and Manufacturers, including provisions reasonably necessary to ensure compliance with the Program.

(2) Credit Allocations and Deficit Coverage.

(a) Oregon DEQ will allocate Program credits to each participating Manufacturer for model year 2025 and 2026 trucks as follows:

(A) Class 7-8 Tractor Trucks: Credits will be provided to cover up to 100% of deficits generated from Class 7-8 tractor trucks produced and delivered for sale in Oregon.

(B) Class 2b-3 and Class 4-8 Straight Trucks: Credits will be provided to cover up to 50% of deficits generated from all vehicles (including ZEV) produced and delivered for sale in Oregon for each truck in Classes 2b through 8.

(b) If a Manufacturer's Class 7-8 Tractor Truck deficit balance resulting from the production and delivery for sale of trucks in Oregon exceeds the optional credit allocation provided for the model year, DEQ will provide additional credits to cover 100% of that Manufacturer's deficit obligations in Oregon. These credits must be based on actual Oregon deficits a Manufacturer has accrued and reported to DEQ no later than 90 days after the end of the previous model year. Manufacturers can report this information to DEQ sooner in order to receive credits sooner.

(c) Additional Oregon Optional Credit Allocations in 2027. Starting in 2027, and annually going forward, DEQ may allocate additional credits based on the criteria in paragraphs (A) through (C). DEQ will make this determination not later than July, 31st of 2026 and each July 31st thereafter. If DEQ determines to allocate additional credits based on the factors in paragraphs (A) through (C), then only Manufacturers that can verify the production and delivery for sale in Oregon of medium- and heavy-duty ZEVs in 2025 and 2026 will be eligible to receive additional Oregon Optional Credits, if available, starting in 2027. DEQ will consider the following factors in determining whether continuing the program is in the public interest:

(A) Total internal combustion engine production and deliveries for sale in Oregon by truck class and an analysis of how their emissions will impact public health and the environment.

(B) Review of Oregon medium- and heavy-duty truck dealerships' experience gaining availability of internal combustion engine trucks for sale to meet market demand. Oregon DEQ will survey dealerships and evaluate responses.

(C) Emissions Inventory and Public Health Risk Data. Oregon DEQ will evaluate air quality and public health risk assessments to evaluate impact of potential additional credit allocations.

(3) Forfeiture Provision. In the event a Manufacturer fails to meet the terms and conditions set forth in the agreement it has executed with DEQ, DEQ may rescind the credits it has provided to the Manufacturer under these rules. DEQ will provide a recission notice to the Manufacturer in writing and will provide the Manufacturer with the opportunity for a hearing regarding the DEQ decision. The hearing will be conducted as a contested case hearing in accordance with ORS 183.413 through 183,470 and OAR chapter 340, division 11.

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.360 **Statutes/Other Implemented:** ORS 468.010, 468A.015, 468A.025 & 468A.360

Division 261 EMISSION STANDARDS FOR NEW HEAVY-DUTY TRUCKS

340-261-0020 Applicability

This division is in effect as of January 1, 2022 and applies to and establishes requirements for medium- and heavy-duty truck, and engine and trailer manufacturers, Oregon truck dealers, all $\frac{20252026}{20252026}$ and subsequent model year on-highway heavy-duty engines, and all $\frac{20262027}{20262027}$ and subsequent model year trucks and trailers delivered for sale or sold in the State of Oregon, except as provided in OAR 340-261-0060 Exemptions.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.360

Statutes/Other Implemented: ORS 468A.025, 468A.360, ORS 468A.010, 468A.015, 468A.050 & 468A.279 History:

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 10-2024, amend filed 07/15/2024, effective 07/15/2024 DEQ 16-2023, temporary amend filed 11/16/2023, effective 01/01/2024 through 06/28/2024 DEQ 17-2021, adopt filed 11/17/2021, effective 11/17/2021

340-261-0040

Requirement to Meet California Vehicle Emission Standards

(1) Starting with the <u>20252026</u> engine model year and for each engine model year thereafter no person may deliver for sale, or sell, in Oregon any new on-highway <u>medium- or heavy-duty</u> engine unless such engine is certified to the California emission standards as required under OAR 340-261-0050, except as provided in OAR 340-261-0060, Exemptions.

