California Air Resources Board

# Public Hearing to Consider the Proposed Amendments to the Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms

# Staff Report: Initial Statement of Reasons

*Date of Release: January 20, 2026*
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## List of Acronyms and Abbreviations

| | |
|---|---|
| 2022 Scoping Plan Update | 2022 Scoping Plan for Achieving Carbon Neutrality |
| AAR | Alternative Account Representative |
| AB | Assembly Bill |
| BAA | Balancing Authority Area |
| CAG | Corporate Association Group |
| CAISO | California Independent System Operator |
| CARB or Board | California Air Resources Board |
| CITSS | Compliance Instrument Tracking System Service |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CFTC | Commodity Futures Trading Commission |
| Co-op | Electrical cooperative |
| CPO | Commodity Pool Operator |
| CPUC | California Public Utilities Commission |
| CTA | Commodity Trading Advisor |
| DAC | Disadvantaged community |
| EA | Environmental Analysis |
| EDAM | Extended Day-Ahead Market |
| EDU | Electrical Distribution Utility |
| EIM | Energy Imbalance Market |
| EIN | Employer Identification Number |
| EITE | Emissions-Intensive Trade-Exposed |
| ETS | Emissions Trading Systems |
| FEIN | Federal Tax Employer Identification Number |
| FERC | Federal Energy Regulatory Commission |
| GHG | Greenhouse Gas |
| GGRF | Greenhouse Gas Reduction Fund |
| IOU | Investor-owned utility |
| KYC | Know-Your-Customer |
| MRR | Mandatory Greenhouse Gas Reporting Regulation |
| $MTCO_2e$ | Metric tons in carbon dioxide equivalent |
| MWh | Megawatt-hour |
| NFA | National Futures Association |
| NGS | Natural Gas Supplier |

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|---|---|
| PAR | Primary Account Representative |
| PCC | Portfolio Content Category |
| POU | Publicly owned utility |
| Program | Cap-and-Invest Program |
| REC | Renewable Energy Credit |
| Regulation | Cap-and-Trade Regulation |
| RPS | Renewables Portfolio Standard |
| SB | Senate Bill |
| VAE | Voluntarily Associated Entity |
| WEIM | Western Energy Imbalance Market |

## Executive Summary

In responding to the threat of global anthropogenic climate change, California is taking bold steps to reduce greenhouse gas (GHG) emissions and transition the State's economy away from dependence on fossil fuels while supporting a growing economy and minimizing impacts to consumers. In September 2025, the California Legislature adopted Assembly Bill (AB) 1207 (Irwin, Chapter 117, Statutes of 2025) and Senate Bill (SB) 840 (Limón, Chapter 121, Statutes of 2025) which provide direction to the Cap-and-Invest Program (formerly Cap-and-Trade, abbreviated here as Program)[1] through 2045 while making updates to specific Program mechanics and providing direction to CARB on Program implementation going forward. These two bills build on California's historic leadership and success in reducing California's GHG emissions and provide critical certainty on the path ahead to achieve California's long-term climate goals. The increasing frequency and scale of climate damages is another part of the affordability challenges affecting California, which the State is taking aggressive steps to address.

A 2024 national report ranked California the worst state for natural disasters fueled by a changing climate, with expected annual losses through 2024 totaling more than $16 billion annually statewide.[2] Home insurance is harder and more expensive to get. Seven of California's largest property insurers, State Farm, Allstate, Farmers, USAA, Travelers, Nationwide, and Chubb recently limited new homeowners policies in the Golden State — raising questions about the stability of the California home insurance market.[3] During an 11-year period, exposure to wildfire smoke caused more than 50,000 deaths in California and more than $400 billion in economic impacts.[4] During seven extreme heat events over the past decade, California experienced $7.7 billion in losses.[5] Those losses do not even include the recent devasting fires California experienced in 2025. Fueled by record drought conditions linked to climate change,[6] the January 2025 Southern California wildfires caused widespread losses including at least 440 deaths, with 31 direct deaths and 409 indirect fatalities from smoke or healthcare disruptions.[7] This included an approximately 110-fold increase in $PM_{2.5}$ lead levels that was recorded locally,[8] and which also impacted indoor air quality.[9] These losses and impacts also included over 37,000 acres that burned and the destruction of more

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[1] AB 1207 expressed its intent that CARB change the name of the Cap-and-Trade Program to Cap-and-Invest. This change is part of the Proposed Amendments. In this document, we refer to the Program generally as Cap-and-Invest or Program. The Cap-and-Trade Regulation will change to the Cap-and-Invest Regulation once the Proposed Amendments are adopted.

