

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Air Quality Control Commission

REGULATION NUMBER 20

COLORADO CLEAN CARS AND TRUCKS REGULATION

5 CCR 1001-24

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

Outline of Regulation

PART A	General Provisions, Definitions, and Severability
PART B	Low Emission Vehicles (LEV)
PART C	Aftermarket Exhaust Treatment Devices
PART D	Zero Emission Vehicles (ZEV)
PART E	Heavy-Duty Low NOx Regulation (HD Low NOx)
PART F	Advanced Clean Trucks Regulation (ACT)
PART G	Large Entity Reporting Requirement (LER)
PART H	Incorporations by Reference
PART I	Statements of Basis, Specific Authority and Purpose

PART A GENERAL PROVISIONS, DEFINITIONS, AND SEVERABILITY

I. General Provisions

- I.A. All provisions of this regulation apply throughout the State of Colorado.
- I.B. Part B of this regulation applies to all 2022 through 2025 and 2027 through 2032 model year motor vehicles that are Passenger Cars and Light-Duty Trucks, motor vehicle engines; to all 2022 and subsequent model year motor vehicles which are Medium-Duty Passenger Vehicles, Medium-Duty Vehicles, or motor vehicle engines offered for sale or lease, or sold, or leased for registration in Colorado.
- I.C. The provisions of Part B of this regulation also apply to all 2022 through 2025 and 2027 through 2032 model year motor vehicles sold or leased to the United States government or an agency thereof, or to the State of Colorado or any agency or political subdivision thereof that would be registered or required to be registered in the State.

- I.D. Part C of this regulation applies to all Aftermarket Catalytic Converters for any model year vehicle that is powered by a spark-ignition engine and has a gross vehicle weight rating of less than 14,001 lbs. Part C of this regulation is effective beginning January 1, 2021.
- I.E. Part D of this regulation applies to 2023 thru 2025 model year and 2027 through 2032 model year motor vehicles. Beginning with the 2023 and 2027 model year, a percentage of each manufacturer's passenger cars and light-duty trucks offered for sale in the State of Colorado shall be Zero Emission Vehicles.
- I.F. The provisions of Part D of this regulation also apply to 2023 through 2025 model year and 2027 through 2032 model year motor vehicles sold or leased to the United States government or an agency thereof, or to the State of Colorado or any agency or political subdivision thereof that would be registered or required to be registered in the State.
- I.G. Part E of this regulation applies to all 2027 and subsequent model year motor vehicles and engines of GVWR 14,001 pounds and above that are offered for sale or lease, or sold, or leased for registration in Colorado.
- I.H. Part F of this regulation applies to all 2027 and subsequent model year motor vehicles and engines of GVWR 8,501 pounds and above that are offered for sale or lease, or sold, or leased for registration in Colorado.
- I.I. This regulation is a state-only regulation and is not contained in any State Implementation Plan.
- II. Definitions
 - II.A. *Aftermarket Catalytic Converter* means a catalytic converter not designed and built to perform exactly as the original equipment manufacturer catalytic converter.
 - II.B. *Authorized Emergency Vehicle or Emergency Vehicle* means such vehicles of the fire department, police vehicles, ambulances, and other special-purpose vehicles as are publicly owned and operated by or for a governmental agency to protect and preserve life and property in accordance with state laws regulating Emergency Vehicles; said term also means the following if equipped and operated as Emergency Vehicles in the manner prescribed by state law:
 - II.B.1. Privately owned vehicles as are designated by the state motor vehicle licensing agency necessary to the preservation of life and property; and
 - II.B.2. Privately owned tow trucks approved by the public utilities commission to respond to vehicle emergencies.
 - II.C. *Auxiliary power unit or APU* means any device that provides electrical or mechanical energy, meeting the requirements of California Code of Regulations, Title 13, Section 1962.2(c)(2), to a BEVx, after the zero emission range has been fully depleted. A fuel fired heater does not qualify under this definition for an APU.
 - II.D. *CARB* means the California Air Resources Board as defined in California's Health and Safety Code, Section 39003.
 - II.E. *California credit ratio* means the ratio of the average number of passenger cars and light-duty trucks that a manufacturer produced and delivered for sale in Colorado to the average number of passenger cars or light-duty trucks the manufacturer produced and delivered for sale in California.

- II.F. *Community-Based Clean Mobility Program* means a program that: 1) provides access to clean mobility solutions other than vehicle ownership including ZEV car sharing, ride-sharing, vanpools, ride-hailing, or on-demand first-mile/last-mile services; 2) serves a disproportionately impacted community, as defined in Colorado by § 24-4-109(2)(b)(II), C.R.S. (2023), or a tribal community regardless of federal recognition; and 3) is implemented by a community-based organization; Native American Tribal government regardless of federal recognition; or a public agency or nonprofit organization that has received a letter of support from a project-related community-based organization or local community group that represents community members that will be impacted by the project or has a service background related to the type of project. Qualifying programs in Colorado will be approved by the Department and posted on the Department designated website.
- II.G. *Department* means the Colorado Department of Public Health and Environment (CDPHE).
- II.H. *Emissions Control System* means equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine, or a system or engine modification on a motor vehicle or motor vehicle engine which causes a reduction of air contaminants emitted from the motor vehicle or motor vehicle engine, including but not limited to exhaust control systems, fuel evaporation control systems and crankcase ventilating systems.
- II.I. *Executive Officer* means the Executive Director of the Colorado Department of Public Health and Environment, unless the context requires otherwise.
- II.J. *Financial assistance program* means a vehicle purchase incentive program where approved dealerships accept a point-of-sale incentive for used ZEVs and PHEVs for lower-income consumers. Qualifying programs in Colorado will be approved by the Department and posted on the Department designated website.
- II.K. *Greenhouse Gas or GHG* means the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.
- II.L. *Heavy-Duty Engine* means an engine which is used to propel a heavy-duty vehicle.
- II.M. *Heavy-Duty Vehicle* means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 8,500 pounds, except passenger cars.
- II.N. *Light-Duty Truck* means any motor vehicle certified to the standards in California Code of Regulations, Title 13, Section 1961(a)(1) or 1961.2 rated at 8,500 pounds' gross vehicle weight or less, and any other motor vehicle, rated at 6,000 pounds' gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.
- II.O. *Medium-Duty Passenger Vehicle* means any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The Medium-Duty Passenger Vehicle definition does not include any vehicle which: (1) is an "incomplete truck" i.e., is a truck that does not have the primary load carrying device or container attached; or (2) has a seating capacity of more than 12 persons; or (3) is designed for more than 9 persons in seating rearward of the driver's seat; or (4) is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area, for purposes of this definition.

- II.P. *Medium-Duty Vehicle* means any heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in California Code of Regulations, Title 13, Section 1961.2 or 1956.8(h) having a manufacturer's gross vehicle weight rating between 8,501 and 14,000 pounds.
- II.Q. *Military Tactical Vehicles and Equipment* means all land combat and transportation vehicles, excluding rail-based, which are designed for and are in use by any of the United States armed forces, or in use as an Authorized Emergency Vehicle by or for a governmental agency.
- II.R. *Neighborhood Electric Vehicle or NEV* means a motor vehicle that meets the definition of Low-Speed Vehicle either in the California Vehicle Code Division 1 VEH Section 385.5, or in 49 CFR 571.500 (as it existed on July 1, 2000), and is certified to Zero Emission Vehicle standards.
- II.S. *New Motor Vehicle* for purposes of this regulation means a 2022 model year or later motor vehicle that has accumulated less than 7500 miles of use as of the date of sale or lease.
- II.T. *NZEV* shall have the same meaning as the term "near-zero-emission vehicle" as defined at California Code of Regulation Title 13 CCR Section 1963(c).
- II.U. *Passenger Car* means any motor vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.
- II.V. *Person* means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships, and joint stock companies, and shall also include, without limitation, all political subdivisions of any states, and any agencies or instrumentalities thereof.
- II.W. *Range Extended Battery Electric Vehicle or BEVx* means a vehicle powered predominantly by a zero emission energy storage device, able to drive the vehicle for more than 75 all-electric miles, and also equipped with a backup Auxiliary Power Unit (APU), which does not operate until the energy storage device is fully depleted, and meeting requirements in California Code of Regulations, Title 13, Section 1962.2(d)(5)(G).
- II.X. *Transitional zero emission vehicle or "TZEV"* means a vehicle that meets all the criteria of California Code of Regulations, Title 13, Section 1962.2(c)(2) and qualifies for an allowance in California Code of Regulations, Title 13, Section 1962.2(c)(3)(A) or (E).
- II.Y. *Ultimate Purchaser* means, with respect to any vehicle, the first person who in good faith purchases a new motor vehicle for purposes other than resale and registers it with the Colorado Department of Motor Vehicle.
- II.Z. *Used Motor Vehicle* means a 2022 model year or later motor vehicle that has accumulated 7500 miles or more of use as of the date of sale or lease.
- II.AA. *Zero emission vehicle or "ZEV"* means a vehicle that produces zero or near-zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

III. Severability

Each provision of this regulation shall be deemed severable, and in the event that any provision of this regulation is held to be invalid, the remainder of this regulation shall continue in full force and effect.

IV. Future Rulemakings

By no later than July 31, 2029, the Division shall submit a petition for rulemaking to the Air Quality Control Commission proposing to update Parts B and D of Regulation Number 20 with emission standards for model year 2033 and subsequent model year motor vehicles.

PART B LOW EMISSION VEHICLES (LEV)

I. Applicability

I.A. Low Emissions Vehicle Sales

I.A.1. It is unlawful for any person to sell or register, offer for sale or lease, import, deliver, purchase, lease, acquire or receive a 2022 through 2025 model year new Passenger Car, or a Light-Duty Truck, Medium-Duty Passenger Vehicle, or a Medium-Duty Vehicle; new light- or medium-duty motor vehicle engine or motor vehicle with a New Motor Vehicle engine in the State of Colorado which is not certified to California Code of Regulations, Title 13, Sections 1961.2 ("LEV III Criteria emissions") and 1961.3 ("GHG emissions") and meets all other applicable requirements of California Code of Regulations, Title 13, Sections 1900, 1956.8(h), 1965, 1968.2, 1976, 1978, 2035, 2037 through 2041, 2046, 2062, 2109, 2111 through 2121, 2122 through 2135, 2139, 2141 through 2149, and 2222(h) and (i), unless the vehicle is sold to another dealer, sold for the purpose of being wrecked or dismantled, sold exclusively for off-highway use or sold for registration out of state. Vehicles that have been certified to standards promulgated pursuant to the authority contained in 42 U.S.C. Section 7521 (November 15, 1990) and that are in the possession of a rental agency in Colorado that are next rented with a final destination outside of Colorado will not be deemed as being in violation of this prohibition.

I.A.2. It is unlawful for any person to sell or register, offer for sale or lease, import, deliver, purchase, lease, acquire or receive a 2027 through 2032 model year new Passenger Car, or a Light-Duty Truck, Medium-Duty Passenger Vehicle, or a Medium-Duty Vehicle; new light- or medium-duty motor vehicle engine or motor vehicle with a New Motor Vehicle engine in the State of Colorado which is not certified to California Code of Regulations, Title 13, Sections 1961.4 ("LEV IV Criteria emissions") and 1961.3 ("GHG emissions") and meets all other applicable requirements of California Code of Regulations, Title 13, Sections 1900, 1956.8(h), 1965, 1968.2, 1969, 1976, 1978, 2035, 2037 through 2041, 2046, 2062, 2109, 2111 through 2121, 2122 through 2135, 2139, 2141 through 2149, and 2222(h) and (i), unless the vehicle is sold to another dealer, sold for the purpose of being wrecked or dismantled, sold exclusively for off-highway use or sold for registration out of state. Vehicles that have been certified to standards promulgated pursuant to the authority contained in 42 U.S.C. Section 7521 (November 15, 1990) and that are in the possession of a rental agency in Colorado that are next rented with a final destination outside of Colorado will not be deemed as being in violation of this prohibition.

I.B. Exceptions - This regulation does not apply to:

- I.B.1. A vehicle acquired by a resident of this State for the purpose of replacing a vehicle registered to such resident which was damaged or became inoperative beyond reasonable repair or was stolen while out of this State; provided that such replacement vehicle is acquired out of state at the time the previously owned vehicle was either damaged or became inoperative or was stolen; or
 - I.B.2. A vehicle transferred by inheritance; or
 - I.B.3. A vehicle transferred by court decree; or
 - I.B.4. Any vehicle sold after the effective date of this regulation if the vehicle was registered in this State before such effective date; or
 - I.B.5. Any motor vehicle having a certificate of conformity issued pursuant to the Clean Air Act (42 U.S.C. Section 7401 et seq.) and originally registered in another state by a resident of that state who subsequently establishes residence in this State and who upon registration of the vehicle in this State provides satisfactory evidence to the Department of Revenue or its assigned designee of the previous residence and registration; or
 - I.B.6. A Used Motor Vehicle (7500 or more miles accumulated); or
 - I.B.7. Authorized Emergency Vehicles; or
 - I.B.8. Military Tactical Vehicles and Equipment.
 - I.C. Transfer to ultimate purchaser - For purposes of this regulation, it is conclusively presumed that the equitable or legal title to any motor vehicle with an odometer reading of 7,500 miles or more has been transferred to an ultimate purchaser and that the equitable or legal title to any motor vehicle with an odometer reading of less than 7,500 miles has not been transferred to an ultimate purchaser.
 - I.D. No Conversion - In accordance with 42 U.S.C. Section 7507 under no circumstances will a Colorado action require the conversion of a vehicle to a standard different from that to which it is certified for sale in California.
- II. Certification Testing
- II.A. Assembly-line quality audit emission testing and reporting shall be performed for 2022 and subsequent model years.
 - III.A.1. All manufacturers of new motor vehicles subject to this regulation produced and delivered for sale in Colorado shall conduct inspection testing in accordance with California Code of Regulations, Title 13, Section 2062.
 - III.A.2. The Department shall accept the results of quality audit testing and inspection testing determinations and findings made by CARB.
 - II.B. Remedial action plans for model year 2022 and subsequent model years are required. If the State of California requires a remedial action plan based upon full calendar or partial calendar quarter testing, under the California Code of Regulations, Title 13, Section 2109, such plan will apply to all vehicles certified to the California standards intended for sale in Colorado. Such plan will not apply to vehicles that have previously been sold to ultimate purchasers in Colorado.

III. Fleet Average Emissions

- III.A. For each model year, manufacturers of Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles produced and delivered for sale in Colorado shall not exceed the fleet average non-methane organic gas plus oxides of nitrogen emission values as set forth in California Code of Regulations, Title 13, Section 1961.2. Credits and debits may be accrued and utilized based upon each manufacturer's sales of vehicles subject to this regulation in Colorado, pursuant to the provisions set forth in California Code of Regulations, Title 13, Section 1961.2(c).
- III.B. For each model year, manufacturers of Passenger Cars, Light-Duty Trucks and Medium-Duty Passenger Vehicles produced and delivered for sale in Colorado shall not exceed the fleet average greenhouse gas exhaust emission levels set forth in California Code of Regulations, Title 13, Section 1961.3. For each model year, manufacturers of Medium-Duty Vehicles produced and delivered for sale or lease in Colorado shall not exceed the CO₂ emission standards set forth in California Code of Regulations, Title 13, Section 1956.8 (h)(6). Credits and debits may be accrued and utilized based upon each manufacturer's sales of vehicles subject to this Rule in Colorado, pursuant to the provisions set forth in California Code of Regulations, Title 13, Section 1961.3.
- III.C. For 2027 through 2032 model year, manufacturers of Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles produced and delivered for sale in Colorado shall not exceed the fleet average non-methane organic gas plus oxides of nitrogen emission values as set forth in California Code of Regulations, Title 13, Section 1961.4. Credits and debits may be accrued and utilized based upon each manufacturer's sales of vehicles subject to this regulation in Colorado, pursuant to the provisions set forth in California Code of Regulations, Title 13, Section 1961.4(d).

IV. Reporting Requirements

IV.A. Certification Reporting

For the purposes of determining compliance with this regulation, the Department may require any vehicle manufacturer subject to this regulation to submit any documentation the Department deems necessary to the effective administration and enforcement of this regulation including, but not limited to all certification materials submitted to CARB.

IV.B. Fleet average reporting

- IV.B.1. For 2022 through 2025 model year, each manufacturer must report to the Department using the same format used to report this information to CARB, the fleet average non-methane organic gas plus oxides of nitrogen pollutant and greenhouse gas emissions of its fleet delivered for sale in Colorado. If the "*Pooling Provision*" option number two in the California Code of Regulations, Title 13, Section 1961.2 is chosen, or the "*Calculation of Fleet Average Carbon Dioxide Value*" option number two in California Code of Regulations, Title 13, Section 1961.3 (5)(D) is chosen, manufacturers must report the data for the entire pool as well as the Colorado specific portion. Non-methane organic gas plus oxides of nitrogen reports must be submitted to the Department by no later than March 1 of the calendar year succeeding the end of the model year. Carbon dioxide reports must be submitted to the Department by no later than May 1 of the calendar year succeeding the end of the model year.

