

State of California
Air Resources Board

Public Hearing to Consider the Proposed Mobile Source Certification and Compliance Fees

Staff Report: Initial Statement of Reasons

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I. Executive Summary

More than fifty years ago, California established the first motor vehicle emission standards as a strategy to improve the severe air pollution plaguing our state. Today, stringent standards cover not only cars and trucks, but nearly every vehicle or equipment powered by a combustion engine. State law prohibits the sale or use of new motor vehicles or new mobile source engines used within California unless they meet applicable emission standards adopted by the California Air Resources Board (CARB). Similarly, state law generally prohibits the installation, sale, offer for sale, or advertisement of aftermarket emission-related parts without approval from CARB to prevent tampering of emission control systems. Manufacturer compliance with these requirements is demonstrated through CARB's certification and compliance programs.

Since the 1990 adoption of Health and Safety Code (HSC) section 43019 to assess a fee for on-road motor vehicles and engines (generally, cars, trucks, and motorcycles), emission standards and certification requirements have expanded to include the numerous categories of off-road vehicles and engines used in the state. CARB currently issues over 3,700 approvals, also known as executive orders or EOs, annually, which allow manufacturers to sell their products in this state. This is approaching a ten fold increase from the 430 EOs issued by CARB in 1990. CARB now issues approvals for all types of vehicles and engines, including automobiles and heavy-duty trucks, as well as large off-road equipment and small lawn and garden engines, evaporative systems, and aftermarket components that are used in automobiles, trucks, and off-road engines. Each product is certified by CARB according to the regulations and test procedures established based on the product's specific equipment classification or operating category.

The amount of fees collected per year, which was capped at \$4.5 million in fiscal year 1989-1990, has increased with CPI, resulting in an assessed amount of roughly \$9.7 million for 2018, which is about one quarter of the cost to implement the current programs. The balance of the program costs is being paid through other sources, primarily the Air Pollution Control Fund (APCF), Motor Vehicle Account (MVA), and Vehicle Inspection and Repair Fund (VIRF), to implement CARB's mobile source certification and compliance programs. Manufacturers of vehicles and engines not subject to an emission standard at the time of adoption were not included in the 1990 fee regulation. As such, fees are currently being collected to help cover certification and compliance costs for only about one third of the products certified by CARB. As described below, CARB has just recently been given the authority to collect fees from regulated parties other than manufacturers of on-road vehicles and engines to cover the cost of certification and compliance activities.

In 2018 and 2019, the Legislature directed CARB through AB 85, AB 2381 and SB 854 to develop fee programs to reasonably cover the costs of its Mobile Source Certification and Compliance programs. This Proposed Regulation focuses accordingly on creating a schedule of fees that will result in the Mobile Source Certification and Compliance Program costs to be covered within the authority provided by SB 85, AB 2381 and SB 854. These funds will be deposited into a new fund, the Certification and

Compliance Fund, specifically to support the Mobile Source Certification and Compliance programs.

For this Proposal, CARB identified 33 different categories of activities, grouped into six separate categories:

- On-Road Vehicles, Engines, and Equipment (On-Road),
- Off-Road Vehicles, Engines, and Equipment (Off-Road),
- Evaporative Components,
- Aftermarket Parts,
- Diesel Emission Control Strategies (Retrofits), and
- At-Berth Alternative Emission Control Technologies (At-Berth Technologies)

The total cost to implement these programs in 2022 is estimated at about \$50 million. Staff's proposal sets up a phase-in fee schedule, starting in calendar year 2022 and fully implemented in 2024. On-Road mobile source fees would be annually adjusted by CPI. Reduced fees include those adjusted for lower CARB workload, to support CARB policy to expand zero-emission technologies, and to assist small businesses and companies with low California sales. The total expected revenue (total fees collected) from the proposed regulation for 2022 through 2031 is shown in Table ES-1. The newly proposed fees combined with historical fee collection would cover a high percentage of total costs for CARB's certification and compliance programs, but would not reach 100 percent. Although we may not have a 100% (full-cost) recovery at the time, this is what CARB reasonably expects that the market can bear based on their feedback from industry and staff's analysis. CARB will strive for getting this program to as close to net-zero when possible in the future through planning and development of our existing and future programs. The unrecovered program costs will continue to be offset by existing funds as they represent a benefit to the state. Staff expects minimal or no impact on the processing time for certifications because of this funding structure.

Table ES-1. Total Fee Revenue from Proposed Regulation

	On-Road ¹	Off-Road ²	Aftermarket Parts	Retrofits	At-Berth	Totals
2022	\$16,189,411	\$2,989,754	\$749,487	\$498,334	\$194,494	\$20,621,481
2023	\$23,924,484	\$4,238,205	\$749,487	\$690,413	\$203,382	\$29,805,970
2024	\$31,659,557	\$5,486,656	\$749,487	\$882,491	\$212,270	\$38,990,460
2025	\$32,546,024	\$5,486,656	\$749,487	\$767,662	\$212,270	\$39,762,099
2026	\$33,457,313	\$5,486,656	\$749,487	\$728,941	\$212,270	\$40,634,667
2027	\$34,394,118	\$5,486,656	\$749,487	\$690,072	\$212,270	\$41,532,603
2028	\$35,357,153	\$5,486,656	\$749,487	\$653,193	\$212,270	\$42,458,759
2029	\$36,347,153	\$5,486,656	\$749,487	\$653,120	\$212,270	\$43,448,686
2030	\$37,364,874	\$5,486,656	\$749,487	\$653,120	\$212,270	\$44,466,406
2031	\$38,411,090	\$5,486,656	\$749,487	\$653,120	\$212,270	\$45,512,623
TOTAL	\$319,651,177	\$51,121,203	\$7,494,875	\$6,870,465	\$2,096,035	\$387,233,755

¹ The proposed certification fees are phased-in from 2022 through 2024. The proposed 2024 certification fees are increased by a 2.8% CPI per year between 2024 and 2031. The fee total includes the baseline fees.

² Includes both the costs to certify off-road vehicles, equipment and equipment and the costs to certify the evaporative emission components that are used in those vehicles and equipment

II. Introduction and Background

In 1966, California established the first tailpipe motor vehicle emission standards for carbon monoxide and hydrocarbons as a strategy to improve the severe air pollution plaguing our state. Today, stringent standards cover not only cars and trucks, but any vehicle or equipment with a combustion engine. State law prohibits the sale of new motor vehicles or new engines used in mobile sources within California unless they meet the currently applicable emission standards adopted by the California Air Resources Board (CARB). Similarly, state law generally prohibits the installation, sale, offer for sale, or advertisement of aftermarket emission-related parts without approval from CARB to prevent tampering with emission control systems. Manufacturer compliance with these requirements is demonstrated through CARB's certification and compliance programs.

When a manufacturer requests certification of a product (i.e., vehicle, engine, or add-on component), CARB may, as part of its certification review, verify the information provided by the manufacturer using pre-sale audits and confirmatory emissions testing of that product. This enables CARB to further validate that the information provided by the manufacturer in each certification application is accurate prior to issuing a certification document (Executive Order [EO] or other approval document). Confirmatory emission testing is done by CARB using the same test procedures employed by manufacturers to confirm emissions tests results. CARB may also perform screening testing that can include standard testing in the lab, in the field using Portable Emission Measurement Systems (PEMS), and/or by using special operating cycles in the lab that replicate conditions encountered in normal use to identify defeat devices. CARB also audits labs used by manufacturers to ensure the accuracy of the testing they conduct.

After the product is sold, continued compliance with emission standards are double-checked through a variety of in-use programs which includes laboratory and on vehicle monitoring systems. In-use emissions testing and warranty activities help confirm that vehicles and engines continue to comply with CARB requirements throughout their useful lives. Compliance issues found through these programs can result in required corrective actions, including product recall.

CARB currently issues over 3,700 EOs annually, which allow manufacturers to sell their products in this State. This is nearly ten times more than the 430 EOs issued by CARB when the fee was first collected in 1990. CARB issues EOs for all types of vehicles and engines, including automobiles and heavy-duty trucks, as well as large off-road equipment and small lawn and garden engines, evaporative systems, and aftermarket components that are used in automobiles, trucks, and off-road engines. Each product is certified by CARB according to the regulations and test procedures established based on the product's specific equipment classification or operating category.

In 1988, the legislature gave CARB authority (Health and Safety Code [HSC] section 43019) to assess a fee for motor vehicles and engines (generally, cars, trucks, and

motorcycles) that was capped at \$4.5 million a year, but with annual adjustment of the cap based on the California Consumer Price Index (CPI). In 1990, CARB implemented this authority through regulation that provides a formula to assess fees on a limited class of motor vehicle and engine manufacturers. Manufacturers of vehicles and engines not subject to an emission standard at the time were not included in regulation. Since then, however, emission standards and certification requirements have expanded to include nearly all mobile sources. As such, only about one third of the products currently certified by CARB are assessed a certification fee. The amount collected in 2018 under these existing rules was roughly \$9.7 million, only about one quarter of the cost to implement the programs. The balance of the program costs is being paid through other revenue sources.

Until now, CARB did not collect fees from regulated parties other than manufacturers of on-road vehicles and engines to cover the cost of certification and compliance activities. Consequently, CARB has historically used existing funds (primarily the Air Pollution Control Fund (APCF), Motor Vehicle Account (MVA), and Vehicle Inspection and Repair Fund (VIRF)) to implement its mobile source certification and compliance programs.

On June 27, 2018, legislation SB 854 (Committee on Budget and Fiscal Review, Chapter 51, Statutes of 2018) was passed and signed into law that directs CARB to adopt a schedule of fees to cover all or part of CARB's reasonable costs associated with certification, audit, and compliance of off-road or non-vehicular engines and equipment, aftermarket parts, and emission control components sold in the State (limited to activities covered by HSC sections 38560, 43013 and 43018, and on-road aftermarket parts under Vehicle Code section 27156(h)). As such, this legislation directs CARB to assess fees to cover its reasonable costs, with specific considerations, on all off-road and other mobile source certification and compliance programs not previously covered under the existing fee regulation authority (HSC 43019). This new requirement is housed in HSC 43019.1. The fees collected will be deposited into the newly established Certification and Compliance Fund (CCF), created specifically to support mobile source certification and compliance activities.

Also in 2018, legislation AB 2381 (Carillo, Chapter 713, Statutes of 2018) directs CARB to enhance its certification, audit, and compliance activities for new motor vehicles to detect defeat devices or other software used to evade emission testing, and allows CARB to recover its reasonable costs. Cost recovery for this activity is capped at \$5 million per year with CPI annual adjustments. The fees collected will also be put into the newly established CCF to support mobile source certification and compliance activities.

The following year, on June 27, 2019, SB 85 (Committee on Budget and Fiscal Review, Chapter 51, Statutes of 2019) removed the cap on existing fee authority housed in HSC 43019, expanded the activities covered, and redirected the fees collected to the CCF. Under this legislation, CARB is directed to develop by regulation a schedule of fees for the certification, audit, and compliance of motor vehicles and engines sold in

the state to cover the state board's reasonable costs of implementing the certification, audit, and compliance program.

III. The Problem that the Proposal is Intended to Address

As described above, CARB mobile source programs have increased in size and complexity since 1966. The fees established in 1990 collect about one quarter of the cost to implement the programs. The balance of the program costs is being paid through other revenue sources. Consequently, CARB has historically used existing funds (primarily the Air Pollution Control Fund (APCF), Motor Vehicle Account (MVA), and Vehicle Inspection and Repair Fund (VIRF)) to implement our mobile source certification and compliance programs. The funds may not be able to support these efforts on an ongoing basis¹, and new legislation, described below, makes clear that these activities should be supported to a much greater extent by the beneficiaries of certification (manufacturers).

New legislation passed by the legislature in 2018 and 2019 provided authority to CARB address these issues.

SB 85 modified Health and Safety Code section 43019 to read:

"The state board may adopt, by regulation, a schedule of annual fees for the certification, audit, and compliance of motor vehicles and engines sold in the state to cover the state board's reasonable costs of implementing the certification, audit, and compliance programs ... related to mobile sources. The fee shall be paid by an entity seeking that certification. The fee shall be in an amount sufficient to cover the state board's reasonable costs in implementing those state programs, including any administrative costs and may be adjusted by the annual change in the California Consumer Price Index ..."

SB 854 added Health and Safety Code section 43019.1 to cover mobile sources that were not included under section 43019, which reads:

"...the state board may adopt a fee to cover all, or a portion of, the state board's reasonable costs associated with each type of certification as authorized pursuant to [Sections 38560², 43013 and 43018 of this code and subdivision (h) of Section 27156 of the Vehicle Code], to be paid by the entity seeking the certification. The state board may assess a fee at the time of application and upon certification to spread the financial burden to entities remitting the fee."

¹Legislative Analyst's Office, LAO, 2020. The 2020-21 Budget: Transportation
<https://lao.ca.gov/Publications/Report/4149>

² Section 38560 added with SB 85 in 2019.

When adopting a schedule of fees, SB 854 directed CARB to work with impacted industries and to consider all of the following in the establishment of the fee schedule:

- Potential impacts on manufacturers that may result from the fee.
- Size of the manufacturer compared to the industry average served by the product on which the fee will be assessed.
- Number of certifications requested and consistency with prior year certifications by the manufacturer.
- Complexity of the regulated category for which a certification is requested.
- A product's potential impact on emissions, and the complexity of the evaluation required, including, for an aftermarket part, determining there is no risk to the environment when the aftermarket part is in actual use.
- Anticipated change in the number of certifications issued annually.
- Potential impacts for enacting a partial fee that does not fully cover the state board's costs for activities associated with certification, including the impacts on the processing time for certification.

New regulations are required along with modification of Title 13 CCR section 1990-1994 to implement these Legislative directives.

IV. The Specific Purpose and Rationale of Each Adoption, Amendment, or Repeal

This chapter provides information regarding CARB's determination that each provision of the Proposed Regulation is: (1) reasonably necessary to carry out the purpose of the regulation; and (2) reasonably necessary to address the problem for which the regulation is proposed.

A. Regulation Purpose And Considerations

The Legislature directed CARB through AB 2381, SB 85, and SB 854 to develop fee programs to reasonably cover the costs of its Mobile Source Certification and Compliance programs. This Proposed Regulation focuses accordingly on creating a schedule of fees that will result in the Mobile Source Certification and Compliance program costs to be covered within the authority provided by AB 2381, SB 85 and SB 854.

For On-Road sources, the controlling statutes are AB 2381 (Carrillo, statutes of 2018) and SB 85. Approved in 2018, AB 2381 directed CARB to enhance its certification, audit, and compliance activities for new motor vehicles to detect defeat devices or

other software used to evade emissions testing, and allows CARB to recover associated costs. Cost recovery for this activity is capped at \$5 million per year, with CPI annual adjustments. CARB implemented enhanced certification, audit, and compliance activities in the years leading up to the enactment of AB 238, and continue making improvements. In 2019, SB 85 was approved that modified the existing fee authority housed in HSC 43019 by removing the previous fee cap and redirecting the fees collected from the Air Pollution Control Fund (APCF) to the newly created Certification and Compliance Fund (CCF). Under this legislation, CARB was directed to develop by regulation a schedule of fees for the certification, audit, and compliance of motor vehicles and engines sold in the state to cover the state board's reasonable costs of implementing the certification, audit, and compliance programs. With the removal of the cap, CARB was directed to determine the reasonable cost of the program. The 2018 estimated program costs include the certification, audit, and compliance activities as well as the enhanced activities developed to detect software to evade emissions testing. These combined resource costs are the basis of the proposed fees. CARB will address the need for further improvements to the program and the associated additional fee recovery under AB2381 in future rulemakings.

For Off-Road sources, Evaporative Components, Aftermarket Parts, Retrofits and At-Berth Alternative Emission Controls, the controlling legislation is SB 854 which directs CARB to adopt a schedule of fees to cover all or a part of CARB's reasonable costs associated with certification, audit and compliance of off-road or non-vehicular engines and equipment, aftermarket parts, and emissions control components sold in the State (limited to activities covered by HSC sections 38560, 43013 and 43018, and Vehicle Code section 27156(h)). SB 854 directs CARB to assess fees to cover its reasonable costs, with specific considerations, on all off-road and other mobile sources programs not currently covered under the existing fee regulation authority (HSC 43019). When assessing a fee, SB 854 directed CARB to work with impacted industries and consider all of the following:

- Potential impacts on manufacturers that may result from the fee.
- Size of the manufacturer compared to the industry average served by the product on which the fee will be assessed.
- Number of certifications requested and consistency with prior year certifications by the manufacturer.
- Complexity of the regulated category for which a certification is requested.
- A product's potential impact on emissions, and the complexity of the evaluation required, including, for an aftermarket part, determining there is no risk to the environment when the aftermarket part is in actual use.
- Anticipated change in the number of certifications issued annually.

- Potential impacts for enacting a partial fee that does not fully cover the state board's costs for activities associated with certification, including the impacts on the processing time for certification.

To address these directives, staff identified the scope of the regulatory activity, reasonable costs associated with certification, audit, and compliance, potential impacts on businesses and other criteria provided by the legislature for the development of the fees.

To define the scope of regulatory activities covered by the Proposed Regulation, CARB conducted a review of existing activities in the Mobile Source Certification and Compliance Programs. The scope of this regulatory activity is based on existing on-road fee sources covered by Health and Safety Code (HSC) section 43019 along with the new categories allowed by the new legislation (SB 854). SB 854 allows CARB to adopt a schedule of fees to cover CARB's reasonable costs associated with certification, audit, and compliance of off-road or non-vehicular engines and equipment, aftermarket parts, and emission control components sold in the State (limited to activities covered by HSC sections 38560, 43013 and 43018, on-road aftermarket parts under Vehicle Code section 27156(h)).

For this Proposal, CARB identified 33 different regulatory categories, 31 of which are assigned a distinct Executive Order series. These regulatory categories are grouped into six areas of activities:

- On-Road Vehicles, Engines, and Equipment (On-Road),
- Off-Road Vehicles, Engines, and Equipment (Off-Road),
- Evaporative Components,
- Aftermarket Parts,
- Retrofits, and
- At-Berth Alternative Emission Control Technologies (At-Berth Technologies)

The Executive Order series and product approvals for each of the regulatory categories are listed below. (A detailed description of each of these is found in Appendix B (Revised SRIA, Appendix A Pages 91-99).

On-Road

- On-Road New Cars, Light/Medium-Duty Vehicles ("A" EO series)
- On-Road Medium/Heavy-Duty Engines and Vehicles ("A" Vehicle and Engine EO series)
- Phase 2 Greenhouse Gas Vehicles, Trailers and Aerodynamic Devices ("A", "AT", and "AD" EO Series)
- Heavy-duty Zero-Emission Powertrain ("A" EO series)
- Federal AB 965 Cars and light trucks ("P" EO series)
- On-Road HD Exempt ("N" EO series)

- Fuel-fired Heaters
- Street-Use Motorcycles ("M" EO series)

Off-Road

- Off-Highway Recreational Vehicles (green sticker ["U-M" EO series] and red sticker ["U-N" EO series] all-terrain vehicles and off-road motorcycles)
- Electric Golf Carts ("U-G" EO series)
- Large Off-Road Spark-Ignition Engines ("U-L" Evaporative and Exhaust EO series)
- Small Off-Road Engines ("U-U" Evaporative and Exhaust EO series)
- Spark-Ignition Marine Engines/Watercraft ("U-W" Evaporative and Exhaust EO series)
- Off-Road Compression Ignition Engines ("U-R" EO series)

Evaporative Components

- Evaporative Emission Control System Components - Small Off-Road Engines ("Q" EO series)
- Evaporative Emission Control System Components - Spark-Ignited Marine Watercraft ("RM" EO series)
- Evaporative Emission Control System Components - Off-Highway Recreational Vehicles ("RV" EO series)
- Portable Fuel Containers and Portable Outboard Marine Tanks ("G" EO series)

Aftermarket Parts

- Alternative Fuel Retrofits ("B" EO Series)
- Experimental Permits ("C" EO series)
- Aftermarket Parts ("D" and "F" EO series)
- Aftermarket Catalytic Converters ("D_{Cat}" EO series)
- Aftermarket Parts – Diesel Particulate Filters ("D_{dpt}" EO series)
- Motorcycle Critical Emission Control Parts ("K" series EO)

Retrofits

- Diesel Emission Control Strategy ("DE" EO Series)
 - SS - Stationary Compression Ignition Engines
 - TRU - Transport Refrigeration Units
 - RTG - Rubber Tired Gantry Crane
 - Marine
 - ON - On-Road: on-road heavy-duty diesel vehicles
 - OFF - Off-Road: off-road heavy-duty diesel compression ignition engines
 - APU - Auxiliary Power Unit
- Locomotive repowers and retrofits

At-Berth Technologies

- Alternative Control Technologies for ocean-going vessels at-berth in a California Port ("AB" EO series)

To develop the proposed fees for this regulatory activity, staff first determined the actual costs for specific certification and approval categories and activities as described in Appendix B (Revised SRIA, Appendix A, pages 91-129) and then applied the various considerations as directed by legislation. The fee development methodology can also be found in Appendix B (Revised SRIA, Appendix B, page 130-134). Staff employed the cost collection methodology used by U.S. EPA³ in 2004 for their mobile source fee development for this process.

A staff survey was conducted to determine the percent time each staff and first line manager spent in each essential certification and compliance activity conducted in 2018. Program costs were based on the essential tasks required to complete certification and compliance activities that ensure products meet California's requirements; therefore, they do not include resources to conduct enforcement, regulatory or research activities. The certification and compliance activities include the evaluation of an application for a vehicle, engine or component to ensure the product meets the certification requirements; the confirmation that the product as produced and distributed as certified; and that the product has durable emission control equipment and meets warranty requirements. A detailed description of the types of activities that are included in this cost determination can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-2, Page 102). Staff assumed that the program activities for 2022 were the same as for 2018, except where new post-2018 regulations are implemented before the 2022 year and DOF approved resources were added to programs. Additional costs were included for facility and operational increases from the 2018 survey data due to additional programs and the additional testing capacity of the new CARB Laboratory being built in Riverside, California. The existing testing capacity does not meet the need of CARB's programs. In 2016, CARB adopted plans and the Legislature approved funding for this new facility, which expands the testing for mobile source certification, audit, and compliance programs expected starting in 2022. A detailed description of the methodology and costs are provided in Appendix B (Revised SRIA, Appendix A, pages 91-129).

Table IV-A-1, presents the total program costs by category for 2018 and 2022.

³ Federal Register Fed. Reg, 2004. The Motor Vehicle and Engine Compliance Program (MVECP) fees rule (69 Fed. Reg. 26222)

Table IV-A-1. CARB Program Costs

Sources	Cost of Program
On-Road	
2018	\$27,850,443
2022 estimate	\$37,299,493
Off-Road	
2018	\$4,673,315
2022 estimate	\$5,512,926
Evaporative Components	
2018	\$426,415
2022 estimate	\$536,228
Aftermarket Parts	
2018	\$3,253,911
2022 estimate	\$4,805,349
Retrofits	
2018	\$1,961,505
2022 estimate	\$1,270,099
At-Berth Technologies	
2018	\$204,833
2022 estimate	\$212,270
TOTAL	
2018	\$38,370,422
2022 estimate	\$49,636,366

To address the legislative directives of SB 854, staff considered the following in developing all fees.

Complexity of the Regulated Category

More complex categories where products are required to meet more regulatory requirements generally had more resources directed to the category, compared to less complex categories. Each category has its own emissions standards, regulations and test procedures. The stringency of the standards is different for each category because of the differences in base emissions levels, cost of controls, and the availability of emission control technologies. Those with more stringent emissions standards tend to have more complicated emissions control technologies that require more thorough review by certification and in-use compliance staff to ensure compliance. Certain regulations include other requirements, such as on-board diagnostics, warranty, production testing, and in-use testing that require staff to expend more resources to ensure compliance with these programs. Some categories have less workload activities than other categories because there are less stringent emissions and procedure requirements. Staff expends fewer resources for these categories where only engineering analysis is required of the application. (See Appendix B: Revised SRIA, Appendix A, Table Appn A-2, Page 102.) To address the

complexity of each category, staff estimated CARB's costs to conduct certification and compliance work by grouping each fee category by the Executive Order series category or certification type. Staff averaged the application variations to arrive at average costs per by executive orders (EO) issued and by application for that category in 2018 (Base year cost was 2018.) Variations in this approach to address the various mobile source categories are discussed below for each separate Article discussed in the Regulation Rationale Section.

For less complicated applications, such as model year renewals or simple permits, a lower rate from each category's Base Fee was determined based on the amount of or reduction in staff time to complete the process. In addition, CARB developed special fee categories to minimize impacts on small businesses and to support California's zero-emission technology goals.

Number of Certifications Requested and Consistency with Prior Year Certifications by the Manufacturer.

Staff reviewed the EO history in each category. EOs issued per year have gradually increased over time since 2000. However, staff evaluated the number of EOs and applications issued for the years 2015 to 2018 and the numbers have remained consistent. For this analysis, staff assumed the number will remain the same for 2022, the first year of the fees program. Since the fee is applied at the time of application, staff compared the number of applications received with the number of EOs issued in each category. In most categories, the number of EOs issued and the number of applications were the same or similar.

Size of Manufacturer

In most categories, as directed by statute, special fee categories were added to address effects on small business or companies with low sales in California.

A Product's Potential Impact on Emissions

Staff provided discounts to products that provide greater air quality benefits, such as a battery and fuel cell electric vehicles or other zero-emission technologies.

Potential Impacts on Manufacturers

Staff worked closely with manufacturers to develop the fee schedule by conducting workshops and several one-on-one meetings to discuss product price, product price elasticity, business effects, and product availability as a result of the fee.

Potential Impacts for Enacting a Partial Fee

Through balancing the above factors, the proposed regulation and schedule of fees would mostly, but not fully, cover the state board's costs for activities associated with certification and compliance. The programs have previously relied on existing funding from sources other than the entities that benefit from certification and staff expects that these funds will continue to be drawn on to the extent necessary to fully fund CARB programs. Staff expects minimal or no impact on the processing time for certifications because of this funding structure.

B. Regulation Rationale

Through the workshop process with stakeholders, CARB developed a proposed fee structure to cover the difference between program costs anticipated for 2022 and existing fees collected for the Mobile Source Certification and Compliance Program.

The current fee for on-road vehicles and engines is assessed under the requirements held in Title 13 CCR Sections 1990 through 1994. The existing fee is based on manufacturers' California sales data, which is reported after the sales year. The total number of on-road engines and vehicles are divided into the annually adjusted statutory limit to determine the per vehicle fee. CARB then invoices the amount each manufacturer must pay based on the number of engines or vehicles that were sold in California. This process is cumbersome and delays the receipt of the monies until about two years after the certification work has been conducted. The new fee structure is based on an upfront fee due upon submittal of a manufacturer's application for certification of the product. See Appendix B (Revised SRIA, Appendix B, pages 130-134) for a description on how the fee levels were determined for the proposed regulation.

The proposed fees would be phased-in from calendar year 2022 through 2024. In general, the proposed phase-in schedule calls for 50 percent of the fee in 2022, 75 percent of the fee in 2023, and 100 percent of the fee starting in 2024. Many of the fees are based on vehicle or engine model year. For example the first year of the fee (calendar year 2022) would apply to 2023 model year applications. Applications that are not annually renewed (not by model year) are phased-in by calendar year. On-Road Fees include a CPI adjustment starting in 2025 for model year 2026 and later engines and vehicles.

The existing fee program will be replaced with the proposed new fee program in 2022 (for 2023 model year). Manufacturers of on-road vehicles and engines will not pay double fees in this transition. The existing fee structure located for on-road vehicles and engines in Title 13, California Code of Regulations, Division 3, Chapter 1, Articles 2.5, Sections 1990 through 1994 will be deleted to align with the new proposed regulatory language. The new proposed regulatory language will be in Title 13, California Code of Regulations, Division 3, Chapter 16, Articles 1 through 7, Sections 2900 through 2914.

1. Repeal Chapter 1, Article 2.5. Sections 1990 through 1994 Certification Fees for On-Road Mobile Sources

Purpose

Repeal language that is no longer necessary and would be duplicative of language in the Proposed Regulation with the adoption of Chapter 16, Articles 1 through 7.

Rationale

The existing regulations in Article 2.5 are proposed to be replaced to accomplish the goals of the Proposed Regulation. The requirements for on-road mobile source

certification fees are being moved into a new chapter of Title 13 instead of amending the existing regulations in Chapter 1, Article 2.5. This approach is necessary to keep all certification related fees in a single chapter within the California Code of Regulations.

The Executive Officer will continue to implement this article until the effective date of the proposed regulation. Therefore, the last fees assessed under this article before it is repealed will be in fiscal year 2021-2022 to cover vehicles and engines produced for sale in California in calendar year 2020 (or model year 2020, as applicable).

Repeal Section 1990. Applicability.

Purpose

Repeal language that is no longer necessary and that would be duplicative of language in the Proposed Regulation with the adoption of Chapter 16, Articles 1 and 2. Repeal of this language on the effective date of the Proposed Regulation will also avoid duplicative fees that would otherwise apply without amendment or repeal of this section. Two categories of activities that are subject to the fee provisions in Article 2.5 are not included in the fee calculations of the Proposed Regulation, including, New Modifier Certified Motor Vehicles (certified under title 13, division 3, chapter 1, article 2, section 1964); and Used Modifier-Certified Motor Vehicles (certified under title 13, division 3, chapter 1, article 7, section 2047).

Rationale

In the Proposed Regulation, Article 1, Section 2900, "Applicability." is substantially similar to the existing language in Section 1991 in that it outlines which entities are subject to the Proposed Regulation and that the fees shall be collected by the Executive Officer.

Although the Proposed Regulation generally applies to many more categories of activities under CARB's authority in comparison to the existing regulations, two categories subject to the fee provisions in Article 2.5 are not included in the fee calculations of the Proposed Regulation, including, New Modifier Certified Motor Vehicles (certified under title 13, division 3, chapter 1, article 2, section 1964); and Used Modifier-Certified Motor Vehicles (certified under title 13, division 3, chapter 1, article 7, section 2047). Vehicles certified through these provisions are small in number, covered by other fees associated with these programs, and under the existing regulations which calculate fees on a per vehicle basis, are charged a minimal fee of roughly \$4 per vehicle. Continuing the existing regulations for only these categories would add administrative burden that is not justified by the expected revenue.

Repeal Section 1991. Calculation of Total Revenues to be Assessed for Each Fiscal Year.

Purpose

Repeal language that is no longer necessary and would be duplicative of language in the Proposed Regulation with the adoption of Chapter 16, Article 2, Section 2904.

