

Amendments to the Regulation for Small Containers of Automotive Refrigerant

Resolution 23-21

October 26, 2023

Agenda Item No.: 23-9-3

Whereas, sections 39600 and 39601 of the Health and Safety Code authorize the California Air Resources Board (CARB or Board) to adopt standards, rules, and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

Whereas, the Legislature enacted the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32 (Nuñez, Stats. 2006, Ch. 488), in Health and Safety Code section 38500 *et seq.* which declared that global warming poses a serious threat to the economic well-being, public health, natural resources, and environment of California and provided initial direction on creating a comprehensive multi-year program to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020;

Whereas, AB 32 added section 38501 to the Health and Safety Code, which expresses the Legislature's intent that CARB coordinate with State agencies and consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing AB 32; and design emissions reduction measures to meet the statewide emissions limits for greenhouse gases in a manner that minimizes costs and maximizes benefits for California's economy, and maximizes additional environmental and economic co-benefits for California, and complements the State's efforts to improve air quality;

Whereas, section 38505 of the Health and Safety Code defines greenhouse gases, as including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride;

Whereas, section 38510 of the Health and Safety Code designates CARB as the State agency charged with monitoring and regulating sources of GHG emissions in order to reduce these emissions;

Whereas, section 38560 of the Health and Safety Code directs the Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emissions reduction from sources or categories of sources, subject to the criteria and schedules specified in Part 4 of Division 25.5 of the Health and Safety Code;

Whereas, section 38560.5 of the Health and Safety Code requires the Board to publish and make available a list of discrete early action GHG emission reduction measures (early action

measures) by June 30, 2007, and to adopt regulations to implement the listed early action measures on or before January 1, 2010;

Whereas, on June 21, 2007, the Board approved the Do-It-Yourself Measure as an early action measure and directed staff to develop it into a regulation (Resolution 07-25);

Whereas, on January 22, 2009, the Board adopted the Regulation for Small Containers of Automotive Refrigerant: Subchapter 10, Article 4, Subarticle 4, Title 17, California Code of Regulations sections 95360 through 95370, the incorporated Certification Procedures for Small Containers of Automotive Refrigerant, Test Procedure TP-503, Test Procedure for Leaks from Small Containers of Automotive Refrigerant, and Balance Protocol BP-A1: Balance Protocol for Gravimetric Determination of Sample Weight using a Precision Analytical Balance;

Whereas, Senate Bill (SB) 32 (Pavley, Stats. 2016, ch.249) was signed into law, which requires CARB to ensure that California's GHG emissions are reduced to at least 40% below the 1990 GHG level by December 31, 2030;

Whereas, section 38580 of the Health and Safety Code requires the Board to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted under Division 25.5 of the Health and Safety Code;

Whereas, on April 22, 2016, the Board adopted amendments to the Regulation for Small Containers of Automotive Refrigerant (Current Regulation): Subchapter 10, Article 4, Subarticle 4, Title 17, California Code of Regulations sections 95362, 95364, 95366, 95367, and 95369, and adopted new sections 95364.1 and 95367.1, and the incorporated Certification Procedures for Small Containers of Automotive Refrigerant sections 2.3;

Whereas, section 38562.2 of the Health and Safety Code specifies that it is California's policy to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to maintain net negative greenhouse gas emissions thereafter, and to also ensure that by 2045 statewide anthropogenic greenhouse gas emissions are reduced to at least 85% below the statewide greenhouse gas emissions limit established by Health and Safety Code section 38550;

Whereas, the current regulation requires self-sealing valves on all product containers sold in California, establishes a container deposit and return program to recover and recycle the container heel (refrigerant remaining in used containers), and a \$10 deposit to act as an incentive to consumers to return the used containers;

Whereas, non-professionals or Do-It-Yourselfers (DIYers) recharge their motor vehicle air conditioning (MVAC) systems by purchasing refrigerant in small containers that hold between 2 ounces and 2 pounds of refrigerant by weight;

Whereas, hydrofluorocarbons (HFCs) are the fastest growing source of GHG emissions in California and the world and are the primary substitutes for ozone-depleting substances, such as chlorofluorocarbons and hydrochlorofluorocarbons, which are being phased out under the Montreal Protocol;

Whereas, HFCs are powerful climate forcers that remain in the atmosphere for a much shorter period of time than longer-lived climate pollutants, such as carbon dioxide, but are more potent when measured in terms of global warming potential, which can be hundreds, or even thousands of times greater than carbon dioxide;

Whereas, HFC-134a is and has been the predominant refrigerant used in MVAC systems manufactured since 1994;

Whereas, HFC-134a is a potent HFC that has a global warming impact 1,430 times greater than carbon dioxide on a 100-year basis according to its Fourth Assessment Working Group 1 Report (AR4) of the Intergovernmental Panel on Climate Change;

Whereas, staff determined the average annual container sales are approximately 1.5 million between 2019 and 2021 and the average container return rate is approximately 66% based on annual reports received from 2011 through 2021;