(2) Starting with the <u>20262027</u> model year and for each model year thereafter no person may deliver for sale, or sell, in Oregon any new medium- or heavy-duty truck or trailer unless such vehicle is certified to the California emission standards as required under OAR 340-261-0050, except as provided in OAR 340-261-0060, Exemptions.

(3) All motor medium- and heavy-duty truck and trailer manufacturers and dealers must comply with the sales and reporting requirements contained in this division.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468A.025, 468A.360, ORS 468A.010, 468A.015, 468A.050 & 468A.279 History:

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 10-2024, amend filed 07/15/2024, effective 07/15/2024 DEQ 16-2023, temporary amend filed 11/16/2023, effective 01/01/2024 through 06/28/2024 DEQ 17-2021, adopt filed 11/17/2021, effective 11/17/2021

340-261-0050 Incorporation by Reference

(1) For purposes of applying the incorporated sections of the California Code of Regulations described in this rule, "California" or "CA" means "Oregon" or "OR," respectively, and "Air Resources Board (ARB)" or "California Air Resources Board (CARB)" means Department of Environmental Quality (DEQ) or Environmental Quality Commission (EQC) depending on context, unless otherwise specified in this division or the application is clearly inappropriate.

(2) The sections of the California Code of Regulations (CCR), Title 13 and Title 17, adopted by reference in sections (3) and (4) are in addition to, and compatible with, the CCR, Title 13, standards and requirements adopted by reference under OAR 340-257-0050. It is the intent of this rule that the standards and requirements adopted by reference under OAR 340-257-0050 also apply in Oregon to the on-highway medium- and heavy-duty engines, and vehicles and trailers regulated by the CCR, Title 13 and Title 17, standards and

requirements adopted by reference in this rule, to the same extent and identical to how they would apply in California.

(3) Emission standards, testing procedures, warranty, reporting, enforcement, recall and other California provisions adopted by reference. Each manufacturer of new 20252026 and subsequent model year on-highway medium- and heavy-duty engines and 20262027 and subsequent model year <u>medium- and heavy-duty</u> trucks and trailers must comply with each of the following applicable standards specified in CCR, Title 13 as incorporated by reference herein.: In addition, on and after January 1, 2025, each manufacturer of medium- and heavy-duty engines and vehicles shall comply with the applicable zero emission powertrain certification standards specified in CCR, Title 13, Section 1956.8(a)(8), incorporated by reference in subsection (a):

(a) Section 1956.8(a) – (f) and (i): Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy Duty Engines and Vehicles. [Anticipated California approval date 4/30/2025]California adopted date 12/28/2023. Except that CCR Title 13, Section 1956.8(a)(2)(F) "Transit Agency Diesel-Fueled Bus Engine Exemption Request" shall be disregarded and is not incorporated by reference.

(b) Section 1971.1: On-Board Diagnostic System Requirements – 2010 and Subsequent Model-Year Heavy-Duty Engines. California adopted date 12/28/2023.

(c) Section 2036: Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles; and 2020 and Subsequent Model Year Trailers. California adopted effective date 9/9/214/1/22.

(d) Section 2121: Penalties. California adopted date 9/9/21. Except that the reference in this regulation to "a violation of Health and Safety Code Section 43105" shall be disregarded and is not incorporated by reference.

(e) Section 2137: Vehicle, Engine, and Trailer Selection. California adopted effective date 9/9/214/1/22.

(f) Section 2139: Testing. California adopted date 9/9/21.

(g) Section 2139.5: CARB Authority to Test for Heavy-Duty In-Use Compliance. California effective date 04/21/03.

(h) Section 2140: Notification and Use of Test Results. California adopted date 9/9/21.

(i) Section 2166: General Provisions. California adopted date 9/9/21.

