



Dedicated to protecting and improving the health and environment of the people of Colorado

January 16, 2024

Colorado Legislative Council
029 State Capitol Building
200 East Colfax
Denver, Colorado 80203

Subject: Air Quality State Implementation Plan Revisions Report

Honorable Members of the Colorado Legislative Council:

Attached is the Colorado Air Quality Control Commission's *State Implementation Plan Revisions Report* submitted pursuant to the requirements of § 25-7-133(1), C.R.S. This report is being submitted on time following the legal holiday pursuant to statutory requirements.

Respectfully,

A handwritten signature in black ink, appearing to read 'Jojo La', is positioned below the word 'Respectfully,'.

Jojo La, Administrator
Colorado Air Quality Control Commission

cc: Elise Jones, Chairperson, Air Quality Control Commission
Jill Hunsaker Ryan, Executive Director, CDPHE
Trisha Oeth, Environmental Health and Protection Director, CDPHE
Michael Ogletree, Air Pollution Control Division Director, CDPHE





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Air Quality State Implementation Plan Revisions Report

**Submitted to the
Colorado Legislative Council
pursuant to the provisions of C.R.S. 25-7-133**

**Colorado Air Quality Control Commission
January 16, 2024**



INTRODUCTION

Under the Colorado Air Pollution Prevention and Control Act, the Colorado Air Quality Control Commission (Commission) is charged with the development of a comprehensive State Implementation Plan (SIP), which will assure attainment and maintenance of National Ambient Air Quality Standards and which must meet all other requirements of the federal Clean Air Act (CAA). This SIP shall be revised when necessary and appropriate, and any revisions must be submitted to the United States Environmental Protection Agency (EPA) for review and approval. Under state law, prior to submitting any SIP revision to EPA, the Commission must submit a report to the legislature each year summarizing any changes or additions to the SIP “that include any new regulatory requirements or modifications to existing regulatory requirements” made in the previous calendar year. See § 25-7-133, C.R.S. The Commission is pleased to submit the following report describing its revisions to Colorado’s SIP that will further improve air quality in Colorado.

STATUTORY REQUIREMENT

§ 25-7-133(1), C.R.S. sets forth the requirements governing the Commission’s annual SIP Revisions Report to the legislature as follows:

Notwithstanding any other provision of law but subject to subsection (7) of this section, by January 15 of each year, the commission shall certify in a report to the chairperson of the legislative council in summary form any additions or changes to elements of the state implementation plan that include any new regulatory requirements or modifications to existing regulatory requirements adopted during the prior year that are to be submitted to the administrator for purposes of federal enforceability. The report shall be written in plain, nontechnical language using words with common and everyday meaning that are understandable to the average reader. Copies of such report must be available to the public and submitted to each member of the general assembly. This section does not apply to control measures and strategies that have been adopted and implemented by the enacting jurisdiction of a local unit of government if such measures and strategies do not result in mandatory direct costs upon any entity other than the enacting jurisdiction.

STATE IMPLEMENTATION PLAN REVISIONS

In 2023, the Commission adopted the following regulatory revisions/additions:

Stationary Sources Requirements in Disproportionately Impacted Communities (Regulation Number 3)

On May 18, 2023, the Commission adopted revisions to the Stationary Source Permitting and Air Pollutant Emission Notice Requirements, Regulation Number 3 that established enhanced reporting, monitoring and permitting requirements for stationary sources in disproportionately impacted communities, in response to HB21-1266. The Commission also renumbered other SIP provisions accordingly. The revisions to permitting requirements for stationary sources in disproportionately impacted communities are not revisions to Colorado’s SIP for purposes of § 25-7-133(1), C.R.S. The revisions advance transparency for disproportionately impacted communities by providing more access to information about emissions of air pollutants that have health impacts from stationary sources.