Rationale

This section provides the total dollar amount of fees to be collected in fiscal year 1989-90 and a calculation to increase that dollar amount each year by the change in the California Consumer Price Index. The statutory change being implemented by the Proposed Rulemaking removed this specific dollar amount to be collected for on-road mobile source certification fees. Accordingly, the specific dollar amount from this regulatory section has not been carried over in the Proposed Regulation in section 2904; however, the California Consumer Price Index adjustment has been retained because statutory authorization remains and moved to Section 2904, subdivision (f) in the Proposed Regulation.

Repeal Section 1992. Calculation of Per-Vehicle or Per-Engine Certification Fees.

Purpose

Repeal language that is no longer necessary and would conflict with language in the Proposed Regulation with the adoption of Chapter 16, Articles 1 and 2.

Rationale

Since this section's first effective date in 1990, CARB has calculated the fee per vehicle or engine according to the formula provided. This requires determining the total number of all vehicles and engines produced for California sale in the previous calendar year, based on numbers reported by manufacturers' assembly line reports, as specified in section 1993. As explained in Section 2902, the Proposed Regulation replaces this process with a certification fee to be submitted in conjunction with an application seeking certification of any mobile source, as defined, for compliance with applicable emission requirements.

Repeal Section 1993. Calculation of Fees to be Collected from Each Manufacturer.

Purpose

Repeal language that is no longer necessary and would conflict with language in the Proposed Regulation with the adoption of Chapter 16, Articles 1 and 2.

Rationale

As explained in Section 2902, the Proposed Regulation replaces the existing fee calculation process with an certification fee to be submitted in conjunction with an application seeking certification of any mobile source, as defined, for compliance with applicable emission requirements. Production numbers are no longer utilized in the

Proposed Regulation to calculate annual fees on a continuous basis, so this section is no longer necessary.

Repeal Section 1994. Fee Payment and Collection.

Purpose

Repeal language that is no longer necessary and would conflict with language in the Proposed Regulation with the adoption of Chapter 16, Articles 1 and 2.

Rationale

As explained in Section 2902, the Proposed Regulation replaces the existing fee calculation process with an certification fee, to be submitted in conjunction with an application seeking certification of any mobile source, as defined, for compliance with applicable emission requirements. Fees are no longer collected on an annual basis, nor is there an installment provision in the Proposed Regulation. In addition, the new statutory authority created a new Certification and Compliance Fund, to which all fees collected must be deposited.

2. Adopt Chapter 16. Certification Fees for Mobile Sources

For this Proposed Regulation, staff proposes new adoption of CCR Title 13, Division 3, Chapter 16 to house the proposed regulations. The entire text of Chapter 16 set forth below is new language proposed to be added to the California Code of Regulations. The proposed Chapter contains 7 Articles.

3. Adopt Article 1. General Provisions

Section 2900. Applicability.

Purpose

The purpose of this section is to define the applicability for Chapter 16, including which parties are subject to the proposed regulation, the Executive Officer's duties, and the categories of mobile sources subject to the regulation.

Rationale

This section is necessary to establish which parties are subject to the proposed regulation, the categories of mobile sources subject to the regulation, and that a certification fee shall be collected by the Executive Officer. This section is substantially similar to the previous fee regulation for on-road mobile sources, section 1991; however, the Proposed Regulation applies to many more categories of mobile sources under CARB's authority in comparison to the existing regulations. Accordingly, "manufacturer or modifier of motor vehicles" has been replaced with "applicant submitting an application to the California Air Resources Board seeking certification of any mobile source described in Articles 2 through 7" to more accurately describe the broader range of mobile sources and entities covered by the proposed regulation. Although manufacturers are often the entities that submit applications for certification, replacing this term with "applicant" more accurately describes the parties subject to

the proposed regulation. The scope of the regulation applies only to those categories of mobile sources that are defined in Articles 2 through 7, which include: On-Road Mobile Sources (Article 2); Off-Road Mobile Sources (Article 3); Evaporative Components (Article 4); Aftermarket Parts (Article 5); Diesel Emission Control Strategy Verifications and Approvals (Article 6); and the At-Berth Regulation (Article 7).

Two categories subject to the fee provisions in the existing fee regulations are not included in the Proposed Regulation, including, New Modifier Certified Motor Vehicles (certified under title 13, division 3, chapter 1, article 2, section 1964); and Used Modifier-Certified Motor Vehicles (certified under title 13, division 3, chapter 1, article 7, section 2047). Vehicles certified through these provisions are small in number and are charged a minimal per vehicle fee under the existing regulations of roughly four dollars (\$4) per vehicle. Staff determined including these categories in the proposed regulations was not necessary because other fees applicable to these categories already exist in each section referenced above, as applicable, and will continue to be collected.

Federally certified vehicles that are sold in California pursuant to Health and Safety Code Section 43102 are not specifically referenced in this section, in contrast to the existing regulations. However, these federally certified vehicles are included in the definition for light-duty vehicle in Article 2.

These regulations apply to the 2023 and subsequent model year or the 2022 and subsequent calendar year, as applicable. Some categories, such as On-Road Mobile Sources (Article 2), are certified on a model-year basis, while other categories are certified on a calendar year basis. The included dates are the earliest these proposed regulations are expected to become effective.

Section 2901. Definitions.

Purpose

The section contains definitions that apply to Chapter 16, Article 1 through Article 7, including: the definitions set forth in chapter 2 (commencing with section 39010), part 1, division 26 of the California Health and Safety Code, "Base fee", "Carry-over," "Certification," "Certification fee" "Executive Officer," "Engine family," "Evaporative family," "Fee credit," "Model year," "Partial carry-over," "Receipt of payment," "Small business," "Test Group," "Vehicle family," and "Zero-Emission".

Rationale

The purpose of this section is to clarify that the definitions in this chapter supplement and are governed by those found in chapter 2 (commencing with section 39010), part 1, division 26 of the California Health and Safety Code, unless a specific definition has been revised in this chapter. Regulatory revision of these statutory definitions is expressly provided by Health and Safety code section 39010. In addition, the following are definitions are located in Article 1 because the definitions are utilized in Article 1, or in multiple articles in this chapter.

"Base fee" – It is necessary to add this definition because it is used in multiple articles throughout the chapter and is included in each of the certification fee tables. This base fee applies to applicants that do not qualify for a reduced cost certification fee, as listed. Not all reduced cost certification fee types apply to all articles or to all categories, but every category does include a base fee. The specific criteria for each reduced cost certification fee type are contained in the definition of each of reduced cost certification fee type.

"Carry-over" - It is necessary to add this definition because the term is used to describe the criteria associated with this lower cost certification fee type in Article 2, Article 3, and Article 5 of the proposed regulation. The "Carry-over" fee type is not used in Article 4, Article 6, and Article 7 because applications covered in those articles are provided alternative lower cost certification fee types. These applications must be identical to previously approved product applications with minor changes due to model year, annual naming conventions, projected sales data, or manufacturer contact information.

"Certification" - It is necessary to add this definition because the term is used in Article 1 through Article 7 of these proposed regulations. This definition is nearly identical to the definition of "certification" in Health and Safety Code section 39018, except where that definition only applies to vehicular sources, the definition included in the proposed regulation is inclusive of all mobile sources as described in Article 2 through Article 7.

"Certification Fee" - It is necessary to add this definition, because the term is used in Article 1 through Article 7 of these proposed regulations.

"Engine family" – It is necessary to add this definition because the term is used in Article 1, Article 2, and Article 3 of these proposed regulations. In Article 1, this is a criteria for the "Partial carry-over" and "Carry-over" definitions. The certification regulations for each category of mobile sources in Article 2 and Article 3, as described with citations to each certification regulation section, contain similar but unique definitions of this term.

"Evaporative family" – It is necessary to add this definition because the term is used in Article 1, Article 2, and Article 3 of these proposed regulations. In Article 1, this is a criteria for the "Partial carry-over" and "Carry-over" definitions. The certification regulations for each category of mobile sources in Article 2 and Article 3, as described with citations to each certification regulation section, contain similar but unique definitions of this term.

"Executive Officer" - It is necessary to add this definition because the term is used in Article 1 and Article 2 of these proposed regulations. CARB's Executive Officer is responsible for numerous provisions in the proposed regulation, as such, it is necessary to establish who has such authority.

“Fee credit” - It is necessary to add this definition because the term is used in Article 1 of these proposed regulations to define that any fee credit balance may be used to pay future fees only under this Chapter. CARB collects fees in a variety of other programs it implements, however, because fees are particularized for activities and categories of mobile sources described in Articles 2 through 7, fees paid for those activities can only be used for similar fees.

“Model year” - It is necessary to add this definition because the term is used in Article 1, Article 2, Article 3, and Article 5 of the proposed regulations. Most applications for on-road and off-road sources are based on the model year of the product requesting certification. The production is limited within each model year’s certification. As a result, each certification must be annually renewed for the next model year of the product. In any calendar year, manufacturers may submit applications for multiple model years. Therefore, to simplify the proposed regulation implementation, these fees are based on engine or vehicle model year as indicated in the certification application, not calendar year of application submittal. The model year of each certification category is defined within the certification regulation itself. This definition is not used in Article 4, Article 6, or Article 7 because applications for all mobile sources covered in those Articles are based on calendar year, or the date of application submittal.

“Partial carry-over” - It is necessary to add this definition because the term is used to reference the criteria associated with this lower cost certification fee type in Article 2, Article 3, and Article 5 of the proposed regulation. The “Partial carry-over” fee type is not used in Article 4, Article 6, and Article 7 because applications covered in those articles are provided alternative lower cost certification fee types. These applications are similar to “Carry-over” applications, but involve more extensive changes from the previous model year. These applications must be identical to previously approved product applications with minor changes due to model year, annual naming conventions, projected sales data or manufacturer contact information. Additionally, changes are allowed to model names (including additional models if the certification emission levels are not changed); part numbers (including new parts are durable to full useful life and do not impact the certification emission levels); and equipment types.

“Receipt of payment” - It is necessary to add this definition because the term is used in Article 1 of the proposed regulations to determine the exact date payment is received. The timing of receipt of payment is critical in calculating the amount of any requested fee credit. This term is not in Articles 2 through 7 because the term is not needed.

“Small business” - It is necessary to add this definition because the term is used as a lower cost certification fee in Article 5, Article 6, and Article 7 of the proposed regulations. The “Small business” fee type is not used in Articles 2 through Article 4 because applications covered in those articles are provided alternative lower cost certification fee types. Staff received multiple questions from stakeholders on the what is meant by independently owned and operated, as used in the Government Code

definition cited. The definition used for the proposed regulation modifies the definition for “small business” in California Government Code section 11346.3, subdivision (b)(4)(B) to clarify what is meant by a business that is independently owned and operated and is consistent with the definition in CCR Title 2, section 1896.12.

“Test Group” – It is necessary to add this definition because the term is used in Article 1 and Article 2 of these proposed regulations. In Article 1, this is a criteria for the “Partial carry-over” and “Carry-over” definitions.

“Vehicle family” – It is necessary to add this definition because the term is used in Article 1 and Article 2 of these proposed regulations. In Article 1, this is a criteria for the “Partial carry-over” and “Carry-over” definitions.

“Zero-emission” - It is necessary to add this definition, because the term is used as a lower cost certification fee in Article 2, Article 3, and Article 5 of these proposed regulations. The Zero-emission fee type is not used in Articles 4, Article 6, and Article 7 because no zero-emission technologies currently exist or are required to get approved under the categories defined in those articles.

Section 2902. Fee Payment, Refunds, and Credits.

Purpose

The purpose of this section is to define the payment, refund, and credit process for fees collected in Chapter 16.

Rationale

The section is necessary to describe the process for applicants to submit certification fees, the paths available to receive a fee credit, and Executive Officer’s duties in reviewing submitted fees. In addition, this section makes clear that certification applications will not be reviewed without fee payment. Necessity for each subsection is described below.

Subsection 2902(a)(1)

Purpose

The purpose of this subsection is to provide the requirement that applicants submitting an application for the certification or evaluation of any mobile source described in Article 2 through 7 shall also submit a fee.

Rationale

This subsection is necessary to address the problem that the proposal is intended to address, accomplish the goals of the proposed regulation, and implement the legislative authority in SB 854 and SB 85 to collect application fees from the entity seeking that certification. This subsection specifies that such fees are to be paid for applications seeking certification of any mobile source described in Articles 2 through 7. Only applications for those mobile sources described in Articles 2 through 7 are required to submit fees. These specific categories of mobile sources

were selected in compliance with the authority to collect certification fees provided in Health and Safety Code sections 43019 and 43019.1, which specify a limited range of activities and specific mobile source categories for which certification fees may be collected.

Subsection 2902(a)(2)

Purpose

The purpose of this subsection is to provide the timing of payment submittal, how payments are to be made, and where payments are to be deposited.

Rationale

This subsection is necessary specify that applicants are required to remit the fee that meets the criteria for the selected category and fee type to the California Air Resources Board in conjunction with the application. The mobile source categories and fee types are provided in Article 2 through Article 7 in fee tables that list the various categories of mobile sources subject to the proposed regulation and corresponding fee types. The fee types include a base fee, as defined in section 2901, and other reduced cost certification fee types that specify the criteria for to qualify for that reduced fee type. Payment shall be made payable to the California Air Resources Board in conjunction with the application. The Executive Officer shall forward all payments to the State Controller's Office for deposit in the Certification and Compliance Fund in compliance with Health and Safety Code section 43019.

Subsection 2902(a)(3)

Purpose

The purpose of this subsection is to provide the criteria for the processing of the application for certification or evaluation of any mobile source described in Articles 2 through 7 for compliance with applicable emission requirements.

Rationale

This subsection is necessary to specify that any submitted application will not be processed, and cannot be deemed complete, before the fee meets the criteria for the selected category and fee type is received. This requirement helps ensure that fees will be submitted in a timely manner by each applicant because processing of each application to determine if the mobile source complies with the applicable emission requirements, contained in the applicable certification regulation and cited in the definition of each mobile source category, cannot begin until the fee is received. The additional criteria that any submitted applications cannot be deemed complete before the fee is received is intended to supplement, not supplant, any other criteria required within the cited certification regulations for each mobile source category. Therefore, the requirements in this subsection are necessary, but not necessarily sufficient, to deem an application complete. The

requirements in this subsection are in addition to any other requirements within the mobile source category certification regulations.

Subsection 2902(a)(4)

Purpose

The purpose of this subsection is to provide requirements for the Executive Officer's review of the submitted fee and the steps that must be taken if the submitted application and fee does not meet the criteria of the selected category and fee type.

Rationale

This subsection is necessary to inform applicants of the initial steps in the review of the submitted application. The determination required by this subsection must be made before the certification or evaluation process of the application can begin, as outlined in subsection 2902(a)(3). To avoid unnecessary delay in the processing of each application, the Executive Officer is only required to notify the applicant if, upon review of the application and the fee submitted, it is determined that the fee does not meet the criteria for the selected category and fee type. If such notification is necessary, the Executive Officer will calculate the appropriate fee, include the results of that calculation in the notification, and allow the applicant to remit the appropriate fee. Although the fee tables in Article 2 through 7 clearly indicate the fee for each category and fee type, it is possible that an applicant may select and remit a fee that does not match the fee in the applicable fee table. The process in this subsection provides a pathway for the Executive Officer to calculate and provide an opportunity for the applicant to submit the appropriate fee.

Subsection 2902(a)(5)

Purpose

The purpose of this subsection is to establish a process for when a manufacturer selects either the "Low California production manufacturer" or "Low California production for sale engine family" fee types and utilizes projected production for sale data, as provided for in the definitions of those reduced cost fee types in sections 2903 and 2905.

Rationale

The "Low California production manufacturer" and "Low California production for sale engine family" fee types are used in Article 2 and Article 3 to provide for reduced cost fees for defined mobile source categories within those articles. The criteria for these fee types limits the total allowable mobile source production for sale total to no more than a specified number. The number of units produced for sale is averaged across the previous three consecutive model years, unless production for sale data is not available for three consecutive model years, in which case projected production for sale estimates are allowed. Projected production for sale estimates are required to be reported under each certification regulation. This subsection states if the end of the model year reported production for sale for that model year application exceeds the criteria in the definition for the "Low California production manufacturer" or "Low California production for sale engine family" fee types, the Executive Officer will bill

the applicant for the difference between the fee paid and the applicable fee And no new applications shall be processed until payment is received. This process is necessary because actual production for sale data is not available until the end of the model year's production. Providing review of this reduced cost fee category ensures the integrity of the proposed regulation to collect appropriate fees.

Subsection 2902(a)(6)

Purpose

The purpose of this subsection is to specify that applicants shall attest any information provided in true, accurate, and correct.

Rationale

This subsection is necessary to inform applicants of this requirement of certification fee submission.

Subsection 2902(b)

Purpose

The purpose of this subsection is to set the criteria for refunds for fee payments.

Rationale

It is necessary to add this subsection to specify that no refunds will be provided after fee payment. The "fee credit" system in 2902(c) exists in lieu of a refund system. Stakeholders did not request refunds but the ability to get credits for their fee payments instead.

Subsection 2902(c)

Purpose

The purpose of this subsection is to provide the criteria for the withdrawal of an application, the fee credit provided based on the timing of a withdrawal, the mobile source categories eligible for fee credits, and the mechanism to request a fee credit.

Rationale

Stakeholders commented on the need for fee credits for applications that are withdrawn early in the process or when the fee payment is made but no application is submitted. Credits are limited to Article 2, 3, and 4, and not used for Articles 5, 6, and 7. Staff believe that no credit is needed for Articles 5, 6, and 7 because these applications undergo more pre-application discussions between the applicant and CARB staff prior to submittal of the application. These applications also are fewer in number within a calendar year. Applicants for Article 2, 3, and 4 approvals often submit multiple applications in a year, sometimes at the same time, and for multiple model years. These manufacturers wish to have the option to submit multiple payments at one time, where some of these applications may be withdrawn, exchanged for different test group or engine family name, or not submitted at all.

Staff determined that minimal work is done on applications received by CARB within 15 days of submittal. The proposed regulations allows for 100 percent credit for withdrawal of an applications in writing within 15 calendar days of the fee payments or the date the Executive Officer notifies the applicant that the submitted payment is not the appropriate fee type for the application submitted (as outlined in section 2902(a)(4)), or if an incorrect fee payment is made. The proposed regulation allows for 100 percent credit if no application is received, as no CARB resources could have been expended for review. For applications withdrawn within 16 to 46 days of the submittal of payment or the date the Executive Officer notifies the submitted payment is not the appropriate fee type for the application submitted, the proposed regulation is providing 50 percent credit of the fee payment. Under existing practice, staff provide feedback to the applicant on the completeness of their application soon after application submittal. Under the proposed regulation, staff will also verify the application matches the criteria for the selected category and fee type and that payment was submitted for the application. If the fee payment is incorrect, staff will notify the applicant, where the applicant can provide the appropriate payment or get credit as described above. The application review does not start until the appropriate fee payment is made. The completeness review is estimated to be about 50 percent of the staff workload, therefore between 16 to 46 calendar days, only 50 percent credit will be provided. No credit is provided after 46 days after payment or the date the staff notifies the applicant that the submitted payment is not the appropriate fee type or the incorrect fee payment is made. The date of the credit request will be the date that CARB received written notification from the applicant.

4. Adopt Article 2. Certification Fees for On-Road Mobile Sources

Article 2 houses the certification fees for on-road mobile sources. These fees are authorized by HSC section 43019, which was amended by AB 85 in 2019.

A phase in schedule for certain fees was created to reduce the initial cost burden to manufacturers for model years 2023 and 2024. Starting model year 2026, fees are adjusted annually by the California Consumer Product Index as allowed by HSC section 43019.

Reduced cost fee types are discussed in each applicable subsection. Fees for less complicated applications, such as model year renewals or other simple applications, are proposed as a discounted rate determined based on the amount of, or reduction in, staff time to complete the process. In addition, CARB developed a special fee to support California's zero-emission technology goals.

The following outlines the new regulatory language purpose and rationale for Article 2. The new fee regulations will be housed in Section 2903 and Section 2904.

Section 2903. Definitions.

Purpose

This section contains definitions that apply to Article 2, including: "Aerodynamic technologies," "Engine family," "Evaporative emissions family," "Family emission limit (FEL)," "Fuel-fired heater," Heavy-duty compression ignition (HD CI) engine family," "Heavy-duty Otto-cycle (HDO) engine family," "Heavy-duty greenhouse gas vehicle family," "Heavy-duty greenhouse gas (HD GHG) partial carry-over," "Heavy-duty vehicle evaporative emission family," "Incomplete medium-duty vehicle," "Incomplete medium-duty vehicle (MDV) evaporative emissions family," "Light-duty vehicle," "Low California production manufacturer," "Low California production for sale engine family," "Medium-duty compression ignition (MD CI) engine family," "Medium-duty Otto-cycle (MDO) engine family," "Medium-duty vehicle," "On-road heavy-duty exempt engine," "Street-use motorcycle family or motorcycle engine," "Test group," "Trailer Family," and "Zero-emission powertrain family".

Rationale

This section is needed to create the following definitions that shall govern the provisions of Article 2. The following terms are required to define each of the fee categories and fee types:

"Aerodynamic technologies"- It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Engine Family" - It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define multiple mobile source certification fee categories.

"Evaporative emission family" - It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define multiple mobile source certification fee categories.

"Fuel-fired heater"- It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Heavy-duty compression ignition (HD CI) engine family"- It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Heavy-duty greenhouse gas vehicle family” - It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Heavy-duty greenhouse gas (HD GHG) partial carry-over application” - It is necessary to add this definition because the term is used in Article 2. The definition for HD GHG partial carry-over is unique from the other partial carry-over reduced cost fee types and it is necessary to clearly define the differences in this mobile source certification fee type. The definition is consistent with the existing regulatory certification requirements.

“Heavy-duty vehicle evaporative emission family” - It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Incomplete medium-duty vehicle evaporative emissions family” - It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Incomplete medium-duty vehicle evaporative emissions family” - It is necessary to add this definition because the term is used in Article 2. The definition is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Light-duty vehicle” - It is necessary to add this definition because the term is used in Article 2. The definition references and is consistent with the existing regulatory definitions, and it is necessary to clearly define the mobile source certification fee category.

“Low California production manufacturer” - It is necessary to add this definition because the term is used in Article 2. “Low California production manufacturer” fee criteria is based on the end of the model year production for California sale number reporting requirement currently in existing regulations. A new company or manufacturer submitting an application with a new engine family name for the “Low California production manufacturer” fee type may not have this information available because there is no reporting history. In this situation, manufacturers can use projected production for California sale numbers for the model year of the product application to determine fee criteria. Subsection 2902(a)(5) states if the end of the model year reported production for that model year application exceeds the criteria in the definition for a “Low California production manufacturer” fee, the Executive Officer will bill the applicant for the difference between the fee paid and the applicable fee. For the “Low California production manufacturer” fee type, projected sales can be used in the three year average, but the average will be adjusted based on

the actual reported model year sales for the application submitted. If three years of actual reported sales numbers are available, projected production of California sales cannot be used. The production caps included in the definition represent a balance of providing this reduced cost fee type to manufacturers with the goals of the proposed regulation.

“Low California production for sale engine family” - It is necessary to add this definition, because the term is used in Article 2. Low California production for sale engine family” fee criteria is based on the end of the model year production for California sale number reporting requirement currently in existing regulations. A manufacturer submitting an application with a new engine family name for the “Low California production for sale engine family” fee type, may not have this information available because there is no reporting history. In this situation, manufacturers can use projected production for California sale numbers for the model year of the product application to determine fee criteria. In subsection 2902(a)(5) states if the end of the model year reported production for that model year application exceeds the criteria in the definition for the “Low California production for sale engine family” fee type, the Executive Officer will bill the applicant for the difference between the fee paid and the applicable fee. If actual reported sales numbers are available, projected production of California sales cannot be used. The production caps included in the definition represent a balance of providing this reduced cost fee type to manufacturers with the goals of the proposed regulation.

“Medium-duty compression ignition (MD CI) engine family”- It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Medium-duty Otto-cycle (MDO) engine family”- It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Medium-duty vehicle”- It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory definition, and it is necessary to clearly define multiple mobile source certification fee categories.

“On-road heavy-duty exempt engine”- It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Street-use motorcycle or motorcycle engine”- It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with

the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Test group” - It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory definition, and it is necessary to clearly define multiple mobile source certification fee categories.

“Trailer Family” - It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Zero-emission powertrain family” - It is necessary to add this definition, because the term is used in Article 2. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

Section 2904. Certification Fees for On-Road Mobile Sources.

Purpose

This section provides the proposed Base Fees and discounted fees that a manufacturer would be required to pay for each category identified under Article 2 for the submission of an application to obtain approval to sell an engine, vehicle or equipment certified as listed in Table IV-B-1.

Table IV-B-1: On-Road Fee Categories

Light-duty vehicle test group and medium-duty vehicle test group
HD CI engine family and MD CI engine family
HDO engine family and MDO engine family
Heavy-duty vehicle evaporative emissions family and Incomplete MDV evaporative emissions family
Heavy-duty greenhouse gas vehicle family
Trailer family
Zero-emission powertrain family
On-road heavy-duty exempt engine
Street-use motorcycle family and motorcycle engine family
Aerodynamic technologies
Fuel-fired heater

Rationale

This section provides the specific fees by category for applications for model years 2023, 2024, 2025 and subsequent years and applications based on calendar year received in 2022, 2023, 2024 and subsequent years as applicable. It also provides the methodology for including annual CPI adjustments of the annual fees for 2025 calendar year or 2026 model year and subsequent years. Specific fee rationale is discussed in the following subsections.

Subsection 2904(a)(1)

Purpose

This subsection provides the certification fees for model year 2023 for Light-duty vehicle test groups, Medium-duty vehicle test groups, Heavy-duty engine families, Medium-Duty Engine Families, Heavy-duty vehicle evaporative emissions families, and Incomplete medium-duty vehicle evaporative emissions families.

Rationale

The Base Fee and Partial carry-over fee type are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2023, the fees are 50 percent of the model year 2025 fees discussed in subsection 2904(a)(3).

Subsection 2904(a)(2)

Purpose

This subsection provides the certification fees for model year 2024 for categories for Light-duty vehicle test groups, Medium-duty vehicle test groups, Heavy-duty engine families, Medium-Duty Engine Families, Heavy-duty vehicle evaporative emissions families, and Incomplete medium-duty vehicle evaporative emissions families.

Rationale

The Base Fee and Partial carry-over fee type are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2024, the fees are 75 percent of the model year 2025 fees discussed in subsection 2904(a)(3).

Subsection 2904(a)(3)

Purpose

This subsection provides the certification fees for model year 2025 for categories for Light-Duty Vehicle Test Groups, Medium-Duty Vehicle Test Groups, Heavy-Duty Engine Families, Medium-Duty Engine Families, Heavy-duty vehicle evaporative emissions families, and Incomplete medium-duty vehicle evaporative emissions families.

Rationale

Subsection 2904(a)(3) lists the Base fee and low cost fee types for Light-duty vehicle test groups, Medium-duty vehicle test groups, Heavy-duty engine families, Medium-Duty Engine Families, Heavy-duty vehicle evaporative emissions families, and Incomplete medium-duty vehicle evaporative emissions families applications. The fees for these categories are based on model year applications, not calendar year submittals, because these categories are certified on a model year basis under the applicable certification regulation section cited in each definition in section 2903. As a result, each product must be annually renewed for the next model year of production. In any given calendar year, manufacturers could submit applications for multiple model years; therefore, to simplify the implementation of the proposed regulation, and provide clarity and level playing field for applicants, these fees are on a model year basis, not the calendar year date of application submittal.

As part of the methodology of calculating the amount of the certification fees in this table, CARB estimated the number applications will be the same as the number of EOs to be issued and these numbers will remain consistent in future years. The Base Fee in this section is the average cost per application or Executive Order. The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The baseline cost to implement the certification and compliance program can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through

129), including a detailed breakdown of CARB's included activities for certification and compliance, labor costs, operational costs, equipment costs, and facilities costs. These costs per category and the average cost per EO can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-7, page 122). The Base fee and reduced fee types are listed in the tables in subsections 2904(a)(1) through subsection 2901(a)(3) for each model year and category.

Subsequent to this analysis, two categories were disaggregated from the broader categories: "Heavy-duty Otto-cycle (HDO) engine family" and "Medium-duty Otto-cycle engine family". The original cost to determine the Base Fee for heavy-duty and medium-duty engine families included both Heavy-duty and medium-duty compression ignition (HD CI, MD CI) and HDO engine families (Appendix B: Revised SRIA, Appendix A, Table Appn A-7, page 122.) A HDO/MDO engine family application evaluation takes about 65 percent less staff evaluation time than for a HD/MD CI engine family application. Because of this difference in evaluation time, the HDO/MDO engine family application Base Fee has been reduced by 65 percent of the original cost used in the analysis and the proposed HD/MD CI Base Fee. Therefore, the HDO/MDO engine family application Base Fee is 35 percent of the HD/MD CI Base Fee.

Three reduced cost fee types, Partial carry-over, Carry-over, and Zero-emission, are available within the categories of Light-duty vehicle test groups, Medium-duty vehicle test groups, Heavy-duty engine families, Medium-Duty Engine Families, Heavy-duty vehicle evaporative emissions families, and Incomplete medium-duty vehicle evaporative emissions families. Medium-Duty Engine Families, Heavy-duty vehicle evaporative emissions families, and Incomplete medium-duty vehicle evaporative emissions families are not eligible for the zero-emission fee type because there are no zero-emission technologies that exist within those categories. (The "zero-emission powertrain family" category is in section 2904(e).) The rationale for each reduced fee type is as follows:

"Carry-over" - As defined in section 2901, this is a lower cost fee type for all categories in subsection 2904(a). A Carry-over application is used in a streamlined review process for those certification applications where there are limited changes made to their product application from the previous model year. The application approval process times are reduced because the applications are identical to previously approved applications except for minor modifications set forth in the definition in section 2901. A reduced review time is required to ensure the current application is identical to the previously approved one in all other aspects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore, the fee for this fee type is discounted by 75 percent resulting in a fee that is 25 percent of the Base Fee.

"Partial carry-over" - As defined in section 2901, this is a lower cost fee type for all categories in subsection 2904(a). A Partial carry-over application is used in a streamlined review process for those certification applications where there are limited

changes made to their product application from the previous model year. The application approval process times are reduced because the applications are identical to previously approved applications except for minor modifications set forth in the definition in section 2901. A reduced review time is required to ensure the current application is identical to the previously approved one in all other aspects. In comparison to the Carry-over application fee type, additional staff time is required to review the additional allowable changes. For example, a Partial carry-over application may include additional parts. Staff must ensure the new parts do not impact certification emission levels or durability requirements. On average, the staff analysis time for this process is roughly 50 percent of staff time required for Base Fee applications. Therefore, the fee for this fee type is discounted by 50 percent resulting in a fee that is 50 percent of the Base Fee.