(j) Section 2166.1: Definitions. California adopted date 9/9/21.

(k) Section 2167: Required Recall and Corrective Action for Failures of Exhaust After-Treatment Devices, On-Board Computers or Systems, Urea Dosers, Hydrocarbon Injectors, Exhaust Gas Recirculation Valves, Exhaust Gas Recirculation Coolers, Turbochargers, Fuel Injectors. California adopted date 9/9/21.

(I) Section 2168: Required Corrective Action and Recall for Emission-Related Component Failures. California adopted date 9/9/21.

(m) Section 2169: Required Recall or Corrective Action Plan. California adopted date 9/9/21.

(n) Section 2169.1: Approval and Implementation of Corrective Action Plan. California adopted date 9/9/21.

(o) Section 2169.2: Notification of Owners. California adopted date 9/9/21.

(p) Section 2169.3: Repair Label. California adopted date 9/9/21.

(q) Section 2169.4: Proof of Correction Certificate. California adopted date 9/9/21.

(r) Section 2169.5: Preliminary Tests. California 9/9/21 date 9/9/21.

(s) Section 2169.6: Communication with Repair Personnel. California adopted date 9/9/21.

(t) Section 2169.7: Recordkeeping and Reporting Requirements. California adopted date 9/9/21.

(u) Section 2169.8: Extension of Time. California adopted date 9/9/21.

(v) Section 2423(n): Exhaust Emission Standards and Test Procedures – Off-Road Compression-Ignition Engines. California adopted date 9/9/21.

(w) Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. California adopted date 9/9/21.

(4) Emission standards, testing procedures, warranty, reporting, enforcement, recall and other California provisions adopted by reference. Each manufacturer of new <u>20262027</u> and subsequent model year onhighway medium- and heavy-duty vehicles and trailers must comply with each of the following applicable standards specified in CCR, Title 17 as incorporated by reference herein:

(a) Section 95660: Purpose. California effective date 1/1/2015.

(b) Section 95661: Applicability. California effective date 1/1/2015.

(c) Section 95662: Definitions. California effective date 12/22/21.

(d) Section 95663: Greenhouse Gas Exhaust Emission Standards and Test Procedures for New 2014 and Subsequent Model Heavy-Duty Vehicles. California effective date 12/22/21.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.360

Statutes/Other Implemented: ORS 468A.025, 468A.360, ORS 468A.010, 468A.015, 468A.050 & 468A.279 History:

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 10-2024, amend filed 07/15/2024, effective 07/15/2024 DEQ 16-2023, temporary amend filed 11/16/2023, effective 01/01/2024 through 06/28/2024 DEQ 17-2021, adopt filed 11/17/2021, effective 11/17/2021

Draft rules – edits included

Division 257 OREGON LOW EMISSION VEHICLES

340-257-0050 Incorporation by Reference and Program Review

(1) For purposes of applying the incorporated sections of the California Code of Regulations in sections (2) and (3), unless otherwise specified in this division or the application is clearly inappropriate, "California" means "Oregon," "Air Resources Board (ARB)" or "California Air Resources Board (CARB)" means "Department of Environmental Quality" or "Environmental Quality Commission," depending on context, and "Executive Officer" means the DEQ director or director's designee. Where such incorporated sections of the California Code of Regulations refer to states that have also adopted California's regulations under Clean Air Act section 177, such references shall be interpreted to include both California and any other such states. Where such incorporated sections of the California Code of Regulations refer to enforcement and civil penalty authority under the California Health and Safety Code for violation of those regulations, such references shall be interpreted to pursue enforcement of such violations under ORS chapters 468 and 468A and OAR chapter 340, division 12.

(2) Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer of new 2009 and subsequent model year passenger cars, light-duty trucks, and medium-duty vehicles must comply with each applicable standard specified in the following sections of the California Code of Regulations (CCR), Title 13, which are incorporated by reference herein. References to provisions of CCR, Title 13 in this division are to such provisions effective on the California effective dates listed in this section:

(a) Section 1900: Definitions. California adopted date 8/25/22.