IV.B.2. Effective 2027 model year and in each subsequent model year through 2032 model year, each manufacturer must report to the Department using the same format used to report this information to CARB, the fleet average non-methane organic gas plus oxides of nitrogen pollutant and greenhouse gas emissions of its fleet delivered for sale in Colorado. If the “*Pooling Provision*” option number two in the California Code of Regulations, Title 13, Section 1961.4 is chosen, or the “*Calculation of Fleet Average Carbon Dioxide Value*” option number two in California Code of Regulations, Title 13, Section 1961.3(5)(D) is chosen, manufacturers must report the data for the entire pool as well as the Colorado specific portion. Non-methane organic gas plus oxides of nitrogen reports must be submitted to the Department by no later than March 1 of the calendar year succeeding the end of the model year. Carbon dioxide reports must be submitted to the Department by no later than May 1 of the calendar year succeeding the end of the model year.

IV.C. Assembly line testing reporting

Upon request by the Department, for 2022 through 2025 model year and 2027 through 2032 model year, vehicle manufacturers are required to provide reports on all assembly-line emission testing and functional test results collected as a result of compliance with this regulation and California Code of Regulations, Title 13, Section 2062. Reports must be provided to the Department or to the Department's designee.

IV.D. Warranty Reporting

Upon request by the Department, for 2022 through 2025 model year and 2027 through 2032 model year, each manufacturer shall submit warranty claim reports submitted to CARB to the Department as required by California Code of Regulations, Title 13, Sections 2141 through 2149.

IV.E. Recall Reporting

Upon request by the Department, for 2022 through 2025 model year and 2027 through 2032 model year, each manufacturer shall submit recall plans and progress reports submitted to CARB to the Department, using the same format and information as required by California Code of Regulations, Title 13, Sections 2119 and 2133.

V. Surveillance and Enforcement

V.A. Surveillance of motor vehicle dealers.

V.A.1. For the purpose of enforcing or administering any Federal or State law, order, regulation, or rule relating to vehicular sources of emissions, the Department or an authorized representative of the Department of Revenue, has the right of entry for the purpose of inspecting any 2022 through 2025 model year and 2027 through 2032 model year vehicles to any premises owned, operated, used, leased, or rented by any new or used car dealer.

V.A.2. Nothing in Section V. or elsewhere in this regulation is intended to limit the Department's authority to enter and inspect pursuant to 25-7-111, C.R.S., effective June 3, 2009.

V.B. Enforcement

- V.B.1. For the purpose of developing the provisions of this regulation, any person subject to the provisions of this regulation must, upon oral or written request of any authorized officer or employee or designee of the Department, when properly identified and duly designated, furnish or permit such officer or employee or designee at all reasonable times to have access to, and to copy all records relating to those vehicles which are subject to this regulation.
- V.B.2. Unless otherwise specified, any person subject to the provisions of this regulation must retain all relevant records for at least three years from the creation of those records. Such records will be provided to the Department upon its request.

V.C. Fleet average enforcement

- V.C.1. If the report issued by a manufacturer under Section IV.B. of this regulation demonstrates noncompliance with the fleet average contained in this regulation during a model year, the manufacturer must within 60 days' file a fleet average enforcement report with the Department documenting such noncompliance. Fleet average enforcement reports must identify all vehicle models delivered for sale or lease in Colorado and their corresponding certification standards and the percentage of each model delivered for sale in Colorado and California in relation to total fleet sales in the respective state.

VI. Emission Control System Warranty and Recall Requirements

- VI.A. Emissions control system warranty requirements - For all 2022 through 2025 model year and 2027 through 2032 model year Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles, and motor vehicle engines subject to this regulation, each manufacturer shall provide defect warranty coverage. For vehicles registered or principally operated in the Front Range AIR Program area, performance warranty coverage that complies with California Code of Regulations, Title 13, Sections 2035, 2037 through 2041, and 2046 shall apply.
- VI.B. Recalls - For all 2022 through 2025 model year and 2027 through 2032 model year Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles, and motor vehicle engines subject to recall in California, each manufacturer shall undertake recall campaigns in Colorado pursuant to California Code of Regulations, Title 13, Sections 2111 through 2121 and 2122 through 2135, unless the manufacturer demonstrates to the Department that such recall is not applicable to vehicles registered in Colorado.

VII. Environmental Performance Labels

- VII.A. It is unlawful for any person to sell or register, offer for sale or lease, import, deliver, purchase, rent, lease, acquire, or receive a 2022 through 2025 model year and 2027 through 2032 model year new Passenger Car, Light-Duty Truck, Medium-Duty Passenger Vehicle, or Medium-Duty Vehicle in Colorado to which emissions control labels and environmental performance labels have not been affixed pursuant to the requirements of California Code of Regulations, Title 13, Section 1965.

PART C AFTERMARKET EXHAUST TREATMENT DEVICES

I. Applicability

Effective January 1, 2021, this regulation applies to all Aftermarket Catalytic Converters that are sold, offered for sale, or advertised for sale or use in Colorado on any model year vehicle that is powered by a spark-ignition engine and has a gross vehicle weight rating of less than 14,001 lbs.

II. Prohibition

- II.A. It is unlawful for any person to install, sell, offer for sale, or advertise any Aftermarket Catalytic Converter intended for use on any motor vehicle originally equipped with catalytic converter(s) in Colorado unless it has been exempted pursuant to the requirements of California Code of Regulations, Title 13, Section 2222 (h) (i.e. a "California Aftermarket Catalytic Converter").
- II.B. It is unlawful for any person to install, sell, offer for sale, or advertise any used, recycled, or salvaged catalytic converter in Colorado pursuant to the requirements of California Code of Regulations, Title 13, Section 2222 (h) and (i).

PART D ZERO EMISSION VEHICLES (ZEV)

I. Applicability

- I.A. Effective 2023 through 2025 model year, each manufacturer's sales fleet of passenger cars and light-duty trucks in the State of Colorado shall be subjected to the ZEV credit percentage requirements in California Code of Regulations, Title 13, Section 1962.2 which is incorporated by reference.
- I.B. Effective 2027 through 2032 model year, each manufacturer's sales fleet of passenger cars and light-duty trucks in the State of Colorado shall be subjected to the ZEV credit percentage requirements in California Code of Regulations, Title 13, Section 1962.4, which is incorporated by reference.
- I.C. Effective 2027 through 2032 model year, this Part D applies to zero-emission medium-duty vehicles produced and delivered for sale in Colorado that the manufacturer optionally chooses to certify to the provisions of this Part D and the neighborhood electric vehicles (NEVs) produced and delivered for sale in Colorado.

II. Emission Standard

- II.A. Certification for ZEV Emission Standards of new 2023 through 2025 model year passenger cars, light-duty trucks and medium-duty vehicles shall be made pursuant to California Code of Regulations, Title 13, Section 1962.2. Medium-duty vehicles shall not be required to meet the ZEV requirement, but if a manufacturer opts to produce medium-duty ZEV's, that manufacturer may earn and expend ZEV credit for those vehicles.
- II.B. Certification for ZEV Emission Standards of new 2027 through 2032 model year passenger cars, light-duty trucks and medium-duty vehicles shall be made pursuant to California Code of Regulations, Title 13, Section 1969, 1962.4, 1962.5, 1962.6, 1962.7 and 1962.8. Zero-emission medium-duty vehicles delivered for sale in Colorado shall be required to meet the ZEV requirements in either this Part D or Part F.

III. Percentage Requirements

- III.A. Effective 2023 through 2025 model year, each manufacturer's sales fleet of passenger cars and light-duty trucks produced and delivered for sale in Colorado shall contain at least the same percentage of ZEVs subject to the same requirements set forth in the California Code of Regulations, Title 13, Section 1962.2 using Colorado specific vehicle production volume calculated per California Code of Regulations, Title 13, Section 1962.2.
- III.B. Effective 2027 through 2032 model year, each manufacturer's sales fleet of passenger cars and light-duty trucks produced and delivered for sale in Colorado shall contain at least the same percentage of ZEVs subject to the same requirements set forth in the California Code of Regulations, Title 13, Section 1962.4 (c)(1)(B) using Colorado specific vehicle production volume calculated per California Code of Regulations, Title 13, Section 1962.4 (c)(1)(C).

IV. Credits and Debits

IV.A. Credits and Debits through model year 2025

- IV.A.1. ZEV credits can be earned per vehicle delivered for sale in Colorado pursuant to California Code of Regulations, Title 13, Section 1962.2(d) and (g).
- IV.A.2. *Credits from ZEVs.* The amount of credits earned by a manufacturer in a given model year from ZEVs shall be expressed in units of credits, and shall be equal to the number of credits from ZEVs produced and delivered for sale in Colorado (with the exception of hydrogen fuel cell vehicles pursuant to California Code of Regulations, Title 13, Section 1962.2(d)(5)(E)) that the manufacturer applied towards meeting its ZEV requirement pursuant to California Code of Regulations, Title 13, Section 1962.2(b).
- IV.A.3. *Credits from TZEVS.* The amount of credits earned by a manufacturer in a given model year from TZEVS shall be expressed in units of credits, and shall be equal to the number of credits from TZEVS produced and delivered for sale in Colorado that the manufacturer applied towards meeting its ZEV requirement pursuant to California Code of Regulations, Title 13, Section 1962.2(b).
- IV.A.4. *Separate Credit Accounts.* Credits and debits from a manufacturer's ZEVs, BEVxs, TZEVS, and NEVs shall each be maintained in separate accounts.
- IV.A.5. *Rounding Credits.* ZEV credits and debits shall be rounded to the nearest 1/100th only on the final credit and debit totals using the conventional rounding method.
- IV.A.6. *ZEV Credits for MDVs.* Credits from ZEVs and TZEVS classified as MDVs, may be counted toward the ZEV requirement for PCs and LDTs, and included in the calculation of ZEV credits as specified in this California Code of Regulations, Title 13, Section 1962.2(g) if the manufacturer so specifies.

IV.B. Calculating ZEV Requirement Performance for model year 2027 through 2032

- IV.B.1. ZEV and PHEV vehicle values can be earned per vehicle delivered for sale in Colorado pursuant to California Code of Regulations, Title 13, Section 1962.4(d) and (e).

IV.B.2. Environmental Justice Vehicle Values can be earned per vehicle delivered for sale in Colorado and will be subject to the limitations and allowance pursuant to California Code of Regulations, Title 13, Section 1962.4.

IV.B.2.a. New ZEVs and PHEVs Provided for Use in Community-based Clean Mobility Programs. New 2024 through 2031 model year ZEVs and PHEVs provided for use in community-based clean mobility programs in Colorado will earn additional vehicle values that can be used to meet a portion of the manufacturer's Annual ZEV Requirement pursuant to California Code of Regulations, Title 13, Section 1962.4(e)(2)(A).

IV.B.2.b. Vehicles in Colorado Sold At the End of Lease to Participating Dealerships. ZEVs or PHEVs initially leased in Colorado and sold at the end of lease to a Colorado dealership participating in a financial assistance program will earn additional vehicle values that can be used to meet a portion of the manufacturer's Annual ZEV Requirement pursuant to California Code of Regulations, Title 13, Section 1962.4.

IV.B.2.c. New ZEVs and PHEVs below MSRP threshold. An additional vehicle value will be earned by a manufacturer for each 2026 through 2028 model year ZEV or PHEV delivered for sale in Colorado with an MSRP less than or equal to \$20,275 for passenger cars and less than or equal to \$26,670 for light-duty trucks. For purposes of this section, the MSRP values shall be adjusted annually, beginning in 2026 model year, per California Code of Regulations, Title 13, Section 1962.4(e)(2)(F).

IV.B.3 Early Compliance Vehicle Values. Manufacturers may fulfill a portion of their total Annual ZEV Requirement with early compliance vehicle values earned according to California Code of Regulations, Title 13, Section 1962.4(e)(3). The Early Compliance Vehicle Values can be earned for model year 2025 and 2026 in Colorado. The early compliance vehicle values earned in model year 2025 and 2026 can be used to meet manufacturers' Annual ZEV Requirement in model year 2027 through 2029 in Colorado.

V. ZEV Credit Bank and Reporting Requirements

V.A. ZEV Credit Bank through model year 2025

V.A.1 Beginning no later than model year 2023, each manufacturer of ZEVs and TZEVs may open an account in the ZEV Credit System for banking credits in Colorado.

V.A.2. *Proportional Starting ZEV Credit Balance.* A manufacturer may deposit into its account in the ZEV Credit Bank a number of credits equal to its starting 2023 model year California credit balance multiplied by the California credit ratio. The deposit may be made only after all credit obligations for model years 2022 and earlier have been satisfied in California. While manufacturers may trade or sell these credits to any other manufacturer, use of these credits is restricted through 2025 model year in accordance with Part D, Section V.C.

V.A.3. Each manufacturer must choose one of the following two options for the 2023 through 2025 model years. A manufacturer that chooses Option 2 must notify the Executive Officer no later than January 1, 2021, or must comply with Option 1.

- V.A.3.a. Option 1: A manufacturer may meet no more than 36 percent of its combined 2023-2025 model year ZEV credit obligation using credits per Part D, Section V.B.
- V.A.3.b. Option 2:
 - V.A.3.b.1. A manufacturer may meet no more than 23 percent of its combined 2023-2025 model year ZEV credit obligation using credits per Part D, Section V.B.
 - V.A.3.b.2. *Early ZEV Credits.* A manufacturer may earn credits for 2021 and 2022 model year TZEVs and ZEVs, including BEVxs, produced and delivered for sale in Colorado.
- V.B. ZEV Credit Bank for 2027 through 2032 model year
 - V.B.1. *Calculating ZEV Requirement Performance for the Model Year.* Each manufacturer shall calculate its ZEV requirement performance at the end of each model year in accordance with California Code of Regulations Title 13 Section 1962.4(f).
 - V.B.2. *Limitations on fulfilling a ZEV requirement shortfall.* A manufacturer who has a shortfall in a given model year, calculated according to CCR Title 13 Section 1962.4(f)(2), may use any combination of excess ZEV, PHEV, or environmental justice vehicle values, early compliance vehicle values, converted ZEV and PHEV values, pooled ZEV and PHEV values, or proportional FCEV values, to fulfill its shortfall, within the following limitations on usage per California Code of Regulations Title 13 Section 1962.4(g)(1).
 - V.B.3. *Calculating Converted ZEV and PHEV Values and Allowance.* At the conclusion of model year 2025, a manufacturer's PHEV and ZEV credit account balances, earned according to California Code of Regulations, Title 13, section 1962.2, will undergo a one-time conversion according to the equations in California Code of Regulations Title 13 Section 1962.4(g)(2). The Converted ZEV and PHEV Values shall be used in accordance to California Code of Regulations Title 13 1962.4(g)(2).
 - V.B.4. *Pooled ZEV and PHEV Values.* Manufacturers may transfer excess 2027 through 2030 model year ZEV and PHEV values earned in Colorado, California or a Section 177 ZEV state to satisfy shortfalls or deficits in 2027 through 2030 model years earned in Colorado, California or a Section 177 ZEV state. A manufacturer may not transfer more excess ZEV or PHEV values than are necessary to fulfill a shortfall within a given year or a deficit carried forward from a previous model year.
 - V.B.5. Calculation of Proportional FCEV Allowance and Earning of Proportional FCEV Values shall be earned and used according to California Code of Regulations Title 13 Section 1962.4(g)(4),
 - V.B.6. Excess vehicle values may be banked and carried over for use in future model years according to California Code of Regulations Title 13 Section 1962.4(f)(3),

- V.B.7. A manufacturer may only trade excess ZEV, excess PHEV, excess environmental justice, early compliance, or converted ZEV and PHEV vehicle values and only if the conditions in California Code of Regulations Title 13 Section 1962.4(f)(4) are met,

V.C. ZEV Reporting Requirements.

- V.C.1. In order to verify the status of each manufacturer's compliance with the ZEV requirements through 2025 model year, each manufacturer shall submit a report to the Executive Officer at least annually, by August 31 of the calendar year following the close of the model year, that identifies the necessary delivery and placement data of all vehicles generating ZEV credits or allowances, and all transfers and acquisitions of ZEV credits pursuant to California Code of Regulations, Title 13, Section 1962.2.
- V.C.2. In order to verify the status of each manufacturer's compliance with the ZEV requirements for 2027 through 2032 model year, each manufacturer shall submit a report to the Executive Officer at least annually, prior to May 1 of the calendar year following the close of the model year, that identifies the necessary delivery and placement data of all vehicles generating ZEV vehicle values or deficits, and all transfers and acquisitions of ZEV values pursuant to California Code of Regulations, Title 13, Section 1962.4.
- V.C.3 Projected Sales of ZEVs and PHEVs for Future Model Years. Each manufacturer subject to the Annual ZEV Requirements of the California Code of Regulations, Title 13, Section 1962.4(c) shall submit a projected ZEV and PHEV sales report by April 1 of each calendar year beginning with the 2027 calendar year. The report shall include the manufacturer's projected number of ZEVs and PHEVs to be produced and delivered for sale in Colorado for the next model year not yet currently being produced and delivered for sale in Colorado, plus each of the subsequent four model years pursuant to California Code of Regulations, Title 13, Section 1962.4(j).