[2] ClaimGuide.org, *Disaster Preparedness: Riskiest Places for Severe Weather* (May 2024).

[3] Bankrate, *Limited Home Insurance Options in California As Major Carriers Pull Back* (August 2024).

[4] UCLA, *The death toll from wildfire smoke* (June 2024).

[5] California Department of Insurance, *Commissioner Lara releases pioneering analysis on hidden costs of extreme heat in California* (July 2024).

[6] NOAA, *The weather and climate influences on the January 2025 fires around Los Angeles* (February 2025).

[7] Boston University School of Public Health, *Death Count for 2025 LA County Wildfires Likely Hundreds Higher than Official Records Show* (August 2025).

[8] Center for Disease Control and Prevention, *Notes from the Field: Elevated Atmospheric Lead Levels During the Los Angeles Urban Fires - California January 2025* (February 2025)

[9] LA Fire HEALTH Study Consortium, *Data Brief 3* (March 2025)

than 16,000 structures in the Palisades and Eaton fires.[10] The economic impacts from these fires alone is estimated to be more than $30 billion.[11] This regulatory update, which reflects the Legislative direction in AB 1207 on the direction of the Program through 2045, will keep momentum for private investment in clean energy and technology to support the State's air quality and climate targets while growing the economy.

Aligned with the State's GHG emissions reduction targets, in 2022, the California Air Resources Board (CARB) approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update; CARB 2022a), which charted a cost-effective and technological feasible path to achieving carbon neutrality by 2045 and reducing greenhouse gas emissions 85% below 1990 levels by 2045. Meeting this goal set by Assembly Bill (AB) 1279 (Muratsuchi, Chapter 337, Statutes of 2022) will require the deployment of GHG emission reduction measures at an unprecedented scale and pace. Importantly, AB 1279 was passed with SB 905 (Caballero, Chapter 359, Statutes of 2022) which recognizes both reducing emissions by 85% below 1990 levels and achieving carbon neutrality by 2045 will require carbon dioxide removal options.

The Cap-and-Invest Program (Program), authorized by AB 32 (Nunez, Chapter 32, Statutes of 2006), has been part of California's successful portfolio approach of incentives, regulations, and carbon pricing to achieving the State's GHG emissions reduction targets for 13 years, and it will remain critical as California progresses towards carbon neutrality. The Program sets a cap on approximately 80% of total statewide GHG emissions, which declines annually in line with the State's GHG emissions reduction goals. Each metric ton of GHG emissions within the cap is represented by a GHG allowance that is distributed by CARB and used by covered entities to fulfill a compliance obligation for their carbon emissions. A portion of these allowances are sold at State-run auctions, which establishes a carbon price and generates revenue for the State to invest in further GHG emissions reduction. Analyses have shown that a cap-and-invest program is a more cost-effective policy for achieving reductions when compared to direct regulations by sector. Other allowances are provided to protect ratepayers from Program costs passed through in utility bills and to avoid GHG emissions leakage. The Program is designed to provide GHG emissions reduction at covered sources and return money to California residents through a climate credit on energy bills and money for budget appropriation to support state priorities such as wildfire mitigation. Altogether, the Program is a system of design elements that together send a steadily increasing carbon price signal to incentivize emissions reductions while minimizing economic impacts.

[10] CAL FIRE, *2025 Fire Season Incident Archive* (undated)

[11] Doug Smith and Sandhya Kambhampati, "*Real estate losses from fires may top $30 billion, from old mobile homes to $23-million mansions*," Los Angeles Times (February 21, 2025).

As noted above, the Proposed Amendments build on California's success in reducing California's GHG emissions to date and set a path to achieving the State's long term climate goals. As seen in Figure 1, GHG emissions in California are down *21% since 2000* — even as the state's GDP increased 81% in that same time period. The latest data from the Mandatory Reporting Regulation, as seen in Figure 2 below, highlights that California's Emissions Inventory is also on track to decline in 2024 (CARB 2025a).