(b) Section 1956.8(g) and (h): Exhaust Emission Standards and Test Procedures — 1985 and Subsequent Model Heavy Duty Engines and Vehicles. California effective date 12/5/14.

(c) Section 1960.1: Exhaust Emission Standards and Test Procedures — 1981 and through 2006 Model Passenger Cars, Light-Duty and Medium-Duty Vehicles. California effective date 12/31/12.

(d) Section 1961: Exhaust Emission Standards and Test Procedures — 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 12/31/12.

(e) Section 1961.1: Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 8/7/12.

(f) Section 1961.2: Exhaust Emission Standards and Test Procedures — 2015 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22.

(g) Section 1961.3: Greenhouse Gas Emission Standards and Test Procedures — 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective adopted date 8/25/22.

(h) Section 1961.4: Exhaust Emission Standards and Test Procedures — 2026 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22 except that subsection 1961.4(g)(1) is not adopted by reference.

(i) Section 1962: Zero-Emission Vehicle Standards for 2005 through 2008 Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles. California effective date 2/13/2010. (j) Section 1962.1: Zero-Emission Vehicle Standards for 2009 through 2017 Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 1/1/16.

(k) Section 1962.2: Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22.

(I) Section 1962.3: Electric Vehicle Charging Requirements. California adopted date 8/25/22.

(m) Section 1962.4: Zero Emission Vehicle Standards for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks. California adopted date 8/25/22; except that subsection 1962.4(e)(2)(A)3 is not adopted by reference.

(n) Section 1962.5: Data Standardization Requirements for 2026 and Subsequent Model Year Light-Duty Zero Emission Vehicles and Plug-in Hybrid Electric Vehicles. California adopted date 8/25/22.

(o) Section 1962.6: Battery Labeling Requirements. California adopted date 8/25/22.

(p) Section 1962.7: In-Use Compliance, Corrective Action and Recall Protocols for Zero Emission for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks. California adopted date 8/25/22.

(q) Section 1962.8: Warranty Requirements for Zero Emission and Batteries in Plug-in Hybrid Electric 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks. California adopted date 8/25/22.

(r) Section 1965: Emission Control and Smog Index Labels - 1979 and Subsequent Model Year Vehicles. California adopted date 8/25/22.

(s) Section 1968.2: Malfunction and Diagnostic System Requirements — 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California adopted date 8/25/22.

(t) Section 1968.5: Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines. California effective date 7/25/16.

(u) Section 1976: Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions. California adopted date 8/25/22.

(v) Section 1978: Standards and Test Procedures for Vehicle Refueling Emissions. California adopted date 8/25/22.

(w) Section 2035: Purpose, Applicability and Definitions. California adopted date 9/9/21.

(x) Section 2036: Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles; and 2020 and Subsequent Model Year Trailers. [Anticipated California Approval Date 04/30/2025].

(y) Section 2037: Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles. California adopted date 8/25/22.

(z) Section 2038: Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such. California adopted date 8/25/22.

(aa) Section 2039: Emission Control System Warranty Statement. California effective date 12/26/90.

- (bb) Section 2040: Vehicle Owner Obligations. California effective date 12/26/90.
- (cc) Section 2046: Defective Catalyst. California effective date 2/15/79.
- (dd) Section 2109: New Vehicle Recall Provisions. California effective date 12/30/83.
- (ee) Section 2111: Applicability. California adopted date 9/9/21.
- (ff) Section 2112: Definitions. California adopted date 8/25/22.
- (gg) Appendix A to Article 2.1. California effective date 8/16/2009.
- (hh) Section 2113: Initiation and Approval of Voluntary and Influenced Recalls. California adopted date 9/9/21.
- (ii) Section 2114: Voluntary and Influenced Recall Plans. California adopted date 9/9/21.
- (jj) Section 2115: Eligibility for Repair. California adopted date 9/9/21.
- (kk) Section 2116: Repair Label. California adopted date 9/9/21.
- (II) Section 2117: Proof of Correction Certificate. California adopted date 9/9/21.
- (mm) Section 2118: Notification. California adopted date 9/9/21.
- (nn) Section 2119: Record keeping and Reporting Requirements. California adopted date 9/9/21.
- (oo) Section 2120: Other Requirements Not Waived. California effective date 1/26/95.
- (pp) Section 2122: General Provisions. California effective date 12/8/2010.