“Zero-emission” - As defined in section 2901, this is a lower cost fee type for the Light-duty vehicle test group and medium-duty vehicle test group categories in subsection 2904(a). Zero-emission vehicles have fewer requirements, are easier to review, and take less processing time. Additionally, the discount for this fee type was provided to support the introduction of zero-emission products. The certification fee for products that meet this definition is reduced by 75 percent, resulting in a fee that is 25 percent of the Base Fee for the category.

Subsection 2904(a)(4)

Purpose

This subsection provides the fee requirements for model year 2026 and subsequent model years by referencing section 2904(f).

Rationale

This subsection is necessary to inform applicants how fees for model year 2026 and subsequent model years are determined. Section 2904(f) contains the calculation to adjust the certification fee by the annual change in the California Consumer Price Index, as authorized by Health and Safety Code Section 43019. Because CPI is not calculated or published by the California Department of Industrial Relations until after the reference time period, it is not possible for CARB to calculate and publish the certification fees for model year 2026 and subsequent model years at this time. However, section 2904(f) does require the Executive Officer to publish the calculated fees annually, so that applicants will be informed of the applicable fees before they must be paid.

This adjustment is needed to help ensure that the fees paid are as commensurate as possible with the costs of implementing the mobile source certification and compliance program. CARB agency costs to implement certification and compliance activities have increased and are expected to continue to increase at rate that outpaces the California Consumer Price Index. Therefore, while including the CPI adjustment is not expected to be sufficient to cover increases in the cost to implement

all program activities, CARB is including this provision as authorized by statute to offset at least a portion of increased agency costs.

The methodology in section 2904(f) is nearly identical to the existing CPI adjustment regulation for on-road mobile source certification fees found in Title 13, Division 3, Chapter 1, Article 2.5, section 1991. See subsection 2904(f) below for specific changes.

Subsection 2904(b)(1)

Purpose

This subsection provides the certification fees for model year 2023 for Heavy-Duty Greenhouse Gas (HD GHG) Vehicle Families and Trailer Families.

Rationale

The Base Fee, Low California Production Manufacturer, and HD GHG Vehicle Partial carry-over fee types are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2023, the fees are 50 percent of the model year 2025 fees discussed in subsection 2904(b)(3).

Subsection 2904(b)(2)

Purpose

This subsection provides the certification fees for model year 2024 for Heavy-Duty Greenhouse Gas (HD GHG) Vehicle Families and Trailer Families.

Rationale

The Base Fee, Low California Production Manufacturer, and HD GHG Vehicle Partial carry-over fees are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2024, the fees are 75 percent of the model year 2025 fees discussed in subsection 2904(b)(3).

Subsection 2904(b)(3)

Purpose

This subsection provides tables of the certification fees for model year 2025 for Heavy-Duty Greenhouse Gas (HD GHG) Vehicle Families and Trailer Families.

Rationale

The certification regulation for these two categories—the Phase 2 Heavy-Duty Greenhouse Gas program—was adopted in 2018 and the new requirements for engines, vehicles, trailers, and aerodynamic components started in 2020. Therefore, no actual certification or application data was available for 2018. The fees are based

on the costs of staff activities identified from the Heavy-Duty Greenhouse Gas (HD GHG) Phase II regulations. To determine the fee, staff identified the resources used for HD GHG Phase I in 2018 and added the Department of Finance (DOF) approved position costs for the implementation of HD Greenhouse Gas Phase II. The total costs were divided by the regulatory estimates for the number of approvals expected in the program starting in model year 2022 to determine the Base Fee. The number of EOs issued is assumed to be consistent in future years.

The HD GHG vehicle family and Trailer family certification fees are based on vehicle or trailer model year applications, not calendar year submittals. There is no difference between applications received and EOs issued for this category. The Base Fee for HD GHG vehicle family and Trailer family is the average cost per application or Executive Order. The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The baseline cost to implement the certification and compliance program can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129), including a detailed breakdown of CARB's included activities for certification and compliance, labor costs, operational costs, equipment costs, and facilities costs. These costs per category and the average cost per EO can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-7, page 122). The Base fee and reduced fee types are listed in the tables in subsections 2904(b)(1) through subsection 2901(b)(3) for each model year and category.

Four reduced fee types: Carry-over, Low California production manufacturer, HD GHG partial carry-over, and Zero-emission, are available within qualified HD GHG vehicle and Trailer families categories. The rationale for each reduced fee type is as follows:

"Carry-over" - As defined in section 2901, this is a lower cost fee type for all categories in subsection 2904(b). A Carry-over application is used in a streamlined review process for those certification applications where there are limited changes made to their product application from the previous model year. The application approval process times are reduced because the applications are identical to previously approved applications except for minor modifications set forth in the definition in section 2901. A reduced review time is required to ensure the current application is identical to the previously approved one in all other aspects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore, the fee for this fee type is discounted by 75 percent resulting in a fee that is 25 percent of the Base Fee.

"Heavy-duty greenhouse gas partial carry-over" - This is lower cost fee type for all categories in subsection 2904(b). A Heavy-duty greenhouse gas partial carry-over application will be used in a streamlined review process for those certification applications where there are limited changes made to their product application from the previous model year. The application approval process times are expected to be reduced because the applications are identical to previously approved applications except for minor modifications. Since the HD Greenhouse Gas Phase 2 regulation requirements initiated in 2020, there are no application submittals for this fee type for

staff's analysis, but there is an expected need for application streamlining approval . This fee type was modeled after the "Partial carry-over" fee type. "Heavy-duty greenhouse gas partial carry-over" is the same as Partial carry-over (as defined in section 2901) but includes heavy-duty greenhouse gas vehicle and trailer family regulatory elements that are specific to this category, such as model names (only if the CO₂ standard to which the vehicle is certified or the lowest and highest FELs are not changed); part numbers (only if the CO₂ standard to which the vehicle is certified or the lowest and highest FELs are not changed); engine families, transmission families, powertrain families, and axle families (only if the CO₂ standard to which the vehicle is certified or the lowest and highest FELs are not changed); and tires (for design-based standards only, tire changes must not impact the worst case coefficient of rolling resistance). Reduced review time is expected to ensure the current application is identical to the previously approved one in all other aspects and review the additional allowable changes. On average, the staff analysis time for this process is expected to be roughly 50 percent of staff time required for Base Fee applications. Therefore, the fee for this fee type is discounted by 50 percent resulting in a fee that is 50 percent of the Base Fee.

"Low California production manufacturer" - This lower cost application applies to "Heavy-duty greenhouse gas vehicle family" applications only. Trailer manufacturers did not provide a business need for this discount, therefore this fee type was not provided for Trailer family applications. The "Low California production manufacturer" fee type is a lower cost fee for HD Greenhouse Gas vehicle manufacturers that produce small volumes for sale in California. The criteria for determining low production is based on criteria used for similar flexibility provided for product approval in the certification regulation for this category. The production limits shall be based on the average number of applicable heavy-duty vehicles produced for sale in California for the three previous consecutive model years for which a manufacturer seeks certification as a low California production manufacturer. This discount takes into consideration the cost burden and business impacts to low California production manufacturers, which include small business. Staff's proposal would provide a 25 percent discount for this fee type, resulting in a fee that is 75 percent of the Base Fee.

"Zero-emission" - As defined in section 2901, this is a lower cost category for HD GHG Vehicle family applications in subsection 2901(b). Trailers do not have combustion emission requirements therefore Trailer family applications do not require this fee type. Zero-emission vehicles have fewer requirements and take less processing time. An additional discount was provided to support the introduction of zero-emission products. The application fee is for product applications that meet this definition. This fee type is reduced by 75 percent, resulting in a fee that is 25 percent of the Base Fee for the category.

Subsection 2904(b)(4)

Purpose

The subsection provides the fee requirements for model year 2026 and subsequent model years by referencing section 2904(f).

Rationale

This subsection is necessary to inform applicants how fees for model year 2026 and subsequent model years are determined. Section 2904(f) contains the calculation to adjust the certification fee by the annual change in the California Consumer Price Index, as authorized by Health and Safety Code Section 43019. Because CPI is not calculated or published by the California Department of Industrial Relations until after the reference time period, it is not possible for CARB to calculate and publish the certification fees for model year 2026 and subsequent model years at this time. However, section 2904(f) does require the Executive Officer to publish the calculated fees annually, so that applicants will be informed of the applicable fees before they must be paid.

This adjustment is needed to help ensure that the fees paid are as commensurate as possible with the costs of implementing the mobile source certification and compliance program. CARB agency costs to implement certification and compliance activities have increased and are expected to continue to increase at rate that outpaces the California Consumer Price Index. Therefore, while including the CPI adjustment is not expected to be sufficient to cover increases in the cost to implement all program activities, CARB is including this provision as authorized by statute to offset at least a portion of increased agency costs.

The methodology in section 2904(f) is nearly identical to the existing CPI adjustment regulation for on-road mobile source certification fees found in Title 13, Division 3, Chapter 1, Article 2.5, section 1991. See subsection 2904(f) below for specific changes.

Subsection 2904(c)(1)

Purpose

This subsection provides tables of the certification fees for model year 2023 for the Street-use motorcycle family and Motorcycle engine family category.

Rationale

The Base Fee, Low California Production manufacturer, and Partial carry-over fees are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2023, the fees are 50 percent of the model year 2025 Base Fee discussed in subsection 2904(c)(3).

Subsection 2904(c)(2)

Purpose

This subsection provides tables of the certification fee for model year 2024 for Street-use motorcycle family and Motorcycle engine family categories.

Rationale

The Base Fee, Low California production manufacturer, and Partial carry-over fees are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2024, the fees are 75 percent of the model year 2025 Base Fee discussed in subsection 2904(c)(3).

Subsection 2904(c)(3)

Purpose

This subsection provides tables of the certification fee for model year 2025 for Street-use motorcycle families and Motorcycle engine families.

Rationale

The certification fees for these categories are based on the model year application requirements, not calendar year. There is no difference between applications received and EOs issued for this category. The Base Fee for Street-use motorcycle family and Motorcycle engine family applications is the average cost per application or Executive Order. The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The baseline cost to implement the certification and compliance program can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129), including a detailed breakdown of CARB's included activities for certification and compliance, labor costs, operational costs, equipment costs, and facilities costs. These costs per category and the average cost per EO can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-7, page 122). The Base fee and reduced fee types are listed in the tables in subsections 2904(c)(1) through subsection 2901(c)(3) for each model year and category.

Four reduced fee types, Carry-over, Low California production manufacturer, Low California production for sale engine family, and Partial carry-over are available within qualified Street-use motorcycle and engine families. The rationale for each reduced fee type is as follows:

"Carry-over" - As defined in section 2901, this is lower cost fee type for all categories in subsection 2904(c). A Carry-over application is used in a streamlined review process for those certification applications where there are limited changes made to their product application from the previous model year. The application approval process times are reduced because the applications are identical to previously approved applications except for minor modifications set forth in the definition in section 2901.

A reduced review time is required to ensure the current application is identical to the previously approved one in all other aspects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore, the fee for this fee type is discounted by 75 percent resulting in a fee that is 25 percent of the Base Fee.

“Low California production manufacturer” - This is a lower cost fee for motorcycle manufacturers that produce small volumes for sale in California. The criteria for determining low production is based on criteria used for similar flexibility provided for product approval in the certification regulation for this category. The production limits shall be based on the average number of applicable street-use motorcycles or motorcycle engines produced for sale in California for the three previous consecutive model years for which a manufacturer seeks certification as a low California production manufacturer. This discount takes into consideration the cost burden and business impacts of low California production manufacturers, which include small business. Staff’s proposal would provide a 25 percent discount to assist these businesses, resulting in a fee that is 75 percent of the Base Fee.

“Low California production for sale engine family” - This lower cost option for motorcycle manufacturers is necessary to mitigate certification costs for low-cost entry-level and extremely low sale volume motorcycle engine families. Business models for the on-road motorcycle industry are more complex than the other on-road categories. There are low-cost entry-level motorcycles and specialized boutique motorcycles, and motorcycles that range from small scooters to full touring size. Based on the significant feedback from the motorcycle industry on the need for additional fee reductions for low sales Street-use motorcycle families and Motorcycle engine families, staff developed the Low California sales engine family fee to be available to all qualifying manufacturers, except those that use the Low California Production Manufacturer option. Staff utilized information from the motorcycle manufacturers to develop this category based on cost burden and business impacts. A manufacturer may produce up to 100 units for sale in California in an engine family to be defined as a “Low California production for sale engine family” application. The production limits shall be based production estimates of street-use motorcycles or motorcycle engines produced for sale in California at the time of application and confirmed by the actual sales reported for each engine family by a manufacturer who seeks to utilize this fee type. Staff’s proposal would provide a 95 percent discount, resulting in a fee that is five percent of the Base Fee. A manufacturer may submit up to three “Low California production for sale engine family” applications for each model year. It may not combine the use of the “Low California production manufacturer” fee type for any other applications of the same model year.

“Partial carry-over” - As defined in section 2901, this is lower cost fee type for all categories in subsection 2904(c). A Partial carry-over application is used in a streamlined review process for those certification applications where there are limited changes made to their product application from the previous model year. The application approval process times are reduced because the applications are identical

to previously approved applications except for minor modifications set forth in the definition in section 2901. A reduced review time is required to ensure the current application is identical to the previously approved one in all other aspects. In comparison to the Carry-over application fee type, additional staff time is required to review the additional allowable changes. For example, the Partial carry-over application may include additional parts. Staff must ensure the new parts do not impact certification emission levels or durability requirements. On average, the staff analysis time for this process is roughly 50 percent of staff time required for Base Fee applications. Therefore, the fee for this fee type is discounted by 50 percent resulting in a fee that is 50 percent of the Base Fee.

Subsection 2904(c)(4)

Purpose

This subsection provides the fee requirements for model year 2026 and subsequent model years by referencing section 2904(f).

Rationale

This subsection is necessary to inform applicants how fees for model year 2026 and subsequent model years are determined. Section 2904(f) contains the calculation to adjust the certification fee by the annual change in the California Consumer Price Index, as authorized by Health and Safety Code Section 43019. Because CPI is not calculated or published by the California Department of Industrial Relations until after the reference time period, it is not possible for CARB to calculate and publish the certification fees for model year 2026 and subsequent model years at this time. However, section 2904(f) does require the Executive Officer to publish the calculated fees annually, so that applicants will be informed of the applicable fees before they must be paid.

This adjustment is needed to help ensure that the fees paid are as commensurate as possible with the costs of implementing the mobile source certification and compliance program. CARB agency costs to implement certification and compliance activities have increased and are expected to continue to increase at rate that outpaces the California Consumer Price Index. Therefore, while including the CPI adjustment is not expected to be sufficient to cover increases in the cost to implement all program activities, CARB is including this provision as authorized by statute to offset at least a portion of increased agency costs.

The methodology in section 2904(f) is nearly identical to the existing CPI adjustment regulation for on-road mobile source certification fees found in Title 13, Division 3, Chapter 1, Article 2.5, section 1991. See subsection 2904(f) below for specific changes.

Subsection 2904(d)(1)

Purpose

This subsection provides the certification fee for model years 2023, 2024, and 2025 for On-road heavy-duty exempt engines.

Rationale

These are applications for approval of a single vehicle and engine to be sold and used in California. The applications must meet specific requirements for approval of an exemption from meeting the current heavy-duty engine emission standards. Since these approvals are issued for an individual vehicle, staff estimated that each application would take one hour to evaluate. The fee is based on an engineering classification cost, is not phased in, and applications are based on model year applications.

Subsection 2904(d)(2)

Purpose

This subsection provides the fee requirements for model year 2026 and subsequent model years by referencing section 2904(f).

Rationale

This subsection is necessary to inform applicants how fees for model year 2026 and subsequent model years are determined. Section 2904(f) contains the calculation to adjust the certification fee by the annual change in the California Consumer Price Index, as authorized by Health and Safety Code Section 43019. Because CPI is not calculated or published by the California Department of Industrial Relations until after the reference time period, it is not possible for CARB to calculate and publish the certification fees for model year 2026 and subsequent model years at this time. However, section 2904(f) does require the Executive Officer to publish the calculated fees annually, so that applicants will be informed of the applicable fees before they must be paid.

This adjustment is needed to help ensure that the fees paid are as commensurate as possible with the costs of implementing the mobile source certification and compliance program. CARB agency costs to implement certification and compliance activities have increased and are expected to continue to increase at rate that outpaces the California Consumer Price Index. Therefore, while including the CPI adjustment is not expected to be sufficient to cover increases in the cost to implement all program activities, CARB is including this provision as authorized by statute to offset at least a portion of increased agency costs.

The methodology in section 2904(f) is nearly identical to the existing CPI adjustment regulation for on-road mobile source certification fees found in Title 13, Division 3,

Chapter 1, Article 2.5, section 1991. See subsection 2904(f) below for specific changes.

Subsection 2904(e)(1)

Purpose

This subsection provides the certification fee for 2022, 2023, and 2024 calendar year applications for Zero-emission powertrain families, Aerodynamic technologies, and Fuel-fired heaters.

Rationale

Zero-Emission Powertrain Families

The zero-emission powertrain family is a new certification category recently created through a new certification regulation. The requirement starts in 2021. Zero-Emission powertrain family applications focus on a vehicle model to power, not model year engine, therefore fees are based on a manufacturer's date of application (calendar year) submittal, not model year. No actual pre-existing data is available for this analysis, so CARB costs are based on estimated costs and the number of EOs to be issued from the regulatory development of the certification standards in "Standards and Test Procedures for New 2021 and Subsequent model Heavy-Duty Zero-Emission Powertrains" adopted in 2019. CARB assumes the number applications will be the same as the number of EOs to be issued and these numbers will remain consistent in future years. The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The baseline cost to implement the certification and compliance program can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129), including a detailed breakdown of CARB's included activities for certification and compliance, labor costs, operational costs, equipment costs, and facilities costs. These costs per category and the average cost per EO can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-7, page 122). To support CARB's zero-emission policy and to be in line with lower review required for zero-emission technology applications, this fee was reduced by 75 percent of the average cost per application. This category does not have a phase in schedule.

Aerodynamic Technologies

This is a new program as the result of HD GHG Phase 2 adoption. Under this process, manufacturers submit an application in a particular calendar year and the approval will be available until regulation requirements change or is revised. Renewals are needed when trailer model year requirements change for model years 2020, 2024, and 2026. Manufacturers submit applications for approval of a component for usage on multiple trailer model years to be sold and used in California. The certification fee is based on date of submittal of the application (calendar year). The CARB costs and EO estimates are based on the regulatory cost estimates. CARB assumes the number applications will be the same as the number of EOs to be issued and these numbers will remain consistent in future years. The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The baseline cost to implement the certification and compliance program can be found in Appendix B

(Revised SRIA, Appendix A, pages 91 through 129), including a detailed breakdown of CARB's included activities for certification and compliance, labor costs, operational costs, equipment costs, and facilities costs. These costs per category and the average cost per EO can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-7, page 122). For 2022 calendar year application submittals, the fees are 50 percent of the 2024 Base Fee; for 2023 calendar year application submittals, the fees are 75 percent of the 2024 Base Fee; and for 2024 application submittals, the full Base Fee would apply.

Fuel-fired Heaters

Manufacturers submit applications on a calendar year basis for approval on multiple model year vehicles or engines. They are reviewed and approved for use according to the certification requirements for Fuel-Fired Heaters and the certification fee is based on the date of submittal of the application (calendar year). Since these approvals are infrequent, staff used an average hourly rate based on an engineering classification cost and estimated that each application takes three hours to evaluate and issue an approval. This category does not have a phase in schedule.

Subsection 2904(e)(2)

Purpose

This subsection provides the fee requirements for calendar year 2025 and subsequent calendar year applications. For the Aerodynamic technologies and Fuel-fired heaters categories, the fees for calendar year 2025 and subsequent calendar year applications are the same as for calendar year 2024. For the Zero-emission powertrain family category, fees in calendar year 2025 and subsequent calendar years is provided by referencing section 2904(f).

Rationale

This subsection is necessary to inform applicants how fees for calendar year 2025 and subsequent calendar years are determined. Health and Safety Code Section 43019 allows for the annual adjustment of fees based on CPI for motor vehicles and engines. Fuel-fired heaters and Aerodynamic technologies are components, therefore these categories are not subject to the annual CPI adjustments. The Zero-emission powertrain family category does meet this definition, and therefore is subject to annual CPI adjustments, as contained in section 2904(f).

Section 2904(f) contains the calculation to adjust the certification fee by the annual change in the California Consumer Price Index, as authorized by Health and Safety Code Section 43019. Because CPI is not calculated or published by the California Department of Industrial Relations until after the reference time period, it is not possible for CARB to calculate and publish the certification fees for model year 2026 and subsequent model years at this time. However, section 2904(f) does require the Executive Officer to publish the calculated fees annually, so that applicants will be informed of the applicable fees before they must be paid.

This adjustment is needed to help ensure that the fees paid are as commensurate as possible with the costs of implementing the mobile source certification and compliance program. CARB agency costs to implement certification and compliance activities have increased and are expected to continue to increase at rate that outpaces the California Consumer Price Index. Therefore, while including the CPI adjustment is not expected to be sufficient to cover increases in the cost to implement all program activities, CARB is including this provision as authorized by statute to offset at least a portion of increased agency costs.

The methodology in section 2904(f) is nearly identical to the existing CPI adjustment regulation for on-road mobile source certification fees found in Title 13, Division 3, Chapter 1, Article 2.5, section 1991. See subsection 2904(f) below for specific changes.

Subsection 2904(f)

Purpose

This subsection provides the methodology to calculate CPI fee adjustments for sections 2904(a) through 2904(e).

Rationale

This subsection is necessary to inform applicants how fees starting with model year 2026 and calendar year 2025 are determined, as applicable. Health and Safety Code Section 43019 allows for the annual adjustment of fees based on the annual change in the California Consumer Price Index. This section provides the methodology to calculate the adjusted certification fee starting with the 2026 model year for the on-road categories included in subsections (a) through (d) and starting with the 2025 calendar year for the on-road categories included in subsection (e). This adjustment is needed to help ensure that the fees paid are as commensurate as possible with the costs of implementing the mobile source certification and compliance program. CARB agency costs to implement certification and compliance activities have increased and are expected to continue to increase at rate that outpaces the California Consumer Price Index. Therefore, while including the CPI adjustment is not expected to be sufficient to cover increases in the cost to implement all program activities, CARB is including this provision as authorized by statute to offset at least a portion of increased agency costs.

The included methodology is nearly identical to the existing CPI adjustment regulation for on-road mobile source certification fees found in Title 13, Division 3, Chapter 1, Article 2.5, section 1991. The proposed regulation no longer includes the \$4.5 million reference for fees to be collected in fiscal year 1989-90 because the amendments to HSC 43019 from SB 85 removed this dollar amount. Further, since fees are no longer collected by fiscal year in the proposed regulation, all mentions of fiscal year have been updated to model year or calendar year, as applicable. The proposed regulation also uses the published CPI from the prior year and two calendar years prior to the state of the current model year or calendar year—this change is necessary because the

proposed regulation requires payment of certification fees at application, instead of the retrospective process in the existing regulation based on prior year mobile source production reports. Therefore, more lead time is necessary to be able to calculate and publish the calculated fees at the beginning of the applicable calendar year or model year. Section 2904(f) requires the Executive Officer to publish the calculated fees annually, so that applicants will be informed of the applicable fees before they must be paid. The proposed regulation also more specifically identifies the California Consumer Price Index for all items and all consumers as determined pursuant to Revenue and Taxation Code Section 2212 is to be used in this calculation. This more accurately matches the Revenue and Taxation Code section cited.

5. Adopt Article 3. Certification Fees for Off-Road Mobile Sources

Article 3 houses the certification fees for off-road mobile sources. These fees are authorized by HSC 43019.1 which was approved by the Legislature through AB 854 in 2018. A phase in schedule is proposed for certain fees to reduce the initial cost burden to manufacturers. There are no certification and compliance fees that currently apply to these sources.

Reduced cost fees are discussed in each applicable section rationale. For example, fees for less complicated applications, such as next carry-over applications, are provided a discounted rate. This was determined based on the amount of reduction in staff time to complete the process. In addition, CARB developed a special fee to support California's zero-emission technology goals.

The following outlines the new regulatory language purpose and rationale for Article 3. The new fee regulations will be housed in Section 2905 and Section 2906.

Section 2905. Definitions.

Purpose

This section contains definitions that apply to Article 3, including: "Large spark-ignition (LSI) engine family," "Large spark-ignition (LSI) evaporative family," "Low California production manufacturer," "Off-road compression-ignition (ORCI) engine family," "Off-highway recreational vehicle (OHRV) engine family," "Off-road compression-ignition (ORCI) engine family," "Small off-road engine (SORE) family," "Small off-road engine (SORE) evaporative family," "Spark-ignition marine engine (SIME) family," "Spark-ignition marine watercraft (SIMW) evaporative family," and "Zero-emission golf cart".

Rationale

The section is needed to define the terms incorporated into the provisions of this Article 3. The following terms are required to define each of the fee categories:

"Large spark-ignition (LSI) engine family"- It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with

the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Large spark-ignition (LSI) evaporative family” - It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Low California production manufacturer” - It is necessary to add this definition, because the term is used in Article 3. “Low California production manufacturer” fee criteria is based on the end of the model year production for California sale number reporting requirement currently in existing regulations. A new company or manufacturer submitting an application with a new engine family name for the “Low California production manufacturer” fee type, may not have this information available because there is no reporting history. In this situation, manufacturers can use projected production for California sale numbers for the model year of the product application to determine fee criteria. Subsection 2902(a)(5) states if the end of the model year reported production for that model year application exceeds the criteria in the definition for a “Low California production manufacturer” fee, the Executive Officer will bill the applicant for the difference between the fee paid and the applicable fee. For the “Low California production manufacturer” fee type, projected sales can be used in the three year average, but the average will be adjusted based on the actual reported model year sales for the application submitted. If three years of actual reported sales numbers are available, projected production of California sales cannot be used. The production caps included in the definition represent a balance of providing this reduced cost fee type to manufacturers with the goals of the proposed regulation.

“Off-highway recreational vehicle (OHRV) engine family” - It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Off-road compression-ignition (ORCI) engine family” - It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Small off-road engine (SORE) family” - It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Small off-road engine (SORE) evaporative family” - It is necessary to add this definition, because the term is used in Article 3. The definition references and is

consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Spark-ignition marine engine (SIME) family”- It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Spark-ignition marine watercraft (SIMW) evaporative family”- It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Zero-emission golf cart”- It is necessary to add this definition, because the term is used in Article 3. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

Section 2906. Certification Fees for Off-Road Mobile Sources.

Purpose

This section provides the proposed Base Fee and discounted fees for which an applicant is required to pay for each category identified under Article 3 when submitting an application to obtain approval to sell an engine, vehicle, or equipment in California as listed in Table IV-B-2

Table IV-B-2: Off-Road Fee Categories

LSI engine family
LSI evaporative family
OHRV engine family
ORCI engine family
SORE family
SORE evaporative family
SIME family
SIMW evaporative family
Zero-emission golf cart

Rationale

The section provides the specific fees by category for applications for model years 2023, 2024, 2025 and subsequent years. Specific fee rationale is discussed in the following subsections.

Subsection 2906(a)**Purpose**

This subsection provides a table of the certification fees for model year 2023 Off-Road Mobile Sources.

Rationale

The Base Fee, Low California Production Manufacturer, and Partial carry-over fee types are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2023, the fees are 50 percent of the model year 2025 Base Fee, Low California Production Manufacturer, and Partial carry-over fees discussed in subsection 2906(c).

Subsection 2906(b)**Purpose**

This subsection provides a table of the certification fees for model year 2024 Off-Road Mobile Sources.

Rationale

The Base Fee, Low California Production Manufacturer, and Partial carry-over fee types are phased-in for model year 2023 and model year 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For model year 2024, the fees are 75 percent of the model year 2025 Base Fee, Low California Production Manufacturer, and Partial carry-over fees discussed in subsection 2906(c).

Subsection 2906(c)**Purpose**

This subsection provides a table of the certification fees for model year 2025 and subsequent model years Off-Road Mobile Sources.

Rationale

The certification fees for these categories are based on the model year application requirements. Production is limited to a model year in the regulatory requirements for each category, cited in the definition of each category. As a result, each product must be annually renewed for the next model year of production. In any given calendar year, manufacturers could submit applications for multiple model years; therefore, to simplify the implementation of the regulations, these fees are on engine, equipment, or vehicle model year basis, not calendar year date of application submittal. As part of

the methodology of calculating the amount of the certification fees in this table, CARB estimated the number applications will be the same as the number of EOs to be issued and these numbers will remain consistent in future years. The Base Fee application fees in section 2906 are the average cost per application or EO. The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The baseline cost to implement the certification and compliance program can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129), including a detailed breakdown of CARB's included activities for certification and compliance, labor costs, operational costs, equipment costs, and facilities costs. These costs per category and the average cost per EO can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-9, page 124). The Base fee and reduced fee types are listed in the tables in subsections 2906(a) through subsection 2906(c) for each model year and category.

Four reduced fee types, Carry-over, Low California production manufacturer, Partial carry-over, and Zero-emission , are available for Off-road mobile source categories. The rationale for each reduced fee type is as follows:

"Carry-over" as defined in section 2901 for the criteria that must be met for this reduced cost fee type for all categories in Article 3, except "Zero-emission golf cart." "Zero-emission golf cart" applications as discussed below are already a discounted fee type, therefore this fee type was not provided for "Zero-emission golf cart" applications. A Carry-over application is used in a streamlined review process for those certification applications where there are very limited changes made to the product application from the previous model year. The application approval process times are reduced because the applications are identical to previously approved applications that were fully reviewed except for minor modifications set forth in the definition in section 2901. A reduced review time is adequate to ensure the current application is identical to the previously approved one in all other respects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore, the fee for this category is discounted by 75 percent resulting in a fee that is 25 percent of the Base Fee.

"Low California production manufacturer" is a reduced cost fee type for all categories in section 2906, except for "ORCI engine family," "SORE family," "SORE evaporative family," and "Zero-emission golf cart." "ORCI engine family," "SORE family," and "SORE evaporative family" manufacturers did not provide a business need for this discount, therefore this fee type was not provided for these application categories. "Zero-emission golf cart" applications as discussed below are already a discounted fee type, therefore this fee type was not provided for "Zero-emission golf cart" applications. The "Low California production manufacturer" fee type is a lower cost fee for manufacturers that produce small volumes for sale in California. The criteria for determining low production is based on criteria used for similar flexibility provided for product approval in the certification regulation for each category. The production limits shall be based on the average number of applicable products produced for sale in California for the three previous consecutive model years for which a manufacturer

seeks certification as a low California production manufacturer. This discount takes into consideration the cost burden and business impacts to low California production manufacturers, which include small business. The proposed regulation would provide a 25 percent discount for this fee type, resulting in a fee that is 75 percent of the Base Fee.