**Figure 1: California's Historic GHG Emissions Decrease as the Economy Grows**

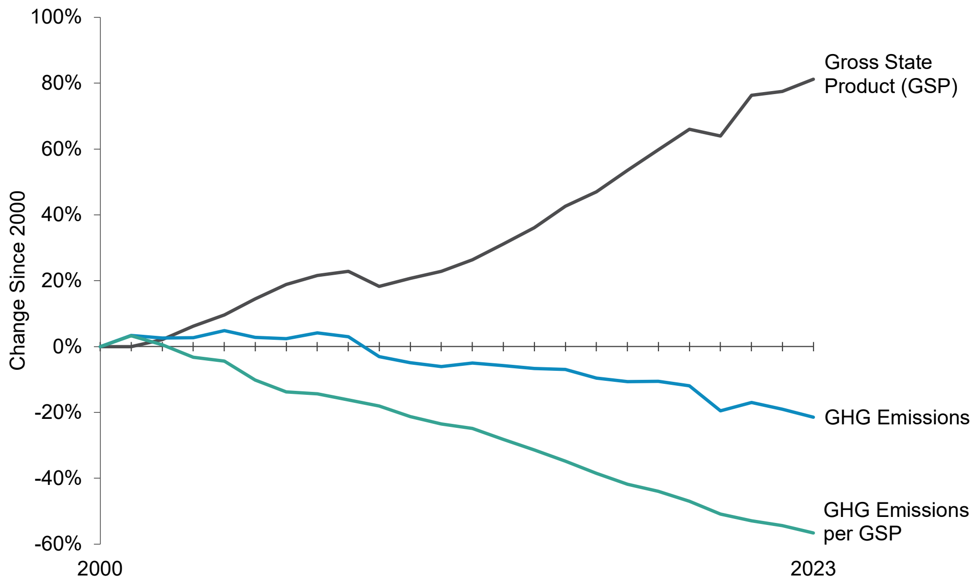
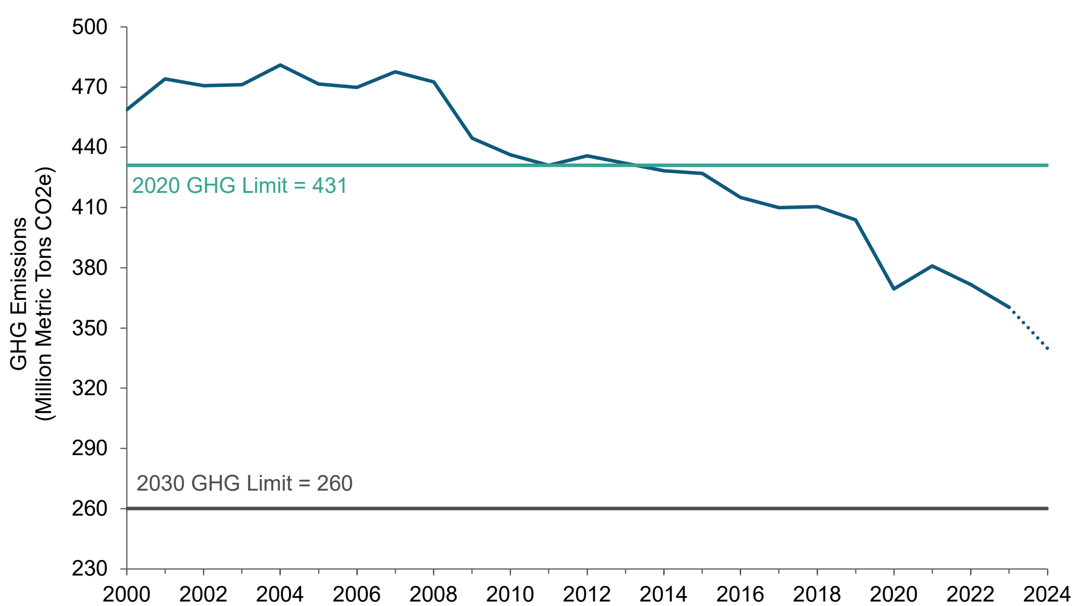