(qq) Section 2123: Initiation and Notification of Ordered Emission-Related Recalls. California adopted date 9/9/21.

- (rr) Section 2124: Availability of Public Hearing. California effective date 1/26/95.
- (ss) Section 2125: Ordered Recall Plan. California adopted date 9/9/21.
- (tt) Section 2126: Approval and Implementation of Recall Plan. California adopted date 9/9/21.
- (uu) Section 2127: Notification of Owners. California adopted date 9/9/21.
- (vv) Section 2128: Repair Label. California adopted date 9/9/21.
- (ww) Section 2129: Proof of Correction Certificate. California adopted date 9/9/21.
- (xx) Section 2130: Capture Rates and Alternative Measures. California adopted date 9/9/21.
- (yy) Section 2131: Preliminary Tests. California adopted date 9/9/21.
- (zz) Section 2132: Communication with Repair Personnel. California effective date 1/26/95.
- (aaa) Section 2133: Record keeping and Reporting Requirements. California adopted date 9/9/21.
- (bbb) Section 2135: Extension of Time. California effective date 1/26/95.
- (ccc) Section 2141: General Provisions. California adopted date 9/9/21.

(ddd) Section 2142: Alternative Procedures. California adopted date 9/9/21.

(eee) Section 2143: Failure Levels Triggering Recall. California adopted date 9/9/21.

(fff) Section 2144: Emission Warranty Information Report. California adopted date 9/9/21.

(ggg) Section 2145: Field Information Report. California adopted date 9/9/21.

(hhh) Section 2146: Emissions Information Report. California adopted date 9/9/21.

(iii) Section 2147: Demonstration of Compliance with Emission Standards. California adopted date 8/25/22.

(jjj) Section 2148: Evaluation of Need for Recall. California adopted date 9/9/21.

(kkk) Section 2149: Notification of Subsequent Action. California adopted date 9/9/21.

(III) Section 2235: Requirements. California effective date 8/8/12.

(3) Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer of new 2025 and subsequent model year medium-duty and heavy-duty vehicles must comply with each applicable standard specified in the following sections of the California Code of Regulations (CCR), Title 13, which are incorporated by reference herein. References to provisions of CCR, Title 13 in this division are to such provisions effective on the California effective dates listed in this section:

(a) Section 1963 Advanced Clean Trucks Purpose, Applicability, Definitions, and General Requirements. [Anticipated California Approval Date 04/30/2025].

(b) Section 1963.1 Advanced Clean Trucks Deficits Section. [Anticipated California Approval Date 04/30/2025].

(c) 1963.2 Advanced Clean Trucks Credit Generation, Banking, and Trading Section. [Anticipated California Approval Date 04/30/2025].

(d) 1963.3 Advanced Clean Trucks Compliance Determination Section. [Anticipated California Approval Date 04/30/2025].

(e) 1963.4 Advanced Clean Trucks Reporting and Recordkeeping Section. [Anticipated California Approval Date 04/30/2025].

(4) Program Review. Beginning in 2028 and every two years through 2034, DEQ will provide a review of program implementation in Oregon including but not limited to:

(a) An evaluation of vehicle manufacturer compliance;

(b) A Summary of publicly available information on vehicle and battery costs;

(c) An assessment of the deployment of ZEVs in low-income and disadvantaged communities;

(d) A description of the geographic distribution of new and used ZEVs and PHEVs by registration;

(e) An evaluation of the electrical grid and its current capacity to meet the charging needs related to ZEV lightduty vehicles; and

(f) A Summary of infrastructure deployment.