- V.D. The report to the Executive Officer by each manufacturer shall be in the same format as the report submitted to CARB.

VI. Requirement to Make Up a ZEV Deficit

- VI.A. Through 2025 model year, a manufacturer that produces and delivers for sale in Colorado fewer ZEVs or TZEVs than required to meet its ZEV credit obligation in a given model year must make up the deficit by the next model year by submitting a commensurate amount of ZEV credits to the Executive Officer pursuant to California Code of Regulations, Title 13, Section 1962.2(g)(7). Any manufacturer that fails to submit an appropriate amount of credits and does not make up ZEV deficits within the time specified in California Code of Regulations, Title 13, Section 1962.2(g)(7)(A) is subject to civil penalties pursuant to §25-7-122, C.R.S. For the purposes of the civil penalties pursuant to §25-7-122, C.R.S., the number of vehicles not meeting the ZEV credit obligation shall be equal to the manufacturer's credit deficit, rounded to the nearest 1/100th, calculated according to the equation in California Code of Regulations, Title 13, Section 1962.2(g)(8), provided that the percentage of a manufacturer's ZEV requirement for a given model year that may be satisfied with TZEVs or credit from such vehicles may not exceed the percentages permitted under California Code of Regulations, Title 13, Section 1962.2(b)(2).

- VI.B. Determining Compliance or Deficit with Annual ZEV Requirements for 2027 through 2032 model year
- VI.B.1. *Demonstrating Compliance.* Each manufacturer must report in accordance with California Code of Regulations, Title 13, Section 1962.4(j), its ZEV requirement performance for the model year under California Code of Regulations, Title 13, Section 1962.4(f) and the resulting surplus or shortfall in values for the model year after applying any values according to California Code of Regulations, Title 13, Section 1962.4 (g).
- VI.B.2 *Incur and Carry Forward a ZEV Deficit.* If a shortfall in meeting the Annual ZEV Requirement remains after determining compliance under California Code of Regulations, Title 13, Section 1962.4(h)(1), the manufacturer shall incur a deficit for the model year. A manufacturer must make up the deficit within three model years following the model year in which the deficit was earned by submitting a commensurate amount, within applicable allowances for fulfilling a ZEV requirement shortfall, under California Code of Regulations, Title 13, Section 1962.4(g)(1) for the model year in which the deficit was earned, of excess ZEV, PHEV, or environmental justice vehicle values, early compliance vehicle values, or pooled ZEV or PHEV values to the Executive Officer. For example, a manufacturer must resolve a 2027 model year deficit by the conclusion of the 2030 model year.
- VI.B.3. Any manufacturer that fails to submit an appropriate amount of credits and does not make up ZEV deficits within the time specified in California Code of Regulations, Title 13, Section 1962.4 is subject to civil penalties pursuant to §25-7-122, C.R.S.

PART E HEAVY-DUTY LOW NO_x REGULATION (HD LOW NO_x)

I. Purpose

The purpose of this Part E is to establish Colorado heavy-duty engine and vehicle standards that incorporate California engine and vehicle emission standards as provided for under Section 177 of the federal Clean Air Act, 42 U.S.C. § 7507. These standards establish criteria and procedures for the manufacturing, testing, distribution and sale of new on-highway heavy-duty trucks and engines in Colorado.

II. Applicability

- II.A. This Part E is in effect as of January 1, 2026 and applies to all 2027 and subsequent model year on-highway heavy-duty engines and vehicles delivered for sale or sold in the State of Colorado. Such vehicles shall comply with the Heavy-Duty Low NO_x requirements set forth in California Code of Regulations, Title 13, Sections 1956.8, 1971.1, 2036, 2121, 2137, 2139, 2139.5, 2140, 2166, 2166.1, 2167, 2168, 2169, 2169.1, 2169.2, 2169.3, 2196.4, 2169.5, 2169.6, 2167.7, 2169.8.
- II.B. Exemptions
- II.B.1. All exemptions in the California rules adopted under by reference apply with the exception of the transit agency diesel-fueled bus and engine exemption described in CCR, Title 13, section 1956.8(a)(2)(F).
- II.B.2. New diesel-fueled buses sold to any transit agency are exempt from this Part E.

- II.B.3. Authorized Emergency vehicles, as defined in § 42-1-102 (6) C.R.S. are exempt from this part E.

III. Requirement to Meet California Heavy-Duty Emission Standards

- III.A. Subject to an applicable exemption, starting with the 2027 engine and vehicle model year and for each engine and vehicle model year thereafter no person may deliver for sale, or sell, in Colorado any new on-highway heavy-duty engine and vehicle unless such engine and vehicle are certified to the California emission standards as set forth in California Code of Regulations, Title 13 Section 1956.8, 1968.2, 1971.1, 2035, 2036, 2112 and 2139.
- III.B. All motor heavy-duty truck manufacturers and dealers must comply with the sales and reporting requirements contained in this Part E.

IV. Recalls

- IV.A. For all 2027 and subsequent model year heavy-duty engines and vehicles subject to recall in California, each manufacturer shall undertake recall campaigns in Colorado pursuant to California Code of Regulations, Title 13, Sections 2109-2135, unless the manufacturer demonstrates to the Department that such recall is not applicable to vehicles registered in Colorado.
- IV.B. Any voluntary or influenced emission-related recall campaign initiated by any manufacturer as provided by under California Code of Regulations, Title 13, Sections 2113 - 2121, for vehicles subject to the requirements incorporated herein by reference, must extend to all applicable vehicles registered in Colorado. If the manufacturer can demonstrate to executive officer's satisfaction that said campaign is not applicable to vehicles registered in Colorado the campaign will not apply in Colorado.
- IV.C. For vehicles subject to an order of enforcement action under Section IV.A. of this rule, each manufacturer must send to owners of vehicles registered in the State of Colorado a notice that complies with the requirements in California Code of Regulations, Title 13, Sections 2118 or 2127. The manufacturer must provide a telephone number that Colorado consumers can use to learn answers to questions about any recall that affects Colorado vehicles.

V. Inspections and Information Requests

- V.A. The Department may inspect new and used motor vehicles and related records for the purposes of determining compliance with the requirements of this division. The Department may perform inspections, as necessary, during regular business hours on public property or on any premises owned, operated or used by any truck dealer or truck rental agency for the purposes of determining compliance with the requirements of this division.
- V.B. For the purposes of determining compliance with this Part E, the Department may require any truck dealer or truck rental agency to submit to the Department any documentation that the Department deems necessary to the effective administration and enforcement of this Part E. This provision does not require creation of new records.

PART F ADVANCED CLEAN TRUCKS (ACT)

I. Applicability

This Part F is in effect as of January 1, 2026 and applies to all 2027 and subsequent model year vehicles. Any manufacturer that certifies on-road vehicles over 8,500 pounds' gross vehicle weight rating (GVWR) for sale in Colorado, must, at minimum, contain at least the same percentage of ZEVs subject to the requirements set forth in California Code of Regulations, Title 13, Sections 1963, 1963.1, 1963.2, 1963.3, 1963.4 and 1963.5.

II. Advanced Clean Trucks Deficits

Starting with the 2027 model year, any manufacturer that produces on-road vehicles over 8,500 pounds GVWR shall annually incur deficits based on the manufacturer's annual sales volume of on-road vehicles produced and delivered for sale in Colorado pursuant to California Code of Regulations, Title 13, Section 1963.1. Deficits are incurred when the on-road vehicle is sold to the ultimate purchaser in Colorado.

III. Advanced Clean Trucks Credit Generation, Banking and Trading

Beginning with the model year 2024 any manufacturer that produces on-road vehicles over 8,500 pounds GVWR for sale in Colorado may generate, bank, and trade ZEV and NZEV credits for such vehicles pursuant to California Code of Regulations, Title 13 Section 1963.2.

IV. Advanced Clean Trucks Compliance Determination

Annual compliance determination, requirement to make up a deficit, and credit retirement order will be determined pursuant to California Code of Regulations, Title 13, Section 1963.3. Medium- and heavy-duty ZEV and NZEV credits may be generated, banked, and traded in Colorado by manufacturers. Credits would have a limited lifetime to ensure medium and heavy-duty ZEVs are sold in Colorado. Manufacturers subject to the sales requirement must report sales information and credit trade information annually to the Department to demonstrate compliance.

V. Advanced Clean Trucks Reporting and Recordkeeping

Beginning with the 2024 model year, and no later than 90 days following the end of each model year, a manufacturer that produces on-road vehicles over 8,500 pounds' gross vehicle weight rating (GVWR) for sale in Colorado must report the listed information to the Department pursuant to California Code of Regulations, Title 13, Section 1963.4 for each on-road vehicle produced and delivered for sale in Colorado for each model year

VI. Advanced Clean Trucks Enforcement

VI.A. Any manufacturer that produces on-road vehicles over 8,500 pounds GVWR for sale in Colorado will be subjected to the enforcement of requirements pursuant to California Code of Regulations, Title 13, Section 1963.5.

- VI.B. Penalty for Failure to Meet Credit and Deficit Requirements: any manufacturer that fails to retire an appropriate amount of ZEV or NLEV credits as specified in Section 1963.3(c) and does not make up deficits within the specified time allowed by Section 1963.3(b) shall be subject to civil penalties contemplated by Colorado statutes and regulations applicable to a manufacturer who does not comply with emission standards or the test procedures adopted by the Colorado Air Quality Control Commission (AQCC). The cause of action shall be deemed to accrue when the deficit is not balanced by the end of the specified time allowed by Section 1963.3(b). For the purposes of §25-7-122, C.R.S., the number of vehicles not meeting the AQCC's standards or procedures shall be equal to one half of the manufacturer's outstanding deficit.

PART G LARGE ENTITY REPORTING REQUIREMENT (LER)

I. Purpose

The purpose of large entity vehicle reporting is to collect information to assess suitability of zero emission vehicles in multiple use cases and to inform future strategies on how to accelerate the zero emission vehicle market in Colorado. All regulated entities must submit information set forth in this Part G to the Department.

II. Applicability

- II.A. Except as provided in Section II.B., the following entities must submit to the Department all of the information described in Sections IV. and V. of this Part G. As used in this rule, all operations conducted by persons under common ownership or control shall be aggregated and considered to be one entity to determine fleet reporting applicability.
- II.A.1. Any fleet owner in the tax year preceding each reporting year in Section III.A. of this Part G that had 20 or more vehicles with a GVWR greater than 8,500 lbs. under common ownership or control and operated a facility in Colorado;
- II.A.2. Any broker or entity that dispatched 20 or more vehicles with a GVWR greater than 8,500 lbs. into or throughout Colorado, and operated a facility in Colorado, in the tax year preceding each reporting year in Section III.A. of this Part G;
- II.A.3. Any Colorado government agency including all state, county and local municipalities including school districts that had 20 or more vehicles over 8,500 lbs. GVWR that were operated in Colorado the tax year preceding each reporting year in Section III.A. of this Part G; and
- II.A.4. Any federal government agency that had 20 or more vehicles over 8,500 lbs. GVWR that were operated in Colorado in the tax year preceding each reporting year in Section III.A. of this Part G.
- II.B. The following vehicles and persons are exempt from the reporting requirements and should not be counted or reported for the purposes of the applicability requirements in Section II.A. or the reporting requirements in Section III. of this Part G:
- II.B.1. Military tactical vehicles and military tactical facilities owned or operated by the United States Department of Defense or any of the United States military services;
- II.B.2. Vehicles awaiting sale; and
- II.B.3. Authorized Emergency vehicles, as defined in § 42-1-102 (6) C.R.S.

III. General Requirements

- III.A. Reporting. All entities required to report pursuant to Section II must submit information specified in Sections IV. and V. of this Part G to the Executive Officer. Subsidiaries, parent companies, or joint ventures may independently report, or the corporate parent or joint venture business may report on their behalf, as long as all information for subsidiaries, corporate parents, and joint ventures with vehicles over 8,500 lbs. are reported. These entities with brokerage and/or motor carrier authority must be reported even if no vehicles are owned by that subsidiary, corporate parents, or joint venture. Vehicles that are under common ownership or control may be submitted separately by each fleet owner. Complete information must be reported by November 30, 2024 and by December 31, 2027. Vehicle data must be reported as the fleet was comprised on a date of the fleet owner's choosing any time after March 31 of each reporting year. To the extent reports submitted contain confidential data, entities may choose to designate that information as confidential under Section 24-72-204 (3)(a), C.R.S.
- III.B. Method of Reporting. Reports submitted to comply with Sections IV. and V. of this Part G must be submitted online through Colorado's Advanced Clean Trucks webpage or through other Department approved methods.
- III.C. Record Retention. The fleet owner or responsible official shall maintain the records of their information required by Sections IV. and V. of this Part G for five years following each reporting deadline, for the overall fleet. In addition, the fleet owner or responsible person must maintain all fleet, vehicle, contract, and facility records used to compile responses to Section IV. and the data and analysis period used for Section V. Records must include the following:
- III.C.1 For owned on-road vehicles and off-road yard tractors, mileage records and dates from records such as maintenance logs, vehicle logs, odometer readings, or other records with the information that the reporting entity used to determine their response;
- III.C.2 For on-road vehicles and off-road yard tractors not owned but dispatched by the entity, dispatch records and dates, contracts, or other records with the information that the reporting entity used to determine their responses;
- III.C.3 Vehicle registration for each owned vehicle in the Colorado fleet; and
- III.C.4 Contracts with entities, or contracts with subhaulers, or other records with the information that an entity used to determine their responses.
- III.D. Request to Clarify Reported Data. A fleet must respond to requests for clarification of reported information within 14 days of receiving the request from the Executive Officer.

IV. General Entity Information Reporting

All entities subject to the regulation must report the following general information about their entity and business practices:

- IV.A. General information.
- IV.A.1. Entity name and fictitious business name if applicable;
- IV.A.2. Mailing address including street name or P.O. box, city, state, and ZIP code;

- IV.A.3. Designated contact person name;
- IV.A.4. Designated contact person's email address;
- IV.A.5. Designated contact person's phone number;
- IV.A.6. Corporate parent name or governing body (if applicable);
- IV.A.7. Federal Taxpayer Identification Number of Corporate Parent or other entities with which your entity has vehicles under common ownership or control (if applicable);
- IV.A.8. For government entities, identify the jurisdiction (federal, state, or local);
- IV.A.9. Federal Taxpayer Identification Number (if applicable);
- IV.A.10. Primary six-digit North American Industry Classification System (NAICS) code (if applicable);
- IV.A.11. For non-governmental entities, identify the total annual revenue for the entity in the United States for the tax year preceding each reporting year in Section III.A. of this Part G. Respond by using the following bins in millions of dollars (<\$10, \$10-\$49, \$50-\$99, \$100-\$499, \$500-\$999, >\$1,000);
- IV.A.12. Identify if your entity has broker authority under the Federal Motor Carrier Safety Administration;
- IV.A.13. The following operating authority numbers, if applicable: Motor carrier identification number, United States Department of Transportation number, Colorado Carrier Identification number, Colorado Public Utilities Commission transportation charter permit number, International Registration Plan number;
- IV.A.14. Identify the number of entities with whom you had a contract to deliver items or to perform work in Colorado using vehicles over 8,500 lbs. GVWR to serve your customers while representing your entity's brand for either 2022 or 2023 for the 2024 reporting year, or for either 2025 or 2026 for the 2027 reporting year in Section III.A. of this Part G. Respond using the following bins (0, 1-10, 11-20, 20-50, or more than 50);
- IV.A.15. If your entity has motor carrier or broker authority and contracts with subhaulers to serve your customers, identify the following for either 2022 or 2023 for the 2024 reporting year or for either 2025 or 2026 for the 2027 reporting year in Section III.A. of this Part G; if you do not have motor carrier or broker authority, mark "Does not apply":
 - IV.A.15.a. The number of subhaulers you contracted with in Colorado to transport goods or other property. Respond using the following bins (Does not apply, 0, 1-10, 11-20, 20-50, or more than 50);
 - IV.A.15.b. Estimated number of vehicles operated by your subhaulers on your behalf in Colorado. Respond using the following bins (Does not apply, 0, 1-10, 11-20, 20-99, 100-500, >500); and

IV.A.15.c. Estimated number of vehicles operated by subhaulers that operated under your motor carrier authority in Colorado. Respond using the following bins (Does not apply, 0, 1-10, 11-20, 20-99, 100-500, >500).

IV.A.16. Identify whether your entity has a written sustainability plan to reduce your carbon footprint. Respond with (Yes, No, Does not apply);

IV.A.17. Identify whether your entity's written sustainability plan includes transportation emissions reduction goals. Respond with (Yes, No, Does not apply);

IV.A.18. Identify the number of vehicles with a GVWR over 8,500 lb. your entity owned and operated in Colorado for either 2022 or 2023 for the 2024 reporting year or for either 2025 or 2026 for the 2027 reporting year in Section III.A. of this Part G that do not have a vehicle home base in Colorado.

IV.A.19. Identify whether the data used to respond to the questions in this Section IV. were from for either 2022 or 2023 for the 2024 reporting year or for either 2025 or 2026 for the 2027 reporting year in Section III.A. of this Part G or a combination thereof.