"Zero-emission" as defined in section 2901 is a lower cost fee type for the categories: OHRV emission family, SORE family, and Zero-emission golf carts. Zero-emission LSI and ORCI engine families are not required to obtain certification under existing regulations, therefore the fee type is not needed. All evaporative family applications do not have combustion emission requirements therefore evaporative family applications do not require this fee type. Zero-emission vehicles have fewer requirements, are easier to review, and take less processing time. Additionally, the discount for this category was provided to support the introduction of zero-emission products. This fee type is available for products that meet the zero-emission definition and are reduced by 75 percent of the base fee, resulting in a fee that is 25 percent of the base fee for the category.

6. Adopt Article 4. Certification Fees for Evaporative Components

Article 4 houses the certification fees for evaporative component mobile sources. The following outlines the new regulatory language purpose and rationale for Article 4. These fees are authorized by HSC 43019.1 which was approved by the Legislature through AB 854 in 2018.

Reduced cost fees are discussed in each applicable section rationale below. For example, fees for less complicated applications, such as a renewal with no changes to the components, are provided a discounted rate which was determined based on the amount of, or reduction, in staff time to complete the certification process.

The following outlines the new regulatory language, purpose, and rationale for Article 4.

There are no certification and compliance fees that currently apply to these sources. The new fee regulations will be housed in Section 2907 and Section 2908.

Section 2907. Definitions.

Purpose

This section contains definitions that apply to Article 4, including: "Administrative change," "Model change," "No change renewal," "Off-highway recreational vehicle (OHRV) evaporative emission control system component," "Portable container product family," "Small off-road engine (SORE) evaporative emission control system

component,” and “Spark-ignition marine watercraft evaporative emission control system component.”

Rationale

This section is needed to create the following definitions that shall govern the provisions of Article 4. The following terms are required to define each of the fee categories:

“Administrative change” - It is necessary to add this definition, because the term is used in Article 4. The term is used to describe the criteria associated with this lower cost certification fee type in this article of the proposed regulation. These applications must be identical to previously approved product applications with minor changes due to manufacturer name, component name, component labeling, or manufacturer contact information.

“Model change” - It is necessary to add this definition, because the term is used in Article 4. The term is used to describe the criteria associated with this lower cost certification fee type in this article of the proposed regulation. These applications must be identical to previously approved product applications except for additional components or component systems.

“No change renewal” - It is necessary to add this definition, because the term is used in Article 4. The term is used to describe the criteria associated with this lower cost certification fee type in this article of the proposed regulation. These applications must be identical to previously approved product applications except for a new certification period.

“Off-highway recreational vehicle (OHRV) evaporative emission control system component” - It is necessary to add this definition, because the term is used in Article 4. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Portable container product family” - It is necessary to add this definition, because the term is used in Article 4. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Small off-road engine (SORE) evaporative emission control system component” - It is necessary to add this definition, because the term is used in Article 4. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Spark ignition marine watercraft evaporative emission control system component” - It is necessary to add this definition, because the term is used in Article 4. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

Section 2908. Certification Fees for Evaporative Components.

Purpose

This section provides the base fee and discounted fees for which an applicant is required to pay for each category identified under Article 4 for the submission of an application to obtain authority to sell evaporative components as listed in Table IV-B-3

Table IV-B-3: Evaporative Component Fee Categories

OHRV evaporative emission control system component
Portable container product family
SORE evaporative emission control system component
Spark-ignition marine watercraft evaporative emission control system component

Rationale

The section provides the specific fees by category for applications received in calendar years 2022, 2023, 2024 and subsequent years as applicable. Specific fee rationale is discussed in the following subsections.

Subsection 2908(a)

Purpose

This subsection provides the certification fees for calendar year 2022 for Evaporative Components.

Rationale

The Base Fee is phased-in for calendar year 2022 through 2024 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For calendar year 2022, the fees are 50 percent of the calendar year 2024 Base Fee discussed in subsection 2908(c).

Subsection 2908(b)

Purpose

This subsection provides the certification fees for calendar year 2023 for Evaporative Components.

Rationale

The Base Fee is phased-in for calendar years 2022 and 2023 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For

calendar year 2023, the fees are 75 percent of the calendar year 2024 Base Fee discussed in subsection 2908(c).

Subsection 2908(c)

Purpose

This subsection provides the certification fees for calendar years 2024 and subsequent years for Evaporative Components.

Rationale

For OHRV evaporative emission control system components, SORE evaporative emission control system components, Spark-ignition marine watercraft evaporative emission control system components, and Portable fuel containers, manufacturers submit applications for approval of a component on multiple model year engines or vehicles. Under this process, manufacturers submit an application in a particular calendar year and the approval is valid until it expires or is revised. They are reviewed and approved for use according to the regulatory requirements for the component category and the application fee is based on the date of submittal of the application (calendar year). The EOs for SORE components and portable fuel containers expire after four years. OHRV and marine watercraft components EOs expire when the emission standards change. CARB assumes the number applications will be the same as the number of EOs to be issued and these numbers will remain consistent in future years. The Base Fee applications in section 2908 is the average cost per application or EO. The methodology to develop these values can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129) and the average cost can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-11, page 125). The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The Base fee and reduced fee types are listed in the tables in subsections 2908(a) through subsection 2908(c) for each calendar year and category.

Three reduced fee types, Administrative change, Model change, and No change renewal are available within all Evaporative Component categories and are listed in the tables for each year and category. The rationale for each reduced fee type is as follows:

“Administrative change” is a lower cost fee type for applications where there are limited changes made to the manufacturer’s previously approved application. The application approval process times are reduced because the applications are identical to previously approved applications except for minor administrative modifications. Examples of administrative changes include: company name change, component name change, and change to component labeling. A review time is required to ensure the current application is identical to the previously approved one in all other respects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore the fee for this category is discounted by 75 percent, resulting in a fee that is 25 percent of the Base Fee.

"Model change" is a lower cost fee type for applications where there are limited changes made to the manufacturer's previously approved application. The application approval process times are reduced because the applications are identical to previously approved applications except for model year where model year changes do not affect the component's ability to control evaporative emissions. A review time is required to ensure the current application is identical to the previously approved one in all other respects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore the fee for this category is discounted by 75 percent, resulting in a fee that is 25 percent of the Base Fee.

"No change renewal" is a lower cost fee type for applications where there are no changes made to the manufacturer's previously approved application. Portable fuel container and small off-road engine evaporative component EOs expire after four years. Renewals that qualify for this fee category have a reduction in staff time to complete the process. The application approval process times are reduced because the applications are identical to previously approved applications. A review time is required to ensure the current application is identical to the previously approved one in all other respects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore the fee for this category is discounted by 75 percent, resulting in a fee that is 25 percent of the Base Fee.

7. Adopt Article 5. Certification Fees for Aftermarket Parts

Article 5 houses the certification fees for aftermarket part mobile sources. The following outlines the new regulatory language purpose and rationale for Article 5. These fees are authorized by HSC 43019.1 which was approved by the Legislature through AB 854 in 2018. Aftermarket Parts certification analyses are different than the previous Articles because these product approvals are exemptions from the California Anti-Tampering Law. Manufacturers must demonstrate that its product does not reduce the effectiveness of the emissions control system of a vehicle or engine as originally certified. Article 5, Aftermarket Parts, contains three different groups of aftermarket parts: experimental Permits, alternative fuel retrofit systems, and the five aftermarket part categories.

The following outlines the new regulatory language, purpose, and rationale for Article 5.

There are no certification and compliance fees that currently apply to these sources. The new fee regulations will be housed in Section 2909 and Section 2910.

Section 2909. Definitions.

Purpose

This section contains definitions that apply to Article 5, including: "Aftermarket catalytic converter," "Aftermarket catalytic converter reduced cost application," "Aftermarket critical emission control part," "Aftermarket diesel particulate filter,"

"Aftermarket fuel tank," "Aftermarket part," "Aftermarket part – general,"
"Alternative fuel retrofit system," "Alternative fuel retrofit system extension,"
"Category I," "Category VIII," "Experimental permit," "Motorcycle critical emission
control part".

Rationale

The section is needed to define the definitions that shall govern the provisions of this Article 5. The following definitions are required to define the fee categories:

"Aftermarket catalytic converter" - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Aftermarket catalytic converter reduced cost application" - It is necessary to add this definition, because the term is used in Article 5. The term is used to describe the criteria associated with this lower cost certification fee type in this article of the proposed regulation.

"Aftermarket diesel particulate filter" - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Aftermarket fuel tank" - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Aftermarket part" - It is necessary to add this definition, because the term is used in Article 5 definition of "Aftermarket part – general."

"Aftermarket part – general" - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Alternative fuel retrofit system" - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Alternative fuel retrofit system extension" - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Category I” - It is necessary to add this definition, because the term is used in Article 5. The term is used to describe the criteria associated with this lower cost certification fee type in this article of the proposed regulation. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee type.

“Category VIII” - It is necessary to add this definition, because the term is used in Article 5. The term is used to describe the criteria associated with this lower cost certification fee type in this article of the proposed regulation. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee type.

“Experimental permit” - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing statutory requirements, and it is necessary to clearly define the mobile source certification fee category.

“Motorcycle critical emission control part” - It is necessary to add this definition, because the term is used in Article 5. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

Section 2910. Certification Fees for Aftermarket Parts.

Purpose

This section provides the Base fee and discounted fee types for which an applicant is required to pay for the submission of an application to obtain an exemption to sell aftermarket parts. Each category identified under Article 4 is listed in Table IV-B-4

Table IV-B-4: Aftermarket Part Fee Categories

Aftermarket catalytic converter
Aftermarket diesel particulate filter
Aftermarket fuel tank
Aftermarket part – general
Alternative fuel retrofit system
Alternative fuel retrofit system extension
Experimental permit
Motorcycle critical emission control part

Rationale

The aftermarket part industry is unique compared to the other categories for which CARB issues certification EOs. Aftermarket part EOs exempt aftermarket parts from statutory anti-tampering requirements on the basis that the installation of the aftermarket part does not have an adverse effect on emissions or the proper operation of emission control components. Many applicants in the industry are small businesses, the product markets can be highly competitive, and the retail value of the parts can be relatively low compared to new vehicle or engine costs, leaving little profit margin. Many applications do not result in CARB approval, resulting in no EOs being issued. These factors, and all other factors in Health and Safety Code section 43019.1 were balanced in determining the base fee for each category. The total cost for Aftermarket part certification and compliance activities can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-13, page 127). The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). Each aftermarket part category is discussed below. There is no phase in of the Base Fee for any category in this article.

Experimental permits ("C" EO Series)

Experimental permits provide a temporary exemption from the CA anti-tampering Law and allow industry to test and operate vehicles, engines, and equipment prior to showing compliance with emission control requirements and the issuance of a new vehicle or engine EO. They are comparatively routine and straightforward, therefore the base fee is based on two hours of average engineering staff time to process the exemption.

Alternative fuel retrofit system & system extension ("B" EO Series)

Alternative fuel retrofit conversions, or "retrofits", are applicable to light-duty or heavy-duty vehicles and engines. They are kits used to convert exiting California certified gasoline or diesel vehicles to alternative fuel. There are two types of activities under this category: alternative fuel retrofit system extensions and alternative fuel retrofit system. This category fee structure was based on staff workload, and reduced cost fee types include zero-emission and small business.

Alternative fuel retrofit system extensions. Manufacturers who submit applications to produce new alternative fuel vehicles or engines may also submit applications to apply the same components onto similar gasoline and diesel vehicles and engines already produced and owned by California consumers. These alternative fuel conversion retrofit extensions include any alternative fuel conversion retrofit that complies with the requirements in Title 13, section 2030, subsection (c) or Title 13, section 2031, subsection (c). When the applications for retrofit are submitted at the same time as the new vehicle or engine applications, CARB will review the applications together. Manufacturers will have to pay the new vehicle or engine fees, but no additional fees will be required for the retrofit application as long as both applications cover the same

scope of vehicles and engines, and hardware and software changes are the same. This category is identified as the alternative fuel conversion retrofit extension.

Alternative fuel retrofit system. For other alternative fuel retrofit system applications submitted according to the requirements in Title 13, section 2030, subsection (c) or Title 13, section 2031, they will be identified as the alternative fuel retrofit system. The fee for this category is based on average number of EOs issued. The Base Fee is based on the average CARB cost per EO issued in 2018, adjusted for 2022 costs. The fee cost methodology can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129) and the average cost can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-13, page 127). The Base fee and reduced fee types are listed in the table in section 2910.

Three reduced fee types, Alternative fuel retrofit system extensions, Small business and Zero-Emission technology application are available within qualified alternative fuel system applications. The rational for each reduced fee type is as follows:

“Alternative fuel retrofit system extensions,” as described above, when the applications for retrofit are submitted at the same time as the new vehicle or engine applications, CARB will review the applications together. Manufacturers will have to pay the new vehicle or engine fees, but no additional fees will be required for the retrofit application as long as both applications cover the same scope of vehicles and engines, and hardware and software changes are the same.

“Small business” – This low cost fee is available to all small businesses that meet the criteria set forth in the definition in section 2901. As a result of comments received at workshops on the business impact of the proposed regulation, CARB is providing a twenty-five percent discount to reduce cost impacts for small businesses. The fee for the alternative fuel retrofit system category is 75 percent of the Base Fee.

“Zero-emission technology application” as defined in section 2901, this is a lower cost category available for alternative fuel system applications in Article 5. Zero-emission technologies have fewer requirements, are easier to review, and take less processing time. Additionally, the discount for this category was provided to support the introduction of zero-emission products. This fee type is for products that meet this definition and are reduced by seventy-five percent of the Base Fee for the category.

Aftermarket fuel tank, Aftermarket part - general, Aftermarket catalytic converter, Aftermarket diesel particulate filter, and Motorcycles critical emission control part (“D”, “F” and “K” EO Series)

For these categories, manufacturers submit applications for approval of a component on multiple model year engines or vehicles. Under this process, manufacturers submit an application in a particular calendar year and the approval will be valid until it expires or is revised. The applications are reviewed and approved for use according to the requirements for the components and the certification fee is based on the date of submittal of the application (calendar year).

For the Aftermarket Parts program, the number of applications received were 25 to 50 percent higher than the number of EOs issued. A manufacturer may submit an application for approval, and after the initial review and prescribed testing requirements presented by CARB, may not follow through with submittal of test results. Because CARB resources are still expended for applications that aren't seen through to approval, the number of applications was used for determining average CARB costs. Stakeholders in the performance parts industry and Specialty Equipment Market Association (SEMA) were concerned about the resource needs of CARB to reduce the response time between the submission of an application and EO issuance. In response, DOF in July of 2018 approved additional resources for this program. For the 2022 CARB cost analysis, staff resource costs from the 2018/2019 budget change approval were added to the 2018 labor cost analysis. The fee cost methodology can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129) and the average cost of the certification and compliance program for these categories can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-13, page 127).

In 2020, CARB adopted "Procedures for Exemption of Add-On And Modified Part(s) for On-Road Vehicles/Engines" to address concerns from industry and SEMA to reduce the response time between the submission of an application and EO issuance. Staff estimated that the new procedures would result in a four times increase in the number of applications submitted. The staff resource analysis noted above did not reflect these modifications. Significant feedback was received from manufacturers and SEMA requesting adjustments in fees due to the increased number of applications required to be submitted. The proposed fees for Aftermarket part - general and Aftermarket fuel tank categories take into consideration the increased number of applications as the results of the 2020 aftermarket part rulemaking and have been adjusted downward.

CARB worked closely with industry, Manufacturers of Emission Controls Association (MECA), Motorcycle Industry Council (MIC) and SEMA to evaluate the industry's business models, product pricing, product price flexibility, and other factors to establish the proposed fees. Aftermarket parts - general, catalytic converters and motorcycle critical emission control parts fee categories were discounted from CARB's average cost per application to reflect the business information received. The Base fee and reduced fee types are listed in the table in section 2910.

Four reduced fee types, Aftermarket catalytic converter reduced cost application, Category I and Category VIII, Carry-over, and Small business are available for the categories of: Aftermarket fuel tank, Aftermarket part - general, Aftermarket catalytic converter, Aftermarket diesel particulate filter, and Motorcycles Critical Emission Control Parts, as applicable. The rationale for each reduced fee type is as follows:

"Aftermarket catalytic converter reduced cost application" – This is a lower cost fee for the Aftermarket catalytic converter category. No other fee categories in section 2910 use this fee type because they are not subject to the same regulatory requirements. Aftermarket catalytic converter approval encompasses different

regulatory approaches than other aftermarket parts. Some of the activities that result in reduced staff workload include review of remarketing agreements, and vehicle model and model year additions. Remarketing agreements are agreements between an aftermarket catalytic converter manufacturer and another manufacturer that is allowed to sell or market the approved aftermarket catalytic converter under its brand name with new part numbers. Also, manufacturers may add vehicle models within the approved model year range and test groups included in the original approval, and add new part numbers for catalytic converters to include additional pipe diameter parts. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore, the fee for this category is discounted by 75 percent resulting in a fee that is 25 percent of the Base Fee.

“Carry-over” as previously defined in section 2901 is the criteria that must be satisfied for a lower cost fee for the Motorcycle critical emission control part category. No other aftermarket part category uses this lower cost category because they have other lower cost fee types that are utilized in their respective categories that serve the same function. A Carry-over application is used for those certification applications where there are very limited changes made to the product application from the previous model year. The application approval process times are reduced because the applications are identical to previously approved applications that were fully reviewed except for minor modifications set forth in the definition in section 2901. A reduced review time is adequate to ensure the current application is identical to the previously approved one in all other respects. On average, the staff analysis time for this process is roughly 25 percent of staff time required for Base Fee applications. Therefore, the fee for this category is discounted by 75 percent resulting in a fee that is 25 percent of the Base Fee.

“Category I and Category VIII” – This is a lower cost fee for the Aftermarket fuel tank and Aftermarket part – general categories. No other fee category in section 2910 use this fee type because they are not subject to the same aftermarket part approval procedures. CARB worked closely with industry and SEMA to evaluate these factors which were included in the development of the fees. Staff worked with industry to establish a fee recognizing the impact on the industry’s business models and the sales revenue of their product. The Category I and Category VIII applications are administrative, take less staff review effort, or require minimal testing, if at all, therefore fees are reduced to reflect the level of CARB effort. For Aftermarket fuel tank and Aftermarket part - general categories, CARB established a minimum fee of \$500 per application for Category I and Category VIII applications.

“Small business” - This is a lower cost fee for all categories in section 2910, except experimental permits. Experimental permit fees are routine and straightforward, therefore the fee is based on two hours of average engineering staff time to process the exemption. A small business fee type is not needed. For Aftermarket fuel tank, Aftermarket part - general, Aftermarket catalytic converter, and Motorcycle Critical Emission Control Parts, CARB worked closely with industry, MECA, MIC and SEMA to

evaluate these factors which were included in the development of the fees. Staff is proposing a fee recognizing the impact the fees may have on the industry's business models and the sales cost of their product. As a result of comments received at workshops on the business impact of the proposed regulation, CARB established a fee 50 percent of the base fee per application for small business applicants meeting the criteria set forth in the definition in section 2901.

8. Adopt Article 6. Certification Fees for Diesel Emission Control Strategy Verifications and Approvals

Article 6 houses the certification fees for Diesel Emission Control Strategy Verifications and Approvals. The following outlines the new regulatory language purpose and rationale for Article 6. These fees are authorized by HSC 43019.1 which was approved by the Legislature through AB 854 in 2018. The Diesel Emission Control Strategy (DECS or Retrofit) program is a mature program that was developed in the early 2000s to address emissions from existing (or in-use) engines. Retrofits are aftermarket parts but also are approved to reduce nitrogen oxides and diesel particulate matter emissions. Many in-use regulations require the use of these products to retrofit engines. Several of the in-use regulations have or will soon be fully implemented; however, some programs are expected to require continued retrofits into the future, or increased sales of retrofits, such as on marine engines to support planned amendments to the Commercial Harbor Craft Regulation. Overall, sales and activity is expected to decline, and CARB staffing on the program will track demand.

There are no certification and compliance fees that currently apply to these sources. The new fee regulations will be housed in Section 2911 and Section 2012.

Section 2911. Definitions.

Purpose

This section contains definitions that apply to Article 6, including: "Diesel emission control strategy verification – locomotive," "Diesel emission control strategy verification – other than locomotive," "Emission control group (ECG)," "Executive Order fee for New Verifications or Major Modification," "Final application fee for new verifications or major modification," "In-use compliance emissions testing fee," "In-use compliance field testing fee," "Locomotive initial application fee," "Locomotive final verification letter fee," "Major modification," "Minor modification," "Minor modification fee," "New verification," "Preliminary application fee for new verifications or major modification" and "Small business."

Rationale

This section is needed to define the definitions that shall govern the provisions of this Article 6. The following definitions are required to define the fee categories:

"Diesel emission control strategy verification – locomotive" - It is necessary to add this definition, because the term is used in Article 6. The definition references and is

consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Diesel emission control strategy verification – other than locomotive” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Emission control group (ECG)” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Executive Order fee for New Verifications or Major Modification” - It is necessary to add this definition, because the term is used in Article 6. The term is used to describe the criteria associated with this certification category in this article of the proposed regulation.

“Final application fee for new verifications or major modification” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“In-use compliance emissions testing fee” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“In-use compliance field testing fee” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Locomotive initial application fee” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Locomotive final verification letter fee” - It is necessary to add this definition, because the term is used in Article 6. The term is used to describe the criteria associated with this certification category in this article of the proposed regulation.

“Major modification” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Minor modification” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Minor Modification Fee” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“New Verification” – It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Preliminary application fee for new verifications or major modification” - It is necessary to add this definition, because the term is used in Article 6. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

Section 2912. Certification Fees for Diesel Emission Control Strategy Verifications and Approvals.

Purpose

This section provides the proposed Base fee and discounted fee types that an applicant would be required to pay for each regulatory activity (category) identified under Article 6 for the submission of an application for obtaining approval to sell or install a diesel emission control strategy or conduct other regulatory activities described in Title 13 section 2700 et seq listed in Table IV-B-5 and Table IV-B-6.

Table IV-B-5: Diesel Emission Control Strategy Verification Fee Categories

Preliminary Application Fee for New Verifications or Major Modification
Final Application Fee for New Verifications or Major Modification
Executive Order Fee for New Verification or Major Modification
In-Use Compliance Field Testing Fee
In-Use Compliance Emissions Testing Fee
Minor Modification Fee

Table IV-B-6: Diesel Emission Control Strategy Verification-Locomotive Fee Categories

Locomotive Initial Application Fee
Locomotive Final Verification Letter Fee

Rationale

This section provides the specific fees by category for applications received in calendar years 2022, 2023, and 2024 and subsequent years, as applicable. Specific fee rationale is discussed in the following subsections.

Subsection 2912(a)

Purpose

This subsection provides an exemption from fees specified in sections 2912(b) through section 2912(d) for the “Diesel emission control strategy verification – other than locomotive” category under certain conditions that are specified in this section.

Rationale

CARB received feedback from manufacturers regarding the impacts on existing businesses with existing products in the market. Manufacturers commented that the cost of fees were not considered at the time of their application submittals and CARB approvals. At that time, there were no fees for the application, updates, and in-use obligations. These costs were not included into the original business plans for their products when they received their original approvals. In addition, this program exists for the purpose of achieving real-world emission reductions through the use of verified devices and in support of CARB fleet rules. Owners and operators of vehicles and equipment subject to CARB’s various fleet rules invested in retrofit technologies to comply with these rules and rely on retrofitted equipment and vehicles for their livelihood. If verified device manufacturers of products verified prior to the effective date of this regulation choose not to support existing in-field devices due to new fees that were unanticipated by the device manufacturers at the time they were originally verified, it might result in owners of retrofitted equipment and vehicles having no way fix or maintain the devices. This in turn might result in the removal of the devices, which could result in non-compliance with fleet rule requirements and loss of emissions reduction benefits. In response, staff is proposing no new fees for an entity holding and identified in a valid EO or conditional verification for verification activities related to the product directly covered by the EO or conditional verification, provided that the entity’s EO or valid conditional verification for the product was issued prior to the effective date of the proposed regulation.

Subsections 2912(b)(1) and (2)

Purpose

These subsections provide tables of the certification fees for calendar year 2022 for application and program activities for Diesel Emission Control Strategies for all applications.

Rationale

The Base Fee and small business fee is phased-in for calendar year 2022 and 2023 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For calendar year 2022, the fees are 50 percent of the calendar year 2024 fees discussed in subsection 2912(d).

Subsections 2912(c)(1) and (2)

Purpose

These subsections provide tables of the certification fees for calendar year 2023 application and program activities for Diesel Emission Control Strategies for all applications.

Rationale

The Base Fee and small business fee is phased-in for calendar year 2022 and 2023 applications to reduce the initial cost burden and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For calendar year 2023, the fees are 75 percent of the calendar year 2024 fees discussed in subsection 2912(d).

Subsections 2912(d)(1) and (2)

Purpose

These subsections provide tables of the certification fees for calendar year 2024 and subsequent calendar years for applications and program activities for Diesel Emission Control Strategies for all applications.

Rationale

Manufacturers submit applications for approval of a DECS (as defined in 13 CCR subsection 2701(a)(14)) which cover multiple model year engines or vehicles. Under this process, manufacturers submit an application in a particular calendar year and the approval will be valid until it is revised, de-verified, or in the case of a conditional verification letter, expires. They are reviewed and approved for use according to the requirements for the DECS certification regulatory requirements and the application fee is based on the date of submittal of the application (calendar year). In addition to initial approval, the DECS regulation includes in-use compliance field and emission

testing requirements that are conducted after total sales meet designated regulatory criteria.

For DECS applications, excluding Locomotives, the fees were calculated based on the number of applications received, actions taken, and staff devoted to the program. Due to the low volume and periodic nature of requests, an average of three calendar years was included, and activities were considered across all retrofit categories – on-road, off-road, stationary, transport refrigeration unit, and marine engines. In addition, manufacturers and MECA requested that the cost be spread out through the program activities. The fees are not based on average application or EO cost, but staff resource costs were broken down by staff time spent in each activity. For new verifications and major modifications, a fee applies to each of the following: Preliminary applications, Final applications, Issuance of the EO/conditional verification letter, In-use compliance field testing, and In-Use compliance emissions testing. A fee also applies to minor modifications. CARB cost methodology for calculating certification and compliance program costs can be found in Appendix B (Revised SRIA, Appendix A, pages 91 through 129) and the total cost for this category can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-15, page 128). The Base fee and reduced fee types are listed in the tables in subsections 2912(b)(1), 2912(c)(1) and subsection 2912(d)(1) for each calendar year and fee type.

Retrofits for Locomotives are conducted through grant programs to clean up locomotive engines. Because of this process, staff analyzed Locomotives separately. The fees for Locomotives were calculated based on the number of locomotive applications received, actions taken, and staff devoted to the program. Due to the low volume and periodic nature of requests, an average of three calendar years was included. Locomotive sales in California are driven by incentive programs, which require CARB verification in order to be eligible. Estimated sales numbers were based on past incentive program funding. Fees for the locomotive category are broken down into the Locomotive application fee and the Locomotive final verification letter. Locomotives are not expected to have any activity in components beyond the aforementioned two, so the additional activity components have not been included in the locomotive fee structure. The total cost for Locomotives can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-15, page 128). The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The Base fee and reduced fee types are listed in the tables in subsections 2912(b)(2), 2912(c)(2) and subsection 2912(d)(2) for each calendar year and fee type.

One reduced fee type, Small business, is available for qualifying applications. The reduced fee type rational is as follows:

“Small business” – This is a low cost fee available to all small businesses that meet the criteria set forth in the definition in section 2901. As a result of comments received at workshops on the business impact of the proposed regulation, CARB is providing a 25 percent discount to reduce cost impacts for small businesses. This fee type is 75 percent of each base fee listed in section 2912(b) through section 2912(d).

9. Adopt Article 7. Certification Fees for the At-Berth Regulation

Article 7 houses the certification fees for the At-Berth Regulation. The following outlines the new regulatory language purpose and rationale for Article 7. These fees are authorized by HSC 43019.1 which was approved by the Legislature through AB 854 in 2018. CARB's At-Berth Regulation requires selected ocean-going vessels to reduce emissions while at berth at certain California ports. Historically, most vessels have complied by using shore power technology; however, some have complied using CARB Approved Emission Control Systems (CAECS), such as capture and control systems. These capture and control systems are a stand alone emission control system that attaches to the stack of a vessel while auxiliary engines operate at berth, and may be operated as a barge or land-based system.

The following outlines the new regulatory language, purpose, and rationale for Article 7.

There are no certification and compliance fees that currently apply to these sources. The new fee regulations will be housed in Section 2913 and Section 2914.

Section 2913. Definitions.

Purpose

This section contains definitions that apply to Article 7, including: "At-Berth Application fee," "CARB approved emission control strategy (CAECS)," "Continuous Emission Monitors (CEMS) data review fee," "Design change fee," "Minor amendment fee," and "Test plan review fee."

Rationale

This section is needed to define the definitions that shall govern the provisions of this Article 7. The following definitions are required to define the fee categories:

"At-Berth Application fee" - It is necessary to add this definition, because the term is used in Article 7. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"CARB approved emission control strategy (CAECS)" - It is necessary to add this definition, because the term is used in Article 7. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

"Continuous Emission Monitors (CEMS) data review fee" - It is necessary to add this definition, because the term is used in Article 7. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Design change fee” - It is necessary to add this definition, because the term is used in Article 7. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Minor amendment fee” - It is necessary to add this definition, because the term is used in Article 7. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

“Test plan review fee” - It is necessary to add this definition, because the term is used in Article 7. The definition references and is consistent with the existing regulatory certification requirements, and it is necessary to clearly define the mobile source certification fee category.

Section 2914. Certification Fees for the At-Berth Regulation.

Purpose

This section provides the proposed Base Fees and discounted fee types that an applicant would be required to pay for each regulatory activity (category) identified under Article 7 for the submission of an application to obtain approval to sell or install a CARB Approved Emission Control System (CAECS) or conduct other listed regulatory activities for the At-Berth Regulation as described in Table IV-B-7.