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468.010, 468A.015, 468A.025 & 468A.360 History: DEO 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 23-2022, amend filed 12/19/2022, effective 12/19/2022 DEQ 17-2021, amend filed 11/17/2021, effective 11/17/2021 DEQ 196-2018, amend filed 11/15/2018, effective 11/15/2018 DEQ 13-2013, f. & cert. ef. 12-19-13 DEQ 6-2011, f. & cert. ef. 4-29-11 DEQ 6-2006, f. & cert. ef. 6-29-06 DEQ 10-2005(Temp), f. 12-27-05, cert. ef. 1-1-06 thru 6-30-06

OAR 340-257-0300 Orogon Optional Credit Br

Oregon Optional Credit Program

The Oregon Optional Credit Program ("Program") is established to provide medium- and heavy-duty truck manufacturers ("Manufacturers") with supplemental compliance flexibility under the Advanced Clean Trucks regulation in Oregon.

(1) Eligibility. To qualify for Oregon Optional Credits, a Manufacturer must enter into an agreement with DEQ in which the Manufacturer agrees to:

(a) Register with DEQ to participate in the Optional Credits Program;

(b) Make zero emissions trucks available to Oregon dealerships;

(c) Commit to put forth their best efforts to make internal combustion engine (ICE) trucks available to Oregon dealerships;

(d) Report their number of vehicle sales in Oregon for Optional Credit calculation;

(e) Maintain transparency in all ZEV credit transactions as the initial step to DEQ making these credits available to manufacturers; and

(f) Other related provisions as determined by DEQ and Manufacturers, including provisions reasonably necessary to ensure compliance with the Program.

(2) Credit Allocations and Deficit Coverage.

(a) Oregon DEQ will allocate Program credits to each participating Manufacturer for model year 2025 and 2026 trucks as follows:

(A) Class 7-8 Tractor Trucks: Credits will be provided to cover up to 100% of deficits generated from Class 7-8 tractor trucks produced and delivered for sale in Oregon.

(B) Class 2b-3 and Class 4-8 Straight Trucks: Credits will be provided to cover up to 50% of deficits generated from all vehicles (including ZEV) produced and delivered for sale in Oregon for each truck in Classes 2b through 8.

(b) If a Manufacturer's Class 7-8 Tractor Truck deficit balance resulting from the production and delivery for sale of trucks in Oregon exceeds the optional credit allocation provided for the model year, DEQ will provide additional credits to cover 100% of that Manufacturer's deficit obligations in Oregon. These credits must be based on actual Oregon deficits a Manufacturer has accrued and reported to DEQ no later than 90 days after the end of the previous model year. Manufacturers can report this information to DEQ sooner in order to receive credits sooner.

(c) Additional Oregon Optional Credit Allocations in 2027. Starting in 2027, and annually going forward, DEQ may allocate additional credits based on the criteria in paragraphs (A) through (C). DEQ will make this determination not later than July, 31st of 2026 and each July 31st thereafter. If DEQ determines to allocate additional credits based on the factors in paragraphs (A) through (C), then only Manufacturers that can verify the production and delivery for sale in Oregon of medium- and heavy-duty ZEVs in 2025 and 2026 will be eligible to receive additional Oregon Optional Credits, if available, starting in 2027. DEQ will consider the following factors in determining whether continuing the program is in the public interest:

(A) Total internal combustion engine production and deliveries for sale in Oregon by truck class and an analysis of how their emissions will impact public health and the environment.

(B) Review of Oregon medium- and heavy-duty truck dealerships' experience gaining availability of internal combustion engine trucks for sale to meet market demand. Oregon DEQ will survey dealerships and evaluate responses.

(C) Emissions Inventory and Public Health Risk Data. Oregon DEQ will evaluate air quality and public health risk assessments to evaluate impact of potential additional credit allocations.

(3) Forfeiture Provision. In the event a Manufacturer fails to meet the terms and conditions set forth in the agreement it has executed with DEQ, DEQ may rescind the credits it has provided to the Manufacturer under these rules. DEQ will provide a recission notice to the Manufacturer in writing and will provide the Manufacturer with the opportunity for a hearing regarding the DEQ decision. The hearing will be conducted as a contested case hearing in accordance with ORS 183.413 through 183,470 and OAR chapter 340, division 11.