V. Vehicle Usage by Facility Reporting.

Regulated entities that own or operate any vehicles under common ownership or control, or that broker to use vehicles with a GVWR greater than 8,500 lbs. must report general information about the vehicle home base where all on-road vehicles and off-road yard tractors are domiciled or assigned as specified in Section V.A., and information about vehicle operating characteristics for vehicles domiciled or assigned to each vehicle home base in Colorado as specified in Section V.B. Vehicles that accrue a majority of their annual miles in Colorado, but are not assigned to a particular location in Colorado, must be reported as part of the headquarters or another location where the vehicles' operation is managed.

V.A. All regulated entities must report the following information for each vehicle home base:

V.A.1. Facility address including street name, city, state, and ZIP code;

V.A.2. Facility type category as listed in Section VI.G.;

V.A.3. Contact person name;

V.A.4. Contact person email address;

V.A.5. Identify whether the facility is owned or leased by the entity;

V.A.6. Identify what type of fueling infrastructure is installed at the facility, by selecting all of the fuel types dispensed at the facility as listed in Sections V.A.6.a to V.A.6.g.:

V.A.6.a. Diesel;

V.A.6.b. Gasoline;

V.A.6.c. Natural gas;

V.A.6.d. Electricity for on-road vehicle charging (Level 2 or higher power);

- V.A.6.d.i. If present, provide a number of chargers.
 - V.A.6.d.ii. If present, provide kW capacity of the charger(s).
 - V.A.6.e. Hydrogen;
 - V.A.6.f. Other fuel; or
 - V.A.6.g. Not applicable.
- V.A.7. Identify what fueling infrastructure was initially installed on or after January 1, 2010 for the fueling options listed in Sections V.A.6.a. to V.A.6.g.;
- V.A.8. Identify what types of trailers you pull if you have tractors assigned or domiciled at this facility:
 - V.A.8.a. Van-dry;
 - V.A.8.b. Van-reefer;
 - V.A.8.c. Tanker;
 - V.A.8.d. Flatbed;
 - V.A.8.e. Shipping container;
 - V.A.8.f. Low bed;
 - V.A.8.g. Curtain side; or
 - V.A.8.h. Other.
- V.B. For each vehicle home base with a vehicle above 8,500 lbs. GVWR, report information specified in Sections V.B.1. to V.B.6. for all vehicles above 8,500 lb. GVWR including off-road yard tractors. Responses must be grouped by vehicle body type as listed in Section VI.T., weight class bin specified in Section VI.W., and fuel type listed in Sections V.A.6.a. to V.A.6.g. Alternatively, responses may be completed for each individual vehicle and include the vehicle's body type, weight class bin, and fuel type. Separately report vehicles dispatched under your brokerage authority, if applicable. Each vehicle should only be counted once for each response. Additional guidance for analysis periods used to respond to questions in this section is located in Section V.B.7. Additional guidance on reusing vehicle operational information between similar locations is located in Section V.B.8. Vehicles dispatched under your brokerage authority but not owned by your entity are not subject to reporting information from Sections V.B.2.a. to V.B.2.e. and additional guidance for brokers is located in Section V.B.9.
 - V.B.1. How many vehicles in each vehicle group;
 - V.B.2. The percent of the vehicles in each vehicle group that have the operations listed in Sections V.B.2.a. through V.b.2.q., except Section V.B.2.j., represented by 90 percent of a vehicle's operating days for the analysis period selected per Section V.B.7. Respond by estimating the percent of the total vehicles that apply to the category and rounding to the nearest 10 percent. For yard tractors, Sections V.B.2.a. through V.B.2.e. and V.B.2.k. are optional. Do not include backup or non-operational vehicles in calculating vehicle group mileage averages.

- V.B.2.a. Operate up to 100 average miles per day;
- V.B.2.b. Operate up to 150 average miles per day;
- V.B.2.c. Operate up to 200 average miles per day;
- V.B.2.d. Operate up to 300 average miles per day;
- V.B.2.e. Operate more than 300 average miles per day;
- V.B.2.f. Has a predictable usage pattern. For example, refuse trucks or package delivery trucks typically have predictable usage patterns because they tend to serve the same neighborhoods each week;
- V.B.2.g. Fuels on-site as the primary means of fueling;
- V.B.2.h. Typically returns to this vehicle home base daily. For example, if a vehicle returns to a personal residence nearly all days of the year and does not return to the vehicle home base often, the vehicle would not be counted; however, a vehicle that returns to the vehicle home base nightly for 9 out of 10 work days, or always stays at home base, would be counted;
- V.B.2.i. Has onboard GPS or mileage tracking;
- V.B.2.j. Whether most of the vehicles in the group stay within approximately 50 miles of this facility on a typical day (indicate either Yes or No);
- V.B.2.k. Tows a trailer more than 100 miles a day;
- V.B.2.l. Commonly operates at its weight limit;
- V.B.2.m. Is not registered in Colorado;
- V.B.2.n. Is regularly parked at the facility more than 8 hours each day;
- V.B.2.o. The highest approximate percent of the vehicle group that was dispatched at the same time over the last 3 years on the behalf of a local, state or federal government to support an emergency operation such as repairing or preventing damage to roads, buildings, terrain, and infrastructure as a result of an earthquake, flood, storm, fire, terrorism, or other infrequent acts of nature;
- V.B.2.p. Is equipped with all-wheel drive; and
- V.B.2.q. Are not being operated or are used as backup vehicles.
- V.B.3. The average annual mileage for a typical vehicle in this vehicle group. Respond by using one of the following that is closest to the average miles (5,000 or less, 10,000, 20,000, 30,000, 40,000, 50,000, 60,000, 70,000, 80,000, 90,000, 100,000, or more than 100,000).

- V.B.4. For vehicle types represented in this group, identify how long you typically keep vehicles after acquisition. Respond in number of years by using one of the following bins: (Less than 4, 5-10, 11-15, 16-20, or more than 20).
- V.B.5. Identify whether your entity is the fleet owner for this group of vehicles, or if they are dispatched under your brokerage authority.
- V.B.6. Identify the start and end date of the analysis period selected per Section V.B.7.
- V.B.7. Entities must either use annual or quarterly data averaged for work days during the period selected to determine responses or alternatively may select a different time period. A shorter analysis period may be used if the respondent deems it more representative of periods of high vehicle utilization when answering questions about typical daily operation. For example, if an entity selects annual data to determine vehicle daily mileage, average the annual mileage accrued by the number of workdays that year. Otherwise, if an entity with seasonal workload fluctuations determines that a week or month during the busy season is representative, average the data records for that week or month when determining a response. If an alternative analysis period is used, the respondent must be prepared to describe their reasoning at the request of the Executive Officer per Section III.D.
- V.B.8. Responses for items in Section V.B.1. through V.B.5. for a vehicle group at one location may be repeated for the same vehicle group at another vehicle home base if the respondent that is familiar with the vehicle operation determines the operation at that location is substantially similar to another location.
- V.B.9. A broker is only expected to provide information about vehicle usage that is dispatched under contract with a fleet owner. For example, if a broker hires a truck to move a load, only the miles driven under that contract should be considered for the responses and the broker is not expected to have information about the miles driven outside the contract, but may voluntarily report the information if known.

VI. Definitions. The following definitions shall apply for this Part G.

- VI.A. *Backup Vehicle* means a self-propelled motor vehicle designed for on-highway use that is used intermittently to maintain service during periods of routine or unplanned maintenance, unexpected vehicle breakdowns, or accidents but is not used in everyday or seasonal operations.
- VI.B. *Broker* means an entity or person who has broker authority from the Federal Motor Carrier Safety Administration and, for compensation, arranges or offers to arrange the transportation of property by an authorized motor carrier. A motor carrier, or person who is an employee or bona fide agent of a carrier, is not a broker when it arranges or offers to arrange the transportation of shipments which it is authorized to transport and which it has accepted and legally bound itself to transport.
- VI.C. *Common Ownership or Control* means being owned or managed day to day by the same person or entity. Vehicles managed by the same directors, officers, or managers, or by corporations controlled by the same majority stockholders are considered to be under common ownership or control even if their title is held by different business entities. Common ownership or control of a federal government vehicle shall be the primary responsibility of the unit that is directly responsible for its day to day operational control.

- VI.D. *Corporate Parent* means a business that possesses the majority of shares in another business, which gives them control of their operational procedures.
- VI.E. *Dispatched* means provided direction or instruction for routing a vehicle(s), whether owned or under contract, to specified destinations for specific purposes, including but not limited to delivering cargo, passengers, property or goods, providing a service, or assisting in an emergency.
- VI.F. *Facility* means any property with one or more unique physical addresses.
- VI.G. *Facility Category* means a classification of different facility types based on a facility's primary purpose. Facility categories are defined as the following:
- VI.G.1. *Administrative/Office Building* means a building or structure used primarily for day-to-day activities that are related to administrative tasks such as financial planning, record keeping & billing, personnel, physical distribution and logistics, within a business.
- VI.G.2. *Distribution Center/Warehouse* means a location used primarily for the storage of goods which are intended for subsequent shipment.
- VI.G.3. *Hotel/Motel/Resort* means a commercial establishment offering lodging to travelers and sometimes to permanent residents.
- VI.G.4. *Manufacturer/Factory/Plant* means a location with equipment for assembling parts, producing finished products, intermediate parts, or energy products.
- VI.G.5. *Medical/Hospital/Care* means an institution engaged in providing inpatient diagnostic and therapeutic services or rehabilitation services by or under the supervision of physicians.
- VI.G.6. *Multi-Building Campus/Base* means a property typically operated by a single entity with several buildings, often serving multiple purposes.
- VI.G.7. *Restaurant* means a business establishment where the primary purpose is serving meals or refreshments.
- VI.G.8. *Service Center* means a facility that supports a business operation that generates revenue by providing a specific service or product, or a group of services or products to a customer.
- VI.G.9. *Store* means an establishment that sells goods or a variety of goods and services to the general public.
- VI.G.10. *Truck/Equipment Yard* means an establishment that primarily stores or dispatches trucks and equipment such as a garage or parking lot.
- VI.G.11. *Any Other Facility Type* means any facility that is not included in Sections VI.G.1. through VI.G.10.

- VI.H. *Fleet* means one or more self-propelled on-road vehicles under common ownership or control of a person, business, or agency as defined in § 42-1-102 (66) C.R.S. This includes vehicles that are rented or leased from a business that regularly engages in the trade or business of leasing or renting motor vehicles without drivers where the vehicle rental or leasing agreement for the use of a vehicle is for a period of one or more years.
- VI.I. *Fleet Owner* means, except as modified in Sections VI.I.1. and VI.I.2., either the person registered as the owner or lessee of a vehicle by the Colorado Department of Motor Vehicles (DMV), or its equivalent in another state, province, or country; as evidenced on the vehicle registration document carried in the vehicle.
- VI.I.1. For vehicles that are owned by the federal government and not registered in any state or local jurisdiction, the owner shall be the department, agency, branch, or other entity of the United States, including the United States Postal Service, to which the vehicles in the fleet are assigned or which have responsibility for maintenance of the vehicles.
- VI.I.2. For a vehicle that is rented or leased from a business that is regularly engaged in the trade or business of leasing or renting motor vehicles without drivers, the owner shall be the rental or leasing entity if the rental or lease agreement for the use of a vehicle is for a period of less than one year, otherwise the owner shall be the renter or lessee.
- VI.J. *Government Agency* means any federal, state, or local governmental agency, including, water districts, or any other public entity with taxing authority.
- VI.K. *Gross Annual Revenue* means the total revenue, receipts, and sales reported to the Internal Revenue Service for a consecutive 12-month period.
- VI.L. *Gross Vehicle Weight Rating or GVWR* means the weight specified by the manufacturer as the loaded weight of a single vehicle.
- VI.M. *Motor Carrier* is the same as defined in California Vehicle Code Section 408.
- VI.N. *Municipality* means a city, county, city and county, special district, or a public agency of the State of Colorado, and any department, division, public corporation, or public agency of this State.
- VI.O. *Responsible Official* means one of the following:
- VI.O.1. For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or their delegate, designee, or any other person who performs similar policy or decision-making functions for the corporation;
- VI.O.2. For a partnership or sole proprietorship: A general partner or the proprietor, or the delegate or designee of the aforementioned, or any other person who performs similar policy or decision-making functions for the business; or

- VI.O.3. For a municipality, state, federal, or other governmental agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the U.S. EPA). For the purposes of the Department of Defense Military Services, a principal executive officer includes a commanding officer of an installation, base, or tenant organization.
- VI.P. *Subsidiary* means a company controlled by another company.
- VI.Q. *Subhauler* means a for-hire motor carrier who enters into an agreement to provide transportation services on the behalf of another motor carrier or broker.
- VI.R. *Transportation Network Company* means any entity or person that provides prearranged transportation services for compensation using an online-enabled application or platform (such as smart phone apps) to connect drivers using their personal vehicles with passengers.
- VI.S. *Vehicle* means self-propelled equipment intended for use on highways, and does not include motorcycles.
- VI.T. *Vehicle Body Type* means commonly used vehicle body descriptions to be used in responding to questions about the fleet of vehicles including the following: beverage truck, boom/bucket, box reefer, box dry van, bus-shuttle, bus-other, car/SUV, car carrier, concrete mixer, concrete pump, crane, drill rig, dump, flatbed or stake bed, garbage front loader, garbage side loader, garbage packer, garbage roll-off, other, pickup bed, service body, sweeper, tank, tractor day cab, tractor sleeper cab, tow, vacuum, water, van-cargo, van-step, van-passenger, on-road or off-road yard tractor.
- VI.U. *Vehicle Home Base* means the location where a vehicle is domiciled meaning a business location where a vehicle is typically kept when not in use. Vehicles that are kept at a personal residence or kept at a location that is not operated by the entity shall use the location where the vehicle is dispatched from or where the vehicle is repaired or maintained.
- VI.V. *Vehicles Awaiting Sale* means vehicles in the possession of dealers, financing companies, or other entities that do not intend to operate the vehicle in Colorado or offer the vehicle for hire for operation in Colorado, and that are operated only to demonstrate functionality to potential buyers or to move short distances while awaiting sale for purposes such as maintenance or storage.
- VI.W. *Weight Class Bin* means a list of vehicles categorized by GVWR. The weight class bins are one of the following:
- VI.W.1. *Light-Duty* means a self-propelled motor vehicle designed for on-highway use with a GVWR of 8,500 lbs. or less. Also referred to as Class 1-2a. This includes passenger cars, sport utility vehicles, minivans, and light pickup trucks.
- VI.W.2. *Class 2b-3* means a self-propelled motor vehicle designed for on-highway use with a GVWR from 8,501 lb. to 14,000 lb. The types of vehicle in this category generally includes full-size pickup trucks, smaller utility trucks, cargo vans, and passenger vans.

VI.W.3. *Class 4-6* means a self-propelled motor vehicle designed for on-highway use with a GVWR from 14,001 lb. to 26,000 lb.

VI.W.4. *Class 7-8* means a self-propelled motor vehicle designed for on-highway use with a GVWR greater than 26,000 lbs.

PART H INCORPORATIONS BY REFERENCE

This Regulation Number 20 incorporates by Reference the following California Code of Regulations, Title 13, Sections identified in the following table. All references to the California Code of Regulations in this Regulation Number 20 mean the versions specified in the table.

For the purposes of applying the incorporated sections of the California Code of Regulations, unless the context requires otherwise, “California” means “Colorado”. Depending on context, “CARB” or “AIR Resources Board” means Colorado Department of Public Health and Environment, and “Executive Officer” means the Executive Director of the Colorado Department of Public Health and Environment.