Table IV-B-7: At-Berth Regulation Fee Categories

Test Plan Review Fee
At-Berth Application Fee
CEMS Data Review
Design Change Fee
Minor Amendment Fee

Rationale

This section provides the specific fees by category for applications received in calendar years 2022, 2023, and 2024 and subsequent years, as applicable. Specific fee rationale is discussed in the following subsections.

Subsection 2914(a)

Purpose

This subsection provides the specific certification fees for the At-Berth Regulation for calendar year 2022.

Rationale

The Base Fee is phased-in for calendar year 2022 and 2023 applications to reduce the initial cost burden on applicants and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For calendar year 2022, the fees are 50 percent of the calendar year 2024 fees discussed in subsection 2914(c).

Subsection 2914(b)

Purpose

This subsection provides the specific certification fees for the At-Berth Regulation for calendar year 2023.

Rationale

The Base Fee is phased-in for calendar year 2022 and 2023 applications to reduce the initial cost burden on applicants and to be responsive to business impacts on manufacturers. The phase-in allows for a stepped increase in fees requested by manufacturers. For calendar year 2023, the fees are 75 percent of the calendar year 2024 fees discussed in subsection 2914(c).

Subsection 2914(c)

Purpose

This subsection provides the specific certification fees for the At-Berth Regulation for calendar year 2024 and subsequent calendar years.

Rationale

As with Diesel Emission Control Strategies, industry requested the fee to be broken into activities of the program. Therefore, the At-Berth fees are not based on average application or EO cost, but total costs broken down by staff time spent in each activity. The fee activities for Article 7 include test plan review, application, CEMS data review, design change, and minor amendments.

Staff calculated a cost per unit by evaluating the time required for CARB staff to approve existing CAECS for ships at berth. The fee structure proposed accounts for the expected lifetime, and frequency of activities required over the lifetime of the approved system. For example, CARB staff will only need to review test data and issue an EO once per product, but estimate they will need to review continuous emissions measurement system (CEMS) data on the frequency of around 60 times per year. A similar logic was provided for other fee line items. A fee is assessed at different activities through the life time of the product, which enables prospective applicants of

CAECS to cover costs over the lifetime of their products. The split fee structure is critical for encouraging the application of future CAECS, as CARB staff anticipate the majority of additional vessel visits required by the new At-Berth Regulation as defined in title 17, CCR, Section 93130 et seq. to comply with control requirements using CAECS. The total program cost can be found in Appendix B (Revised SRIA, Appendix A, Table Appn A-17, page 128). The fee development methodology can be found in Appendix B (Revised SRIA, Appendix B, page 130-134). The Base fee and reduced fee types are listed in the tables in subsections 2914(a) through subsection 2914(c) for each calendar year and fee type.

One reduced fee type, Small business, is available for qualifying applications. The reduced fee type rationale is as follows:

“Small business” – This is a low cost fee available to all small businesses that meet the criteria set forth in the definition in section 2901. As a result of comments received at workshops on the business impact of the proposed regulation, CARB is providing a 25 percent discount to reduce cost impacts for small businesses. This fee type is 75 percent of each base fee listed in section 2914.

V. Benefits Anticipated from the Regulatory Action, Including the Benefits or Goals Provided in the Authorizing Statute

This rulemaking is the result of legislative directives to create a more fiscally sustainable funding solution for CARB’s Mobile Source Certification and Compliance programs that is based on greater recovery of costs from the businesses that benefit from receiving CARB certification for their products. The proposed regulation provides for new fees and increases existing fees, thereby reducing reliance on existing funds. The following provides a summary of the fiscal revenue to CARB and ultimately to the State of California. The revenue to the State of California with the Proposed Regulation is shown in Table V-1. Table V-2 provides the fiscal savings per year by type of product purchased for 2022-2031.

Table V-1. Fiscal Revenue-Yearly Totals

Year	Total Certification and Compliance Fiscal Costs	Revenue ¹ to CARB with Proposed Regulation
2022	\$49,636,366	\$9,811,698
2023	\$50,680,751	\$18,693,514
2024	\$51,754,380	\$27,566,855
2025	\$52,689,411	\$28,018,633
2026	\$53,739,675	\$28,562,384
2027	\$54,821,450	\$29,122,296
2028	\$55,955,770	\$29,700,964
2029	\$57,188,234	\$30,333,672
2030	\$58,455,339	\$30,984,172
2031	\$59,757,924	\$31,652,886
TOTAL	\$544,679,301	\$264,447,075

¹ Revenue = Fee from proposed regulation minus fee from Business as Usual (BAU) scenario.

Table V-2. Fiscal Savings¹ per Year by Type of Product Purchased for 2022-2031

	On-Road ¹	Off-Road ²	Aftermarket Parts	Retrofits	At-Berth Technology	Totals
2022	\$5,379,628	\$2,989,754	\$749,487	\$498,334	\$194,494	\$9,811,698
2023	\$12,812,027	\$4,238,205	\$749,487	\$690,413	\$203,382	\$18,693,514
2024	\$20,235,952	\$5,486,656	\$749,487	\$882,491	\$212,270	\$27,566,855
2025	\$20,802,558	\$5,486,656	\$749,487	\$767,662	\$212,270	\$28,018,633
2026	\$21,385,030	\$5,486,656	\$749,487	\$728,941	\$212,270	\$28,562,384
2027	\$21,983,811	\$5,486,656	\$749,487	\$690,072	\$212,270	\$29,122,296
2028	\$22,599,358	\$5,486,656	\$749,487	\$653,193	\$212,270	\$29,700,964
2029	\$23,232,140	\$5,486,656	\$749,487	\$653,120	\$212,270	\$30,333,672
2030	\$23,882,640	\$5,486,656	\$749,487	\$653,120	\$212,270	\$30,984,172
2031	\$24,551,353	\$5,486,656	\$749,487	\$653,120	\$212,270	\$31,652,886
TOTAL	\$196,864,497	\$51,121,203	\$7,494,875	\$6,870,465	\$2,096,035	\$264,447,075

¹ Fiscal cost savings = fees collected under proposed regulation – fees collected under BAU scenario

² Includes both the total certification fees collected to certify off-road vehicles, engines and equipment and the total certification fees collected to certify the evaporative emission components that are used in those vehicles and equipment

This proposed rulemaking addresses fees paid by manufacturers to obtain approvals necessary for CARB's existing mobile source certification and compliance programs. This proposed regulation does not change the stringency of current emission standards nor does it create new emission standards. Rather, the proposed regulation establishes upfront fees to fund certification and compliance actions that are already conducted by CARB. Manufacturers of products that are covered by this proposed regulation will be required to pay this fee upon request for services conducted by CARB. For this proposed rulemaking, staff assumes that new costs to affected

manufacturers are passed through to purchasers of the products for all product categories except for aftermarket parts and marine watercraft Executive Order (EO) series categories. Manufacturers of aftermarket parts and marine watercraft have indicated to CARB that they do not plan to increase the price of their products to recoup any new certification fees. The typical fees per unit are less than one percent of average purchase price and were determined to have a negligible impact on purchasing behavior and emission activity.

VI. Air Quality

The proposed amendments are not anticipated to have air quality impacts due to the nature of the proposed changes. The proposal updates and introduces a fee upon submission of an application for certification by manufacturers intending to produce and sell product in California. There are no changes to emissions standards, regulations, and test procedures that would affect air quality. Consequently, manufacturers will continue to show compliance with emission control regulations and requirements.

VII. Environmental Analysis

This chapter provides the basis for CARB's determination that the proposed amendments are exempt from the requirements of the California Environmental Quality Act (CEQA). A brief explanation of this determination is provided below. CARB's regulatory program, which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State's ambient air quality, has been certified by the California Secretary for Natural Resources under Public Resources Code section 21080.5 of CEQA (14 CCR 15251(d)). Public agencies with certified regulatory programs are exempt from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. CARB, as a lead agency, prepares a substitute environmental document (referred to as an "Environmental Analysis" or "EA") as part of the Staff Report prepared for a proposed action to comply with CEQA (17 CCR 60000-60008). If the regulation is finalized, a Notice of Exemption will be filed with the Office of the Secretary for the Natural Resources Agency for public inspection.

CARB has determined that the proposed amendments are exempt from CEQA under the "general rule" or "common sense" exemption (14 CCR 15061(b)(3)). The common sense exemption states a project is exempt from CEQA if "the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." The proposed amendments will increase fees for the processing of Executive Orders, which are required for manufacturers to sell affected products in the State of California. The setting, collection, and administration of these fees under the proposed amendments have no potential to

adversely affect air quality or any other environmental resource area. Based on CARB's review it can be seen with certainty that there is no possibility that the proposed amendments may result in a significant adverse impact on the environment; therefore, this activity is exempt from CEQA.

VIII. Environmental Justice

State law defines environmental justice as the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Gov. Code, § 65040.12, subd. (e)(1)). Environmental justice includes, but is not limited to, all of the following: (A) The availability of a healthy environment for all people. (B) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities. (C) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision making process. (D) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions (Gov. Code, § 65040.12, subd. (e)(2)). The Board approved its Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into CARB's programs consistent with the directives of State law (CARB 2001). These policies apply to all communities in California, but are intended to address the disproportionate environmental exposure burden borne by low-income communities and communities of color. Environmental justice is one of CARB's core values and fundamental to achieving its mission.

The proposed amendments are not anticipated to have an impact on emissions, and therefore are not anticipated to have environmental justice impacts. The proposed amendments would preserve the emission reductions targeted by CARB's existing regulations for all communities, including environmental justice areas.

IX. Standardized Regulatory Impact Analysis

A. Legal Requirements

Sections 11346.3 and 11346.5 of the Government Code require state agencies to assess the potential adverse economic impacts on California business enterprises and individuals when proposing to adopt or amend any administrative regulation. The assessment shall evaluate whether and to what extent the regulatory proposal will affect the creation or elimination of jobs within the state, the creation of new businesses or the elimination of existing businesses within the state, the expansion of businesses currently doing business within the state, and the benefits of the regulation

to the health and welfare of California residents, worker safety, and the state's environment.

State agencies are also required to estimate the cost or savings of any state or local agency and school districts in accordance with instructions adopted by the Department of Finance. This estimate is to include any nondiscretionary costs or savings to local agencies and the costs or savings in federal funding to the state.

B. California Health and Safety Code Section 57005 - Major Regulation Requirements

Per Department of Finance regulations (California Code of Regulations, title 1, sections 2000-2004), any agency that anticipates promulgating a regulation that will have an economic impact on California business enterprises and individuals in an amount exceeding \$50 million in any 12-month period between the date the regulation is filed with the California Secretary of State through 12 months after it is fully implemented (defined as major regulation) is required to submit a Standardized Regulatory Impact Assessment (SRIA). The Proposed Regulation and associated amendments would be fully implemented in 2024 and would result in an economic impact exceeding \$50 million starting in 2022, which triggers the threshold for a major regulation and the requirement for a SRIA. The projected economic impact of this rulemaking is in the approximate \$50-\$82 million range as shown in the SRIA for this rulemaking.⁴

Comments from the California Department of Finance on the SRIA:

Finance generally concurs with the methodology used to estimate impacts of the proposed regulations, with the following exceptions.

- 1) First, the SRIA must estimate and discuss the impacts of securing additional funding of around \$30 million per year through the proposed fee on existing CARB operations and funding. Freeing up these resources from the funds that currently support the mobile source certification activities should result in avoided negative consequences or added economic and emissions benefits to the state, and impacts will vary depending on fund allocation and use.

CARB Response to Comment from the California Department of Finance:

The benefits of freed up resources resulting from the collection of a certification and compliance fee would include an increase towards sustainability of current and ongoing regulatory and emissions based projects as well as known deficiencies within APCF. Not all regulatory and legislatively mandated activities within CARB are fully funded or funded at all, which results in strain on current

⁴ Attachment B to this Staff Report: Initial Statement of Reasons.

funding sources. The addition of resources that will be offset by the certification and compliance fund will begin to relieve the pressure on strained resources edging closer to sustainability within the fund.

- 2) Second, the baseline should include a description of the number and types of affected manufacturers, as well as the distribution of costs among these manufacturers. This would help support CARB's assessment that the burden is not being borne in a manner to create disparate impacts to California businesses.

CARB Response to Comment from the California Department of Finance:

Tables IX-B-1 through IX-B-3 show costs to manufacturers that have indicated they will pass all costs to purchasers of mobile sources. Tables IX-B-4 and IX-B-5 shows costs to manufacturers that have indicated they will not pass any costs to purchasers. Average Cost Per Year is the average cost per year from 2022 through 2031. Estimated costs that are less than \$1,000 per year are rounded to the nearest \$100. Estimated costs that are greater than \$1,000 are rounded to the nearest \$1,000.

Table IX-B-1. Average Yearly Costs Per On-Road Manufacturer that are Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Fuel Fired Heater	5	\$100
	On-Road Heavy-Duty Exempt Engines	3	\$300
	Zero-Emission Powertrains	9	\$300
\$1,001-\$10,000	Heavy-Duty ZEVs that use the conventional HD GHG Phase II Path	30	\$2000
\$10,001-\$100,000	Heavy-Duty GHG Trailer/Aerodynamic Devices	18	\$19,000
	Gasoline Heavy-Duty Vehicles – evaporative emission certification	9	\$21,000
	Medium- and Heavy-Duty Otto-Cycle Engines	16	\$25,000
	Street-Use Motorcycles	42	\$35,000
	Heavy-Duty Vehicles – GHG certification	30	\$36,000

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
> \$100,000	Medium- and Heavy-Duty Compression Ignition Engines	16	\$164,000
	Cars, Light-Duty Trucks, Medium-Duty Vehicles	43	\$310,000

Table IX-B-2. Average Yearly Costs Per Off-Road and Evaporative Component Manufacturer that are Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Electric Golf Carts	4	\$800
\$1,001-\$10,000	Equipment that uses Large Off-Road Spark-Ignition Engines - evaporative emission certification	15	\$1,000
	Off-Highway Recreational Vehicles	242	\$3,000
	SORE Equipment - Evaporative Certification	209	\$3,000
	Evaporative Components for SORE Equipment	105	\$3,000
	Portable Fuel Containers	8	\$6,000
	Small Off-Road Spark-Ignition Engines	179	\$9,000
\$10,001-\$50,000	Large Off-Road Spark-Ignition Engines	19	\$11,000
	Off-Road Compression Ignition Engines	51	\$25,000
> \$50,000	none		

Table IX-B-3. Average Yearly Costs Per Manufacturer of Diesel Emission Control Strategy Retrofits and At-Berth Technology that are Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$50,000	Diesel Emission Control Strategy Retrofits – other than locomotive	33	\$21,000
	Diesel Emission Control Strategy Retrofits – locomotive	9	\$38,000
> \$50,000	At-Bert Alternative Emission Control Technology	4	\$52,000

Table IX-B-4. Average Yearly Costs Per Marine Watercraft Manufacturer that are Not Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Evaporative Components for Spark-Ignition Marine Watercraft	22	\$500
\$1,001-\$10,000	Spark-Ignition Marine Watercraft - evaporative emission certification	68	\$2,000
	Spark-Ignition Marine Engines	31	\$6,000
> \$10,000	none		

Table IX-B-5. Average Yearly Costs Per Aftermarket Parts Manufacturer that are Not Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Experimental Permit	74	\$100
	Motorcycle Critical Emission Control Parts	12	\$700

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$1,001-\$10,000	Aftermarket Parts - (other than listed separately)	231	\$2,000
	Auxiliary Fuel Tanks	17	\$2,000
	Aftermarket Catalytic Converters and Diesel Particulate Filters	23	\$5,000
	Alternative Fuel Retrofits	27	\$7,000
> \$10,000	none		

As seen in Table IX-B-6, the costs to each industry are comparably far higher than the project impacts to individual manufacturers. The highest projected impact, shown in Table IX-B-1 is projected to be \$310,000 to vehicle manufacturers on a per manufacturer basis (NAICS 3361). This amount is 0.02% of the average yearly costs to that industry. All figures in Table IX-B-6 are shown in Millions of U.S. Dollars.

Table IX-B-6. Average Yearly Costs to Industry in \$US Million.

Industry Code	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Lifetime total
3363	0.337500	0.620780	0.904839	1.188898	1.472957	1.419516	1.420295	2.814310	3.511318	4.208325	0.337500
3361	0.397407	0.807935	1.231891	1.667435	2.114889	2.177182	2.238941	2.300212	2.363198	2.427948	0.397407
3369	0.020282	0.049023	0.086700	0.122680	0.158087	0.173881	0.179427	0.176036	0.174343	0.171979	0.020282
3336	0.099047	0.216514	0.352493	0.488471	0.624450	0.661381	0.679892	0.679892	0.679892	0.679892	0.099047

C. Changes Since the Release of the SRIA

Since the release of the SRIA on November 18, 2020, CARB staff's proposal and economic impact analysis has changed. The following fee categories have been modified, reducing the fee amount collected in each category.

- 1) In the original SRIA, costs of the entire mobile source certification program were used to identify costs to business and individuals, as opposed to the incremental costs of these proposed amendments. The analysis presented in the Revised SRIA correctly accounts for fees collected in the business as usual (BAU). Accounting for the BAU fees for the on-road category results in costs that are approximately 40 percent lower than those presented in the original SRIA. The Revised SRIA can be found in Appendix B.

- 2) Modification of Heavy-duty Engine certification category: This category assesses a fee for medium and heavy-duty engine certifications. These regulations cover two types of engines: those that run on gasoline (otto-cycle engines) and those that run on diesel (compression-ignition or CI engines). Due to manufacturer input, it was identified that Otto-cycle engines take about 35 percent of the work to certify and evaluate compliance as compared to CI engines. The HD engine category was split into 2 new categories, HD CI engine and HD otto-cycle engine. CARB reduced the Otto-cycle engine certification fee by sixty-five percent, from \$121,265 to \$42,443 affecting about a quarter of the estimated applications in the category. The new category fee total for 2024 is reduced by \$1,182,332 from the original SRIA estimate.
- 3) A new category was added to the On-Road Street Motorcycle certification group for a reduced fee for three engine families per model year certification per manufacturer. This was the result of manufacturer input on business impacts on low volume or entry level motorcycle certifications. This new category affects thirty-one percent of the estimated applications and the new category fee total for 2024 is reduced by \$997,070 from the original SRIA estimate.
- 4) The Zero-Emission Powertrain fee estimate used in the original SRIA was based on the average EO cost, without the discount for zero-emission products. The corrected base fee is \$977. The correction reduced the category fee total for 2024 by \$13,189.
- 5) For SORE Evaporative components, the incorrect fee value was used in the original SRIA analysis. The fee used in the original SRIA was \$4753. The correct fee based on average application/EO costs is \$3771. The correction reduced the category fee total for 2024 by \$73,884.
- 6) Alternative fuel retrofit systems are aftermarket part conversion kits that can be retrofitted to existing vehicles or engines. Manufacturers may submit applications for alternative fuel retrofits at the same time as applications for new vehicle and engine applications, and if they include the same hardware and software, they will be reviewed and approved together. Under this scenario, the manufacturer will receive new and aftermarket EOs. Manufacturers may also submit applications for alternative fuel retrofits independently of new vehicle or engine applications. These applications will be subject to separate review and approval. The original fee captured resources used to conduct both activities. It was determined that if a manufacturer's alternative fuel retrofit system application was submitted at the same time as its new vehicle or engine application or within 30 days of the issuance of the EO, only minimal resources were needed to review and approve it. For applications that meet this criteria, CARB is proposing no additional fee. The resources used for alternative fuel retrofit system applications from a different manufacturer or submitted after 30 days was reduced, which reduced the original fee from \$23,978 to \$5161. The

new category fee total for 2024 is reduced by \$268,145 from the original SRIA estimate.

- 7) Aftermarket part-general and fuel-tank categories originally were analyzed by EOs issued. The number of applications received were about 30 percent more than EOs issued which affected the cost per application. In addition, new regulations adopted by CARB in 2020 are expected to increase the total number of applications to be submitted in 2022 as compared to 2018. The total number of 2022 applications is estimated to be four times the 2018 number, bringing the estimated total of applications from 237 to 738. CARB reduced the fee used in the SRIA analysis in half to adjust for application volumes. In addition, with input from the manufacturers, it was identified that two application categories (Category 1 and Category 8) within the new procedure required less work than other categories. The new reduced cost categories account for an additional thirty percent of the applications. About ninety percent of the applications in 2022 will pay the minimum fee of \$500. The new category fee total for 2024 will increase by \$207,107 from the original SRIA estimate.
- 8) CARB received significant input from the Motorcycle critical emission control part manufacturers. After evaluating the business models and business effects, CARB determined that this application category fits the fee schedule used for general aftermarket parts. The fee was reduced from \$10,000 to \$1,000. The new category fee total for 2024 is reduced by \$72,400 from the original SRIA estimate.
- 9) The Diesel Emission Control Strategy (retrofit) approvals went into effect in 2000 and these products have been used to reduce emissions through many in-use vehicle and equipment regulations. Many of these in-use regulations are or will be fully implemented by 2022. As a result, sales are very low for existing retrofit manufacturers. As a result of manufacturer comments that fees were not part of the regulatory requirements when they submitted applications and received CARB approval, CARB staff grandfathered this category's approvals for minor modification and other fee categories provided the approval is received prior to the implementation date of this regulation. The new category fee total for 2024 is reduced by \$318,498 from the original SRIA estimate.

D. Cost Methodology and Analysis

The economic impacts of the Proposed Amendments are evaluated against the baseline scenario for the analysis period from 2022 through 2031. The baseline vehicle inventory includes the vehicle sales and population growth assumptions currently reflected in Appendix B (Revised SRIA, Appendix D, pages 139-144).

The total cost of this regulatory item was determined by the amount of certification fees collected to cover CARB costs along with standard financing costs applicable to

all of the product categories. Staff estimates that additional fees collected from the proposed regulation will amount to as much as approximately \$32 million in 2031. Purchasing behavior is assumed to remain the same for all categories. The fees that are already required to be paid by the existing regulations have been included in the baseline and are therefore excluded from the cost analysis and the alternatives analysis to avoid double-counting.

For the SRIA, the costs that are paid by manufacturers were assumed to be passed through to purchasers as part of the sales price of the vehicle or piece of equipment, with a few exceptions indicated by stakeholder feedback (marine and aftermarket parts). These passed on costs were distributed among individuals, business, and State and local government in the same proportions as product sales to these types of purchasers. Appendix B (Revised SRIA, Appendix C, pages 135-138) shows the sales percentages for each type of purchaser, by category, that were used in the analysis. Appendix B (Revised SRIA, Appendix D, pages 139-144) shows the current and future sales projections for each category that were used in this analysis.

As previously mentioned, recent legislation changed CARB's authority to collect fees, removing the cap on existing fees and allowing fees to be collected on new categories with specific considerations. Through the workshop process with industry, CARB developed a proposed fee structure to cover the Direct Costs for this program, based on anticipated fiscal needs. The new fee structure is based on an upfront fee due upon submittal of a manufacturer's application for certification and approval of the product. Most fee categories are based on the average cost per application in each category. Lower cost subcategories use a percent reduction from the category average cost. The Direct Costs were calculated using a case by case fee structure for each fee category based on 2018 applications (updated with FY 2018/2019 and 2019/2020 approved budget change proposal estimates), multiplied by the proposed fee, then totaled for each category listed below. All costs and expected revenue from this proposed regulation included the use of a three-year phase-in for many of the new fees. Amortization costs are included at a rate of five percent over an average loan period of five years. In general, the phase-in schedules allow full-cost fees for "new" applications (shown in Tables IX-D-2 through IX-D-7) to be phased-in at 50 percent of the fee in 2022, 75 percent of the fee in 2023, and 100 percent of the fee starting in 2024. There is no phase-in of fees for the "reduced fee applications."

Maximum base fees start in 2024 after the phase-in schedule. On-Road Fees include a Consumer Price Index (CPI) adjustment, which was included in the calculations starting in 2025 (for model year 2026 applications). The CPI figure utilized is an average of CPI over the past three years as projected by California's Department of Finance. Three categories, Experimental permits, Exempt heavy-duty engines, and Fuel-fired heaters, were based on average engineer time to review and approve the certification. In addition, Locomotive, Retrofit, and At-Berth regulatory programs are more complex; therefore, the fee structure is based on staff time spent for specific activities. All costs

here have been assigned North American Industry Classification System (NAICS) codes and are analyzed in Section IX.J.

The total expected revenue from the proposed regulation for 2022 through 2031 is shown in Table IX-D-1. The proposed fee structure, number of actions per category, and fee totals that are used to estimate the total expected revenue from the proposed regulation are shown in Tables IX-D-2 through IX-D-7.

Table IX-D-1. Incremental Fee Revenue from Proposed Regulation

	On-Road ¹	Off-Road ²	Aftermarket Parts	Retrofits	At-Berth	Totals
2022	\$5,379,628	\$2,989,754	\$749,487	\$498,334	\$194,494	\$9,811,698
2023	\$12,812,027	\$4,238,205	\$749,487	\$690,413	\$203,382	\$18,693,514
2024	\$20,235,952	\$5,486,656	\$749,487	\$882,491	\$212,270	\$27,566,855
2025	\$20,802,558	\$5,486,656	\$749,487	\$767,662	\$212,270	\$28,018,633
2026	\$21,385,030	\$5,486,656	\$749,487	\$728,941	\$212,270	\$28,562,384
2027	\$21,983,811	\$5,486,656	\$749,487	\$690,072	\$212,270	\$29,122,296
2028	\$22,599,358	\$5,486,656	\$749,487	\$653,193	\$212,270	\$29,700,964
2029	\$23,232,140	\$5,486,656	\$749,487	\$653,120	\$212,270	\$30,333,672
2030	\$23,882,640	\$5,486,656	\$749,487	\$653,120	\$212,270	\$30,984,172
2031	\$24,551,353	\$5,486,656	\$749,487	\$653,120	\$212,270	\$31,652,886
TOTAL	\$196,864,497	\$51,121,203	\$7,494,875	\$6,870,465	\$2,096,035	\$264,447,075

¹ The proposed certification fees are phased-in from 2022 through 2024. The proposed 2024 certification fees are increased by a 2.8% CPI per year between 2024 and 2031. Does not include baseline fees.

² Includes both the costs to certify off-road vehicles, equipment and equipment and the costs to certify the evaporative emission components that are used in those vehicles and equipment

Below Table IX-D-2 through IX-D-7 provide the fee structure and total fees collected in 2024 for each category:

Table IX-D-2. Proposed On-Road Fees and Total Estimated 2024 Annual Fee Collected

Category	Fee Type					2024 Estimate Fee Collected
	Base Fee	Partial Carry Over	Carry Over	Small Volume CA Production Manufacturer/Low California Production for Sale Engine Family	Zero-Emission	
Light-duty vehicle and medium-duty vehicle	\$46,509	\$23,254	\$11,627	–	\$11,627	\$21,428,988
HD CI engine and MD CI engine	\$121,265	\$60,633	\$30,316	–	–	\$4,608,075
HDO engine and MDO engine	\$42,443	\$21,222	\$10,611	–	–	\$636,645
Incomplete MD/HD Evaporative vehicle	\$14,935	\$7,468	\$3,734	–	–	\$298,701
HD GHG Vehicle	\$17,720	\$8,860	\$4,430	\$8,860/-	\$4,430	\$1,727,726
HD GHG Trailer/Aero	\$3,936	–	–	–	–	\$562,800
Zero-Emission Powertrain	-	–	–	–	\$977	\$4,397
HD Exempt engine	\$98	–	–	–	–	\$1,464
Fuel-fire Heaters	\$293	–	–	–	–	\$586
Motorcycle	\$17,447	\$8,723	\$4,362	\$13,085/\$872	–	\$2,452,984
All On-Road Applications						\$31,722,366

Table IX-D-3. Proposed Off-Road Fees and Total Estimated 2024 Annual Fee Collected

Category	Fee Type					2024 Estimate Fee Collected
	Base Fee	Partial Carry Over	Carry over	Low CA Production Manufacturer	Zero-Emission	
Zero-emission Golf Carts	–	–	–	–	\$842	\$3,367
LSI Engine	\$4,511	\$2,255	\$1,128	\$3,383	-	\$233,428
LSI Evaporative	\$1,099	\$550	\$275	\$824	-	\$20,064
OHRV	\$2,988	\$1,494	\$747	\$2,241	\$747	\$686,444
ORCI	\$4,153	\$2,076	\$1,038	-	-	\$1,341,289
SORE Engine	\$2,603	\$1,302	\$651	-	\$651	\$1,709,514
SORE Evaporative	\$1,212	\$606	\$303	-	-	\$746,592
SIME	\$1,478	\$739	\$369	\$1,108	-	\$202,841
SIMW	\$1,043	\$522	\$261	\$782	-	\$122,569
All Off-Road Applications						\$5,066,108

Table IX-D-4. Proposed Evaporative Component Fees and Total Estimated 2024 Annual Fee Collected

Category	Fee Type			2024 Estimate Fee Collected
	New	No Change Renewal	Adding Models	
Portable Container Product Family	\$6,827	\$1,707	\$1,707	\$51,200
SORE Evap Component	\$3,771	\$943	\$943	\$283,768
SI Marine and OHRV Evap Components	\$917	-	\$229	\$11,696
All Evaporative Component Applications				\$346,664

Table IX-D-5. Proposed Aftermarket Parts Fees and Total Estimated 2024 Annual Fee Collected

Category	Fee					2024 Estimate Fee Collected
	Base Fee	Carry- over	Category I and Category VIII	Small Business	Zero- Emission	
Alternative Fuel Retrofits	\$5,161	-	-	\$3,871	\$1,290	\$193,435
Experimental Permit	\$195	-	-	-	-	\$10,346
Aftermarket Part-general and Motorcycle Critical Emission	\$1,000	-	\$500	\$500	-	\$425,707
Catalytic Converters and dpf	\$10,000	\$2,500	-	\$5,000	-	\$120,000
All Aftermarket						\$749,488

Table IX-D-6. Proposed Retrofit Fees and Total Estimated 2024 Annual Fee Collected

Category	Fee Type						2024 Estimated Fee Collected
	Preliminary Application Fee for New Verification or Major Modification	Final Application for New Verification or Major Modification	Executive Order Fee	In-Use Compliance Field Testing Fee	In-Use Compliance Emissions Testing Fee	Minor Modification Fee	
Diesel Emission Control Strategies (Retrofit or DECS)	\$48,075	\$24,038	\$24,038	\$12,019	\$24,037	\$24,038	\$513,803
Small Business	\$36,056	\$18,028	\$18,028	\$9,014	\$18,028	\$18,028	
	Initial Application	Final Verification Letter					
Locomotive	\$18,434	\$73,738	-	-	-	-	\$368,688
Small Business	\$13,826	\$55,304	-	-	-	-	
All Retrofit Activities							\$882,491

Table IX-D-7. Proposed At-Berth Technology Fees and Total Estimated 2024 Annual Fee Collected

Category	Fee Type					2024 Estimated Fee Collected
	Test Plan review	Application Fee	CEMS review	Design Change fee	Minor Amendment	
At-Berth CAECS	\$10,158	\$25,394	\$254	\$10,158	\$2,032	\$212,270
Small Business	\$7,618	\$19,046	\$190	\$7,618	\$1,524	
All At-Berth Applications						\$212,270

E. Total Direct Costs

The proposed certification fee increases would result in direct incremental costs to manufacturers that certify a mobile source product (i.e., vehicle, engine, or add-on component) for sale in California. Manufacturers have disclosed through discussions with CARB staff that, with the exception of marine watercraft and aftermarket parts, all new certification fees will be passed along to vehicle and equipment purchasers. (Manufacturers of aftermarket parts and marine watercraft have indicated to CARB that they do not plan to increase the price of their products to recoup any new certification fees.) Therefore, this analysis looks at the direct costs to California purchasers rather than the cost to manufacturers paying the certification fee, unless otherwise noted. Cost to purchasers are amortized over five years.