Whereas, approximately 40% of container sales in California occur in a Disadvantaged Community (DAC);

Whereas, staff determined that the current deposit and return program continues to accrue approximately \$5.5 million in unclaimed deposits annually;

Whereas, staff initially anticipated that returned used containers would hold approximately 22% of the original refrigerant for reclamation, however, data from annual reports indicate that returned used containers hold approximately 4% of the original refrigerant;

Whereas, staff determined that the self-sealing valve requirement has accounted for a majority of the originally anticipated emission reductions as opposed to the deposit and return program due to the low percentage of refrigerant that remains in used containers;

Whereas, staff initially projected a used container return rate of 95%, however, data from annual reports indicate that the return rate has averaged approximately 65% each year;

Whereas, the intention of the container deposit and return program was to encourage container and refrigerant recycling, however, the program has not increased the return rate. In addition, the refrigerant left in the can is low, leading to few reductions from the return program;

Whereas, staff is proposing amendments that would remove the deposit and return program and replace it by phasing in the requirement that reclaimed refrigerant be used in future small containers;

Whereas, staff is proposing amendments that would establish new recordkeeping and reporting requirements for manufacturers to ensure compliance with the reclaimed refrigerant requirement;

Whereas, staff is proposing amendments that would remove existing recordkeeping and reporting requirements for retailers, distributors, and manufacturers for the current deposit and return program;

Whereas, staff is proposing amendments that would create new requirements for the approval and revocation of a manufacturer's designee to spend unclaimed deposits;

Whereas, staff is proposing amendments that would remove the option for manufacturers to spend the unclaimed consumer deposits on consumer Enhanced Education Programs while specifying that unclaimed consumer deposits must support either the repair of MVAC systems or the recovery and reclamation of refrigerants or foams;

Whereas, staff is proposing amendments that would allow retailers to sell containers that are manufactured before January 1, 2025, after which the proposed new container labeling will be required;

Whereas, in developing the proposed amendments, staff conducted two public workshops, a technical meeting, and a number of individual stakeholder meetings to discuss issues related to the proposed amendments;

Whereas, staff considered two alternatives: 1) no amendments with business as usual; and 2) a ban on the sales of small containers of automotive refrigerant in California;

Whereas, staff analyzed alternatives and determined neither would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the proposed regulation;

Whereas, staff concludes that the deposit and return program negatively impacts California consumers, with consumers in DACs bearing a disproportionate cost burden;

Whereas, the removal of deposit and return program will provide savings to all California communities with DACs receiving the greatest benefit without any negative impacts to reducing GHG emissions in keep with CARB's;

Whereas, the proposed amendments are estimated to reduce HFC emissions by approximately 1.6 and 3.3 million metric tons of carbon dioxide equivalent cumulatively by 2030 and 2045, respectively;

Whereas, the proposed amendments are estimated to have a total benefit of \$77 million to \$341 million, cumulatively, for 2025 through 2045 estimated using the Social Cost of Carbon and are otherwise not expected to have a significant statewide adverse economic impact;

Whereas, staff has proposed amendments to the Regulation for Small Containers of Automotive Refrigerant, as set forth in Appendix A-1 to the Initial State of Reasons released to the public on July 3, 2023, for a 45-day comment period that began on July 7, 2023;

Whereas, the Board routinely adopts certification and test procedures in tandem with regulations to alert parties of the manner in which CARB will determine compliance with technical requirements;

Whereas, staff further proposes that the Board therefore adopt amendments to the "Certification Procedures for Small Containers of Automotive Refrigerant," as set forth in Appendix B-1 to the Initial Statement of Reasons released to the public on July 3, 2023;

Whereas, CARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code Section 21080.5 of the California Environmental Quality Act (CEQA; California Code of Regulations, Title 14, Section 15251(d)), and CARB conducts its CEQA review according to this certified program (California Code of Regulations, Title 17, sections 60000-60007);

Whereas, staff has determined that the proposed amendments are exempt from CEQA under California Code of Regulations, Title 14, Section 15061, Subdivision (b)(3) ("common sense" exemption) because the record evidence shows with certainty that there is no possibility that the proposed activity may result in a significant adverse impact on the environment, as described in Chapter VI of the Staff Report;

Whereas, staff has determined the proposed amendments are exempt from CEQA under California Code of Regulations, Title 14, Section 15308 ("Class 8" exemption: Actions Taken by Regulatory Agencies for Protection of the Environment) because the record evidence shows that the amendments will enhance the environment by better protecting the public from

health impacts associated with exposure to adverse impacts caused by climate change, the regulatory process involves procedures for protection of the environment, and the amendments will not result in any significant adverse environmental impacts as described in Chapter VI of the Staff Report;

Whereas, a public hearing and other administrative proceedings have been held according to the provisions of Chapter 3.5 (commencing with section 11340), Part 1, Division 3, Title 2 of the Government Code;