Table 1. Code of California Regulations, Title 13. Motor Vehicle, Division 3. Air Resource Board

Section	Title	Section Amended Date
Chapter 1 Motor Vehicle Pollution Control Devices		
Article 1. General Provisions		
1900	Definitions	<i>November 30, 2022</i>
Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles)		
1956.8	Exhaust Emissions Standards and Test Procedures--1985 and Subsequent Model Heavy-Duty Engines and Vehicles, 2021 and Subsequent Zero-Emission Powertrains, and 2022 and Subsequent Model Heavy-Duty Hybrid Powertrains.	<i>April 1, 2022</i>
1961.2	Exhaust Emission Standards and Test Procedures--2015 through 2025 Model Year Passenger Cars and Light-Duty Trucks, and 2015 through 2028 Model Year Medium-Duty Vehicles.	<i>November 30, 2022</i>
1961.3	Greenhouse Gas Exhaust Emission Standards and Test Procedures – 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.	<i>November 30, 2022</i>
1961.4	Exhaust Emission Standards and Test Procedures--2026 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.	<i>November 30, 2022</i>
1962.2	Zero-Emission Vehicle Standards for 2018 through 2025 Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.	<i>November 30, 2022</i>
1962.3	Electric Vehicle Charging Requirements	<i>November 30, 2022</i>

Section	Title	Section Amended Date
1962.4	Zero-Emission Vehicle Requirements for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks.	<i>November 30, 2022</i>
1962.5	Data Standardization Requirements for 2026 and Subsequent Model Year Light-Duty Zero Emission Vehicles and Plug-in Hybrid Electric Vehicles.	<i>November 30, 2022</i>
1962.6	Battery Labeling Requirements.	<i>November 30, 2022</i>
1962.7	In-Use Compliance, Corrective Action and Recall Protocols for 2026 and Subsequent Model Year Zero-Emission and Plug-in Hybrid Electric Passenger Cars and Light-Duty Trucks.	<i>November 30, 2022</i>
1962.8	Warranty Requirements for Zero-Emission and Batteries in Plug-in Hybrid Electric 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks.	<i>November 30, 2022</i>
1963	Advanced Clean Trucks Purpose, Applicability, Definitions, and General Requirements	<i>March 15, 2021</i>
1963.1	Advanced Clean Trucks Deficits	<i>March 15, 2021</i>
1963.2	Advanced Clean Trucks Credit Generation, Banking, and Trading	<i>March 15, 2021</i>
1963.3	Advanced Clean Trucks Compliance Determination	<i>March 15, 2021</i>
1963.4	Advanced Clean Trucks Reporting and Recordkeeping	<i>March 15, 2021</i>
1963.5	Advanced Clean Trucks Enforcement	<i>March 15, 2021</i>
1965	Emission Control and Smog Index Labels – 1979 and Subsequent Model Year Vehicles	<i>April 1, 2022</i>
1968.2	Malfunction and Diagnostic System Requirements – 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	<i>November 30, 2022</i>
1969	Motor Vehicle Service Information--1994 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Engines and Vehicles, and 2007 and Subsequent Model Heavy-Duty Engines.	<i>November 30, 2022</i>
1971.1	On-Board Diagnostic System Requirements - 2010 and Subsequent Model-Year Heavy-Duty Engines	<i>November 22, 2022</i>
1976	Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions	<i>November 30, 2022</i>

Section	Title	Section Amended Date
1978	Standards and Test Procedures for Vehicle Refueling Emissions	<i>November 30, 2022</i>
Article 6. Emission Control System Warranty		
2035	Purpose, Applicability and Definitions	<i>April 1, 2022</i>
2036	Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles	<i>April 1, 2022</i>
2037	Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	<i>November 30, 2022</i>
2038	Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	<i>November 30, 2022</i>
2039	Emission Control System Warranty Statement	<i>December 26, 1990</i>
2040	Vehicle Owner Obligations	<i>October 1, 2019</i>
2041	Mediation; Finding of Warrantable Condition	<i>December 26, 1990</i>
2046	Defective Catalyst	<i>February 15, 1979</i>
Chapter 2 Enforcement of Vehicle Emission Standards and Enforcement Testing		
Article 1. Assembly-Line Testing		
2062	Assembly-line Test Procedures 1998 and Subsequent Model years	<i>August 7, 2012</i>
Article 1.5. Enforcement of Vehicle Emission Standards and Surveillance Testing for 2005 and Subsequent Model Year Heavy-Duty Engines and Vehicles		
2065	Applicability of Chapter 2 to 2005 and Subsequent Model Year Heavy-Duty Engines and Vehicles	<i>April 1, 2019</i>
Article 2. Enforcement of New and In-use Vehicle Standards		
2109	New Vehicle Recall Provisions	<i>December 30, 1983</i>
Article 2.1. Procedures for In-Use Vehicle Voluntary and Influenced Recalls		
2111	Applicability	<i>April 1, 2022</i>

Section	Title	Section Amended Date
2112	Definitions	<i>April 1, 2022</i>
2113	Initiation and Approval of Voluntary and Influenced Emission-Related Recalls	<i>April 1, 2022</i>
2114	Voluntary and Influenced Recall Plans	<i>April 1, 2022</i>
2115	Eligibility for Repair	<i>April 1, 2022</i>
2116	Repair Label	<i>April 1, 2022</i>
2117	Proof of Correction Certificate	<i>April 1, 2022</i>
2118	Notification	<i>April 1, 2022</i>
2119	Recordkeeping and Reporting Requirements	<i>April 1, 2022</i>
2120	Other Requirements Not Waived	<i>January 26, 1995</i>
2121	Penalties	<i>April 1, 2022</i>
Article 2.2. Procedures for In-Use Vehicle Ordered Recalls		
2122	General Provisions	<i>December 8, 2010</i>
2123	Initiation and Notification of Ordered Emission-Related Recalls	<i>April 1, 2022</i>
2124	Availability of Public Hearing	<i>January 26, 1995</i>
2125	Ordered Recall Plan	<i>April 1, 2022</i>
2126	Approval and Implementation of Recall Plan	<i>April 1, 2022</i>
2127	Notification of Owners	<i>April 1, 2022</i>
2128	Repair Label	<i>April 1, 2022</i>
2129	Proof of Correction Certificate	<i>April 1, 2022</i>
2130	Capture Rates and Alternative Measures	<i>April 1, 2022</i>
2131	Preliminary Tests	<i>April 1, 2022</i>
2132	Communication with Repair Personnel	<i>January 26, 1995</i>
2133	Recordkeeping and Reporting Requirements	<i>April 1, 2022</i>
2134	Penalties	<i>January 26, 1995</i>
2135	Extension of Time	<i>January 26, 1995</i>

Section	Title	Section Amended Date
Article 2.3. In-Use Vehicle Enforcement Test Procedures		
2137	Vehicle, Engine, and Trailer Selection	<i>April 1, 2022</i>
2139	Testing	<i>November 30, 2022</i>
2140	Notification and Use of Test Results	<i>November 30, 2022</i>
Article 2.4. Procedures for Reporting Failure of Emission-Related Components		
2141	General Provisions	<i>April 1, 2022</i>
2142	Alternative Procedures	<i>April 1, 2022</i>
2143	Failure Levels Triggering Recall	<i>April 1, 2022</i>
2144	Emission Warranty Information Report	<i>April 1, 2022</i>
2145	Field Information Report	<i>April 1, 2022</i>
2146	Emissions Information Report	<i>April 1, 2022</i>
2147	Demonstration of Compliance with Emission Standards	<i>November 30, 2022</i>
2148	Evaluation of Need for Recall	<i>April 1, 2022</i>
2149	Notification of Subsequent Action	<i>April 1, 2022</i>
Article 5. Procedures for Reporting Failures of Emission-Related Equipment and Required Corrective Action		
2166	General Provisions	<i>April 1, 2022</i>
2166.1	Definitions	<i>April 1, 2022</i>
2167	Required Recall and Corrective Action for Failures of Exhaust After-Treatment Devices, On-Board Computers or Systems, Urea Dosers, Hydrocarbon Injectors, Exhaust Gas Recirculation Valves, Exhaust Gas Recirculation Coolers, Turbochargers, Fuel Injectors	<i>April 1, 2022</i>
2168	Required Corrective Action and Recall for Emission-Related Component Failures	<i>April 1, 2022</i>
2169	Required Recall or Corrective Action Plan	<i>April 1, 2022</i>
2169.1	Approval and Implementation of Corrective Action Plan	<i>April 1, 2022</i>
2169.2	Notification of Owners	<i>April 1, 2022</i>
2169.3	Repair Label	<i>April 1, 2022</i>

Section	Title	Section Amended Date
2169.4	Proof of Correction Certificate	<i>April 1, 2022</i>
2169.5	Preliminary Tests	<i>April 1, 2022</i>
2169.6	Communication with Repair Personnel	<i>April 1, 2022</i>
2169.7	Recordkeeping and Reporting Requirements	<i>April 1, 2022</i>
2169.8	Extension of Time	<i>April 1, 2022</i>
Chapter 4. Criteria for the Evaluation of Motor Vehicle Pollution Control Devices and Fuel Additives		
Article 2. Aftermarket Parts		
2222 (h) and (i)	Add-On Parts and Modified Parts	<i>October 1, 2021</i>

Regulation Number 20 does not include any later amendments or editions of the regulations incorporated by reference. The incorporated regulations are available for inspection at the Division during normal business hours at:

Colorado Department of Public Health and Environment
Air Pollution Control Division, Mobile Sources Section
4300 Cherry Creek Drive South, Denver, CO, 80220

Or online at:

<https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I88D700E0D46911DE8879F88E8B0DAAAE&originationContext=documenttoc&transitionType=Default&contextData=%28sc.Default%29>

Copies of the incorporated regulations are also available for a reasonable charge from the Department and from:

Barclays Official California Code of Regulations
50 California Street Second Floor
San Francisco, CA 94111

PART I STATEMENTS OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE

I. ADOPTED: November 15, 2018 (Adoption of all Sections)

This Statement of Basis, Specific Statutory Authority, and Purpose complies with the requirements of the Colorado Administrative Procedure Act, § 24-4-103(4), C.R.S., the Colorado Air Pollution Prevention and Control Act, §§ 25-7-110 and 25-7-110.5, C.R.S. and the Air Quality Control Commission's ("Commission") Procedural Rules.

Basis

On June 18, 2018, Governor John Hickenlooper, by Executive Order B 2018 006, directed the Colorado Department of Public Health and Environment to develop and propose a regulation for the implementation of a Colorado low emission vehicle ("LEV") program, incorporating the requirements of the California LEV program. The Executive Order declared the need for adopting the LEV program as a response to the federal governments announced intention to roll back vehicle greenhouse gas ("GHG") standards for model years 2022 and beyond. Currently, the federal and California vehicle standards establish essentially the same emission limits. Colorado's adoption of the California vehicle standards for light- and medium-duty vehicles is intended to maintain the standards already in place for these vehicle in Colorado.

However, the Commission notes that it spent considerable time gathering input from the auto industry, environmental groups, local governments, and the Division regarding the potential implications of this rule prior to the issuance of the Executive Order. The Commission's decision to embark upon this rulemaking hearing was deliberate and well considered, and all interested parties and members of the public had significant opportunity to provide input to the Commission in its consideration of whether to adopt this regulation. The Commission determines adoption of Regulation Number 20, Colorado Low Emission Automobile Regulation Number ("CLEAR") will reduce vehicle GHG emissions in Colorado by retaining vehicle standards demonstrated through comprehensive analyses as being economically reasonable, technologically feasible and to provide the co-benefit of reducing costs for Colorado drivers.

Statutory Authority

Section 177 of the federal Clean Air Act ("CAA"), 42 U.S.C. Section 7507, provides states the option of requiring compliance with either federal or approved California standards for vehicles sold within their borders. The Colorado Air Pollution Prevention and Control Act, §§ 25-7-101, C.R.S., et seq., ("Act") at § 25-7-105(1), directs the Commission to promulgate emission control regulations consistent with the legislative declaration set forth in § 25-7-102 and in conformity with § 25-7-109. The legislative declaration identifies, among other objectives, the need to "achieve the maximum practical degree of air purity in every portion of the State" § 25-7-102, C.R.S. §§ 25-7-109(1)(a) and (2) of the Act authorize the Commission to promulgate regulations requiring effective and practical air pollution controls for significant sources and categories of sources, and emission control regulations pertaining to carbon oxides. § 25-7-106 further provides the Commission maximum flexibility in developing an effective air quality program and promulgating such combination of regulations as may be necessary or desirable to carry out that program. § 25-7-106 also authorizes the Commission to promulgate emission control regulations applicable to the entire state, specified areas or zones, or a specified class of pollution.

While there were arguments made as part of the proceeding that vehicle emission control studies and a resulting recommendation from the Commission are prerequisites to the adoption of Regulation Number 20 pursuant to § 25-7-130, the Commission disagrees, based on both the plain language and the legislative history of the statute. § 25-7-130 pertains to inspection and maintenance programs for in-use vehicles, and this regulation is solely applicable to new vehicles. In addition, while § 25-7-130 requires the Division to conduct studies and pilot programs and the Commission to create recommendations based upon the results of those efforts, nothing in the statute directly requires those studies, programs, and recommendations to be performed and developed before the Commission can propose and adopt a rule.

Purpose

The following section sets forth the Commission's purpose in adopting Regulation Number 20, and includes the technological and scientific rationale for the adoption of the regulation. The Commission determines adoption of Regulation Number 20 CLEAR will reduce vehicle emissions in Colorado. The Commission is utilizing the option that CAA Section 177 provides states to choose between the federal and approved California vehicle standards. Nothing in CLEAR is intended to differ in any substantive way from the provisions adopted by California as of the effective date of these revisions adopted by the Commission. The Commission determines adopting the California standards will retain the vehicle standards currently in place in Colorado and avoid the disbenefits of the anticipated roll back of federal standards. In accordance with C.R.S. §§ 25-7-105.1 and 25-7-133(3) the Commission states the rules in Regulation Number 20 adopted in this rulemaking are state-only requirements and are not intended as additions or revisions to Colorado's State Implementation Plan (SIP).

As part of adopting the revisions to Regulation Number 20, the Commission has taken into consideration each of the factors set forth in C.R.S. § 25-7-109(1)(b). The Commission considered information in the record regarding the state policy regarding air pollution ("...to achieve the maximum practical degree of air purity in every portion of the state, to attain and maintain the national ambient air quality standards..."), federal recommendations and requirements, the degree to which altitude, topography, climate, or meteorology requires different more or less stringent regulations in different parts of the state, the degree to which these types of emissions are subject to treatment and the availability and feasibility of treatment, the significance of the emissions to be controlled, the continuous nature of the emissions to be controlled, the economic, environmental, and energy costs of complying with the rule, and whether the rule should be statewide or apply only to portion of the state.

The Division provided an economic impact analysis for this rule, as well as a cost-benefit analysis pursuant to § 24-4-103(2.5), C.R.S. and a regulatory analysis pursuant to § 24-4-103(4.5), C.R.S. The Division made a good faith effort to provide the most complete and accurate analyses based on the information reasonably available to it. Expert testimony presented to the commission raises serious questions about cost estimates from the August 2018 SAFE Rule proposal (83 FR 48578). The commission did not rely on these estimates. Nevertheless, the division's cost benefit analysis, revised final economic impact analysis, and regulatory analysis and other evidence in the record amply support the conclusion that Regulation Number 20 is a practical measure that will cost effectively reduce GHG emissions.

To the extent that C.R.S. § 25-7-110.5(5)(b) requirements apply to this rulemaking, and after considering all the information in the record, the Commission hereby makes the determination that:

- (I) *Any federal requirements that are applicable to this situation with a commentary on those requirements;*

Section 177 of the Federal Clean Air Act permits states the option of adopting California car standards. Twelve other states and the District of Columbia made this adoption of California standards in the past 14 years.

Auto manufacturers typically build two models of a particular car – one for sale in California, and another to sell elsewhere. California cars have been historically slightly lower-emitting than their federally certified counterparts. However, the standards for both were harmonized in 2017. The U.S. Environmental Protection Agency (“US EPA”) is taking action to roll back a standards change proposed for the 2021 model year. California cars would retain the standards-change that further reduces GHG emissions. California’s rules previously allowed for manufacturers to comply with California’s program by complying with the equivalent federal standards; however, California recently revised its rules to disallow compliance with federal standards to satisfy compliance with California standards in the event of a roll back.

- (II) *Whether the applicable federal requirements are performance-based or technology-based and whether there is any flexibility in those requirements, and if not, why not;*

The federal Clean Air Act grants authority to US EPA to establish new vehicle emissions standards. California mandated its own emissions standards, predating the federal Act. Car manufacturers have been engineering to federal or California emissions standards for 50 years, with tremendous technological innovation during that time. These are performance-based emissions standards – vehicles may not emit more than x grams per mile of the various criteria and GHG emissions for either certification.

- (III) *Whether the applicable federal requirements specifically address the issues that are of concern to Colorado and whether data or information that would reasonably reflect Colorado’s concern and situation was considered in the federal process that established the federal requirements;*

The Executive Order requires the Commission to consider adopting California Low Emission Vehicle standards. Because the ozone-forming criteria emissions standards are essentially the same between California and federal cars, there is little ozone benefit for Colorado in this rule. The emission reduction benefits to be derived from this regulation is primarily for GHG reductions. GHG are contributing to climate change, which is a concern to many Coloradans. The extent to which Colorado’s concerns and issues will be specifically addressed in the federal proposal is unclear.

- (IV) *Whether the proposed requirement will improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later;*

The regulatory burden of the proposed rule falls on auto manufacturers and dealers. The proposed rule does not significantly improve nor inhibit manufacturer’s and Dealers’ ability to comply, since these cars are being built for consumers in 13 states and the District of Columbia already.

- (V) *Whether there is a timing issue which might justify changing the time frame for implementation of federal requirement;*

The federal administration formally proposed rollback options for the 2021 GHG standards on August 2, 2018. This proposed federal rule also considers revoking California’s waiver to set their own standards. The federal Clean Air Act, Section 177 allows a state to adopt California new car emissions standards in lieu of federal standards. There is a mandated two-model-year lead time when a state makes the Section 177 adoption to California standards. Those standards are due to lapse after the 2025 model year. So, in order for Colorado to maximize the benefits from this new rule, it should be adopted before January 1, 2019.

- (VI) *Whether the proposed requirement will assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth;*

The proposed rule will reduce GHG emissions in support of Colorado's Climate Action Plan and Executive Order D 2017-015. As the Colorado vehicle fleet turns over and newer, lower-emitting vehicles are brought into use, overall emissions are reduced.