To assess the potential impact on the California economy, staff also evaluated the costs assuming that all of the increased costs in certifying a mobile source product will be passed on to the businesses and individuals purchasing the product, except for those categories for which manufacturers of the products have informed staff that they do not plan to pass these additional costs to consumers. This analysis is performed by comparing the baseline scenario with the proposed regulation, in which certification fees are increased for calendar years 2022 through 2031. All costs are presented in nominal dollars.

In some cases, the increased cost to California consumers is not a one-to-one correlation between the increased certification fee for a particular fee category and the product that is ultimately purchased. This is because certain types of vehicles and equipment are built using emission control equipment from several different manufacturers. When this occurs, the added cost to a vehicle or piece of equipment under this proposed regulation will be their respective portion of multiple new certification fees, established by this proposed regulation. This cost analysis will identify those types of vehicles or equipment that incorporate multiple certification fees.

For each mobile source category, the incremental costs per unit are calculated by dividing the total fee for that category equally over all new vehicles or equipment sold for that category. The total cost of the proposed regulation is then determined by applying a five percent additional financing cost over an average period of five years for those units that are expected to be purchased and financed by California businesses and individuals. Appendix B (Revised SRIA, Appendix C, pages 135-138) shows the percentage of units for each category of vehicles that are expected to be purchased by California businesses and by individuals, respectively. These percentages are then used to calculate the total cost of the proposed regulation.

1. Incremental Costs for Compliance with Certification Requirements for On-Road

"On-Road" consists of nine types of products based on their unique certification requirements, each of which is tied to one or more distinct fee category and its

associated fee. In order to determine the total cost of compliance for each type of vehicle, staff identified the number of fee categories tied to each type of vehicle and the portion of the fees for each fee category type that will apply to each type of vehicle. The Total Fee cost that will apply to each vehicle category is calculated using these assumptions. The fee per unit is then calculated by dividing the proposed Total Fee for this category by the vehicle population for the category. Tables IX-E-1-1 through IX-E-1-3 provide the total fees for the on-road category, the fees per unit for on-road vehicles and equipment, and the total incremental cost for the Proposed Regulation.

Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles (PC, LDT, MDV)

This category of vehicle is certified using one fee category, which covers all emission certification requirements, including exhaust emission standards for both criteria pollutants and greenhouse gases and evaporative emission standards.

Heavy-Duty Vehicles that Use an Engine

For the purpose of this analysis, heavy-duty vehicles that use an engine are divided into two subcategories based on the number of fee categories that each receives: heavy-duty gasoline vehicles (HDV – gasoline), which receive three fee category approvals, and heavy-duty vehicles other than gasoline vehicles (HDV – not gasoline), which receive two fee category approvals.

Heavy-duty gasoline vehicles and heavy-duty vehicles other than gasoline both receive an engine exhaust emission fee category approval, which includes both criteria pollutants and greenhouse gasses, and a tractor/vocational vehicle (greenhouse gas) fee category approval. Staff estimated the portion of the proposed regulation Total Fees for these shared fee categories that is attributed to these two categories using the sales split of 18 percent heavy-duty gasoline vehicles and 82 percent heavy-duty vehicles other than gasoline.

The third fee category approval that heavy-duty gasoline vehicles receive is for certification to evaporative emission standards. Heavy-duty vehicles other than gasoline vehicles do not have evaporative emissions and, therefore, do not certify to these standards.

Heavy-Duty Electric Vehicles

Heavy-duty zero-emission vehicles can be certified using either the Zero-Emission Powertrain Test Procedure (HDV – ZEP Cert) or the conventional route, in which the vehicle is certified in its entirety (HD ZEV – not ZEP Cert).

HDV – ZEP Cert vehicles are certified using two fee category approvals, a ZEP approval, which replaces engine exhaust fee category approval, and an “Enhanced Fuel Cell or Electric Vehicle (tractor/vocational)” fee category approval that requires a

certified zero-emission powertrain. HD ZEV – not ZEP Cert vehicles are certified using one fee category approval that covers the entire vehicle.

Other On-Road Mobile Source Categories

Heavy-Duty Trailers (HD Trailer) require two fee category approvals, one for the Heavy-Duty Greenhouse Gas Trailer and one for the Aerodynamic technology.

Heavy-Duty Vehicles that Use Exempt Engines (HD – exempt), which requires one fee category approval.

Fuel-fired Heaters Used in Heavy-Duty Vehicles, which require one approval letter.

Street-Use Motorcycles, which require one fee category approval.

Table IX-E-1-1. Incremental Fees for On-Road Category for Proposed Regulation over BAU Scenario

Year	PC, LDT, MDV	HDV - gasoline	HDV – not gasoline	HDV – ZEP Cert	HD ZEV – not ZEP Cert	HD Trailer	HD - exempt	Fuel-fired Heaters	Motorcycles
2022	\$3,627,965	\$202,040	\$978,066	\$29,430	\$27,970	\$93,507	\$243	\$97	\$420,309
2023	\$8,661,213	\$488,408	\$2,364,360	\$47,430	\$45,075	\$226,043	\$588	\$235	\$978,675
2024	\$13,696,843	\$777,257	\$3,762,667	\$56,610	\$53,800	\$359,727	\$936	\$374	\$1,527,737
2025	\$14,080,354	\$799,021	\$3,868,022	\$58,195	\$55,306	\$369,799	\$962	\$385	\$1,570,514
2026	\$14,474,604	\$821,393	\$3,976,327	\$59,825	\$56,855	\$380,154	\$989	\$396	\$1,614,488
2027	\$14,879,893	\$844,392	\$4,087,664	\$61,500	\$58,447	\$390,798	\$1,017	\$407	\$1,659,694
2028	\$15,296,530	\$868,035	\$4,202,118	\$63,222	\$60,083	\$401,740	\$1,045	\$418	\$1,706,165
2029	\$15,724,833	\$892,340	\$4,319,778	\$64,992	\$61,766	\$412,989	\$1,074	\$430	\$1,753,938
2030	\$16,165,128	\$917,326	\$4,440,731	\$66,812	\$63,495	\$424,553	\$1,104	\$442	\$1,803,048
2031	\$16,617,752	\$943,011	\$4,565,072	\$68,683	\$65,273	\$436,440	\$1,135	\$454	\$1,853,534
TOTAL	\$133,225,116	\$7,553,223	\$36,564,805	\$576,698	\$548,071	\$3,495,750	\$9,093	\$3,637	\$14,888,103

Table IX-E-1-2. Incremental Fee per Unit over BAU Scenario for On-Road Vehicles and Equipment for Proposed Regulation

Year	PC, LDT, MDV	HDV - gasoline	HDV – not gasoline	HDV – ZEP Cert	HD ZEV – not ZEP Cert	HD Trailer	HD - exempt	Fuel-fired Heaters	Motorcycles
2022	\$2.04	\$24.85	\$26.08	\$272.50	\$0.96	\$13.29	\$16.22	< \$0.01	\$12.21
2023	\$4.81	\$58.67	\$61.56	\$395.25	\$1.40	\$31.50	\$39.20	\$0.01	\$28.10
2024	\$7.51	\$91.18	\$95.67	\$428.86	\$1.86	\$49.14	\$62.38	\$0.01	\$43.35
2025	\$7.63	\$91.53	\$96.04	\$404.13	\$2.12	\$49.53	\$64.13	\$0.01	\$44.04
2026	\$7.75	\$91.89	\$96.42	\$383.49	\$2.42	\$49.92	\$65.93	\$0.01	\$44.73
2027	\$7.87	\$92.25	\$96.79	\$366.07	\$2.77	\$50.31	\$67.77	\$0.01	\$45.44
2028	\$8.00	\$92.61	\$97.17	\$351.23	\$3.16	\$50.70	\$69.67	\$0.01	\$46.16
2029	\$8.12	\$92.97	\$97.55	\$338.50	\$3.61	\$51.10	\$71.62	\$0.01	\$46.89
2030	\$8.25	\$93.34	\$97.93	\$327.51	\$4.12	\$51.50	\$73.63	\$0.01	\$47.63
2031	\$8.38	\$93.70	\$98.31	\$317.97	\$4.71	\$51.90	\$75.69	\$0.01	\$48.38

Table IX-E-1-3. Incremental Total Fees and Total Cost to Purchasers of Proposed Regulation for On-Road Category

Year	Incremental Total Fees	Total Cost of Proposed Regulation ¹
2022	\$5,379,628	\$1,242,558
2023	\$12,812,027	\$4,201,813
2024	\$20,235,952	\$8,875,808
2025	\$20,802,558	\$13,680,675
2026	\$21,385,030	\$18,620,078
2027	\$21,983,811	\$22,455,226
2028	\$22,599,358	\$24,715,853
2029	\$23,232,140	\$25,407,896
2030	\$23,882,640	\$26,119,318
2031	\$24,551,353	\$26,850,659
TOTAL	\$196,864,497	\$172,169,888

¹ Total Cost = Total Fees plus 5% financing for businesses and individuals. Cost to purchasers are amortized over five years.

2. Total New Costs for Compliance with Certification Requirements for Off-Road

The “off-road mobile source” category can be split into eight types of vehicles and equipment, based on their unique certification requirements, each of which is tied to one or more distinct EO-series and its associated fee. As with the On-Road category, in order to determine the total cost of compliance for each type of vehicle, staff identified the number of EOs tied to each type of vehicle and the portion of the fees for each EO type that will apply to each type of vehicle. The Total Fee cost that will apply to each vehicle category is calculated using these assumptions. The fee per unit is then calculated by dividing the proposed Total Fee for this category by the vehicle population for the category. Tables IX-E-2-1 through IX-E-2-3 provide the total fees for the off-road category, the fees per unit for off-road vehicles and equipment, and the total cost for the Proposed Regulation.

Off-Road Mobile Source Categories that Require Fee Category Approval

Four of the seven off-road mobile source categories require only fee category approval. For these categories, 100 percent of the fee for the associated certification fee is allocated to that single category. These include:

1. Off-Highway Recreational Vehicles (OHRV), which require one combined exhaust and evaporative emission approval.
2. Electric Golf Carts, which require one “zero-emission vehicle” approval.
3. Equipment and Vehicles that use Off-Road Compression Ignition Engines (CI Equipment), which require one approval.

4. Portable Fuel Containers and Portable Outboard Marine Tanks, which require one approval.

Equipment that uses Multiple Fee Category Approvals

Three of the off-road mobile source categories receive separate fee category approvals for certification to exhaust emission standards and certification to evaporative emission standards. These categories are also equipped with evaporative emission control system components that receive their own separate fee category approvals.

The Total Fee for Spark ignition marine watercraft evaporative emission component approvals are included in the cost of spark-ignition marine watercraft. The Total Fees for evaporative emission control system component approvals are split between equipment that uses small off-road engines (SORE) and equipment that uses large spark-ignition (LSI) engines, using the sales split of 99 percent SORE and 1 percent LSI in 2018.

The Total Fees attributed to each of these categories, based on number of applications, are calculated as follows:

1. Equipment that uses LSI Engines (LSI Equipment) includes the Total Fees for two equipment fee category approvals (one Large spark ignition engine exhaust fee and one Large spark ignition evaporative emission fee) and includes one percent of the Total Fees for evaporative emission control system components approvals.
2. Equipment that uses SORE (SORE Equipment) includes the Total Fees for two equipment fee category approvals (one SORE series engine exhaust fee and one SORE evaporative emission fee) and includes 99 percent of the Total Fees for SORE evaporative emission control system components.
3. Spark-Ignition Marine Watercraft (SI Marine) includes the Total Fees for two equipment fee category approvals (one spark ignition marine engine exhaust fee and one spark ignition marine watercraft evaporative emission fee) and 100 percent of the Total Fees for spark ignition marine watercraft evaporative emission components.

Table IX-E-2-1. New Fees for Off-Road Category for Proposed Regulation

Year	OHRV	Electric Golf Carts	LSI Equipment	SORE Equipment	SI Marine	CI Equipment	Portable Container Products
2022	\$394,388	\$3,367	\$137,301	\$1,457,548	\$205,765	\$764,078	\$27,307
2023	\$540,416	\$3,367	\$197,185	\$2,133,865	\$271,435	\$1,052,683	\$39,254
2024	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
2025	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
2026	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
2027	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200

Year	OHRV	Electric Golf Carts	LSI Equipment	SORE Equipment	SI Marine	CI Equipment	Portable Container Products
2028	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
2029	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
2030	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
2031	\$686,444	\$3,367	\$257,068	\$2,810,182	\$337,106	\$1,341,289	\$51,200
TOTAL	\$6,426,360	\$33,666	\$2,391,032	\$26,072,867	\$3,174,046	\$12,547,069	\$476,164

Table IX-E-2-2. New Fee per Unit for Off-Road Vehicles and Equipment for Proposed Regulation

Year	OHRV	Electric Golf Carts	LSI Equipment	SORE Equipment	SI Marine	CI Equipment	Portable Container Products
2022	\$3.69	\$0.17	\$6.72	\$0.37	\$7.85	\$6.41	\$0.02
2023	\$4.96	\$0.17	\$9.57	\$0.53	\$10.24	\$8.79	\$0.03
2024	\$6.18	\$0.17	\$12.37	\$0.70	\$12.57	\$11.14	\$0.04
2025	\$6.07	\$0.17	\$12.27	\$0.69	\$12.42	\$11.09	\$0.04
2026	\$5.96	\$0.17	\$12.17	\$0.69	\$12.28	\$11.03	\$0.04
2027	\$5.85	\$0.17	\$12.07	\$0.69	\$12.14	\$10.98	\$0.04
2028	\$5.75	\$0.17	\$11.97	\$0.68	\$12.00	\$10.92	\$0.04
2029	\$5.64	\$0.17	\$11.88	\$0.68	\$11.86	\$10.87	\$0.04
2030	\$5.54	\$0.17	\$11.78	\$0.67	\$11.73	\$10.82	\$0.04
2031	\$5.44	\$0.17	\$11.68	\$0.67	\$11.59	\$10.76	\$0.04

Table IX-E-2-3. New Total Fees and Total Cost to Purchasers of Proposed Regulation for Off-Road Category

Year	Total New Fees	Total Cost of Proposed Regulation ¹
2022	\$2,989,754	\$690,557
2023	\$4,238,205	\$1,669,476
2024	\$5,486,656	\$2,936,755
2025	\$5,486,656	\$4,204,034
2026	\$5,486,656	\$5,471,314
2027	\$5,486,656	\$6,048,035
2028	\$5,486,656	\$6,336,396
2029	\$5,486,656	\$6,336,396
2030	\$5,486,656	\$6,336,396
2031	\$5,486,656	\$6,336,396
TOTAL	\$51,121,203	\$46,365,759

¹ Total Cost = Total Fees plus 5% financing for businesses and individuals. Costs to purchasers amortized over five years.

3. Total New Costs for Compliance with Certification Requirements for Aftermarket Parts

For Aftermarket Parts, there is only one EO used to certify each category of part. The Total Costs for aftermarket parts is shown in Table IX-E-3-1. The Cost Per Unit values shown in Table IX-E-3-2. Table IX-E-3-3 provides the total cost for the Proposed Regulation.

Table IX-E-3-1. Total New Fees for Aftermarket Parts by Category for Proposed Regulation

Year	Experimental Permits	Fuel Tanks	Alt. Fuel Retrofits	Perf. Parts	Cat. Conv. & DPF	Motorcycle AMP
2022	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2023	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2024	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2025	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2026	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2027	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2028	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2029	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2030	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
2031	\$10,346	\$33,611	\$193,435	\$383,496	\$120,000	\$8,600
TOTAL	\$103,456	\$336,111	\$1,934,352	\$3,834,955	\$1,200,000	\$86,000

Table IX-E-3-2. New Cost per Unit for Aftermarket Parts for Proposed Regulation

Year	Experimental Permits	Fuel Tanks	Alt. Fuel Retrofits	Performance Parts	Catalytic Conv. & DPF	Motorcycle AMP
2022	\$164.22	\$10.85	\$268.66	\$0.32	\$0.38	\$13.25
2023	\$164.22	\$9.44	\$268.66	\$0.32	\$0.38	\$13.25
2024	\$164.22	\$8.20	\$268.66	\$0.32	\$0.38	\$13.25
2025	\$164.22	\$7.13	\$268.66	\$0.32	\$0.38	\$13.25
2026	\$164.22	\$6.20	\$268.66	\$0.32	\$0.38	\$13.25
2027	\$164.22	\$5.39	\$268.66	\$0.32	\$0.38	\$13.25
2028	\$164.22	\$4.69	\$268.66	\$0.32	\$0.38	\$13.25
2029	\$164.22	\$4.08	\$268.66	\$0.32	\$0.38	\$13.25
2030	\$164.22	\$3.55	\$268.66	\$0.32	\$0.38	\$13.25
2031	\$164.22	\$3.08	\$268.66	\$0.32	\$0.38	\$13.25

Table IX-E-3-3. New Total Fees and Cost to Purchasers of Aftermarket Parts for Proposed Regulation

Year	Total New Fees	Total Cost of Proposed Regulation ¹
2022	\$749,487	\$173,112
2023	\$749,487	\$346,225
2024	\$749,487	\$519,337
2025	\$749,487	\$692,450
2026	\$749,487	\$865,563
2027	\$749,487	\$865,563
2028	\$749,487	\$865,563
2029	\$749,487	\$865,563
2030	\$749,487	\$865,563
2031	\$749,487	\$865,563
TOTAL	\$7,494,875	\$6,924,504

¹ Total Cost = Total Fees plus 5% financing for businesses and individuals, except that no financing costs were added to experimental permit. Total costs assumes that these costs will be passed on to purchasers. Purchaser costs amortized for five years. Aftermarket part manufacturers stated they will not be passing on these costs to purchasers.

4. Total New Costs for Compliance with Certification Requirements for Diesel Emission Control Strategies

For Diesel Emission Control Strategies or “Retrofits,” there is only one approval used to certify each category of part. Tables IX-E-4-1 through IX-E-4-3 provide the total fees for the retrofit category, the fees per unit for retrofit categories, and the total cost for the Proposed Regulation.

Table IX-E-4-1. Total New Fees for Retrofits by Category for Proposed Regulation

Year	CHC	Stationary CI	APU	TRU	RTG	On-Road	Off-Road	Locomotive
2022	\$0	\$47,132	\$92,272	\$144,493	\$221	\$2,213	\$27,659	\$184,344
2023	\$76,138	\$54,079	\$98,908	\$154,885	\$237	\$0	\$29,649	\$276,516
2024	\$94,516	\$67,133	\$122,783	\$192,271	\$294	\$0	\$36,805	\$368,688
2025	\$94,516	\$67,133	\$122,783	\$77,443	\$294	\$0	\$36,805	\$368,688
2026	\$94,516	\$67,133	\$122,783	\$38,721	\$294	\$0	\$36,805	\$368,688
2027	\$94,516	\$67,133	\$122,783	\$0	\$147	\$0	\$36,805	\$368,688
2028	\$94,516	\$67,133	\$122,783	\$0	\$74	\$0	\$0	\$368,688
2029	\$94,516	\$67,133	\$122,783	\$0	\$0	\$0	\$0	\$368,688
2030	\$94,516	\$67,133	\$122,783	\$0	\$0	\$0	\$0	\$368,688
2031	\$94,516	\$67,133	\$122,783	\$0	\$0	\$0	\$0	\$368,688
TOTAL	\$832,267	\$638,275	\$1,173,441	\$607,813	\$1,563	\$2,213	\$204,530	\$3,410,364

Table IX-E-4-2. New Cost per Unit for Retrofits for Proposed Regulation

Year	CHC	Stationary CI	APU	TRU	RTG	On-Road	Off-Road	Locomotive
2022	\$0.00	\$221.28	\$221.28	\$221.28	\$221.28	\$221.28	\$221.28	\$12,289.60
2023	\$237.19	\$237.19	\$237.19	\$237.19	\$237.19	\$0.00	\$237.19	\$18,434.40
2024	\$294.44	\$277.41	\$294.44	\$294.44	\$294.44	\$0.00	\$294.44	\$24,579.20
2025	\$294.44	\$262.24	\$294.44	\$0.00	\$294.44	\$0.00	\$294.44	\$24,579.20
2026	\$294.44	\$247.72	\$294.44	\$0.00	\$294.44	\$0.00	\$294.44	\$24,579.20
2027	\$294.44	\$235.55	\$294.44	\$0.00	\$0.00	\$0.00	\$294.44	\$24,579.20
2028	\$294.44	\$224.52	\$294.44	\$0.00	\$0.00	\$0.00	\$0.00	\$24,579.20
2029	\$294.44	\$213.80	\$294.44	\$0.00	\$0.00	\$0.00	\$0.00	\$24,579.20
2030	\$294.44	\$204.67	\$294.44	\$0.00	\$0.00	\$0.00	\$0.00	\$24,579.20
2031	\$294.44	\$196.30	\$294.44	\$0.00	\$0.00	\$0.00	\$0.00	\$24,579.20

Table IX-E-4-3. Total New Fees and Cost to Purchasers for Retrofits for the Proposed Regulation

Year	Total New Fees	Total Cost of Proposed Regulation ¹
2022	\$498,334	\$115,102
2023	\$690,413	\$274,570
2024	\$882,491	\$478,403
2025	\$767,662	\$655,714
2026	\$728,941	\$824,081
2027	\$690,072	\$868,368
2028	\$653,193	\$859,771
2029	\$653,120	\$806,792
2030	\$653,120	\$780,335
2031	\$653,120	\$762,823
TOTAL	\$6,870,465	\$6,425,963

¹ Total Cost = Total Fees plus 5% financing for businesses and individuals. Purchaser costs amortized over five years

5. Total New Costs for Compliance with Certification Requirements for At-Berth Technologies

California regulations require ocean-going vessels to reduce emissions from diesel auxiliary engines on container vessels, reefer vessels, and passenger cruise vessels, while berthing at a California port. At-berth, auxiliary engines are used by vessels to run power for lighting, ventilation, pumps, communication, heating, and other on-board equipment while a vessel is docked. Container, reefer, and cruise vessel fleets that visit specified California ports, as described below, are the regulated parties. The California ports included in the existing regulation are Ports of Los Angeles, Long Beach, Oakland, Richmond, San Diego, San Francisco, and Hueneme.

The existing regulation provides fleet operators two different pathway options to comply: the Reduced On-board Power Generation option or the Equivalent Emissions Reduction option.

The Equivalent Emissions Reduction pathway requires a percentage reduction of emissions below a fleet's baseline levels. Fleets following this pathway can comply using shore power or a CARB approved alternative control technology, such as a barge-based capture and control system or a land-based emissions capture and control system.

For At-Berth Alternative Emission Control Technology, there is only one approval used to certify each system. Table IX-E-5-1 shows the total fees, the fee per visit, and the total cost for the Proposed Regulation for At-Berth Technologies.

Table IX-E-5-1. New Fee per Visit, Total Fees, and Total Cost of Proposed Regulation for At-Berth Technologies

Year	Fee per Visit	Total Fees	Total Cost of Proposed Regulation ¹
2022	\$146.03	\$194,494	\$44,923
2023	\$146.03	\$203,382	\$91,899
2024	\$146.03	\$212,270	\$140,928
2025	\$146.03	\$212,270	\$189,957
2026	\$146.03	\$212,270	\$238,986
2027	\$146.03	\$212,270	\$243,092
2028	\$146.03	\$212,270	\$245,145
2029	\$146.03	\$212,270	\$245,145
2030	\$146.03	\$212,270	\$245,145
2031	\$146.03	\$212,270	\$245,145
TOTAL		\$2,096,035	\$1,930,367

¹ Total Cost = Total Fees plus 5% financing for businesses. Total costs amortized over five years.

6. Total Incremental and New Costs of Compliance with the Proposed Regulation for All Mobile Source Categories

The total cost of compliance with the proposed regulation for all mobile source categories is presented in Table IX-E-6-1. The second column, Total Fees, is the total of all certification fees that are expected to be paid by manufacturers for 2022 through 2031 under the proposed regulation. Total Fees are calculated based on the assumption that the fees for on-road mobile sources will increase by 2.8 percent per year (averaged CPI value) and all other fees remain unchanged from year to year. The second column, Total Cost of the Proposed Regulation, is the total actual cost that is expected to be paid by purchasers of mobile sources due to the increase in certification fees. These figures were generated from amortization tables assuming 5 percent interest over an average loan period of five years. As all items subject to the

proposed regulation are financed in more than 95 percent of purchases (businesses and households), applying amortization costs provides a more realistic perspective on how the Proposed Regulation will impact the affected industries. Year 2022 shows only the payments due that year in the loan structure, about one-fifth of the total amount financed, and the yearly amounts increases per the amortization structure. The Grand Total of the column titled “Total Cost of Proposed Regulation” is less than the total of the column titled “Total Fees” because the government will receive the fees upfront, the passed on fees to industries are paid in spread out financing installments and thus are delayed. No financing costs are added for either Local or State government purchases.

Table IX-E-6-1. Total Incremental and New Cost of Compliance with the Proposed Regulation for All Mobile Source Categories

Year	Total Fees	Total Cost of Proposed Regulation ¹
2022	\$9,811,698	\$2,266,254
2023	\$18,693,514	\$6,583,985
2024	\$27,566,855	\$12,951,234
2025	\$28,018,633	\$19,422,832
2026	\$28,562,384	\$26,020,023
2027	\$29,122,296	\$30,480,285
2028	\$29,700,964	\$33,022,728
2029	\$30,333,672	\$33,661,793
2030	\$30,984,172	\$34,346,758
2031	\$31,652,886	\$35,060,586
TOTAL	\$264,447,075	\$233,816,482

¹ Total Cost = Total Fees plus 5% financing for businesses and individuals. Total costs amortized over five years.

F. Direct Costs to Typical Businesses

Since the proposed amendments only increase certification fees that are paid upfront by manufacturers, there will be no ongoing costs associated with the proposed regulation. It is assumed in this analysis that for all product categories, except for aftermarket parts and marine watercraft, manufacturers will pass along 100 percent of the certification fee increases to purchasers of the products. Manufacturers of aftermarket parts and marine watercraft have indicated to CARB that they do not plan to increase the price of their products to recoup any new certification fees.

The cost impacts to a typical business under the proposed regulation would depend primarily on how many new vehicles or other products the business purchases per year and the purchase year. For each category, CARB estimated the total fees expected to be collected under the proposed regulation and then apportioned the total fees expected to be passed through each year between business, individuals, local

government entities, and state government entities that purchase each product. Appendix C of the Revised SRIA shows the percentage of sales for each category that are assumed to be purchased by California businesses.⁵ The total cost to all California businesses, presented in Table IX-F-1, assumes that purchases are financed at a 5 percent financing rate.

The estimated costs to businesses for aftermarket parts in Table IX-D-1 are a “worst case” scenario that assumes manufacturers of aftermarket parts will pass along fee costs to purchasers. If manufacturers of aftermarket parts do not pass along fee costs to purchasers of the products, the costs in column 4 will only include the portion of the aftermarket parts fees that will be paid by California manufacturers (i.e., 17 percent of the total aftermarket parts fees). (See footnote 3 to Table IX-F-1.) All amortization figures were calculated using the same amortization structure explained above. An average loan period of five years and a 5 percent interest rate were applied, as the vast majority of all items affected by the proposed regulation are financed.

Table IX-F-1. Total Costs to California Businesses with the Proposed Regulation¹

Year	On-Road Vehicles	Off-Road Equipment ²	Aftermarket Parts ³	Retrofit	At-Berth	Totals	Total Costs with Amortization Costs
2022	\$1,470,811	\$1,404,081	\$226,105	\$495,398	\$194,008	\$3,790,403	\$875,487
2023	\$3,510,974	\$1,984,870	\$226,105	\$691,027	\$202,873	\$6,615,849	\$2,403,581
2024	\$5,551,960	\$2,565,658	\$226,105	\$884,525	\$211,739	\$9,439,988	\$4,583,981
2025	\$5,707,415	\$2,565,658	\$226,105	\$763,955	\$211,739	\$9,474,873	\$6,772,438
2026	\$5,867,223	\$2,565,658	\$226,105	\$723,298	\$211,739	\$9,594,023	\$8,988,415
2027	\$6,031,505	\$2,565,658	\$226,105	\$682,331	\$211,739	\$9,717,339	\$10,357,388
2028	\$6,200,387	\$2,565,658	\$226,105	\$665,734	\$211,739	\$9,869,624	\$11,108,928
2029	\$6,373,998	\$2,565,658	\$226,105	\$665,734	\$211,739	\$10,043,235	\$11,248,263
2030	\$6,552,470	\$2,565,658	\$226,105	\$665,734	\$211,739	\$10,221,707	\$11,420,763
2031	\$6,735,939	\$2,565,658	\$226,105	\$665,734	\$211,739	\$10,405,176	\$11,608,119
TOTAL	\$54,002,682	\$23,914,217	\$2,261,051	\$6,903,473	\$2,090,795	\$89,172,219	\$79,367,367

¹ Total Cost = Total Fees plus 5% financing. Financing is not applied to Experimental Permits (Aftermarket Parts EO), because the vehicles are retained by the manufacturers and are never sold to consumers.

² It is assumed that businesses do not purchase marine watercraft. So these costs are not changed if manufacturers of these products do not pass through fees to purchasers of the products.

³ If manufacturers of aftermarket parts do not pass through fees to purchasers of the products, the total cost to California businesses will only include the portion of the aftermarket parts fees that will be

⁵ The complete purchase splits are between business, individuals, local government entities, and state government entities are in Appendix B (Revised SRIA, Appendix C, Pages 135-138).

paid by California manufacturers. This will reduce the cost to California businesses to \$128,246 each year, for a total of \$1,282,456 for 2022-2031.