**Figure 2: California's Historic GHG Emissions on Track to Decline**



Staff are proposing amendments to the Cap-and-Trade Regulation (Proposed Amendments), aligned with Legislative direction in AB 1207, Senate Bill (SB) 32 (Pavley, Chapter 249, Statutes of 2016) GHG emissions reduction target of at least 40% below 1990 levels in 2030, the carbon neutrality and 85% below 1990 targets in AB 1279 and the requirements of AB 398 (Garcia, Chapter 135, Statutes of 2017) which are aimed at ensuring the Program:

- Supports the State's climate targets including enabling a smooth transition to the post-2030 Program;
- Considers consumer affordability, cost-effective GHG emissions reduction and technological feasibility;
- Minimizes the risks of emissions leakage;
- Maintains cost-containment mechanisms to protect against price volatility; and
- Avoids disproportionate impacts on low-income communities.

The Proposed Amendments aim to achieve the following objectives:

- Updating allowance budgets to reflect recent adjustments to the GHG Emission Inventory and alignment of post-2030 budgets in support of achieving the State's 2045 climate targets.
- Updates to market rules, in the context of budget adjustments, to support liquidity, enhance market protections, and contain costs.
- Amendments to ensure the Program appropriately supports consumer affordability, covers emissions, minimizes GHG emissions leakage, and incentivizes decarbonization in the evolving electricity, industrial, and transportation sectors.
- Revised methodology to account for the use of offset credits in annual budgets.
- Technical updates to offset credit provisions to clarify, streamline implementation, and reflect lessons learned.
- Administrative updates to clarify and streamline Program implementation.

The Proposed Amendments, if adopted, would result in significant GHG emissions reduction as well as air quality, health, and economic benefits across the State. These benefits, which are presented relative to expectations under the current Cap-and-Invest Regulation, include:

GHG Reductions:

- The Proposed Amendments are designed to support achieving the State's 2030 and 2045 GHG emissions reduction targets and are expected to result in 953 million metric tons CO2e of avoided GHG emissions from 2027-2046, largely from reduced fossil fuel combustion at covered facilities.[12]

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[12] Although the Cap-and-Invest Program imparts an economy-wide carbon price that extends to transportation fuels and residential/commercial energy use, staff analysis for the Proposed Amendments assigns GHG emissions benefits, criteria pollutant emissions benefits, and associated health benefits from decarbonization measures in those sectors to complementary measures such as the Low Carbon Fuel Standard. In reality, the Cap-and-Invest Program is expected to drive down emissions in all covered sectors. The GHG and health benefits in this analysis should be seen as conservative estimates.

- The Proposed Amendments are also expected to increase revenues from state-owned allowances sold at auction, which are deposited into the Greenhouse Gas Reduction Fund (GGRF) for appropriation by the Legislature and Governor. These increased revenues will produce an estimated 10 million metric tons CO2e of additional GHG emissions reduction over the lifetime of GGRF projects in sectors not otherwise covered by the Program.

Health Benefits from Local Air Quality Improvements:

- Reduced fossil fuel combustion and additional GGRF program expenditures due to the Proposed Amendments are estimated to reduce 305,000 tons of oxides of nitrogen (NOx) and 50,000 tons of fine particulate matter ($PM_{2.5}$) emissions from 2027-2046. These local air quality improvements result in avoided incidents of public health indicators such as asthma symptoms or cardiopulmonary mortality in communities near covered facilities.
- Staff estimate the cumulative monetary value of these avoided health costs to be approximately $123 billion between 2027-2046.

Economic Benefits:

- $3.5 billion in estimated increased GGRF revenue through 2035, most of which will be invested in GHG emissions reduction projects that benefit priority populations.[13]
- $9.7 billion in estimated increased utility allowance auction revenue through 2046, which will be used to benefit ratepayers through the California Climate Credit and programs that reduce GHG emissions.[13]
- Avoided future global climate damages of $192-$486 billion, as estimated by applying the social cost of carbon.
- Expansion of businesses and employment opportunities in sectors that provide clean energy technologies and low-carbon fuels.