Regulatory Revisions Associated with Colorado's Ozone SIP (Regulation Number 7, Regulation Number 26, and Air Quality Standards)

On December 15, 2023, the Commission adopted revisions addressing the Clean Air Act (CAA) Ozone Nonattainment requirements for the 2008 and 2015 Ozone National Ambient Air Quality Standards (NAAQS) to further reduce ozone precursor emissions in Colorado's Non-Attainment area. This action included proposed elements to Colorado's SIP, which are not regulatory revisions for purposes of § 25-7-133(1), C.R.S. The Commission's action also included revisions to associated regulations including Regulation Number 7, Regulation Number 26, and Air Quality Standards, Designations and Emission Budgets. These revisions were to assist in emission control strategies of major sources and combustion engines, oil and gas pre-production equipment (lowering NO_x by 30% by 2025), as well as a number of other technical elements. Certain of the revisions to Regulation Numbers 7 and 26 were not revisions to Colorado's SIP for purposes of § 25-7-133(1), C.R.S.

Administrative Action to Separate Out Regulations (Regulation Number 7 and Regulation Number 22)

On April 20, 2023, the Commission adopted regulatory revisions separating Regulations Numbers 7 and 22. This was completed by maintaining parts of Regulation Number 7 as such and establishing new regulations: Part B becomes Regulation Number 24; Part C becomes Regulation Number 25; and Part E becomes Regulation Number 26. The upstream oil and gas intensity and midstream combustion program provisions currently in Regulation Number 22 would be moved to Regulation Number 7. The manufacturing sector greenhouse gas provisions in Regulation Number 22 would become a new Regulation Number 27. The proposed revisions also included formatting changes.

In addition to regulatory actions taken by the Air Quality Control Commission in 2023 that are incorporated into the SIP, there are also many other state-only measures and strategies that are currently being implemented and are key elements of the state's ozone strategy. While these state-only measures are not intended to become part of the federally approved SIP, they result in meaningful reductions of ozone precursors in the nonattainment area.

Transportation Emissions Reductions from Light and Medium Duty Vehicles (Regulation Number 20)

The Colorado Clean Cars Program is being implemented in Colorado under Section 177 of the federal Clean Air Act. The Colorado Clean Cars Program establishes zero emission vehicle and low emission vehicle standards and requirements applicable to new light and medium duty vehicles sold in Colorado commencing with vehicle model year 2027. This regulation aids the state in achieving its greenhouse gas emission reduction goals, reducing ozone precursor emissions, and limiting harmful direct exposure to pollutants that negatively affect disproportionately impacted communities in Colorado.

Transportation Emissions Reductions from Medium and Heavy Duty Vehicles (Regulation Number 20)

The Advanced Clean Trucks Program and the Heavy Duty Low NO_x Program are being implemented in Colorado, which are voluntary regulatory strategies available to states under Sec. 177 of the Clean Air Act. The Advanced Clean Trucks Program requires that manufacturers of medium and heavy duty vehicles sold in Colorado sell a specified percentage of zero emission vehicles starting with model year 2027. The Heavy Duty Low NO_x Program establishes stringent NO_x emission standards for model year 2027

and later vehicles sold in Colorado. Both of these requirements will continue to drive down greenhouse gas and criteria air pollution from medium and heavy duty trucks sold in Colorado.

Building Performance Standards (Regulation Number 28)

Building Performance Standards are being implemented as required by HB 21-1286. The Commission promulgated a statewide benchmarking program that requires commercial, multifamily, and public buildings 50,000-square-foot or larger to report their annual energy use. These reports provide building owners and tenants with information about how their building's energy performance compares to similar buildings, and helps them identify opportunities to reduce energy waste and associated emissions. Associated regulations are expected to achieve greenhouse gas emission reductions of 7% by 2026 and 20% by 2030, from 2021 energy data baseline, as required by the statute.

Greenhouse Gas Emissions and Energy Management for Manufacturing (GEMM) (Regulation Number 27)

A first-of-its-kind rule to both reduce air pollution in local communities and greenhouse gas emissions from manufacturers is being implemented. The Greenhouse Gas Emissions and Energy Management for Manufacturing Phase 2 plan, or GEMM 2, aims to ensure 18 of Colorado's highest-emitting manufacturers collectively reduce their greenhouse gas emissions at least 20% by 2030, compared to 2015 levels. These manufacturers emit air pollutants when producing a wide range of products, including petrochemicals, microchips, and glass. GEMM 2 covers facilities with manufacturing operations that emit 25,000 or more metric tons of GHGs per year. GEMM 2 builds upon the progress of the existing energy intensive trade-exposed facilities GEMM rule (GEMM 1). The rule prioritizes on-site GHG emission reduction projects that also achieve the greater amount of co-pollutant reductions, and facilitates deeper emissions cuts in disproportionately impacted communities.