G. Direct Costs to Small Businesses

It is assumed in this analysis that for all product categories except for aftermarket parts and marine watercraft, manufacturers will pass along 100 percent of the certification fee increases to purchasers of the products. Since the proposed fees will cover certification of all new mobile sources, staff assumes that all California businesses will bear some of the costs of the proposed regulation and the direct costs on California small businesses will be proportional to the percentage of California businesses that are small businesses. Staff used data compiled by the California Employment Development Department, which indicates that in 2019, approximate 98 percent of California businesses had fewer than 100 employees, to estimate the direct cost of this proposed regulation on California small businesses. For the At-Berth Alternative Emission Control Technology category, the cost to California small businesses is expected to be zero, because use of this technology is limited to major shipping companies and local governments. All amortization figures were calculated using the same amortization structure explained in Section D. An average loan period of five years and a 5 percent interest rate were applied, as the vast majority of all items affected by the proposed regulation are financed.

For aftermarket parts and marine watercraft, the direct cost on California small businesses was estimated based on the percentage of manufacturers for each of these categories that are California small businesses. Using the Dunn and Bradstreet database, staff estimated that 12 percent of manufacturers that certify and sell aftermarket parts in California are California small businesses and 7 percent of manufacturers that receive EOs for spark ignition marine watercraft (including those that certify engines, evaporative emission control systems, and evaporative emission components) are California small businesses.

As mentioned in Section D, there are only initial costs and no ongoing costs to the proposed regulation, because certification fees that are paid upfront by manufacturers. Tables IX-G-1 through IX-G-3 provide the total costs to California small business purchasers, the total costs to California small business manufacturers, and the total costs to all California small businesses under the Proposed Regulation. The costs to California small business manufacturers are not amortized, because they are equal to the fees paid by the manufacturers.

Table IX-G-1. Total Costs to California Small Business Purchasers under the Proposed Regulation¹

Year	On-Road Vehicles	Off-Road Mobile Sources ²	Aftermarket Parts ³	Retrofits	At-Berth ⁴	Total	Amortized Total Costs
2022	\$1,441,395	\$1,375,999	\$0	\$485,490	\$0	\$3,302,885	\$762,883
2023	\$3,440,754	\$1,945,172	\$0	\$677,207	\$0	\$6,063,133	\$2,163,314
2024	\$5,440,921	\$2,514,345	\$0	\$866,835	\$0	\$8,822,101	\$4,200,997
2025	\$5,593,267	\$2,514,345	\$0	\$748,676	\$0	\$8,856,288	\$6,246,576
2026	\$5,749,878	\$2,514,345	\$0	\$708,832	\$0	\$8,973,056	\$8,319,126
2027	\$5,910,875	\$2,514,345	\$0	\$668,685	\$0	\$9,093,905	\$9,656,706
2028	\$6,076,379	\$2,514,345	\$0	\$652,420	\$0	\$9,243,144	\$10,391,208
2029	\$6,246,518	\$2,514,345	\$0	\$652,420	\$0	\$9,413,283	\$10,527,756
2030	\$6,421,421	\$2,514,345	\$0	\$652,420	\$0	\$9,588,185	\$10,696,806
2031	\$6,601,220	\$2,514,345	\$0	\$652,420	\$0	\$9,767,985	\$10,880,415
TOTAL	\$52,922,629	\$23,435,933	\$0	\$6,765,404	\$0	\$83,123,966	\$73,845,789

¹ Total Cost = Total Fees plus 5% financing. Financing is not applied to Experimental Permits (Aftermarket Parts EO), because the vehicles are retained by the manufacturers and are never sold to consumers.

² It is assumed that businesses do not purchase spark-ignition marine watercraft. So these costs are not changed if manufacturers of these products do not pass through fees to purchasers of the products.

³ It is assumed that manufacturers of aftermarket parts do not pass through fees to purchasers of the products. If manufacturers of aftermarket parts decide to pass through fees to purchasers, the costs per year in this column will be approximately 98 percent of the costs to business purchasers in Table IX-F-1 and the yearly costs to aftermarket parts manufacturers in Table IX-E-3-2 will be \$0.

⁴ Use of this technology is limited to major shipping companies and local governments, so it does not affect California small businesses.

Table IX-G-2. Total Costs to California Small Business Manufacturers with the Proposed regulation¹

Year	Spark-Ignition Marine Watercraft ^{2,3}	Aftermarket Parts ⁴	Total
2022	\$15,305	\$89,938	\$105,243
2023	\$20,189	\$89,938	\$110,128
2024	\$25,074	\$89,938	\$115,012
2025	\$25,074	\$89,938	\$115,012
2026	\$25,074	\$89,938	\$115,012
2027	\$25,074	\$89,938	\$115,012
2028	\$25,074	\$89,938	\$115,012
2029	\$25,074	\$89,938	\$115,012
2030	\$25,074	\$89,938	\$115,012
2031	\$25,074	\$89,938	\$115,012
TOTAL	\$236,086	\$899,385	\$1,135,471

¹ For all categories except aftermarket parts and marine watercraft, it is assumed that manufacturers pass through fees to purchasers of the products. Therefore, costs to California small businesses for the other categories are ascribed to the purchaser rather than the manufacturer.

² Spark-ignition marine watercraft are a subset of the Off-Road Mobile Source category.

³ It is assumed that 7 percent of manufacturers that receive EOs for spark-ignition marine watercraft are California small businesses.

⁴ It is assumed that 12 percent of aftermarket part manufacturers that apply for approvals are California small businesses.

Table IX-G-3. Total Costs to All California Small Businesses with the Proposed Regulation¹

Year	Total Cost	Total Amortized Cost
2022	\$3,408,128	\$787,192
2023	\$6,173,261	\$2,213,059
2024	\$8,937,114	\$4,277,307
2025	\$8,971,301	\$6,349,452
2026	\$9,088,068	\$8,448,567
2027	\$9,208,917	\$9,788,403
2028	\$9,358,157	\$10,524,033
2029	\$9,528,295	\$10,660,581
2030	\$9,703,198	\$10,829,631
2031	\$9,882,998	\$11,013,240
TOTAL	\$84,259,437	\$73,317,082

¹ Includes small business purchaser costs, which are amortized, and small business manufacturer costs, which are equal to the fees paid by the businesses.

H. Direct Costs to Individuals

The direct costs to individuals are assumed to be only initial purchase costs that are due to increased costs of vehicles and equipment purchased by individuals. A five percent financing cost over an average loan period of five years is applied to purchasing costs by individuals, consistent with Section C. There are no ongoing costs to individuals.

The most important factor for assessing the impact on individuals is the increased cost per vehicle or piece of equipment due to the proposed regulation. (See Tables IX-E-1-2, IX-E-2-2, IX-E-3-2, IX-E-4-2, and IX-E-5-2.)

The direct cost to individuals is calculated by multiplying the Total Fee (Table IX-E-6-1) for a category by the percentage of the vehicle/equipment/ or use of the product affected by the fee that is purchased or used by individuals. Appendix B (Revised SRIA, Appendix C, Pages 135-138) shows the percentage of sales for each category that are assumed to be purchased by individuals. An additional five percent financing cost is then applied to all purchases by individuals. The Cost per Household is calculated by dividing the Total Cost by 12,965,400 California households. As the total amortized impact throughout the lifetime of the Proposed Regulation is \$12.29, with a yearly average of \$1.23, and there is an even impact of costs and policies throughout the Californian economy, (to businesses and households alike), the Proposed Regulation appears to not produce any disparate impacts. Table IX-H-1 provides total costs to individuals with the Proposed Regulation.

Table IX-H-1. Total Costs to Individuals with the Proposed Regulation¹

Year	On-Road Vehicles	Off-Road Equipment ²	Aftermarket Parts ³	Retrofits	At-Berth	Non-Amortized Total ⁴	Cost per Household	Amortized Total	Amortized Cost per Household
2022	\$4,069,742	\$1,720,832	\$557,516	\$5,879	\$0	\$6,353,969	\$0.49	\$1,467,606	\$0.11
2023	\$9,694,550	\$2,444,998	\$557,516	\$6,301	\$0	\$12,703,365	\$0.98	\$4,401,763	\$0.34
2024	\$15,313,769	\$3,169,164	\$557,516	\$7,822	\$0	\$19,048,271	\$1.47	\$8,801,434	\$0.68
2025	\$15,742,554	\$3,169,164	\$557,516	\$7,822	\$0	\$19,477,056	\$1.50	\$13,300,143	\$1.03
2026	\$16,183,346	\$3,169,164	\$557,516	\$7,822	\$0	\$19,917,848	\$1.54	\$17,900,664	\$1.38
2027	\$16,636,480	\$3,169,164	\$557,516	\$7,822	\$0	\$20,370,982	\$1.57	\$21,138,241	\$1.63
2028	\$17,102,301	\$3,169,164	\$557,516	\$0	\$0	\$20,828,981	\$1.61	\$23,015,053	\$1.78
2029	\$17,581,165	\$3,169,164	\$557,516	\$0	\$0	\$21,307,845	\$1.64	\$23,536,958	\$1.82
2030	\$18,073,438	\$3,169,164	\$557,516	\$0	\$0	\$21,800,118	\$1.68	\$24,073,527	\$1.86
2031	\$18,579,494	\$3,169,164	\$557,516	\$0	\$0	\$22,306,174	\$1.72	\$24,625,170	\$1.90
TOTAL	\$148,976,840	\$29,519,138	\$5,575,161	\$43,470	\$0	\$184,114,609	\$14.20	\$162,260,563	\$12.29

¹ Total Cost = Total Fees plus 5% financing.

² If manufacturers of marine watercraft do not pass through fees to purchasers of the products, these costs will be \$215,983 lower in 2022, \$284,915 lower in 2023, and \$353,846 lower each year from 2024 through 2031 than the numbers presented in this table.

³ If manufacturers of aftermarket parts do not pass through fees to purchasers of the products, these costs will not be borne by individual purchasers.

⁴ If manufacturers of both marine watercraft and aftermarket parts do not pass through fees to purchasers of the products, these costs will be \$773,499 lower in 2022, \$842,431 lower in 2023, and \$911,362 lower each year from 2024 through 2031 than the numbers presented in this table.

I. Fiscal Impacts to Local and State Governments

The fiscal costs for local and state government are calculated based on the percentage of the vehicle/equipment/ or use of the product affected by the fee that is purchased or used by each government entity. Appendix B (Revised SRIA, Appendix C, Pages 135-138) shows the percentage of sales for each category that are assumed to be purchased by each of these government entities. For costs that local and state agencies will pay, it is assumed that neither local nor state governments finance their purchases, which is consistent with the assumptions made in the SRIA for the Heavy-Duty Omnibus Rulemaking.⁶ No state implementation costs were identified from the analysis.

1. Local government

The fiscal impact (costs) to Local government is calculated by multiplying the Total Fee (Table IX-E-6-1) for a category by the percentage of the vehicle/equipment/ or use of

⁶ See Appendix C-1 of the California Air Resources Board, 2020b. Original SRIA Submitted to DOF: Heavy-Duty Omnibus Rulemaking Initial Statement of Reasons. <https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/appc1.pdf>. Accessed August 27, 2020.

the product affected by the fee that is purchased or used by Local governments, as shown in the tables above. Tables IX-I-1-1 and IX-I-1-2 provide the costs to local government due to increased cost of purchases and the change in sale tax revenue.

Table IX-I-1-1. Costs to Local Government with the Proposed Regulation

Year	On-Road Vehicles	Off-Road Equipment	Aftermarket Parts ¹	Retrofits	At-Berth	Total
2022	\$91,293	\$12,273	\$672	\$13,725	\$9,725	\$127,688
2023	\$207,461	\$17,403	\$672	\$18,238	\$10,169	\$253,944
2024	\$319,630	\$22,534	\$672	\$22,641	\$10,613	\$376,090
2025	\$328,580	\$22,534	\$672	\$22,641	\$10,613	\$385,040
2026	\$337,780	\$22,534	\$672	\$22,641	\$10,613	\$394,240
2027	\$347,238	\$22,534	\$672	\$22,641	\$10,613	\$403,698
2028	\$356,961	\$22,534	\$672	\$12,844	\$10,613	\$403,623
2029	\$366,955	\$22,534	\$672	\$12,844	\$10,613	\$413,618
2030	\$377,230	\$22,534	\$672	\$12,844	\$10,613	\$423,893
2031	\$387,793	\$22,534	\$672	\$12,844	\$10,613	\$434,455
TOTAL	\$3,120,921	\$209,944	\$6,722	\$173,900	\$104,802	\$3,616,289

¹ If manufacturers of aftermarket parts do not pass through fees to purchasers of the products, these costs will not be borne by local government purchasers.

Sales taxes are levied in California to fund a variety of programs at the state and local level. For this analysis, the CARB staff assumed an average of 4.56 percent local sales tax revenues based on how the state sales tax is apportioned plus an average of local additional sales taxes. This leads to a year over year net increase in local sales tax revenue totaling \$10.9 million over the modeled lifetime.

Table IX-I-1-2. Change in Local Government Sales Tax Revenue with the Proposed Regulation Compared to Business as Usual (BAU) Scenario

Year	Change in Local Government Sales Tax Revenue (\$)
2022	\$105,870
2023	\$307,608
2024	\$605,175
2025	\$907,728
2026	\$1,216,198
2027	\$1,424,894
2028	\$1,543,996
2029	\$1,574,134
2030	\$1,606,447
2031	\$1,640,152
Total	\$10,932,202

2. State Government

The overall fiscal impact of the proposed regulation is projected to be added revenues to the State in the range of \$10 million to \$20 million each year during the phase-in of the proposed fees (2022 and 2023) and approximately \$30 million each year from 2024 through 2031, with a total revenue of almost \$300 million during the lifetime of the proposed regulation. In order to estimate these revenue, staff estimated the additional fees that are expected to be collected by CARB each year under the proposed regulation compared to the Business as Usual scenario (Table IX-I-2-2) and the additional State sales tax that is expected to be collected each year (Table IX-I-2-3). Then staff estimated the passed on cost of the proposed regulation's requirements each year to all State agencies including CARB (Table IX-I-2-4). The additional fees collected plus the additional sales tax minus the additional purchase price of vehicles and equipment by State agencies gives the revenue to the State.

a) Revenue to CARB

Under the BAU scenario, the certification fees collected from manufacturers will be increasingly insufficient to cover costs to CARB. Table IX-I-2-1 shows the estimated total certification and compliance costs for 2022 through 2031, the expected fees that will be collected under the BAU scenario, and the additional costs to CARB that will not be covered by the collected fees. As previously discussed, certification and compliance costs that are not covered by fees must be covered by other sources of funding, such as the Air Pollution Control Fund, the Motor Vehicle Account, and the Vehicle Inspection and Repair Fund.

Table IX-I-2-1. Revenues to CARB for 2022 through 2031 for BAU Scenario

Year	Total Certification and Compliance Fiscal Costs	Expected Fees Collected for BAU Scenario ⁷	Program funding from Existing Budgeted Sources (APCF, MVA, VIRF and others)
2022	\$49,636,366	\$10,809,783	\$38,826,583
2023	\$50,680,751	\$11,112,456	\$39,568,295
2024	\$51,754,380	\$11,423,605	\$40,330,775
2025	\$52,689,411	\$11,743,466	\$40,945,945
2026	\$53,739,675	\$12,072,283	\$41,667,392
2027	\$54,821,450	\$12,410,307	\$42,411,143
2028	\$55,955,770	\$12,757,795	\$43,197,975
2029	\$57,188,234	\$13,115,014	\$44,073,220
2030	\$58,455,339	\$13,482,234	\$44,973,105
2031	\$59,757,924	\$13,859,737	\$45,898,187
TOTAL	\$544,679,301	\$122,786,682	\$421,892,620

Table IX-I-2-2 shows the estimated certification and compliance costs for 2022 through 2031, the expected fees that will be collected with the proposed regulation and under the BAU scenario, and the revenue to CARB due to the proposed regulation. The last column shows the revenue to CARB with the proposed regulation, as compared to the business as usual scenario.

⁷ The total fees expected to be collected in 2022 through 2031 assumes that the 2018 certification fees are increased by a 2.8% CPI per year between 2018 and 2031. Fees for all other categories do not change.

Table IX-I-2-2. Revenue to CARB for 2022 through 2031 with the Proposed Regulation⁸

Year	Total Certification and Compliance Costs	Expected Fees Collected with Proposed Regulation	Expected Fees Collected under BAU Scenario	Additional Fees Collected (Revenue to CARB) with Proposed Regulation
2022	\$49,636,366	\$20,621,481	\$10,809,783	\$9,811,698
2023	\$50,680,751	\$29,805,970	\$11,112,456	\$18,693,514
2024	\$51,754,380	\$38,990,460	\$11,423,605	\$27,566,855
2025	\$52,689,411	\$39,762,099	\$11,743,466	\$28,018,633
2026	\$53,739,675	\$40,634,667	\$12,072,283	\$28,562,384
2027	\$54,821,450	\$41,532,603	\$12,410,307	\$29,122,296
2028	\$55,955,770	\$42,458,760	\$12,757,796	\$29,700,964
2029	\$57,188,234	\$43,448,686	\$13,115,014	\$30,333,672
2030	\$58,455,339	\$44,466,406	\$13,482,234	\$30,984,172
2031	\$59,757,924	\$45,512,623	\$13,859,737	\$31,652,886
TOTAL	\$544,679,301	\$387,233,757	\$122,786,682	\$264,447,075

b) Revenue to State Government

Sales taxes are levied in California to fund a variety of programs at the state and local level. For this analysis, state sales tax was assumed to remain constant until 2040 with 3.53 percent being for state programs and the general fund. This leads to an increase in state sales tax revenue starting in 2022 of approximately \$89,227. Over the modeled life of the regulation, the state will gain \$9.2 million in sales tax revenue compared to the baseline scenario.

⁸ The total fees expected to be collected in 2022 through 2031 assumes that the proposed 2022 certification fees for on-road vehicles and equipment only are increased by a 2.8% CPI per year between 2022 and 2031. Fees for all other categories do not change.

Table IX-I-2-3. Change in State Sales Tax Revenues for Proposed Regulation

Calendar Year	Revenue (\$)
2022	\$89,227
2023	\$259,225
2024	\$509,916
2025	\$764,716
2026	\$1,024,460
2027	\$1,200,070
2028	\$1,300,171
2029	\$1,325,332
2030	\$1,352,301
2031	\$1,380,405
Total	\$9,205,823

c) Costs Incurred by All State Agencies, Including CARB

The only costs incurred by State government are due to increased costs of vehicles and equipment purchased by State agencies as shown in Table IX-I-2-4.

Table IX-I-2-4. Costs Incurred by All State Agencies with the Proposed Regulation

Year	On-Road Vehicles	Off-Road Equipment	Aftermarket Parts ¹	Retrofits	At-Berth	Total
2022	\$21,523	\$5,876	\$1,681	\$2,705	\$0	\$31,785
2023	\$51,823	\$8,494	\$1,681	\$2,956	\$0	\$64,954
2024	\$82,306	\$11,113	\$1,681	\$3,670	\$0	\$98,770
2025	\$84,610	\$11,113	\$1,681	\$3,670	\$0	\$101,074
2026	\$86,979	\$11,113	\$1,681	\$3,670	\$0	\$103,443
2027	\$89,415	\$11,113	\$1,681	\$3,670	\$0	\$105,879
2028	\$91,918	\$11,113	\$1,681	\$1,074	\$0	\$105,786
2029	\$94,492	\$11,113	\$1,681	\$1,074	\$0	\$108,360
2030	\$97,138	\$11,113	\$1,681	\$1,074	\$0	\$111,006
2031	\$99,858	\$11,113	\$1,681	\$1,074	\$0	\$113,726
TOTAL	\$800,063	\$103,275	\$16,806	\$24,638	\$0	\$944,782

¹ If manufacturers of aftermarket parts do not pass through fees to purchasers of the products, these costs will not be borne by State government purchasers.

d) Total Fiscal Impacts on State Government Due to the Proposed Regulation

Table IX-I-2-5 shows the complete fiscal impact of this Proposed Regulation upon the State of California.

Table IX-I-2-5. Total Fiscal Impact on State Government Due to the Proposed Regulation

Year	Increase in Revenue to CARB (\$ gain)	Increase in Sales Tax Revenue (\$ gain)	Costs from State Purchases (\$ loss)	Total Fiscal Impact of Proposed Regulation
2022	\$9,811,698	\$89,227	-\$31,785	\$9,869,140
2023	\$18,693,514	\$259,225	-\$64,954	\$18,887,785
2024	\$27,566,855	\$509,916	-\$98,770	\$27,978,001
2025	\$28,018,633	\$764,716	-\$101,074	\$28,682,275
2026	\$28,562,384	\$1,024,460	-\$103,443	\$29,483,401
2027	\$29,122,296	\$1,200,070	-\$105,879	\$30,216,487
2028	\$29,700,964	\$1,300,171	-\$105,786	\$30,895,349
2029	\$30,333,672	\$1,325,332	-\$108,360	\$31,550,644
2030	\$30,984,172	\$1,352,301	-\$111,006	\$32,225,467
2031	\$31,652,886	\$1,380,405	-\$113,726	\$32,919,565
TOTAL	\$264,447,074	\$9,205,823	-\$944,783	\$272,708,114

J. Macroeconomic Impacts

The modeling methodology and REMI specifications can be found in the SRIA, published on the California Department of Finance's website on the Major Regulations page.

1. The creation or elimination of jobs within the State of California.

The following table presents the impact of the Proposed Regulation on total employment in California across all industries. Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work for all industries. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included. The employment impacts represent the net change in employment, which consist of positive impacts for some industries and negative impacts for others. The Proposed Regulation is estimated to result in a positive job growth from 2022 to 2028 then negative job growth from 2029 to 2031. These changes in employment represent less than 0.01 percent of baseline California employment. There is an increase in employment of 491 jobs in the year with the greatest positive impact, and the smallest increase being 84 jobs in the year as the smallest impact with no job losses projected during the period of analysis.

Table IX-J-1. California Employment Impacts of the Proposed Regulation

California Employment Impacts			
Calendar Year	Change in Total Jobs	Change	California Employment
2022	366	0.00%	21,758,117
2023	448	0.00%	22,604,362
2024	491	0.00%	23,202,217
2025	357	0.00%	23,781,813
2026	223	0.00%	24,350,687
2027	139	0.00%	24,725,833
2028	97	0.00%	24,712,297
2029	85	0.00%	24,753,756
2030	84	0.00%	24,751,334
2031	90	0.00%	24,765,475

All of the Industries showing impacts to employment in individual years at levels over 25 jobs per individual year in the period of analysis are as follows: Construction (NAICS 23) Manufacturing (NAICS 31-33), Motor Vehicle Manufacturing (NAICS 3361), Retail and Wholesale Trade (NAICS 42, 44-45), Transportation (NAICS 48).

2. The creation of new business or the elimination of existing businesses within the State of California.

The Proposed Regulation is not anticipated to directly cause the creation or elimination of any businesses. No businesses are expected to be created, because the Proposed Regulation does not incentivize new business creation. Rather, it only changes the fee structure for CARB's mobile source certification and compliance programs. No businesses are expected to be eliminated, since costs will be passed on to purchasers of the products. In addition, as costs are passed on the end user experiences a relatively small impact. The typical fees per unit are less than one percent of average purchase price and were determined to have a negligible impact on purchasing behavior and emission activity.

While the REMI model cannot directly estimate the creation or elimination of businesses, changes in output for the California economy can be used to understand some potential inputs. Gross output is used as a measure for business impacts because it represents an industry's sales or receipts and tracks the total quantity of goods or services produced in a given time period. Output growth is the sum of output in each private industry and state and local government as it contributes to California's GSP, and is affected by production cost and demand changes. As production cost increases or demand decreases, output is expected to contract, but as production costs decline or demand increases, industry would likely experience output growth. Output growth indicates more favorable circumstances for the formation of new businesses.

As shown in the table below, the Proposed Regulation is anticipated to have a very negligible impact on California Output, relative to the California economy. For each year in the lifetime, changes in the output of the Californian economy are measured in incremental changes in dollars, percentages and the aggregate total output in the Californian Economy. As the percentage change for each year is less than 0.01 percent and is therefore unlikely to affect business formation or elimination.

Table IX-J-2. California Output Impacts of the Proposed Regulation

California Output Impacts			
Calendar Year	Change in Total Value (2018M\$)	% Change	Agg. Total Value (2018M\$)
2022	62.2	0.00%	4,273,546
2023	74.91	0.00%	4,425,730
2024	81.95	0.00%	4,599,802
2025	58.04	0.00%	4,767,863
2026	33.63	0.00%	4,931,115
2027	17.41	0.00%	5,041,181
2028	8.46	0.00%	5,095,697
2029	4.91	0.00%	5,165,307
2030	4.91	0.00%	5,231,806
2031	3.91	0.00%	5,305,182

3. The expansion of businesses currently doing business within the State of California.

Please refer to Section J.2.

4. Significant Statewide adverse economic impact directly affecting business, including ability to compete

As directed by SB 854, staff considered information received from manufacturers on the effects on their business models and product sales when developing this proposal. CARB worked with manufacturers to evaluate effects on business and developed lower cost fees to lessen the burden on manufacturers where needed. Based on the data within the tables in this subchapter, CARB staff has determined that these increased costs will not create significant adverse impacts to business or their ability to compete.

Tables IX-B-1 through IX-B-3 show costs to manufacturers that have indicated they will pass all costs to purchasers of mobile sources. Tables IX-B-4 and IX-B-5 shows costs to manufacturers that have indicated they will not pass any costs to purchasers. Average Cost Per Year is the average cost per year from 2022 through 2031. Estimated costs that are less than \$1,000 per year are rounded to the nearest \$100. Estimated costs that are greater than \$1,000 are rounded to the nearest \$1,000.

Table IX-J-3. Average Yearly Costs Per On-Road Manufacturer that are Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Fuel Fired Heater	5	\$100
	On-Road Heavy-Duty Exempt Engines	3	\$350
\$1,001-\$10,000	Zero-Emission Powertrains	9	\$1250
	Heavy-Duty ZEVs that use the conventional HD GHG Phase II Path	30	\$1,850
\$10,001-\$50,000	Heavy-Duty GHG Trailer/Aerodynamic Devices	18	\$19,500
	Gasoline Heavy-Duty Vehicles – evaporative emission certification	9	\$21,000
	Medium- and Heavy-Duty Otto-Cycle Engines	16	\$25,000
\$50,001-\$100,000	Street-Use Motorcycles	42	\$36,000
	Heavy-Duty Vehicles – GHG certification	30	\$36,000

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
> \$100,000	Medium- and Heavy-Duty Compression Ignition Engines	16	\$164,000
	Cars, Light-Duty Trucks, Medium-Duty Vehicles	43	\$310,000

Table IX-J-3. Average Yearly Costs Per Off-Road and Evaporative Component Manufacturer that are Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Electric Golf Carts	4	\$800
\$1,001-\$10,000	Equipment that uses Large Off-Road Spark-Ignition Engines - evaporative emission certification	15	\$1,000
	Off-Highway Recreational Vehicles	242	\$3,000
	SORE Equipment - Evaporative Certification	209	\$3,000
	Evaporative Components for SORE Equipment	105	\$3,000
	Portable Fuel Containers	8	\$6,000
	Small Off-Road Spark-Ignition Engines	179	\$9,000
\$10,001-\$50,000	Large Off-Road Spark-Ignition Engines	19	\$11,000
	Off-Road Compression Ignition Engines	51	\$25,000
> \$50,000	None		

Table IX-J-4. Average Yearly Costs Per Manufacturer of Diesel Emission Control Strategy Retrofits and At-Berth Technology that are Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$50,000	Diesel Emission Control Strategy Retrofits – other than locomotive	33	\$21,000
	Diesel Emission Control Strategy Retrofits – locomotive	9	\$38,000
> \$50,000	At-Berth Alternative Emission Control Technology	4	\$52,000

Table IX-J-5. Average Yearly Costs Per Marine Watercraft Manufacturer that are Not Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Evaporative Components for Spark-Ignition Marine Watercraft	22	\$500
\$1,001-\$10,000	Spark-Ignition Marine Watercraft - evaporative emission certification	68	\$2,000
	Spark-Ignition Marine Engines	31	\$6,000
> \$10,000	None		

Table IX-J-6. Average Yearly Costs Per Aftermarket Parts Manufacturer that are Not Expected to be Passed Along to Purchasers.

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$0-\$1,000	Experimental Permit	74	\$100
	Motorcycle Critical Emission Control Parts	12	\$700

Average Yearly Cost Range Per Manufacturer	Type of Manufacturer	Number of Manufacturers	Estimated Average Yearly Cost Per Manufacturer
\$1,001-\$10,000	Aftermarket Parts - (other than listed separately)	231	\$2,000
	Auxiliary Fuel Tanks	17	\$2,000
	Aftermarket Catalytic Converters and Diesel Particulate Filters	23	\$5,000
	Alternative Fuel Retrofits	27	\$7,000
> \$10,000	none		

5. The competitive advantages or disadvantages for businesses currently doing business within the state.

No advantages or disadvantages were identified.

6. The increase or decrease of investment in the state.

Private domestic investment consists of purchases of residential and nonresidential structures and of equipment and software by private businesses and nonprofit institutions. It is used as a proxy for impacts on investments in California because it provides an indicator of the future productive capacity of the economy.

In 2031, the Proposed Regulation is anticipated to result in a decrease in total Private Domestic Investment of \$11 million, less than 0.01 percent of baseline private domestic investment. The increase in investment activity is due to the reallocated state spending. In no years, is the decrease in investment growth estimated to exceed 0.01 percent of baseline private domestic investment.

Table IX-J-6. Impact of the Proposed Regulation on California Investment

California Investment Impacts			
Calendar Year	Change in Total Investment (2018\$M)	% Change	California Investment (2018\$M)
2022	5.08	0.00%	320,693
2023	5.53	0.00%	339,120
2024	4.06	0.00%	365,143
2025	-1.02	0.00%	392,976
2026	-6.98	0.00%	421,119
2027	-10.76	0.00%	434,419
2028	-12.61	0.00%	440,248
2029	-12.81	0.00%	447,337
2030	-12.11	0.00%	452,650
2031	-10.96	0.00%	458,897

7. The incentives for innovation in products, materials, or processes.

Senate Bill 854, which provided CARB with authority to expand the scope of mobile source certification and compliance fees, directed CARB to work with impacted industries and to consider a number of factors when adopting a schedule of fees. These factors included consideration of a product's potential impact on emissions.

In addition, Executive Order N-79-20 issued by Governor Newsom directing CARB to develop and propose regulations and strategies to reach, if economically and technically feasible, the goal of 100 percent zero-emission in-state sales of new passenger cars and light trucks by 2035.

