

To: Honorable Board Members
From: Craig Segall, Deputy Executive Officer 
Date: May 20, 2022
Subject: Truck and Bus Regulation Final Compliance Deadline

The Truck and Bus Regulation (regulation), requiring most pre-2010 model year engine trucks to turnover to 2010-or-better model year engine vehicles, is one of the most significant steps the California Air Resources Board (CARB or Board) has ever taken on air quality. It has been a team effort, and its success is due to staff working together across CARB, sustained Board support, and much learning from stakeholders and communities. As we draw near to its final implementation date, staff developed these updates for you on our successful efforts. Thank you for your support of this critically important program.

Vehicle turnover regulations like this one are extraordinarily complex to implement. Since implementation of the regulation began in 2008, CARB has invested heavily in years of public outreach, incentives, and public support to enable vehicle owners to comply, and we are now approaching the final January 1, 2023, compliance deadline. The regulation has accomplished significant emission reductions of both particulate matter (PM) and oxides of nitrogen (NO_x). In 2023, the regulation accounts for an 80 percent reduction in PM emissions and a 60 percent reduction in NO_x from diesel trucks when compared to normal truck replacements. The vast majority of affected parties are on track to comply, and there are compliance pathways and extensions already available in the regulation for those who have trucks remaining to be upgraded. Timely compliance is, of course, critical to meeting federal, State, and local public health standards, so we are focused on completing this decade-plus effort.

Of course, some stakeholders are still working toward compliance. The main challenge being presented by stakeholders is that some affected vehicle owners may not be able to meet the final compliance deadline due to supply chain issues creating a lack of availability of new diesel trucks. The regulation, in fact, provides paths forward for this limited group, while protecting public health. Our response letter to a recent letter on this topic is attached.

This memorandum provides you a detailed update on CARB staff efforts to assist affected stakeholders meet regulatory requirements through outreach, compliance assistance, funding, and enforcement, and provides information regarding current market status and vehicle availability.

Background

The regulation was initially adopted in 2008 to help meet federal air quality standards and reduce community exposure to toxic air contaminants. In 2014, CARB amended the regulation to introduce additional flexibility to assist vehicle owners in meeting compliance

requirements. However, the added flexibility options in the amendments were nullified by the Fifth Appellate District Court in 2018 due to the Lawson/California Trucking Association lawsuit. The original regulatory requirements to upgrade to 2010 engines by January 1, 2023, have not changed and remain in effect. In 2017, the California State Legislature passed the Road Repair and Accountability Act (Senate Bill 1) which requires the California Department of Motor Vehicles (DMV) to deny registration renewal or transfer to diesel-fueled vehicles that are not in compliance with the regulation. CARB staff are currently working with DMV to implement this law. Senate Bill 1 also established useful life criteria that must be applied when truck regulations are newly adopted or amended.

Current Status

Most vehicle owners in California have already taken the necessary steps to comply with the regulation. According to CARB's annual enforcement report, more than 85 percent of all affected vehicles, approximately 1,580,000, have already been upgraded to 2010 model year or newer engines and comply with the final upgrade requirement. The remaining number of vehicles facing a January 1, 2023, compliance deadline (2007 through 2009 model year engines) is estimated to be about 36,900 California registered trucks and up to 192,400 trucks registered in other states. The remaining California registered vehicles are typically smaller fleets with 10 or fewer vehicles, while the fleet size for out-of-state registered vehicles varies.

Compliance Assistance Efforts

CARB staff have developed and implemented aggressive efforts to alert vehicle owners they may be affected by the regulation, to provide them training and compliance assistance to help them comply with the regulation, to provide them with financial assistance in purchasing newer vehicles and enforcing the regulation in a fair and equitable manner assuring a level-playing field for those vehicle owners who took the steps necessary to comply with the regulation. These efforts are essential for implementing the regulation and have helped achieve the high compliance rate of the regulation.

Outreach

A comprehensive outreach program is vital to educate and provide information to the regulated community and public and facilitate discussion and provide feedback mechanisms. With this in mind, CARB developed an outreach plan that included the efforts described below.

Mail-outs

Our outreach efforts have included sending out targeted mail-outs to over 200,000 fleet owners providing a two-year notice of upcoming deadlines each year and following up with a one-year reminder. Since 2018 a total of 109,877 letters and 169,832 postcards have been mailed to individuals identified as owning vehicles facing upcoming compliance deadlines.

Diesel Hotline

In 2009, CARB created the Diesel Hotline to provide the public with real-time compliance assistance from live operators. The Diesel Hotline began with 5 operators but has grown to 20 operators answering up to 200,000 calls and about 20,000 emails every year.