Oil and Gas Greenhouse Gas Intensity Verification (Regulation Number 7)

A new greenhouse gas intensity verification rule is being implemented. The GHG intensity program applies to upstream oil and gas operations. The program includes two main parts: the new verification rule and greenhouse intensity standards. The new verification rule ensures that facilities adhere to the greenhouse gas intensity standards adopted in 2021. The standards become more protective over time in accordance with the 2021 Colorado Greenhouse Gas Pollution Reduction Roadmap, which calls for the oil and gas industry to achieve a 36% reduction in greenhouse gases by 2025 and a 60% reduction by 2030. Current forecasting suggests that the oil and gas sector is on track to meet or exceed this 2030 emissions target.

Emissions from Power Plants (Regulation Number 23)

The Regional Haze SIP provisions in Regulation Number 23 include a number of power plants that were identified for shutdown, conversion to natural gas, or additional emission controls. The Regional Haze SIP for the second 10-year planning period has been approved by the Commission and was submitted to EPA in May 2022. EPA has not proposed action on the submission as of December 2023. Closures and Fuel conversions

identified in Regulation Number 23 are still moving forward as planned through the Clean Energy Plan process and actions at the Public Utilities Commission. With the implementation of the Regional Haze requirements by 2030, approximately 23,000 tons of nitrogen oxides, 13,000 tons of sulfur dioxide, and 400 tons of particulates will be reduced annually in Colorado.

Emission Reduction Requirements for Lawn and Garden Equipment (Regulation Number 29)

In 2023, in a continued effort to reduce ozone precursor emissions and achieve ozone National Ambient Air Quality Standards, the Commission preliminarily adopted a new Regulation Number 29, Emission Reduction Requirements for Lawn and Garden Equipment. The proposed regulation includes limitations on the use of certain gasoline-powered lawn and garden equipment statewide for state agencies and for local governments in the ozone nonattainment area during June through August, thereby reducing the ozone precursors emissions emitted from this equipment.

VOLUNTARY PROGRAMS

The Clean Fleet Enterprise Clean Fleet Vehicle and Technology Grant Program provided funding on August 24, 2023 to incentivize businesses and governmental entities that operate fleets to use electric motor vehicles. This includes motor vehicles that were originally powered by internal combustion engines, but have been converted into battery electric or hydrogen fuel cell electric motor vehicles, and compressed natural gas motor vehicles that are fueled by recovered methane. Selections could receive a total of up to \$14 million combined once state contracts are finalized. Seventeen projects were selected for grant funding, which included diverse public and private organizations such as cities, counties, universities, and the transportation and utility sectors across Colorado. The next round of the Clean Fleet Vehicle and Technology Grant Program is scheduled to open in approximately March 2024.

The Electric School Bus Investments Grant Program (SB22-193) launched a Request for Applications to support the procurement of electric school buses and other electric vehicles that transport children, as well as associated charging infrastructure on March 29. The first two rounds of grants occurred in April and September 2023, in which 17 districts were awarded approximately \$26 million in combined state and federal funding to support electric school buses and related infrastructure. The grant program will also fund project start-up costs, technical assistance, and high-voltage training for technicians. Exhaust from diesel school bus engines is among the leading exposure of young children to air pollution. The next round of state school bus program funding is scheduled to open in approximately March 2024.

The Air Quality Enterprise identified ozone-related research and the development of a centralized, public air quality monitoring database as its top priorities. In order to improve the state's understanding of ozone pollution in Colorado, facilitate efforts to attain federal ozone standards, and support tangible progress toward aiding fee payers' obligations and commitments to reducing air pollutants, the Air Quality Enterprise solicited proposals in 2023 on a broad category of research related to ozone, including but not limited to ozone emissions, monitoring, and modeling information. This research could include, but would not be limited to, work to improve the ozone SIP model and ozone precursor emissions characterization.