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468.010, 468A.015, 468A.025 & 468A.360

Division 261 EMISSION STANDARDS FOR NEW HEAVY-DUTY TRUCKS

340-261-0020 Applicability

This division is in effect as of January 1, 2022 and applies to and establishes requirements for medium- and heavy-duty truck and engine manufacturers, Oregon truck dealers, all 2026 and subsequent model year onhighway heavy-duty engines, and all 2027 and subsequent model year trucks delivered for sale or sold in the State of Oregon, except as provided in OAR 340-261-0060 Exemptions.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468A.025, 468A.360, ORS 468A.010, 468A.015, 468A.050 & 468A.279 History:

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 10-2024, amend filed 07/15/2024, effective 07/15/2024 DEQ 16-2023, temporary amend filed 11/16/2023, effective 01/01/2024 through 06/28/2024 DEQ 17-2021, adopt filed 11/17/2021, effective 11/17/2021

340-261-0040

Requirement to Meet California Vehicle Emission Standards

(1) Starting with the 2026 engine model year and for each engine model year thereafter no person may deliver for sale, or sell, in Oregon any new on-highway medium- or heavy-duty engine unless such engine is certified to the California emission standards as required under OAR 340-261-0050, except as provided in OAR 340-261-0060, Exemptions.

(2) Starting with the 2027 model year and for each model year thereafter no person may deliver for sale, or sell, in Oregon any new medium- or heavy-duty truck unless such vehicle is certified to the California emission standards as required under OAR 340-261-0050, except as provided in OAR 340-261-0060, Exemptions.

(3) All motor medium- and heavy-duty truck manufacturers and dealers must comply with the sales and reporting requirements contained in this division.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468A.025, 468A.360, ORS 468A.010, 468A.015, 468A.050 & 468A.279 History:

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 10-2024, amend filed 07/15/2024, effective 07/15/2024 DEQ 16-2023, temporary amend filed 11/16/2023, effective 01/01/2024 through 06/28/2024 DEQ 17-2021, adopt filed 11/17/2021, effective 11/17/2021

340-261-0050 Incorporation by Reference

(1) For purposes of applying the incorporated sections of the California Code of Regulations described in this rule, "California" or "CA" means "Oregon" or "OR," respectively, and "Air Resources Board (ARB)" or "California Air Resources Board (CARB)" means Department of Environmental Quality (DEQ) or Environmental Quality Commission (EQC) depending on context, unless otherwise specified in this division or the application is clearly inappropriate.

(2) The sections of the California Code of Regulations (CCR), Title 13 and Title 17, adopted by reference in sections (3) and (4) are in addition to, and compatible with, the CCR, Title 13, standards and requirements adopted by reference under OAR 340-257-0050. It is the intent of this rule that the standards and requirements adopted by reference under OAR 340-257-0050 also apply in Oregon to the on-highway medium- and heavy-duty engines and vehicles regulated by the CCR, Title 13 and Title 17, standards and requirements adopted by reference in this rule, to the same extent and identical to how they would apply in California.

(3) Emission standards, testing procedures, warranty, reporting, enforcement, recall and other California provisions adopted by reference. Each manufacturer of new 2026 and subsequent model year on-highway medium- and heavy-duty engines and 2027 and subsequent model year medium- and heavy-duty trucks must comply with each of the following applicable standards specified in CCR, Title 13 as incorporated by reference herein. In addition, on and after January 1, 2025, each manufacturer of medium- and heavy-duty engines and vehicles shall comply with the applicable zero emission powertrain certification standards specified in CCR, Title 13, Section 1956.8(a)(8), incorporated by reference in subsection (a):

(a) Section 1956.8(a) – (f) and (i): Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy Duty Engines and Vehicles. [Anticipated California approval date 4/30/2025] Except that CCR Title 13, Section 1956.8(a)(2)(F) "Transit Agency Diesel-Fueled Bus Engine Exemption Request" shall be disregarded and is not incorporated by reference.