Whereas, the Board finds that:

The proposed amendments are within the scope of CARB's authority and legislative direction to address the serious problem presented by emissions of HFCs from small containers of automotive refrigerant to meet CARB's statutory obligations identified in the following sections of the Health and Safety Code, as explained below:

Sections 39600 and 39601, because the proposed amendments are being promulgated under CARB's duty to perform actions needed to properly execute the powers and duties granted to it, including adopting standards, rules, and regulations needed to properly execute such powers and duties, including the powers and duties discussed below regarding controlling emissions of greenhouse gases including HFCs;

Sections 38501, 38505, 38510, 38560, and 38566, because the proposed amendments are being promulgated under CARB's authority to regulate sources of GHGs, which the Legislature has determined pose serious threats to California and accordingly requires actions by CARB to address such threats, including achieving the maximum technologically feasible and cost-effective reductions of GHGs needed to ensure California's emissions of GHGs are reduced to at least 40% below the State's GHG emissions limit by December 31, 2030;

Section 38562.2, because the proposed amendments are being promulgated under CARB's authority to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to maintain net negative greenhouse gas emissions thereafter; and to ensure that statewide anthropogenic greenhouse gas emissions are reduced to at least 85% below the statewide greenhouse gas emissions limit established by Health and Safety Code section 38550;

Section 38580, because the proposed amendments establish rules, regulations, orders, or other measures adopted by CARB, violations of which are deemed to be emissions of air contaminants subject to the provisions of Health and Safety Code section 38580.

The reporting requirements of the proposed amendments that apply to businesses are necessary for the health, safety, and welfare of the people of the State;

The proposed amendments enhance California's leadership on climate issues and demonstrate that subnational jurisdictions can take important action to reduce HFC emissions;

The proposed amendments are estimated to reduce HFC emissions by approximately 1.6 and 3.3 million metric tons of carbon dioxide equivalent cumulatively by 2030 and 2045, respectively;

The proposed amendments are estimated to reduce costs to consumers by approximately \$5.5 million in unclaimed deposits annually, of which approximately \$1.8 million are from sales in DACs;

The proposed amendments have a total benefit of \$77 million to \$341 million, cumulatively, for 2025 through 2045, estimated using the Social Cost of Carbon;

The proposed amendments are not expected to have a significant statewide adverse economic impact that would directly affect businesses, including the ability of California businesses to compete with businesses in other states, or on represented private persons, or the creation or elimination of jobs;

The proposed amendments were developed in an open public process, in consultation with affected parties, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue;

No reasonable alternatives to the amendments considered to date, or that have otherwise been identified and brought to the attention of CARB, would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the proposed regulation; and

The proposed amendments are consistent with CARB's environmental justice policies and do not disproportionately negatively impact people of any race, culture, income, or national origin.

The proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15061, subdivision (b)(3) because substantial evidence in the record shows with certainty that there is no possibility that the proposal may result in a significant adverse impact on the environment.

The proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15308 because substantial evidence in the record shows that it will enhance the environment by better protecting the public from health impacts associated with exposure to adverse impacts caused by climate change, the regulatory process involves procedures for protection of the environment, and the proposal will not result in any significant adverse environmental impacts.

Now, therefore, be it resolved that the Board hereby approves for adoption amendments to sections 95360, 95361, 95362, 95364, 95364.1, 95365, 95366, 95367, 95368, 95369, and 95370, the repeal and reservation of section 95363, and the adoption of new sections 95364.2, 95366.1, 95366.2, 95367.1, 95367.2, Title 17 of the California Code of Regulations, as set forth in Appendix A-1 and amendments to the incorporated "Certification Procedures for Small Containers of Automotive Refrigerant," as set forth in Appendix B-1 of the Initial Statement of Reasons released to the public on July 3, 2023.

Be it further resolved that if there is a possibility that any modifications to the regulation made available for one or more 15-day public comment periods may affect the conclusion of the environmental analysis, the Executive Officer shall prepare and circulate any additional environmental analysis to the extent required by CARB's regulations at California Code of Regulations, title 17, section 60004.

Be it further resolved that the Board directs the Executive Officer to determine if additional conforming modifications to the regulation are appropriate, including non-substantive and grammatical changes. If no additional modifications are appropriate, the Executive Officer shall

take final action to adopt the regulation, as set forth in Appendix A-1 of the Initial Statement of Reasons released to the public on July 3, 2023. If the Executive Officer determines that additional conforming modifications are appropriate, the modified regulatory language shall be made available for public comment, with any additional supporting documents and information. The Executive Officer shall consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Executive Officer may present the regulation to the Board for further consideration if warranted, and if not, the Executive Officer shall take final action to adopt the regulation after addressing all appropriate conforming modifications.

I hereby certify that the above is a true and correct copy of Resolution 23-21 as adopted by the California Air Resources Board.



Board Clerk