- (VII) *Whether the proposed requirement establishes or maintains reasonable equity in the requirements for various sources;*

The proposed rule affects a single source category, mobile sources. Therefore, there are no equity issues between these sources. However, if the federal vehicle standards are rolled back and this proposed rule is not adopted, additional GHG emissions reductions will be required from other emission source categories to make up for the loss of approximately 30 million tons of benefit in GHG reduction projected to be achieved through this rule, in order to meet the Governor's Executive Order D2017-015.

- (VIII) *Whether others would face increased costs if a more stringent rule is not enacted;*

As a contributor to climate change, GHG emissions present a cost to Coloradoans and Colorado businesses. In order to meet the goals of the Climate Action Plan, GHG emissions reductions not gained from the Mobile source sector may need to be taken from other industries.

- (IX) *Whether the proposed requirement includes procedural, reporting, or monitoring requirements that are different from applicable federal requirements and, if so, why and what the "compelling reason" is for different procedural, reporting, or monitoring requirements;*

Although California-certified Low Emission Vehicles will be built to different standards than their federally-certified counterparts, the processes and procedures are very similar. There will be some additional monitoring, averaging, and reporting requirements, although vehicle manufacturers and dealers are already meeting those requirements in 13 other states and the District of Columbia.

There will be additional workload on state and county staff, performing surveillance and enforcement, new vehicle titling and registration requirements, and monitoring vehicles sales.

- (X) *Whether demonstrated technology is available to comply with the proposed requirement;*

Both US EPA and the California Air Resources Board have found that the standards in the proposed rule are appropriate based on existing and maturing technologies. EPA has reversed themselves stating in April 2018 that the 2021 GHG standards change is inappropriate.

- (XI) *Whether the proposed requirement will contribute to the prevention of pollution or address a potential problem and represent a more cost-effective environmental gain; and*

The proposed rule is estimated to reduce GHG emissions by approximately 30 million tons over the lifetime of vehicles built for model years 2022 through 2031. A co-benefit to reducing GHG emissions is a savings to Colorado motorists, resulting in a savings over the life of a LEV vehicle that more than offsets the increase in purchase price of the vehicle.

- (XII) *Whether an alternative rule, including a no-action alternative, would address the required standard.*

Other than retaining the federal standards, there is no regulatory alternative to adopting California LEV standards for Colorado. Assuming the proposed rollback of the federal standards occurs, no action would result in a significant increase in vehicle GHG emissions in Colorado.

To the extent that C.R.S. § 25-7-110.8 requirements apply to this rulemaking, and after considering all the information in the record, the Commission hereby makes the determination that:

- (I) These rules are based upon reasonably available, validated, reviewed, and sound scientific methodologies, and the Commission has considered all information submitted by interested parties.
- (II) Evidence in the record supports the finding that the rules result in a demonstrable reduction of emissions.
- (III) Evidence in the record supports the finding that the rules bring about reductions in risks to human health and the environment that justify the costs to implement and comply with the rules.
- (IV) The rules are the most cost-effective to achieve the necessary and desired results, provide the regulated community flexibility, and achieve the necessary reduction in air pollution.
- (V) The selected regulatory alternative will maximize the air quality benefits of regulation in the most cost-effective manner.

II. **ADOPTED: August 16, 2019 (Adoption of ZEV Section as part of CLEAR)**

This Statement of Basis, Specific Statutory Authority, and Purpose complies with the requirements of the Colorado Administrative Procedure Act, § 24-4-103(4), C.R.S., the Colorado Air Pollution Prevention and Control Act ("Act"), §§ 25-7-110 and 25-7-110.5, C.R.S. and the Air Quality Control Commission's ("Commission") Procedural Rules, 5 CCR 1001-1.

Basis

On January 17, 2019, Governor Jared Polis, by Executive Order B 2019 002, directed the Colorado Department of Public Health and Environment to develop and propose a regulation for the implementation of a Colorado Zero Emission Vehicle ("ZEV") program pursuant to Section 177 of the federal Clean Air Act, 42 U.S.C. § 7507. The Executive Order declared the need for adopting the ZEV program based upon the transportation sector's major contribution to air pollution. The Executive Order noted that transportation is one of two primary sources of ozone precursors and a leading source of greenhouse gas emissions. The Executive Order further clarified its intent as including the promotion of choice and lower costs for Coloradans, while not imposing requirements upon sectors such as agriculture and related farming equipment such as tractors.

Prior to the Governor's Executive Order, at its November 15-16, 2018 hearing the Commission had asked the Air Pollution Control Division to develop for its consideration a proposed ZEV program for inclusion in the Colorado Low Emission Automobile Regulation.

Statutory Authority

Section 177 of the federal Clean Air Act (“CAA”), 42 U.S.C. § 7507, provides states the option of requiring compliance with approved California standards for vehicles sold within their borders. The Act at § 25-7-105(1), directs the Commission to promulgate emission control regulations consistent with the legislative declaration set forth in § 25-7-102 and in conformity with § 25-7-109. §§ 25-7-109(1)(a) and (2) of the Act authorize the Commission to promulgate regulations requiring effective and practical air pollution controls for significant sources and categories of sources, and emission control regulations pertaining to carbon oxides. § 25-7-103 provides that such emission control regulations include, inter alia, design, equipment, or operational standards. § 25-7-106 further provides the Commission maximum flexibility in developing an effective air quality program and promulgating such combination of regulations as may be necessary or desirable to carry out that program. § 25-7-106 also authorizes the Commission to promulgate emission control regulations applicable to the entire state, specified areas or zones, or a specified class of pollution.

The Colorado Legislature further bolstered the Commission’s authority to adopt regulations to reduce greenhouse gas emissions in the 2019 legislative session. The Duties of the Commission, set forth in § 25-7-105 of the Act, now directs that the Commission, “shall consider the relative contribution of each source or source category to statewide greenhouse gas pollution” and specifies that in addressing greenhouse gas pollution the Commission may utilize “strategies that have been deployed in another jurisdiction [and] that facilitate adoption of technologies that have very low or zero emissions...among other regulatory strategies.”

Purpose

The ZEV Program in Regulation Number 20, the Colorado Low Emission Automobile Regulation (CLEAR), incorporates the requirements of the California ZEV program. Pursuant to the requirements of the program, vehicle manufacturers selling vehicles in Colorado must also offer for sale zero emitting vehicles in order to generate compliance credits under the program. The requirements of the program apply only to light-duty vehicles (8500 lbs. or less) and begin with model-year 2023 vehicles.

Advancements in technology, availability and pricing of ZEVs has made increased utilization of such vehicles an effective strategy to reduce air pollution. Therefore, the Commission determines adoption of the ZEV Program as part of CLEAR will reduce vehicle emissions in Colorado in a manner that is demonstrated to be economically reasonable and technologically feasible. The Division has been evaluating the technological rationale and finds that by the 2023 model year, a ZEV standard for Colorado will be both economically reasonable and technologically feasible.

Statement regarding Federal Requirements

In accordance with C.R.S. §§ 25-7-105.1 and 25-7-133(3) the Commission states the rules in CLEAR adopted in this rulemaking are state-only requirements and are not intended as additions or revisions to Colorado’s State Implementation Plan (SIP). The Federal Clean Air Act, pursuant to §177 LEV states the option of adopting a ZEV standard for additional emissions benefit and fuel cost savings. There is no federal ZEV standard. As part of adopting the revisions to CLEAR, the Commission has taken into consideration each of the factors set forth in C.R.S. § 25-7-109(1)(b). These factors are discussed in detail in the attendant Request for Hearing and Hearing documents.

To the extent that C.R.S. § 25-7-110.5(5)(b) requirements apply to this rulemaking, and after considering all the information in the record, the Commission hereby makes the determination that:

- (I) Any federal requirements that are applicable to this situation with a commentary on those requirements;

A Zero Emission Vehicle (ZEV) standard would ensure that a portion of each manufacturer's vehicles sold in Colorado are Zero Emission Vehicles as defined in the California ZEV standard. Battery electric vehicles (BEV) and fuel cell electric vehicles (FCEVs) have no criteria and greenhouse gas (GHG) tailpipe emissions.

- (II) Whether the applicable federal requirements are performance-based or technology-based and whether there is any flexibility in those requirements, and if not, why not;

The Clean Air Act grants authority to U.S. EPA to establish new vehicle emissions standards. California mandated its own emissions standards, predating the federal Act. Car manufacturers have been engineering to federal or California emissions for 50 years, with tremendous technological innovation during that time. CLEAR, which incorporated California's Low Emission Vehicle Standard (LEV III) is the current state of that technological development.

A Zero Emission Vehicle rule is technology-based and taps into rapidly-developing electric storage battery technology, which diverges from the conventional internal combustion engine vehicle technological development path. Coupled with improved high efficiency motors and controllers and parochial chassis development, ZEVs for model year 2023 will be efficient transportation for a segment of the general population. Market demand for ZEVs is growing globally, so the auto industry will step up to meet market demand as technology becomes available and cost-effective.

There is no flexibility in adoption of a ZEV standard. As with the LEV Rule, the incorporation by reference must strictly adopt Code of California Regulations, Title 13 Sections 1962.2 {and .3}. However, there is flexibility in the ability to grant early action credits for sales that take place prior to the effective date of the rule and to grant a one-time bank of proportional credits. All states adopting the California standard in the past fifteen years have issued one-time proportional ZEV credits to ensure that the impact of the standards is equal to their impact within the state of California. The market has evolved, and the impact of granting a one-time proportional credit bank today is much larger than it was at the time that other states adopted the ZEV standard. Colorado has the flexibility to adjust its enforcement program for the proposed ZEV standard—for example, by including early action credits and a modified bank of proportional credits—to ensure that there is no undue burden for automakers, while at the same time maintaining the efficacy of the standard, as well as consistency with the objective of prior Section 177 state practice.

- (III) Whether the applicable federal requirements specifically address the issues that are of concern to Colorado and whether data or information that would reasonably reflect Colorado's concern and situation was considered in the federal process that established the federal requirements;

There is no federal ZEV Rule. The Executive Order "Supporting a Transition to Zero Emission Vehicles", required the Colorado Department of Public Health and Environment to develop and propose a ZEV standard to the Commission by May 2019. Prior to this, the Commission voted 8-0 to direct CDPHE staff to propose a ZEV standard.

Colorado will implement the ZEV standard more than 20 years after California implemented the ZEV standard, and 10 to 20 years after other states that have implemented the ZEV standard. These states have established ZEV credit banks for each automaker, providing a one-time credit proportional to the credit bank in California. Issuing one-time proportional ZEV credits in Colorado ensures that the Colorado ZEV standard starts with the same regulatory conditions as California and reduces undue burden on the automakers, who must meet program requirements midway through their implementation. However, restricting the use during model years 2023-2025 of ZEV credits from the one-time transfer will ensure that the regulations will require additional ZEVs to be deployed in Colorado. Early action credits get ZEVs into Colorado even in advance of the standard taking effect.

The testimony at the hearing confirmed the filings before this Commission that the members of the Alliance of Automobile Manufacturers and Association of Global Automakers (which they state collectively represent more than 99 percent of light-duty vehicle sales in the United State) have agreed to support Colorado's Regulation Number 20 ZEV program, as reflected in the alternative adopted by the Commission, which was jointly proposed by the Colorado Energy Office (CEO), Colorado Department of Transportation (CDOT), the Alliance and Global Automakers. The Commission directs the Division, CDOT and CEO to monitor these efforts of support along with the generation and use of credits provided for in Regulation Number 20, and to report back to the Commission as necessary. The rule is intended to result in improved air quality in Colorado. Electric vehicles have no direct emissions, so they do not directly contribute to local air quality concerns in urbanized or other sensitive areas in Colorado. The emissions from electrical power generating plants are generally well controlled and mostly dispersed outside of Colorado's ozone nonattainment area.

In addition, electrical power generation is becoming increasingly cleaner over time, as the state shifts to the use of renewable sources of energy. The passage of HB 19-1261 and SB 19-236 reinforce this move toward cleaner electrical generation, and are expected to lead to the state's largest utility reducing GHG emissions by 80% below 2005 levels by 2030.

Electric vehicles, unlike gasoline-powered vehicles, do not have emissions controls that deteriorate over time. Their indirect emissions become cleaner as their power sources become cleaner. The use of electric vehicles will result in direct emission reductions of particulate, carbon monoxide, volatile organic compounds, and other emissions compared to new model conventional motor vehicles. Vehicle lifetime emissions of nitrogen oxides will also be reduced, which along with reduced VOC emissions, will result in lower ozone concentrations. The ZEV Rule is projected to significantly reduce greenhouse gas emissions which are contributing to climate change, a concern of many Coloradoans.

Additional adoption of electric vehicles and other ZEVs will lead to reductions in GHG emissions, particularly during the period after Model Year 2025, as the number of ZEVs increases.

- (IV) Whether the proposed requirement will improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later;

The regulatory compliance requirement of the proposed rule falls on auto manufacturers. Colorado's ZEV standard will require a small percentage increase in overall ZEV production across the industry. Significantly, being part of the ZEV program enables manufacturers to accrue credits in the market for ZEVs sold in Colorado, which is itself a strong positive incentive to make ZEVs available in the Colorado market. Experience has demonstrated that without the program structure in place, manufacturers may be incentivized to prioritize their ZEV allocations to other states where program credits are available for sales.

A grant of proportional credits will make it easier to phase in compliance with the ZEV standard and increases certainty for manufacturers by providing them with a set of starting credits (beginning with a percentage use cap in model year 2023) proportional to what they presently have earned in California. In addition, the early action credits option will spread the compliance requirement.

- (V) Whether there is a timing issue which might justify changing the time frame for implementation of federal requirement;

The federal administration formally proposed alternatives for the 2021 GHG standards on August 2, 2018 that significantly reduce the stringency of the existing GHG standards for model years 2021-2025, and also considers revoking California's waiver to set their own GHG and ZEV standards.

However, while ZEV and LEV were both addressed as part of a single 2013 EPA waiver for California's Advanced Clean Cars Program, it is important to note that discrete elements considered within the 2013 waiver incorporated past waivers that were based on both a variety of justifications and different waiver types, such as GHG emissions and criteria pollutants.

The federal Clean Air Act, Section 177, allows a state to adopt California new car emissions standards. Section 177 mandates a two-model-year minimum lead time prior to requiring the California standards. For Colorado to maximize the benefits from this new rule, it should be adopted before January 1, 2020 in order to be effective for the 2023 Model Year, which will begin to be introduced in 2022. Manufacturers choosing the early action compliance option can begin earning, banking, and trading ZEV credits starting with sales of model year 2021 vehicles, which began as early as January 2, 2020. This early action compliance option is expected to yield earlier benefit to Coloradans as well as flexibility for manufacturers.

- (VI) Whether the proposed requirement will assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth;

As the Colorado vehicle fleet turns over and zero emission vehicles are brought into use to replace older internal combustion-engine vehicles, overall emissions are reduced, which will align with meeting federal ozone standards as the Front Range grows.

The proposed rule will reduce GHG emissions in support of Colorado's Climate Action Plan and legislatively adopted goals. As Colorado moves toward implementation of HB 19-1261, deep reductions in GHG emissions from transportation will be required in order to reach economy-wide goals of 50% reduction below 2005 levels by 2030 and 90% by 2050. Adoption of a ZEV standard that accelerates adoption of ZEVs will reduce the stringency of future efforts that will be required to meet these goals.

The provision of proportional and early credits will also ensure that there is a reasonable accommodation for automakers for uncertainty and future growth. ZEV standards for model years beyond 2025 have not yet been set by California, and have the potential to completely change the nature of the ZEV standard program at the time they are instituted. The grant of proportional and/or early credits allows automakers to produce and deliver the same portion of ZEVs in Colorado as in California, and provides them a better margin to handle future uncertainty and changes.

- (VII) Whether the proposed requirement establishes or maintains reasonable equity in the requirements for various sources;

The proposed rule affects a single source category, Mobile Sources. Therefore, there are no equity issues between various sources. Other source categories including electricity generation and oil and gas production have been the subject of multiple state regulatory and legislative actions to reduce both GHG emissions and ozone precursors, and multiple regulatory proceedings are expected over the next two years at the Commission and the Public Utilities Commission affecting these sources.

- (VIII) Whether others would face increased costs if a more stringent rule is not enacted;

As a contributor to ozone non-attainment and climate change, mobile source emissions represent a cost to Coloradoans and Colorado businesses. In order to meet the goals of ozone attainment and legislatively mandated goals for reduction of GHG emissions, emissions reductions not gained from the proposed ZEV standard may need to be taken from other industries.

- (IX) Whether the proposed requirement includes procedural, reporting, or monitoring requirements that are different from applicable federal requirements and, if so, why and what the “compelling reason” is for different procedural, reporting, or monitoring requirements;

There will be some additional monitoring, credit accounting, and reporting requirements, although vehicle manufacturers are already meeting those accountability requirements in nine other states and California. There will be additional workload on state staff, performing surveillance and enforcement, and monitoring vehicle sales and registrations.

- (X) Whether demonstrated technology is available to comply with the proposed requirement;

The Division has reviewed the body of current scientific literature demonstrating the availability of ZEV technology to comply with the ZEV Rule based on existing and maturing technologies. Information supporting this conclusion has been provided into the record for the rulemaking.