Training Courses

As of 2011, our training team has held 1,300 in-person and online regulatory training courses for over 42,000 attendees. Additionally, our outreach team held in-person One-Stop truck events that take place in locations throughout the State. These One-Stop events include numerous training presentations, enforcement demonstrations, one-on-one compliance assistance, and opportunities for the public to speak with vendors and exhibitors.

One-Stop Truck Events

One-Stop Truck Events provide an opportunity for fleets and truck owners to access one-on-one assistance, vendors, and presentations on regulatory compliance, financial assistance, and new technology options. Since 2011 there have been 42 One-Stop events with over 5,000 attendees participating, and since September of 2020, staff has transitioned to an online format for One-Stop events. Staff have held 4 online virtual One-Stop events, with a total of 1,172 attendees.

Partnership with DMV

As part of our outreach efforts, we have also worked extensively with DMV to incorporate regulatory information in their "Commercial Driver's Handbook", including a warning on vehicle registration renewal notices regarding the regulation, running video advertisements on televisions at DMV offices, and providing informational handouts at the counters at 21 commercial DMV outlets informing the public of upcoming compliance deadlines.

Statewide Media Campaign in Preparation for Senate Bill 1

We also conducted a state-wide media campaign from 2019-2020 informing affected vehicle owners of potential DMV registration denials due to provisions introduced in Senate Bill 1. The media campaign included billboards in California and neighboring states, advertisements and articles in industry magazines, television and YouTube video advertisements, radio commercials, targeted digital advertisements, a social media campaign, radio interviews, and pump topper advertising at truck stops.

Enforcement

Enforcement efforts are also an important part of regulation. CARB's Enforcement Division has been working to ensure vehicles operating in California are compliant with regulatory requirements from the time the regulation was initially adopted. Since 2018, when Senate Bill 1 tied DMV registrations to compliance with the regulation, the Enforcement Division has issued notices of non-compliance/violation/warning to over 50,000 fleets accounting for nearly 150,000 regulated vehicles. These actions resulted in vehicle owners being notified of

regulatory requirements, and non-compliant vehicles being brought into compliance with the regulation or taken out of service in California resulting in a 98 percent compliance rate for the regulation.

Funding

Since the inception of the regulation, based on appropriations from the Legislature and developed through public process, CARB has also provided several incentive programs to help affected vehicle owners replace older vehicles with newer, cleaner vehicles.

Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)

HVIP provides funding opportunities for fleet owners to help lower the purchase price of zero or advanced technology vehicles. Since inception, HVIP has awarded over \$600 million to support the purchase of over 9,200 cleaner heavy-duty vehicles. CARB is committed to helping small business and has taken additional steps to help them comply with the regulation by keeping \$25 million in funding reserved for fleets with 10 or fewer vehicles. Also, the Innovative Small e-Fleets Pilot Project will be launched in the summer of 2022 and will provide \$25 million in incentives geared toward small trucking fleets and independent owner operators. We are supporting our disadvantaged communities by providing higher voucher amounts for small fleets located in those areas of the state.

Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program

The FARMER Program provides funding for agricultural vehicle and equipment replacement projects to reduce agricultural sector emissions. Agricultural trucks are typically low use due to the seasonality of agriculture or are custom-built for specialty agricultural work making these trucks expensive and therefore, not cost-effective under other incentive programs. To provide funding opportunities for these vehicles, in September 2018, CARB added a project category to fund new or used agricultural trucks meeting the 2010 model year emission standard. As of September 2021, the FARMER Program invested \$23.8 million to replace 275 heavy-duty agricultural trucks with 2010 model year or cleaner engines.

Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program)

The Carl Moyer Program cost-effectively provides grant funding for cleaner-than-required engines, equipment, and other sources of air pollution by yielding emission reductions creditable to the State Implementation Plan that are above and beyond, or before, what is required by regulations. As of 2020, the Carl Moyer Program has executed nearly \$95 million to fund over 2,500 compliant vehicles in support of the regulation. In November 2021, the Board passed amendments to the Carl Moyer Program that increased funding amounts and cost-effectiveness limits to provide greater opportunities for smaller fleet owners to transition to advanced technologies. Working in partnership with air districts and other stakeholders,

the Carl Moyer Program also provided recent updates to administrative requirements to help air districts streamline and facilitate the process for applicants. CARB continues to engage stakeholders on how the program can further support the transition to zero-emission technologies. The Incentives Program Advisory Group (also known as IPAG) led by Vice Chair Berg and Board members, Hurt and Krakov, will provide greater opportunities for robust discussions on small fleet engagement, environmental justice and equity, and infrastructure. In 2022, IPAG will continue to provide a forum for discussing policy level issues, including exploring potential updates for on-road heavy-duty projects in the Carl Moyer Program and its On-Road Voucher Incentive Program, which further supports the regulation.

Volkswagen Environmental Mitigation Trust (VW Trust)

The VW Trust provides funding opportunities for specified eligible actions for the heavy-duty sector, including on-road freight trucks regulated under the regulation. As of 2022, the VW Trust has funded 227 vehicles, adding up to over \$58 million awarded.