(b) Section 1971.1: On-Board Diagnostic System Requirements – 2010 and Subsequent Model-Year Heavy-Duty Engines. California adopted date 12/28/2023.

(c) Section 2036: Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles; and 2020 and Subsequent Model Year Trailers. California effective date 4/1/22.

(d) Section 2121: Penalties. California adopted date 9/9/21. Except that the reference in this regulation to "a violation of Health and Safety Code Section 43105" shall be disregarded and is not incorporated by reference.

(e) Section 2137: Vehicle, Engine, and Trailer Selection. California effective date 4/1/22.

(f) Section 2139: Testing. California adopted date 9/9/21.

(g) Section 2139.5: CARB Authority to Test for Heavy-Duty In-Use Compliance. California effective date 04/21/03.

(h) Section 2140: Notification and Use of Test Results. California adopted date 9/9/21.

(i) Section 2166: General Provisions. California adopted date 9/9/21.

(j) Section 2166.1: Definitions. California adopted date 9/9/21.

(k) Section 2167: Required Recall and Corrective Action for Failures of Exhaust After-Treatment Devices, On-Board Computers or Systems, Urea Dosers, Hydrocarbon Injectors, Exhaust Gas Recirculation Valves, Exhaust Gas Recirculation Coolers, Turbochargers, Fuel Injectors. California adopted date 9/9/21.

(I) Section 2168: Required Corrective Action and Recall for Emission-Related Component Failures. California adopted date 9/9/21.

(m) Section 2169: Required Recall or Corrective Action Plan. California adopted date 9/9/21.

(n) Section 2169.1: Approval and Implementation of Corrective Action Plan. California adopted date 9/9/21.

- (o) Section 2169.2: Notification of Owners. California adopted date 9/9/21.
- (p) Section 2169.3: Repair Label. California adopted date 9/9/21.
- (q) Section 2169.4: Proof of Correction Certificate. California adopted date 9/9/21.

(r) Section 2169.5: Preliminary Tests. California 9/9/21 date 9/9/21.

(s) Section 2169.6: Communication with Repair Personnel. California adopted date 9/9/21.

(t) Section 2169.7: Recordkeeping and Reporting Requirements. California adopted date 9/9/21.

(u) Section 2169.8: Extension of Time. California adopted date 9/9/21.

(v) Section 2423(n): Exhaust Emission Standards and Test Procedures – Off-Road Compression-Ignition Engines. California adopted date 9/9/21.

(w) Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. California adopted date 9/9/21.

(4) Emission standards, testing procedures, warranty, reporting, enforcement, recall and other California provisions adopted by reference. Each manufacturer of new 2027 and subsequent model year on-highway medium- and heavy-duty vehicles must comply with each of the following applicable standards specified in CCR, Title 17 as incorporated by reference herein:

(a) Section 95660: Purpose. California effective date 1/1/2015.

(b) Section 95661: Applicability. California effective date 1/1/2015.

(c) Section 95662: Definitions. California effective date 12/22/21.

(d) Section 95663: Greenhouse Gas Exhaust Emission Standards and Test Procedures for New 2014 and Subsequent Model Heavy-Duty Vehicles. California effective date 12/22/21.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.360 Statutes/Other Implemented: ORS 468A.025, 468A.360, ORS 468A.010, 468A.015, 468A.050 & 468A.279 History:

DEQ 23-2024, temporary amend filed 12/17/2024, effective 01/01/2025 through 06/29/2025 DEQ 10-2024, amend filed 07/15/2024, effective 07/15/2024 DEQ 16-2023, temporary amend filed 11/16/2023, effective 01/01/2024 through 06/28/2024

DEQ 17-2021, adopt filed 11/17/2021, effective 11/17/2021

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age, sex, religion, sexual orientation, gender identity, or marital status in the administration of its programs and activities. Visit DEQ's Civil Rights and Environmental Justice page.