- (XI) Whether the proposed requirement will contribute to the prevention of pollution or address a potential problem and represent a more cost-effective environmental gain;

The proposed requirement will contribute to the prevention of pollution as light-duty vehicles shift from liquid fuels (gasoline and diesel) to electricity. Colorado motorists will be the beneficiaries of reduced ‘fuel’ and maintenance costs, resulting in a cost savings over the life of a ZEV car. As technology and production capacities shift, cost should continue to drop.

As electric energy from the grid continues to trend cleaner going forward, ZEV emissions benefit effectively increases with time.

- (XII) Whether an alternative rule, including a no-action alternative, would address the required standard.

Other than maintaining the status quo, there is no regulatory alternative to adopting the California ZEV standards for Colorado. No action would maintain the status quo, and since there is no federal ZEV program, the rate of ZEV adoption will be slower in 2023 and beyond. This would result in the loss of program benefits in terms of greenhouse gas emission reductions, and higher sustained ozone levels in the non-attainment area. Colorado ZEV standards that include a grant of proportional credits, with restrictions on their use during model years 2023-2025, and early action credits ensure that automakers can efficiently transition to meeting the standard while expanding the growth of ZEVs in Colorado.

To the extent that C.R.S. § 25-7-110.8 requirements apply to this rulemaking, and after considering all the information in the record, the Commission hereby makes the determination that:

- (I) These rules are based upon reasonably available, validated, reviewed, and sound scientific methodologies, and the Commission has considered all information submitted by interested parties.
- (II) Evidence in the record supports the finding that the rules result in a demonstrable reduction of emissions.

- (III) Evidence in the record supports the finding that the rules bring about reductions in risks to human health and the environment that justify the costs to implement and comply with the rules. The evidence and testimony presented claiming that air emissions, gasoline prices, and electrical rates will rise as a result of this regulation was not convincing.
- (IV) The rules are the most cost-effective to achieve the necessary and desired results, provide the regulated community flexibility, and achieve the necessary reduction in air pollution.
- (V) The selected regulatory alternative will maximize the air quality benefits of regulation in the most cost-effective manner.

Since the matter was set for hearing on May 10, 2019, the Commission has received thousands of public comments on the proposal, including a petition with more than 8800 signatures urging consideration of a ZEV standard; a mass email campaign from more than 2500 individuals who supported adopting the rule; separate emails or letters from more than 170 other individuals; and a number of letters from business and trade organizations and from environmental or public interest groups that were not parties to the rulemaking. The Commission also heard oral public comment on the proposal on August 13, 2019, with approximately 60 people speaking. A strong majority of the written comments from individuals supported adoption of a ZEV program. Comments from individuals and groups supporting adoption generally cited the need to reduce emissions of criteria pollutants and/or greenhouse gases, and the desire for more electric vehicle models to be offered in the State. Comments from individuals and groups in opposition to the ZEV program generally expressed preference for technology-neutral approaches and/or concern about potentially increased vehicle and energy costs that they believed might extend beyond ZEV purchasers. A strong majority of the oral public comments were in support of adoption of the ZEV standard for similar reasons as those expressed in the written comments. Very few oral commenters were in opposition to the ZEV standard and cited a preference for a technology-neutral approach.

III. ADOPTED: August 19, 2021 (Revisions to Regulation Number 20 - Colorado Low Emission Automobile Regulation)

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedure Act §§ 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act ("the Act") §§ 25-7-110 and 25-7-110.5, C.R.S.

Basis

Regulation Number 20 was adopted to implement California Low Emission Vehicle ("LEV") standards for new vehicles in Colorado. The Air Quality Control Commission ("Commission") choose, in establishing Regulation Number 20, to adopt California new vehicle standards in place of the then existing federal new vehicle standards. Under the Section 177 of the Clean Air Act ("CAA"), Colorado has the choice of adopting Federal or California Standards. Subsequently, the Commission adopted a Zero Emission Vehicle ("ZEV") program that is a component of California's Advanced Clean Car program. This satisfies the requirements of Governor Polis' Executive Order B 2019 002.

Adoption of California new vehicle emissions standards and ZEV requirements allowed Colorado to maintain the emissions benefits for newly manufactured motor vehicles that would have been lost by maintaining federal standards, which were subject to a rollback of new vehicle emissions standards. This loss of future emissions benefit from new vehicles would be counter to Governor Polis' Executive Order B 2019 002 on zero emission vehicles and the need to control greenhouse gas emissions and lower ozone concentrations

An update to Regulation Number 20, the Colorado Low Emission Automobile Regulation, was adopted in this rulemaking to replace some outdated incorporation by references with the most current ones contained in California's Code of Regulations. Also adopted is the reorganization of Regulation Number 20, Part B.VII, addressing aftermarket catalytic converters, to its own new section entitled, "Part C, Aftermarket Exhaust Treatment Devices," with a renumbering of all sections following the new Part C. Finally, the Commission adopted a minor correction to the definition of "California credit ratio" contained in Part A.II.E., and deleted the word "California" in newly renumbered Part D.V.A.

Specific Statutory Authority

Section 177 of the CAA, 42 U.S.C. § 7507, provides states the option of requiring compliance with approved California standards for vehicles sold within their borders. The Act at § 25-7-105(1), directs the Commission to promulgate emission control regulations consistent with the legislative declaration set forth in § 25-7-102 and in conformity with § 25-7-109. §§ 25-7-109(1)(a) and (2) of the Act authorize the Commission to promulgate regulations requiring effective and practical air pollution controls for significant sources and categories of sources, and emission control regulations pertaining to carbon oxides. § 25-7-103 provides that such emission control regulations include, inter alia, design, equipment, or operational standards. § 25-7-106 further provides the Commission maximum flexibility in developing an effective air quality program and promulgating such combination of regulations as may be necessary or desirable to carry out that program. § 25-7-106 also authorizes the Commission to promulgate emission control regulations applicable to the entire state, specified areas or zones, or a specified class of pollution.

Purpose

The purpose of the proposed changes is to update references pertaining to California's Low Emission Vehicle ("LEV") and ZEV Program. Adoption of these updated references will allow Regulation Number 20 to enforce current California LEV and ZEV Program technical requirements. Reorganizing aftermarket exhaust treatment devices into their own separate section streamlines the regulation and improves structure and user access to various parts of the regulation.

Federal vs. State-Only Conditions (if applicable)

In accordance with C.R.S. §§ 25-7-105.1 and 25-7-133(3), the Commission states the rules in CLEAR adopted in this rulemaking are state-only requirements and are not intended as additions or revisions to Colorado's State Implementation Plan ("SIP"). They are administrative in purpose.

Findings pursuant to C.R.S. 25-7-110.5(5)

Under Section 177 of the CAA (42 U.S.C. § 7507), Colorado had the choice of adopting federal standards or California standards for new vehicles. On August 16, 2019, the Commission adopted Regulation Number 20 to implement California LEV standards for new vehicles in Colorado. The Commission choose, in establishing Regulation Number 20, to adopt California new vehicle standards in place of the then-existing federal new vehicle standards. The Commission subsequently adopted a ZEV program that is a component of California's overall LEV program.

The Division's proposed updates to Regulation Number 20 do not alter the Commission's decision in adopting Regulation Number 20. The Division proposes to incorporate by reference technical updates found within California's Code of Regulations. The Division must periodically incorporate by reference technical updates to California's new vehicle emission standards and ZEV requirements to ensure that Colorado's program is administered in conformity with California's standards. The Commission therefore finds that the Division's proposed regulatory modifications to Regulation Number 20 do not substantively alter, amend, or add requirements different from the federal act or rules thereunder.

Findings pursuant to C.R.S. § 25-7-110.8

Colorado must reduce greenhouse gas emissions to address global warming concerns. This is reflected in Governor Polis' Executive Order B 2019 002 on zero emission vehicles, and by House Bill 19-1261 *Climate Action Plan to Reduce Pollution*, under C.R.S. § 25-7-105.1.e, that directs the Commission to promulgate rules and regulations that advance GHG reductions that are in accordance with the act's stated GHG reduction goals.

The Commission hereby makes the determination that:

- a. The rule is based on reasonably available, validated, reviewed, and sound scientific methodologies.
- b. The rule shall result in a demonstrable reduction in air pollution (unless the rule is administrative in nature).
- c. The rule is the most cost effective alternative, or provides an analysis detailing why the alternative is unacceptable.
- d. The rule maximizes air quality benefits in the most cost-effective manner.

Further, the Commission corrected any typographical, grammatical, and formatting errors found within the regulation.

IV. **ADOPTED: April 21, 2023 (Revisions to Regulation Number 20 - Colorado Advanced Clean Truck and Low NOx Standards).**

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedure Act §§ 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act ("the Act") §§ 25-7-110 and 25-7-110.5, C.R.S.

Basis

Regulation Number 20 was adopted to implement the following new requirements: 1) Advanced Clean Truck ("ACT") standards for new, medium and heavy duty vehicles; 2) Low Nitrogen Oxide ("Low NOx") standards for new heavy duty vehicles; and 3) Large Entity Reporting requirements. The new ACT and Low NOx requirements were adopted through the incorporation of California regulatory requirements by reference. In addition, adding complementary regulatory text to Regulation Number 20 provides a fuller explanation of how the programs work; clarifies that the regulations adopted by reference apply to new vehicle sales and fleet reporting in Colorado, and to provides explanation that violations of the requirements would be addressed through Colorado specific penalty provisions set forth in Colorado statute. In addition, the revisions update existing incorporations by reference to California rules adopted in prior rulemakings in order that the Colorado requirements match the latest versions of California regulations. Finally, the revisions re-organize and clarify existing provisions, and correct typographical errors. These last set of revisions are non-substantive and are aimed at improving the readability of existing requirements.

The Air Quality Control Commission ("Commission") chose, in updating Regulation Number 20, to adopt California new vehicle standards in place of the then existing federal new vehicle standards. The Commission further decided to adopt LER in order to obtain information regarding vehicles at large fleets in Colorado, to better assess other potential vehicle emission reduction strategies. Under Section 177 of the Clean Air Act ("CAA"), Colorado has the choice to adopt California Standards in lieu of being subject to federal vehicle standards.

The Commission has authority under Colorado law to adopt California standards as well as reporting requirements for Colorado fleets. The Commission adopted ACT and Low NOx standards based on its determination that these standards would provide cost-effective emission reduction benefits relative to the Federal Standards.

Specific Statutory Authority

Section 177 of the CAA, 42 U.S.C. § 7507, provides states the option of mandating compliance with approved California standards for vehicles sold within their borders. The Act at § 25-7-105(1), directs the Commission to promulgate emission control regulations consistent with the legislative declaration set forth in § 25-7-102 and in conformity with § 25-7-109. §§ 25-7-109(1)(a) and (2) of the Act authorize the Commission to promulgate regulations requiring effective and practical air pollution controls for significant sources and categories of sources, and emission control regulations pertaining to carbon oxides, nitrogen oxides, and particulates. § 25-7-103 provides that such emission control regulations include, inter alia, design, equipment, or operational standards. § 25-7-106 further provides the Commission maximum flexibility in developing an effective air quality program and promulgating such combination of regulations as may be necessary, or desirable, to carry out that program. § 25-7-106 also authorizes the Commission to promulgate emission control regulations applicable to the entire state, specified areas or zones, or a specified class of pollution. Finally, § 25-7-106 authorizes the Commission to require that air pollution sources provide information that the Commission may require, and to exercise all incidental powers that may be necessary to carry out the purposes of Article 7.

Purpose

The purpose of the changes is to incorporate references pertaining to California's ACT, and Omnibus Low NOx standards, and adopt Colorado specific LER standards. Adoption of these provisions will aid the state in achieving its greenhouse gas emission reduction goals; reduce ozone precursor emissions; reduce harmful direct exposure to pollutants from medium and heavy duty trucks including emissions that negatively affect disproportionately impacted communities; and provide information on fleet vehicles in Colorado that will be helpful in assessing potential emission reduction strategies from vehicles in Colorado. The Commission believes that, in addition to helping the Division assess potential emission reduction strategies, the information gathered under the LER may be useful to other stakeholders and the general public. The Commission notes that this information should be publicly available consistent with the confidentiality provisions of the Colorado Open Records Act. Further, in implementing the LER the Commission expects that the Division will work with interested stakeholders to ensure that the public information gathered under the LER is published in an expeditious manner. These revisions update existing incorporations by reference so that the Colorado new vehicle program applies the most recent version of applicable California regulations. Finally, these additions clarify and slightly reorganize existing Regulation Number 20 provisions, and make typographical corrections.

Federal vs. State-Only Conditions

In accordance with C.R.S. §§ 25-7-105.1 and 25-7-133(3), the Commission states the ACT, Low NOx, and LER rules adopted in this rulemaking are state-only requirements and are not intended as additions or revisions to Colorado's State Implementation Plan ("SIP").

Findings pursuant to C.R.S. 25-7-110.5(5)

Under Section 177 of the CAA (42 U.S.C. § 7507), Colorado has the choice of being subject to federal standards or adopting California standards for new vehicles. On April 21, 2023, the Commission adopted revisions to Regulation Number 20 to incorporate by reference the California Advanced Clean Trucks, and Low NOx Omnibus programs, along with adopting Large Entity Reporting requirements. These incorporations by reference, the adoption of reporting requirements, along with clarifying and explanatory regulatory text, create the Colorado ACT, Low NOx, and LER programs.

The Commission also incorporated more recent versions of California regulations that had previously been adopted to create Colorado's light duty new vehicle program and implement California LEV standards for new vehicles in Colorado. The Commission chose, when establishing Regulation Number 20, to adopt California new vehicle standards in place of the then-existing federal new vehicle standards. These requirements were incorporated and adopted consistent with Section 177 of the CAA. While there are Federal standards for the reduction of NOx and other pollutants from heavy duty vehicles, the Federal Clean Air Act pursuant to §177 gives states the option of adopting California vehicle standards. There are no federal standards analogous to ACT or LER. Accordingly, these regulatory revisions should not be considered to be exceeding or differing from the federal act or federal rules. But to the extent that C.R.S. § 25-7-110.5(5)(b) requirements apply to this rulemaking, and after considering all the information in the record, the Commission hereby makes the determination that:

- (I) Any federal requirements that are applicable to this situation with a commentary on those requirements;

There are Federal standards governing NOx emissions from new heavy duty vehicles that are analogous to the requirements in the Low NOx program. The Federal standards are less stringent, and thus provide less emission reduction benefits of ozone precursor emissions and emissions that directly impact Colorado residents exposed to vehicle exhaust.

- (II) Whether the applicable federal requirements are performance-based or technology-based and whether there is any flexibility in those requirements, and if not, why not;

The Clean Air Act grants authority to the U.S. EPA to establish new vehicle emissions standards. EPA has adopted NOx standards for new heavy duty vehicles that set performance based emission standards. There are flexibility mechanisms contained within the federal requirements including allowances for cold weather operations, how engines are tested, averaging provisions, and credit allowances.

- (III) Whether the applicable federal requirements specifically address the issues that are of concern to Colorado and whether data or information that would reasonably reflect Colorado's concern and situation was considered in the federal process that established the federal requirements;

There are no federal ACT or LER programs. The Federal Low NOx program achieves emission reductions from heavy duty vehicles, but the Colorado Low NOx requirements will achieve greater reductions of ozone precursor emissions that are important to help Colorado attain National Ambient Air Quality Standards for ozone as well as reduce the harmful effects of direct exposure to these pollutants, especially important to help Colorado achieve its ambitious environmental justice goals. In developing its rules, it does not appear that EPA specifically considered Colorado's air quality challenges.

- (IV) Whether the proposed requirement will improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later;

The regulatory compliance requirements of ACT and Low NOx programs fall on vehicle manufacturers. These requirements are already in place in California and other states, therefore the manufacturers are already aware of these requirements. The requirements are intended to achieve additional emission reductions, and are not intended to clarify conflicting requirements, or increase certainty, or prevent the need for costly retrofit. Evidence in the record indicates that the Colorado ACT and Low NOx programs are cost effective and will achieve significant emission reductions.

The ACT program will ultimately result in significant savings to consumers in the form of reduced fuel and maintenance costs. There are mechanisms in both sets of rules to provide flexibility to manufacturers that will allow them to comply in a more cost effective manner. There was no information in the record that costs to manufacturers to comply will be less than under existing federal rules.

- (V) Whether there is a timing issue which might justify changing the time frame for implementation of federal requirement;

There is not a timing issue with respect to the Federal rule. However, Section 177 of the CAA mandates a two-model-year minimum lead time prior to requiring compliance with California standards. For Colorado to maximize the benefits from ACT and Low NOx new rule, they needed to be adopted before January 1, 2024 in order to be effective for the 2027 Model Year, which will begin to be introduced in 2026.