Truck Loan Assistance Program

Launched in 2009, the Truck Loan Assistance Program helps small-business fleet owners affected by the regulation to secure financing for upgrading their fleets with newer trucks. The program is funded by the Air Quality Improvement Program (AQIP), a voluntary incentive program administered by CARB that was created under the *California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007* (AB 118, Núñez, Chapter 750, Statutes of 2007). The passage of AB 8 (Perea, Chapter 401, Statutes of 2013) extended the funding for AB 118 programs until January 1, 2024. The program helps small business truck owners, fleets with 10 or fewer trucks, that fall below conventional lending criteria and are unable to qualify for traditional financing for cleaner trucks. Lenders use their traditional underwriting standards to establish loan terms; however, the program currently includes an interest rate cap of 20 percent. As of April 2022, more than \$200 million in contributions has been leveraged into over \$2.5 billion in financing for the purchase of nearly 38,000 compliant vehicles.

Vehicle Availability

Recently, stakeholders have raised concerns regarding meeting the final January 1, 2023, compliance deadline due to supply chain issues. CARB staff conducted research on the current availability of new and used diesel vehicles with 2010 model year or newer engines that meet the regulation's final requirement. For new trucks, staff contacted several dealers and confirmed that most have stopped taking orders for the 2022 model year, but several dealers are either already taking orders for the 2023 model year or will be taking orders soon. Under the regulation, truck owners that place orders for a new truck by September 1, will be able to keep using their existing trucks past the January 1, deadline until the replacement truck is delivered. Truck owners can also purchase used trucks with 2010 engines to comply with the regulation. Staff also looked at a snapshot of the used truck market through a basic online search using "[The TruckPaper website](#)". Truckpaper is a national website where dealers and vehicle owners can post medium- and heavy-duty trucks and

trailers that are for sale. As of April 27, 2022, the website showed there were more than 60,000 compliant used diesel trucks (2011 model year or newer) for sale at that time.

Considering the snapshot only included one website on a single day, the number of available compliant used vehicles is higher. Some truck owners have also identified the elevated used truck price as a barrier to upgrading existing trucks; however, the truck being replaced also has a higher resale value.

CARB staff have also heard concerns from stakeholders that Truck and Bus requirements will significantly limit the number of drayage trucks that will be available to service California ports, but that is not the case. Currently, there are about 29,000 in-state Class 8 trucks actively servicing California's seaports and intermodal railyards, with even more trucks registered as able to serve and compliant with our regulations. At the beginning of 2022, there were approximately 44,000 Class 7 and 8 drayage trucks registered in the statewide Drayage Truck Registry (DTR) that met the regulation's final requirement of having a 2010 or newer model year engine. These compliant vehicles registered in the DTR should be sufficient to service the State's ports without interruption. Finally, it should be noted that as part of the Clean Truck Program at the San Pedro Bay Ports, new trucks, registered in the Port DTR after October 1, 2018, must be model year 2014 or newer. This enhanced requirement ensures that vehicles compliant with this program are also compliant with CARB's rule.

Flexibilities and Remaining Compliance Options

The regulation includes flexibility for fleet owners to remain in compliance with the January 1, 2023, compliance deadline. In the event delivery of new compliant vehicles is delayed due circumstances beyond the control of the buyer, like supply chain issues, the regulation includes a manufacturer delay provision. Affected vehicle owners that place a new vehicle purchase order by September 1, 2022, may continue operating the existing vehicle past the January 1, 2023, compliance deadline until the new vehicle is delivered. The regulation also includes 2 limited compliance options that can continue to be used beyond the final January 1, 2023, compliance deadline. Vehicles that travel less than 1,000 miles per year in California and meet reporting requirements may continue to operate indefinitely under the low-use vehicle exemption. Vehicles that operate exclusively in areas defined under the regulation as NOx exempt areas and meet filter, labeling and reporting requirements may continue operating those vehicles beyond 2023.

Conclusion

The regulation has been one of CARB's biggest successes in protecting public health not only across the State but particularly in our disadvantaged communities by reducing emissions through the replacement older diesel vehicles with newer/cleaner vehicles. CARB's success can be directly attributed to effective implementation of the regulation through our exhaustive efforts working with the regulated community, providing financial support, conducting extensive outreach, providing compliance assistance, and consistently enforcing the rule to create a level playing field. We are committed to continue working collaboratively

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with all affected vehicle owners to find the best available path forward to comply with the final January 1, 2023, deadline. Continued implementation of the regulation is still needed as emissions from diesel powered vehicles remain a major source of health risk in California's disadvantaged communities. Please contact me or my staff with any questions or comments.

Attachment: CARB Response to Western States Trucking Association