Consistent with these directives, the Proposed Regulation includes seven low-cost certification fees for zero-emission technologies, which are 25 percent of the Base Fees.

8. The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

The proposed regulation helps establish a stable source of funding for CARB's mobile source certification and compliance program.

X. Evaluation of Regulatory Alternatives

Government Code section 11346.2, subdivision (b)(4) requires CARB to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons for rejecting those alternatives. This section discusses alternatives evaluated and provides reasons why these alternatives were not included in the proposal. As explained below, no alternative proposed was found to be less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing law. The Board has not identified any reasonable alternatives that would lessen any adverse impact on small business.

A. Alternative 1 – Set Fee Equal To Total Cost: Do Not Provide Discounts

Alternative 1 would establish fees that are equal to 100 percent of certification and compliance costs to CARB. This alternative was selected to maximize the fiscal savings to the State, which would eliminate the need for additional funding to be diverted from other sources to cover the cost of CARB's certification and compliance activities.

Currently for FY 2019-20 and FY 2020-21, CARB collected a little more than \$10 Million per year for ongoing compliance efforts in the newly established Certification and Compliance Fund (CCF). Total compliance efforts, department-wide, have been estimated by CARB at approximately \$50 Million. Staff evaluated assessing fees to cover the total cost of the program implementation of each category with no fee discounts.

1. Costs

Under Alternative 1, the total fees collected for all mobile source categories would be \$157,445,547 higher over the 2022 through 2031 timeframe than will be collected under the proposed regulation. When a 5 percent financing cost is added for purchases by businesses and individuals, the total added cost of Alternative 1 compared to the proposed regulation is \$395,269,295. These costs are broken down per year in Appendix B Tables F-1-1 and F-1-21.

2. Benefits

The benefit of Alternative 1 is that the total mobile source certification fees collected from manufacturers would equal the total cost to CARB for certification and compliance activities. This Alternative would create a fiscal savings to the State of \$157,445,547 over the 2022-2031 timeframe. As there are no emissions benefits accrued under this alternative, there are no benefits besides fiscal cost savings.

3. Economic Impacts

Alternative 1 would impose the same standards as the Proposed Regulation but with greater scope in collecting fees compared to the Proposed Regulation. The larger scope of collecting fees would increase the total revenue or fiscal cost savings of the government of California during the 2022 through 2031 time period. Appendix B

(Revised SRIA, Table F-1-22, page 72) shows the impact on select macroeconomic indicators in the economy. The analysis of Alternative 1 shows that the major macroeconomic indicators would decrease from 2022 to 2031. The major macroeconomic indicators show a greater increase in economic impacts by Alternative 1 compared with the Proposed Rulemaking and Alternative 2 during the period of analysis. Overall, Alternative 1 would have greater impacts to the Californian economy than the impacts of Alternative 2 and the Proposed Regulation.

4. Cost-Effectiveness

Neither this proposed regulation nor either of the Alternatives (Alternative 1 and Alternative 2) change the stringency of current emission standards, have emissions impacts nor do any of these create new emission standards. Therefore, this assessment is not applicable to this proposed regulation or to either of the Alternatives.

5. Reason for Rejecting

On June 27, 2018, new legislation (SB 854) was passed by the legislature and signed by the Governor, which allows CARB to adopt a schedule of fees to cover all or part of CARB's reasonable costs associated with certification, audit, and compliance of off-road or non-vehicular engines and equipment, aftermarket parts, and emissions control components sold in the State (limited to activities covered by HSC sections 38560, 43013 and 43018, on-road aftermarket parts under Vehicle Code section 27156(h)). This legislation provides CARB the authority to assess fees to cover their reasonable costs on all off-road and other mobile sources programs not currently covered under the existing fee regulation authority (HSC 43019). SB 854 provided criteria to consider when determining the fee. When assessing a fee, SB 854 states that CARB shall work with impacted industries and consider all of the following:

- Potential impacts on manufacturers that may result from the fee.
- Size of the manufacturer compared to the industry average served by the product on which the fee will be assessed.
- Number of certifications requested and consistency with prior year certifications by the manufacturer.
- Complexity of the regulated category for which a certification is requested.
- A product's potential impact on emissions, and the complexity of the evaluation required, including, for an aftermarket part, determining there is no risk to the environment when the aftermarket part is in actual use.
- Anticipated change in the number of certifications issued annually.

- Potential impacts for enacting a partial fee that does not fully cover the state board's costs for activities associated with certification, including the impacts on the processing time for certification.

CARB's fee proposed regulation has been discussed with the industry through the workshop process to fund up to about \$50 Million of these programs with the new Certification and Compliance Fund. This is an achievement for the department because this regulatory effort has been historically funded through existing funding (which currently includes only about \$10 Million in fees). Although we may not have a 100% (full-cost) recovery at the time, this is what CARB reasonably expects that the market can bear based on their feedback from industry and staff's analysis. CARB will strive for getting this program to as close to net-zero when possible in the future through planning and development of our existing and future programs.

CARB rejects Alternative 1 because it does not adequately consider the potential impacts on manufacturers, especially California's small business, as required by statute (listed above). Alternative 1 does not take into consideration the impact of fees for products that have cleaner emissions and zero-emissions, less complex certification and compliance requirements and reviews, and the impact on affected businesses. Alternative 1 does not mitigate manufacturer impacts due to price competition in the market or low product sales volume or cost. Manufacturers stated they would be forced to absorb the cost of the fee (not pass the cost to the consumer) and may limit product offerings in California. This could lead to the increased use of older products and deterioration of CARB's emission goals.

B. Alternative 2 – Adopt Same Fees As U.S. EPA

Alternative 2 would align CARB's certification fees and fee structure with that currently used by U.S. EPA.⁹ This Alternative was selected based on suggestion from the regulated industry. Currently, U.S. EPA has fees for certification of on-road light-duty vehicles, heavy-duty vehicles, motorcycles, off-road motorcycles, forklifts, off-road engines, marine watercraft, and evaporative components. Although aftermarket parts are sold nationally, U.S. EPA does not certify them and thus does not charge certification fees for this mobile source category. There are also no federal certification fees for either Diesel Emission Control Strategies Retrofits or At-Berth Alternative Emission Control Technology, since these categories only apply to emission control technologies that are sold to meet the requirements of California-specific regulations. Table X-2-1 through X-2-6 (see following pages) lists the fees for the proposed regulation and 2020 model year U.S EPA fees.

⁹Environmental Protection Agency, 2019. Adjustment of the Motor Vehicle and Engine Compliance Program Fees for Calendar Year 2020.
https://iaspub.epa.gov/otaqpub/display_file.jsp?docid=46428&flag=1

Table X-2-1. U.S. EPA and Proposed CARB On-Road Fees

Category	U.S. EPA	CARB Proposed On-Road Certification Fee Type				
On-Road		Base Fee	Partial Carry- over	Carry- over	Low CA production Manufacturer/ Low California Production for Sale Engine Family	Zero- Emission
Light-duty and Medium- duty Vehicle	\$27,347	\$46,509	\$23,254	\$11,627	-	\$11,627
HD CI and MD CI engine	\$56,299	\$121,265	\$60,632	\$30,316	-	-
HDO and MDO engine	\$56,299	\$42,443	\$21,222	\$10,611	-	-
Incomplete MD/HD Evaporative vehicle	\$563	\$14,935	\$7,468	\$3,734	-	-
HD GHG Vehicle	NA	\$17,720	\$8,860	\$4,430	\$8,860/-	\$4,430
HD GHG Trailer/Aero	NA	\$3,936	-	-	-	-
Zero-Emission Powertrain	NA	-	-	-	-	\$977
HD exempt engine	NA	\$98	-	-	-	-
Fuel-fire Heaters	NA	\$293	-	-	-	-
Motorcycle	\$1,852	\$17,447	\$8,723	\$4,362	\$13,085/\$872	-

Table X-2-2. U.S. EPA and Proposed CARB Off-Road Fees

Category	U.S. EPA	CARB Proposed Certification Fee Type				
Off-Road		Base Fee	Partial Carry- Over	Carry- Over	Low CA Production Manufacturer	Zero- Emission
Zero-emission Golf Cart	NA	-	-	-	-	\$842
LSI Engine	\$563	\$4,511	\$2,255	\$1,128	\$3,383	-
LSI Evaporative	\$397	\$1,099	\$550	\$275	\$824	-
OHRV	\$563	\$2,988	\$1,494	\$747	\$2,241	\$747
OHCI	\$2940	\$4,153	\$2,076	\$1,038	-	-
SORE Engine	\$563	\$2,603	\$1,302	\$651	-	\$651
SORE Evaporative	\$397	\$1,212	\$606	\$303	-	-
SIME	\$563	\$1,478	\$739	\$340	\$1108	-
SIMW	\$397	\$1,043	\$522	\$261	\$782	-

Table X-2-3. U.S. EPA and Proposed CARB Evaporative Component Fees

Category	U.S. EPA	CARB Proposed Certification Fee Type		
Evaporative Components		Base Fee	No Change Renewal	Adding Models
Portable Containers	NA	\$6,827	\$1,707	\$1,707
SORE Evap Components	\$397	\$3,771	\$943	\$943
OHRV and SIMW Evap Components	\$397	\$917	-	\$229

Table X-2-4. U.S. EPA and Proposed CARB Aftermarket Part Program Fees

Category	U.S. EPA	CARB Proposed Certification Fee Type				
Aftermarket Parts		Base Fee	Carry Over	Category I, Category XIII	Small Business	Zero-Emission
Alternative Fuel Retrofits	NA	\$5,161	-	-	\$3,871	\$1,290
Experimental Permits	NA	\$195	-	-	-	-
Aftermarket parts-general and Motorcycle Critical	NA	\$1,000	\$500	\$500	\$500	-
Catalytic Converters and DPFs	NA	\$10,000	\$2,500	-	\$5,000	-

Table X-2-5. U.S. EPA and Proposed CARB Retrofit Program Fees

Category	U.S. EPA	CARB Proposed Certification Fee Type					
Retrofits		Preliminary Application Fee for New Verification or Major Modification	Final Application Fee for New Verification or Major Modification	Executive Order Fee for New Verification or Major Modification	In-Use Compliance Field Testing Fee	In-Use Compliance Emissions Testing Fee	Minor Modification Fee
Diesel Emission Control Strategy (DECS)	NA	\$48,075	\$24,038	\$24,038	\$12,019	\$24,038	\$24,038
Small Business	NA	\$36,056	\$18,028	\$18,028	\$9,014	\$18,028	\$18,028
Locomotive	NA	\$18,434	\$73,738	-	-	-	-
Small Business	NA	\$18,434	\$73,738	-	-	-	-

Table X-2-6. U.S. EPA and Proposed CARB At-Berth Program Fees

Category	U.S. EPA	CARB Proposed Certification Fee				
At-Berth		Test Plan review	Application Fee	CEMS review	Design Change fee	Minor Amendment
Base Fee	NA	\$10,158	\$25,394	\$254	\$10,158	\$2,032
Small Business	NA	\$7,618	\$19,046	\$190	\$7,618	\$1,524

1. Costs

Under Alternative 2, the total fees collected for all mobile source categories would be \$174,664,772 lower over the 2022 through 2031 timeframe than will be collected under the proposed regulation. This deficit would need to be funded by diverting funds from other existing funds. When a 5 percent financing cost is added for purchases by businesses and individuals, the total cost of Alternative 2 is \$81,418,019 lower than the cost of the proposed regulation. These costs are broken down per year in Appendix B (Revised SRIA, Tables F-2-2 and F-2-3, page 78). As previously mentioned, U.S. EPA does not charge certification fees for aftermarket parts, diesel emission control strategies, and At-Berth emission control technologies. Consequently, under Alternative 2, the cost per unit for all would be \$0, and the total fee by category for all aftermarket parts would also be \$0.

2. Benefits

The benefit of Alternative 2 would be lower overall costs for purchasers of mobile sources, both on a per unit cost and on a total cost basis. This Alternative would create a fiscal loss to the State of \$174,664,772 over the 2022-2031 timeframe compared to the Proposed Regulation. As there are no emissions benefits under this alternative, the cost savings would constitute the benefits of this Alternative.

3. Economic Impacts

Alternative 2 would implement a smaller scope of fee collection in 2022 and 2031 compared to the Proposed Regulation and Alternative 1. The total amortized cost of Alternative 2 (\$81 million) would be 66 percent lower than the total amortized cost of the Proposed Regulation (\$233 million) over the years between 2022 and 2031.

4. Cost-Effectiveness

Neither this proposed regulation nor either of the Alternatives (Alternative 1 and Alternative 2) change the stringency of current emission standards, have emissions impacts nor do any of these create new emission standards. Therefore, this assessment is not applicable to this proposed regulation or to either of the Alternatives.

5. Reason for Rejecting

Alternative 2 will fund up to \$21 million per year on average. Total mobile sources certification and compliance efforts, department-wide, have been estimated by CARB at close to \$50 million annually. CARB's fee proposed regulation will fund up to about \$39 million of these programs with the new Certification and Compliance Fund. U.S. EPA's fee program is based on a 2004 rulemaking. Since 2004 a significant number of new regulatory efforts and higher emission standards have been added to California's program to meet our clean air goals. California's efforts to meet the ambient air quality standards has led to a more stringent program from the federal level. U.S. EPA's program utilizes CARB's on-board diagnostics and aftermarket parts programs for their certification and compliance efforts. In addition, CARB's proposed regulation collects fees from additional categories (aftermarket parts, some off-road categories, and retrofits) not included in U.S. EPA fee structure. These issues result in a significant difference in workload effort and costs between CARB's and U.S. EPA's programs. Using U.S. EPA's fee structure would lead to the collection of \$21 Million in fees, a deficit of about \$18 million per year in from the proposed regulation.

CARB rejects Alternative 2 because the U.S EPA fee structure and program does not adequately reflect CARB's workload effort and does not sufficiently cover CARB's reasonable costs. This alternative does not collect reasonable costs as required by statute. As with Alternative 1, it does not take into consideration the impact of fees for products that have cleaner emissions and zero-emissions and the impact on the affected businesses.

C. Small Business Alternative

The regulatory proposal incorporates small business options. The Board has not identified any reasonable alternatives that would lessen any adverse impact on small business.

D. Performance Standards in Place of Prescriptive Standards

The regulatory proposal does not mandate the use of specific technologies or equipment, or prescribe specific actions or procedures for equipment where performance standards are applicable.

E. Health and Safety Code Section 57005 Major Regulation Alternatives

CARB estimates the proposed regulation will have an economic impact on the state's business enterprises of more than \$10 million in one or more years of implementation. CARB will evaluate alternatives submitted to CARB and consider whether there is a less costly alternative or combination of alternatives that would be equally as effective in achieving increments of environmental protection in full compliance with statutory mandates within the same amount of time as the proposed regulatory requirements, as required by Health and Safety Code section 57005.

XI. Justification for Adoption of Regulations Different from Federal Regulations Contained in the Code of Federal Regulations

Both U.S. EPA and CARB fee programs are based on the actual costs to conduct the activities to ensure mobile source certification and compliance. U.S. EPA surveyed their certification and compliance program staff to determine the amount of work that was conducted in various parts of their mobile source certification and compliance programs. Their fee determination is based on costs per certification approval. The program costs were based on 2002 workload and testing costs. The regulation was adopted in 2003 and the fees are annually adjusted by the number of approvals and a cost of living index. CARB's program, however, is based on 2018/2019 activities and 2019/2020 labor and testing costs.

Since 2002, CARB has adopted or enhanced many emission control programs for a wider variety of emission sources to meet health protective ambient air standards. As shown on Table X-2-1 above, there are about 14 additional fee categories which U.S. EPA does not collect fees. For example, in that time frame, U.S. EPA did not have programs for the approval of on-board diagnostics, certification of aftermarket parts, or certification of At-Berth CARB approved emission control strategy (CAECS). In addition, some of the CARB certification and compliance programs require more testing or have additional compliance elements compared to the U.S. EPA programs, resulting in more costs to implement. Examples of these include in-use emission testing and warranty programs for cars, trucks, aftermarket parts, diesel emission control strategies and other off-road equipment. Therefore, using U.S. EPA's fee structure would result in insufficient reimbursement for the added certification and compliance work that CARB is now conducting.

U.S. EPA certification fee program does not in any way reimburse CARB for its costs to conduct its own mobile source certification and compliance program. In addition, the CARB Mobile Source Certification and Compliance program is broader and covers additional emission sources which are not covered in the U.S. EPA program, therefore there are no federal regulations that address the same issues as CARB's proposed regulations.

XII. Public Process for Development of the Proposed Action (Pre-Regulatory Information)

Consistent with Government Code sections 11346, subdivision (b), and 11346.45, subdivision (a), and with the Board's long-standing practice, CARB staff held public workshops and had other meetings with interested persons during the development of the proposed regulation. These informal pre-rulemaking discussions provided staff with useful information that was considered during development of the regulation that is now being proposed for formal public comment.

To support development of this proposed regulation, CARB staff held a number of meetings with representatives from industry, as well as four public workshops to

engage stakeholders and obtain input on the proposed changes to the regulations. The workshop hosted on November 21-22, 2019, and February 20-21, 2020, included a solicitation of alternatives to all stakeholders in the presentations delivered. To reach a wider audience, the workshops were also webcasted. These meetings/workshops are listed in Table XII-1. In addition, CARB staff also participated in numerous individual meetings with vehicle, equipment, component, aftermarket parts, and retrofit manufacturers to obtain business information and discuss the proposed changes.

Table XII-1. Regulatory Development Timeline

Date	Meeting
April 30, 2019	Public Workshop on Rulemaking
May 20, 2019	Meeting with MECA ¹
May 28, 2019	Small Off-Road Engine Industry Working Group ²
June 5, 2019	Meeting with SEMA ³
November 21-22, 2019	Public Workshop on Rulemaking
February 20-21, 2020	Public Workshop on Rulemaking
July 30-31, 2020	Public Workshop on Rulemaking and SRIA inputs
September 9, 2020	Meeting with MIC ⁴
November 19-20, 2020	Public Workshop on Rulemaking
December 2, 2020	Meeting with MECA ¹

¹ Manufacturers of Emission Controls Association

² This group includes government, industry, environmental groups and individuals.

³ Specialty Equipment Market Association

⁴ Motorcycle Industry Council

XIII. Acronyms and Abbreviations

AB:	Assembly Bill
AB 965:	California Assembly Bill 965 (Stats. 1981, Ch. 1185)
AETS:	Automotive Emission Test Specialist (California State Civil Service Job Classification)
AETS Sup:	Automotive Emission Test Supervisor (California State Civil Service Job Classification)
AGPA:	Associate Governmental Program Analyst (California State Civil Service Job Classification)
AMP:	Aftermarket Parts
APCF:	Air Pollution Control Fund
APS:	Air Pollution Specialist (California State Civil Service Job Classification)
APU:	Auxiliary power unit
ARE:	Air Resources Engineer (California State Civil Service Job Classification)
ARFR:	Air Resources Field Representative (California State Civil Service Job Classification)
ARS:	Air Resources Supervisor (California State Civil Service Job Classification)
ART:	Air Resources Technician (California State Civil Service Job Classification)
ATV:	All-terrain Vehicle
BAU:	Business As Usual
CAECS:	CARB Approved Emission Control Systems
CARB:	California Air Resources Board
CCF:	Certification and Compliance Fund
CCR:	California Code of Regulations
CEQA:	California Environmental Quality Act
CHC:	Commercial Harbor Craft
CHE:	Cargo Handling Equipment
CI:	Compression Ignition (e.g., diesel engine)
CPI:	Consumer Price Index
DECS:	Diesel Emission Control Strategy
DOF:	Department of Finance
DPF:	Diesel Particulate Filter
ECG:	Emission Control Group
EO:	Executive Order
FEL:	Family Emission Limit
FFH:	Fuel-fired Heater
GHG:	Greenhouse Gas
Gov. Code:	Government Code
HD:	Heavy-duty
HDO:	Heavy-duty Otto-cycle
HDV:	Heavy-duty Vehicle
HSC:	California Health and Safety Code
LD:	Light-duty
LDT:	Light-duty Truck
LSI:	Large Spark-Ignition Engine

MC:	Motorcycle
MD:	Medium-duty
MDV:	Medium-duty Vehicle
MECA:	Manufacturers of Emission Controls Association; Member companies include leading manufacturers of emission control and efficiency technologies for all mobile sources.
MIC:	Motorcycle Industry Council
MVA:	Motor Vehicle Account
MY:	Model Year
NAICS:	North American Industry Classification System
NOx:	Oxides of Nitrogen
OBD:	On-board Diagnostics
OEM:	Original Equipment Manufacturer
OFMC:	Off-road Motorcycle
OFRSV:	Off-road Sport Vehicle
OFRUV:	Off-road Utility Vehicle
OHRV:	Off-highway Recreational Vehicles
ORCI	Off-road Compression Ignition
PC:	Passenger Car
PEMS:	Portable Emission Measurement Systems
PFC:	Portable Fuel Container
PM:	Particulate Matter
REMI:	Regional Economic Models, Inc.
RSQE:	University of Michigan's Research Seminar in Quantitative Economics
RTG:	Rubber Tired Gantry
SAPS:	Staff Air Pollution Specialist (California State Civil Service Job Classification)
SB:	Senate Bill
SCAR:	Sand Car
SEMA:	Specialty Equipment Market Association; Member companies include manufacturers, distributors, resellers, and promoters of automotive specialty-equipment parts and accessories.
SI:	Spark Ignition (e.g., gasoline engine)
SIME:	Spark-ignition Marine Engine
SIMW:	Spark-ignition Marine Watercraft
SORE:	Small Off-road Engine
SRIA:	Standardized Regulatory Impact Assessment
SS:	Stationary Compression Ignition Engines
subd.	Subdivision
VIRF:	Vehicle Inspection and Repair Fund
TRU:	Transport Refrigeration Unit
U.S. EPA:	United States Environmental Protection Agency
VC:	Vehicle Code
ZEPCert:	Zero-Emission Powertrain (ZEP) test procedure certification
ZEV:	Zero-emission Vehicle

XIV. References

- California Air Resources Board, 2003. Staff Report: Initial Statement of Reasons for the Proposed Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate. <https://ww3.arb.ca.gov/regact/trude03/revisor.pdf> . Accessed March, 2020.
- California Air Resources Board, 2003. Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Airborne Toxic Control Measure for Stationary Compression-Ignition Engines. <https://ww3.arb.ca.gov/regact/statde/isor.pdf>. Accessed March, 2020.
- California Air Resources Board, 2007. Technical Support Document: Initial Statement of Reasons for Proposed Rulemaking for the Proposed Regulation for Commercial Harbor Craft. <https://ww3.arb.ca.gov/regact/2007/chc07/tsd.pdf>. Accessed March, 2020.
- California Air Resources Board, 2016a. Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the Proposed Amendments to the Large Spark-Ignition Engine Fleet Requirements Regulation. <https://ww3.arb.ca.gov/regact/2016/sparkignition2016/largesparkisor.pdf>. Accessed March, 2020
- California Air Resources Board, 2016b. Initial Statement of Reasons For Public Hearing To Consider The Proposed Amendments To The Large Spark-Ignition Engine Fleet Requirements Regulation.
- California Air Resources Board, 2017. Further Detail on Cost and Economic Analysis" for the Phase 2 and Tractor-Trailer Amendments Regulation. <https://ww3.arb.ca.gov/regact/2018/phase2/apph.pdf>. Accessed September, 2020.
- California Air Resources Board, 2018a. Economic Analysis For the Proposed Zero-Emission Airport Shuttle Regulation. https://ww3.arb.ca.gov/regact/2019/asb/appc.pdf?_ga=2.42799973.1516358679.1597432500-175292052.1588026090. Accessed August, 2020.
- California Air Resources Board, 2018b. Staff Report: Initial Statement of Reasons for Zero-Emission Powertrain Certification Regulation. https://ww3.arb.ca.gov/regact/2019/zepecert/isor.pdf?_ga=2.118321676.405845639.1599769688-2116452653.1597169257. Accessed September, 2020.
- California Air Resources Board, 2019. Survey of Small Off-Road Engines (SORE) Operating within California: Results from Surveys with Four Statewide Populations. <https://ww3.arb.ca.gov/msprog/offroad/sore/AbstractExecutiveSummary.pdf>. Accessed July, 2020

- California Air Resources Board, 2020a. Control Measure for Ocean-Going Vessels At-Berth. <https://ww3.arb.ca.gov/regact/2019/ogvatberth2019/fro.pdf>.
- California Air Resources Board, 2020b. Original SRIA Submitted to DOF: Heavy-Duty Omnibus Rulemaking Initial Statement of Reasons. <https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/appc1.pdf>. Accessed August, 2020.
- California Air Resources Board, 2020c. Procedures for Exemption of Add-On And Modified Part(s) for On-Road Vehicles/Engines. <https://ww3.arb.ca.gov/board/res/2020/res20-21.pdf>.
- California Air Resources Board. Advanced Clean Trucks. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>.
- California Air Resources Board. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. https://ww2.arb.ca.gov/sites/default/files/classic/msprog/truck-idling/13ccr2485_09022016.pdf. Accessed March, 2020.
- California Air Resources Board. Draft Proposed Amendments to the Airborne Toxic Control Measure for Commercial Harbor Craft – Draft Cost Analysis for Standardized Regulatory Impact Assessment, January 28, 2021.
- California Air Resources Board. Form 399 for the Public Hearing to Consider Proposed Amendments to the Evaporative Emission Requirements for Small Off-Road Engines. <https://ww3.arb.ca.gov/regact/2016/sore2016/sorenotice.pdf>.
- California Air Resources Board. Initial Statement of Reasons for Proposed Rulemaking: Proposed Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer Greenhouse Gas Regulation. <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>. Accessed March, 2020.
- California Air Resources Board. Off-highway emission inventory model: RV2018. https://ww3.arb.ca.gov/msei/pc2014_technical_document.pdf.
- California Air Resources Board. OFFROAD2007 Model. <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-modeling-tools>.
- California Air Resources Board. Off-Road Diesel Equipment Models. <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-documentation-road>.
- California Air Resources Board. PC2014 Technical Document. https://ww3.arb.ca.gov/msei/pc2014_technical_document.pdf.

- California Air Resources Board. SORE2020 Model.
https://ww2.arb.ca.gov/sites/default/files/2020-09/SORE2020_Technical_Documentation_2020_09_09_Final_Cleaned_ADA.pdf
- California Air Resources Board Staff. Data from Verified Diesel Emission Control Systems (VDECS) database. Email conversation on March 13, 2020.
- California Code of Regulations CCR, 2011a. Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards. Title 13, CCR, Section 2479.
- California Code of Regulations CCR, 2011b. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles. Title 13, CCR, Section 2025.
- California Code of Regulations CCR. Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port. Title 13, CCR, Section 2299.3.
- California Code of Regulations CCR. Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Title 13, CCR, Section 2477.
- California Code of Regulations CCR. Calculation of Total Revenues to be Assessed for Each Fiscal Year. Title 13, CCR, Section 1991.
- California Department of Finance, 2020.
<http://www.dof.ca.gov/Forecasting/Economics/Indicators/Inflation/>. Accessed February, 2020.
- California Department of Finance.
http://www.dof.ca.gov/Forecasting/Economics/Major_Regulations/Major_Regulations_Table/documents/SRIA_with_Appendices.
- California Department of General Services, 2019. State Administrative Manual, 6600:Standardized Regulatory Impact Assessment For Major Regulations- Order of Adoption.
https://www.dgsapps.dgs.ca.gov/documents/sam/SamPrint/new/sam_master/sam_master_File/chap6000/6600.pdf. Accessed November, 2019.
- California Department of Motor Vehicles, 2020. 2014-2018 DMV data used for purchase splits between multiple vehicle classes. Accessed February, 2020.
- California Department of Tax and Fee Administration, 2020. Tax Rates by County and City. <https://cdtfa.ca.gov/formspubs/cdtfa95.pdf>. Accessed June, 2020.

California Energy Commission Staff and California Air Resources Board Staff. Revised Transportation Energy Demand Forecast, 2019-2030. Email conversation on April 15, 2020.

California Government. State Agency Listing. <https://www.ca.gov/agenciesall/>. Accessed March, 2020.

California Legislative Information, 2018a. AB 2381 Vehicles emissions certification, auditing, and compliance (Cabrillo, Chapter 713, Statutes of 2018). http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB2381.

California Legislative Information, 2018b. SB-854 Public resources. (Committee on Budget and Fiscal Review, Chapter 51, Statutes of 2018) http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB854

California Legislative Information, 2019a. SB-85 Public resources omnibus trailer bill. (Committee on Budget and Fiscal Review, Chapter 31, Statutes of 2019) http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB85

California Legislative Information, 2019b. State government: financial and administrative accountability (Calderon; Chapter 496, Statutes of 2011). http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB617. Accessed November, 2019.

Census Bureau. Quick Facts California. <https://www.census.gov/quickfacts/CA>. Accessed March, 2020.

Census Bureau. https://www2.census.gov/programs-surveys/gus/tables/2017/cog2017_cg1700org02.zip. Accessed March, 2020.

Code of Federal Regulation CFR. Definitions. 40 CFR 86 Section 1803.01.

Dunn and Bradstreet, 2019a. www.dnbi.com. Accessed November, 2019.

Dunn and Bradstreet, 2019b. www.dnbi.com. Accessed November, 2019.

Employment Development Department EDD, 2020. Size of Business Data for California (Quarterly). https://www.labormarketinfo.edd.ca.gov/LMID/Size_of_Business_Data_for_CA.html. Accessed February, 2020.

Federal Register Fed. Reg, 2004. The Motor Vehicle and Engine Compliance Program (MVECP) fees rule. 69 Fed. Reg. 26222.

Environmental Protection Agency, 2019. Adjustment of the Motor Vehicle and Engine Compliance Program Fees for Calendar Year 2020.

https://iaspub.epa.gov/otaqpub/display_file.jsp?docid=46428&flag=1.

Governor Newsom. Executive Order N-79-20. <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>.

Legislative Analyst's Office, LAO, 2020. The 2020-21 Budget: Transportation. <https://lao.ca.gov/Publications/Report/4149>.

National Golf Foundation. <https://www.ngf.org/news/2018/06/municipal-golfs-high-water-mark/>.

World Population Review, 2020. California Population 2020
<https://worldpopulationreview.com/states/california-population>. Accessed October, 2020

XV. APPENDICES

Appendix A: Proposed Regulation Order

Appendix B: Revised Standardized Regulatory Impact Assessment (SRIA)

Appendix C: Standardized Regulatory Impact Assessment (SRIA)

Appendix D: DOF Comments on Standardized Regulatory Impact Assessment (SRIA)