- (VI) Whether the proposed requirement will assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth;

As the Colorado vehicle fleet turns over and zero emission vehicles are brought into use to replace older internal combustion-engine vehicles, overall emissions are reduced, which will align with meeting federal ozone standards as the Front Range grows. The proposed rule reduces GHG emissions in support of Colorado's Climate Action Plan and legislatively adopted goals. As Colorado moves toward implementation of HB 19-1261, deep reductions in GHG emissions from transportation will be required to reach economy-wide goals of 50% reduction below 2005 levels by 2030 and 90% by 2050. Adoption of a ACT standard that accelerates adoption of zero emission trucks will reduce the stringency of future efforts that will be required to meet these goals.

- (VII) Whether the proposed requirement establishes or maintains reasonable equity in the requirements for various sources;

The proposed rule affects a single source category, Mobile Sources. Therefore, there are no equity issues between various sources. Other source categories including electricity generation and oil and gas production have been the subject of multiple state regulatory and legislative actions to reduce both GHG emissions and ozone precursors, and multiple regulatory proceedings are expected over the next two years at the Commission and other regulatory venues affecting these sources.

- (VIII) Whether others would face increased costs if a more stringent rule is not enacted;

As a contributor to ozone nonattainment and climate change, mobile source emissions represent a cost to Coloradans and Colorado businesses. In order to meet the goals of ozone attainment and legislatively mandated goals for reduction of GHG emissions, emissions reductions not gained from the ACT and Low NOx programs may need to be taken from other industries and emission sources.

- (IX) Whether the proposed requirement includes procedural, reporting, or monitoring requirements that are different from applicable federal requirements and, if so, why and what the "compelling reason" is for different procedural, reporting, or monitoring requirements;

For ACT and Low NOx requirements, there will be additional or different monitoring, credit accounting, and reporting requirements, although vehicle manufacturers are already meeting those accountability requirements in California and other states that have adopted California standards. Adoption of these different requirements is essential so that the Colorado program has consistent requirements with California and other states that adopted these standards to create certainty and consistency for the regulated entities. There are no Federal reporting requirements equivalent to LER. Adoption of LER is vital to provide Colorado with additional information about large motor vehicle fleets in order to evaluate potential other vehicle emission reduction strategies.

- (X) Whether demonstrated technology is available to comply with the proposed requirement;

The Division has reviewed the body of current scientific literature demonstrating the availability of technology to comply with both the ACT and Low NOx programs. These programs are already being implemented successfully in California and other states. California did an extensive analysis of the feasibility of these standards prior to adoption of their rules. Information supporting this conclusion has been provided in the record for the rulemaking.

- (XI) Whether the proposed requirement will contribute to the prevention of pollution or address a potential problem and represent a more cost-effective environmental gain;

The proposed requirement will contribute to the prevention of significant amounts of pollution from the medium and heavy duty vehicle fleet as demonstrated by evidence introduced into the record during the rulemaking. The ACT program will result in a significant cost savings to consumers in the form of decreased fuel and maintenance costs. As technology and production capacities shift, costs should continue to drop.

- (XII) Whether an alternative rule, including a no-action alternative, would address the required standard.

Other than maintaining the status quo, there is no regulatory alternative to adopting the California ACT and Low NOx standards for Colorado. No action would maintain the status quo of a less protective Federal Low NOx rule, with no corresponding Federal ACT or LER program. This would result in more pollution in Colorado from the medium and heavy duty vehicle fleet, and the need to achieve emission reductions from other sources in order to meet ozone standards and reduce greenhouse gas emissions to achieve Colorado's GHG reduction goals. Additionally, maintaining the status quo would reduce the effectiveness of Colorado's environmental justice goals, by increasing emissions in communities that are disproportionately impacted by medium and heavy duty vehicle emissions.

Findings pursuant to C.R.S. § 25-7-110.8

- a. These rules are based upon reasonably available, validated, reviewed, and sound scientific methodologies, and the Commission has considered all information submitted by interested parties.
- b. Evidence in the record supports the finding that the rules shall result in a demonstrable reduction of greenhouse gasses related to building performance.
- c. Evidence in the record supports the finding that the rules shall bring about reductions in risks to human health and the environment that justify the costs to implement and comply with the rules.

- d. The rules are the most cost-effective to achieve the necessary and desired results, provide the regulated community flexibility, and achieve the necessary reduction in air pollution.
 - e. The rule will maximize the air quality benefits of regulation in the most cost-effective manner.
- V. ADOPTED: October 20, 2023 (Revisions to Regulation Number 20 - Colorado Clean Cars and Trucks Standards)

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedure Act Sections 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act ("the Act") Sections 25-7-110 and 25-7-110.5, C.R.S.

Basis

Revisions to Regulation Number 20 were adopted to update Colorado emission requirements applicable to the sale of new light and medium vehicles in the state. Previous provisions adopted by the Commission established requirements applicable through vehicle model year 2025. The new provisions establish more stringent standards for model years 2027-2032 light and medium duty vehicles. These new requirements were adopted through the incorporating California regulatory requirements by reference, and adding complementary regulatory text to Regulation Number 20 to better explain how the programs work, to clarify that the regulations adopted by reference apply to new vehicle sales and fleet reporting in Colorado, and to provide that violations of the requirements would be addressed through Colorado specific penalty provisions set forth in Colorado statute. In addition, the revisions update existing incorporations by reference of California rules adopted in prior rulemakings so that the Colorado requirements match the latest versions of California regulations. Finally, the revisions re-organize and clarify existing provisions, and correct typographical errors. This includes an update to regulatory requirements governing after-market catalytic converters, clarifying that these requirements only apply to vehicles with spark ignition engines. These last set of revisions are non-substantive and are aimed at improving the readability of existing requirements.

In updating Regulation Number 20, the Air Quality Control Commission ("Commission") chose to adopt California new vehicle standards for model year 2027-2032 light and medium duty vehicles in place of existing federal new vehicle standards. Under Section 177 of the Clean Air Act ("CAA"), Colorado has the choice of adopting California Standards in lieu of being subject to federal vehicle standards. The Commission has authority under Colorado law to adopt California Standards. The Commission adopted the zero emission vehicle (ZEV) and low emission vehicle (Low) standards based on its determination that these standards would provide cost-effective emission reduction benefits relative to the Federal Standards, and that these additional emission reductions were needed to address Colorado air quality and climate change goals. The Commission recognizes that parties to this rulemaking provided evidence regarding the benefits of adopting standards through model year 2035. The Commission considered this evidence but ultimately chose to adopt standards through 2032. Notwithstanding this decision, the Commission agrees that further evaluation of whether Colorado should adopt the standards through 2035 is warranted. Accordingly, the Commission directs the Division to do an assessment of the costs, benefits, and feasibility of adopting additional model year standards, and determine whether to proceed with requesting a rulemaking. The Commission further intends that the assessment start no later than January 2028 and that the Division report back to the Commission on its findings by the end of 2028. If a rulemaking moves forward, the Commission intends that the rulemaking be completed on a schedule that would allow Colorado to be covered under ACC II standards for model year 2033 and beyond.

Specific Statutory Authority

Section 177 of the CAA, 42 U.S.C. § 7507, provides states the option of requiring compliance with approved California standards for vehicles sold within their borders. The Act at Section 25-7-105(1), directs the Commission to promulgate emission control regulations consistent with the legislative declaration set forth in Section 25-7-102 and in conformity with Section 25-7-109. Sections 25-7-109(1)(a) and (2) of the Act authorize the Commission to promulgate regulations requiring effective and practical air pollution controls for significant sources and categories of sources, and emission control regulations pertaining to carbon oxides, nitrogen oxides, and particulates. Section 25-7-103 provides that such emission control regulations include, inter alia, design, equipment, or operational standards. Section 25-7-106 further provides the Commission maximum flexibility in developing an effective air quality program and promulgating such combination of regulations as may be necessary or desirable to carry out that program. Section 25-7-106 also authorizes the Commission to promulgate emission control regulations applicable to the entire state, specified areas or zones, or a specified class of pollution.

Purpose

The purpose of the changes is to incorporate references pertaining to California's Advanced Clean Cars II standards for model years 2027-2032. Adoption of these provisions will aid the state in achieving its greenhouse gas emission reduction goals, reduce ozone precursor emissions, and limit harmful direct exposure to pollutants from light and medium duty vehicles including emissions that negatively affect disproportionately impacted communities Colorado. These revisions also update existing incorporations by reference so that the Colorado new vehicle program applies the most recent version of applicable California regulations. Finally, these additions clarify and slightly reorganize existing Regulation Number 20 provisions, and make typographical corrections.

Federal vs. State-Only Conditions

In accordance with C.R.S. §§ 25-7-105.1 and 25-7-133(3), the Commission states the ZEV and LEV rules adopted in this rulemaking are state-only requirements and are not intended as additions or revisions to Colorado's State Implementation Plan ("SIP").

Findings pursuant to C.R.S. 25-7-110.5(5)

Under Section 177 of the CAA (42 U.S.C. § 7507), Colorado has the choice of being subject to federal standards or adopting California standards for new vehicles. The Commission adopted these revisions to Regulation Number 20 to incorporate by reference the California Advanced Clean Cars II standards for model year 2027-2032 light and medium duty vehicles. These incorporations by reference, along with clarifying and explanatory regulatory text create the next generation of Colorado Clean Cars standards. The Commission also incorporated more recent versions of California regulations that had previously been adopted in prior rulemakings. The Commission chose, in amending Regulation Number 20, to adopt California new vehicle standards in place of existing federal new vehicle standards. These requirements were incorporated and adopted consistent with Section 177 of the CAA

While there are Federal standards for the reduction of nitrogen oxides (NOx), volatile organic compound (VOC), greenhouse gases (GHG) and other pollutants from light and medium duty vehicles, the Federal Clean Air Act, pursuant to §177 gives states the option of adopting California vehicle standards. There are no federal standards analogous to the ZEV component. Accordingly, these regulatory revisions should not be considered to be exceeding or differing from the federal act or federal rules. But to the extent that C.R.S. § 25-7-110.5(5)(b) requirements apply to this rulemaking, and after considering all the information in the record, the Commission hereby makes the determination that:

- (I) Any federal requirements that are applicable to this situation with a commentary on those requirements;

There are Federal standards governing NO_x, VOC, particulate matter, GHG and other emissions from new light and medium duty vehicles that are analogous to the requirements in the LEV component of the Colorado Clean Cars program. The Federal standards are less stringent, and thus provide less emission reduction benefits of ozone precursor emissions and emissions that directly impact Colorado residents exposed to vehicle exhaust. There are no federal standards analogous to the ZEV component of Colorado Clean Cars.

- (II) Whether the applicable federal requirements are performance-based or technology-based and whether there is any flexibility in those requirements, and if not, why not;

The Clean Air Act grants authority to U.S. EPA to establish new vehicle emissions standards. EPA has adopted criteria pollutant and GHG requirements for new light and medium duty vehicles that set performance based emission standards. There are flexibility mechanisms contained within the federal requirements including allowances for cold weather operations, how engines are tested, averaging provisions, and credit allowances.

- (III) Whether the applicable federal requirements specifically address the issues that are of concern to Colorado and whether data or information that would reasonably reflect Colorado's concern and situation was considered in the federal process that established the federal requirements;

There is no federal ZEV program for light and medium duty vehicles. The federal program establishes emission standards for NO_x, VOC, particulate matter, GHG and other pollutants, but the Colorado LEV requirements will achieve greater reductions of ozone precursor emissions that are important to help Colorado attain National Ambient Air Quality Standards for ozone as well as reduce the harmful effects of direct exposure to these pollutants that is important to help Colorado achieve its ambitious environmental justice goals. In developing its rules, it does not appear that EPA specifically considered Colorado's air quality challenges.

- (IV) Whether the proposed requirement will improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later;

The regulatory compliance requirements of the Colorado Clean Cars and Trucks program fall on vehicle manufacturers. These requirements are already in place in California and other states, so the manufacturers are already aware of these requirements. The requirements are intended to achieve additional emission reductions, and are not intended to clarify conflicting requirements, or increase certainty, or prevent the need for costly retrofit. At the same time, evidence in the record indicates that the new ZEV and LEV requirements for model year 2027-2032 light and medium duty vehicles are cost effective and will achieve significant emission reductions above and beyond federal standards. The new requirements will ultimately result in significant savings to consumers in the form of lower upfront vehicle costs, and reduced fuel and maintenance costs. There are mechanisms in both sets of rules to provide flexibility to manufacturers that will allow them to comply in a more cost effective manner.

- (V) Whether there is a timing issue which might justify changing the time frame for implementation of federal requirement;

There is not a timing issue with respect to the federal rule. However, Section 177 of the CAA mandates a two-model-year minimum lead time prior to requiring compliance with California standards. For Colorado to maximize the benefits from the new requirements, they needed to be adopted before January 1, 2024 in order to be effective for the 2027 model year, which will begin to be introduced in 2026.

- (VI) Whether the proposed requirement will assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth;

As the Colorado vehicle fleet turns over and cleaner conventional fueled vehicles and zero emission vehicles are brought into use to replace older internal combustion-engine vehicles, overall fleet emissions will be reduced, which will align with meeting federal ozone standards as the Front Range grows as well as aid the state in meeting its ambitious greenhouse gas emission reduction goals.

The proposed rule will reduce GHG emissions in support of Colorado's Climate Action Plan and legislatively adopted goals. As Colorado moves toward implementation of HB 19-1261, deep reductions in GHG emissions from transportation will be required in order to reach economy-wide goals of 50% reduction below 2005 levels by 2030 and 90% by 2050. Adoption of a ZEV standard that accelerates adoption of zero emission vehicles will reduce the stringency of future efforts that will be required to meet these goals.

- (VII) Whether the proposed requirement establishes or maintains reasonable equity in the requirements for various sources;

The proposed rule affects a single source category, mobile sources. Therefore, there are no equity issues between various sources. Other source categories including electricity generation and oil and gas production have been the subject of multiple state regulatory and legislative actions to reduce both GHG emissions and ozone precursors, and multiple regulatory proceedings are expected over the next two years at the Commission and other regulatory venues affecting these sources.

- (VIII) Whether others would face increased costs if a more stringent rule is not enacted;

As a contributor to ozone non-attainment and climate change, mobile source emissions represent a cost to Coloradoans and Colorado businesses. In order to meet the goals of ozone attainment and legislatively mandated goals for reduction of GHG emissions, emissions reductions not gained from the LEV and ZEV programs may need to be taken from other industries and emission sources.

- (IX) Whether the proposed requirement includes procedural, reporting, or monitoring requirements that are different from applicable federal requirements and, if so, why and what the "compelling reason" is for different procedural, reporting, or monitoring requirements;

There will be some additional or different monitoring, credit accounting, and reporting requirements, although vehicle manufacturers are already meeting those accountability requirements in California and other states that have adopted California standards. Adoption of these different requirements is essential so that the Colorado program has consistent requirements with California and other states that have adopted these standard to create certainty and consistency for the regulated entities.

- (X) Whether demonstrated technology is available to comply with the proposed requirement;

The Division has reviewed the body of current scientific literature demonstrating the availability of technology to comply with both the LEV and ZEV ACT programs. These programs are already being implemented successfully in California and other states, and California did an extensive analysis of the feasibility of these standards prior to adoption of their rules. Information supporting this conclusion has been provided into the record for the rulemaking.

- (XI) Whether the proposed requirement will contribute to the prevention of pollution or address a potential problem and represent a more cost-effective environmental gain;

The proposed requirement will contribute to the prevention of significant amounts of pollution from the light and medium and heavy duty vehicle fleet as demonstrated by evidenced introduced into the record during the rulemaking. The ZEV program will result in a significant cost savings to consumers in the form of decreased fuel and maintenance costs, as well as reduced upfront vehicle costs for the majority of the model years and vehicles impacted by the program. As technology and production capacities shift, costs should continue to drop.

- (XII) Whether an alternative rule, including a no-action alternative, would address the required standard.

Other than maintaining the status quo, there is no regulatory alternative to adopting the California standards for Colorado. No action would maintain the status quo of a less protective federal program. This would result in more pollution in Colorado from the light and medium duty vehicle fleet, and the need to achieve emission reductions from other sources in order to meet ozone standards, and reduce greenhouse gas emissions to achieve Colorado's GHG reduction goals. Additionally, maintaining the status quo would reduce the effectiveness of Colorado's environmental justice goals, by increasing emissions in communities that are disproportionately impacted vehicle emissions.

Findings pursuant to C.R.S. § 25-7-110.8

- a. These rules are based upon reasonably available, validated, reviewed, and sound scientific methodologies, and the Commission has considered all information submitted by interested parties.
- b. Evidence in the record supports the finding that the rules shall result in a demonstrable reduction of greenhouse gases and criteria pollutants.
- c. Evidence in the record supports the finding that the rules shall bring about reductions in risks to human health and the environment that justify the costs to implement and comply with the rules.
- d. The rules are the most cost-effective to achieve the necessary and desired results, provide the regulated community flexibility, and achieve the necessary reduction in air pollution.
- e. The rule will maximize the air quality benefits of regulation in the most cost-effective manner.

Editor's Notes

History

New rule eff. 12/30/2018.

Entire rule eff. 09/30/2019.

Part A I, IIE, Part C, Part D V, Part E, Part F III eff. 10/15/2021.

Parts A-H, Part I IV eff. 06/14/2023.

Parts A-D, H, Part I V eff. 12/15/2023.