The Proposed Amendments will also help support implementation of California's complementary sector-specific programs, facilitate the rapid large-scale deployment of emission reduction solutions identified by the 2022 Scoping Plan Update, and will provide a model for other jurisdictions looking to adopt their own emissions trading systems. A well-designed Cap-and-Invest Program that continues to reduce GHG emissions while growing the economy signals the viability of the Program and supports other jurisdictions in pursuing similar policies. CARB's policy leadership may have profound effects on the global effort to combat climate change, which in turn benefits California by further reducing the risk of prolonged drought, heat waves, wildfires, and other extreme climate events.

[13] All economic benefits are estimated using a set of assumptions described in Sections IV and VIII below and in the Form 399 Economic Analysis. As the market administrator and due to forecast uncertainty, CARB cannot predict actual allowance value and is using a base set of assumptions for this economic analysis.

# I. Introduction and Background

This Staff Report presents CARB staff's rationale for Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Regulation or Regulation, title 17, California Code of Regulations, sections 95801 et seq.). The Cap-and-Invest Program is one of the key policies implemented by CARB to reduce greenhouse gas emissions to help the State achieve its climate targets. In this chapter, CARB staff provide a brief overview of the Regulation, information on the history and status of the Program, and an overview of the proposed revisions to the Program.

California has been on a path to reducing its GHG emissions since the Global Warming Solutions Act of 2006, also known as AB 32, was signed into law. AB 32 called for the state to return to 1990 GHG emissions levels by 2020 and maintain and continue GHG emissions reduction beyond 2020, identified CARB as the State agency charged with monitoring and regulating sources of the GHG emissions that cause climate change, and authorized the development of a market-based compliance mechanism to reduce GHG emissions. CARB promulgated the Cap-and-Trade Regulation pursuant to this authority through a multi-year public process. In 2016, the Legislature reaffirmed California's commitment to acting against climate change by adopting SB 32, which called for at least a 40% reduction in GHG emissions below 1990 levels by 2030. In 2017, AB 398 (Garcia, Chapter 135, Statutes of 2017) clarified the role of the Cap-and-Invest Program in achieving the 2030 GHG emissions reduction target. In 2022, the Legislature passed AB 1279 (Muratsuchi, Chapter 337, Statutes of 2022), which requires both reducing anthropogenic GHG emissions by 85% below 1990 levels by 2045 and achieving carbon neutrality by 2045. AB 1279 was passed along side SB 905 (Caballero, Chapter 359, Statutes of 2022) which recognized the need for carbon dioxide removal in achieving the state's mid-century climate targets. The 2022 Scoping Plan Update[14] laid out a cost-effective and technologically feasible path to fulfill the mandates in AB 1279, which requires both reducing anthropogenic GHG emissions by 85% below 1990 levels by 2045 and achieving carbon neutrality by 2045. Successful implementation of the 2022 Scoping Plan Update requires reductions in GHG emissions at sources covered by the Regulation and deployment of both carbon capture and sequestration and direct air capture and sequestration. Achieving the programmatic goals outlined in the 2022 Scoping Plan Update would result in an 86% reduction in total fossil fuel demand in 2045 relative to 2022. Under the Scoping Plan, impacts to economic and job growth would be negligible in both 2035 and 2045 and far overshadowed by the expected economic and workforce growth over the next two decades, while delivering approximately $200 billion of health benefits in 2045 due to substantial reductions in emissions of criteria and toxic air pollutants.

Since the passage of AB 32 and adoption of the first Scoping Plan in 2008 (CARB 2008), carbon pricing in the form of a Cap-and-Invest Program has been part of California's successful portfolio approach to achieving the State's GHG emissions reduction targets, and it will remain critical as California progresses toward carbon neutrality. The Program creates a strong economic incentive for investments in GHG emission reductions by establishing a declining cap on approximately 80% of total statewide GHG emissions. As such, there remain

[14] See *2022 Scoping Plan Documents* for more information.

GHG emissions sources included in the State's 2030 and 2045 numerical targets, such as natural and working lands and short-lived climate pollutants, that are outside the scope of the Program. If other policies are not in place to reduce GHG emissions in those non-covered sectors, there is a risk of not achieving the State's climate targets. Post-2030, emissions outside the scope of the Program are expected to make up an increasing proportion of total emissions included in statewide targets (CARB 2022a). To realize the GHG emissions reduction needed across all California sources, the 2022 Scoping Plan Update emphasizes the need to continue with a diverse portfolio of policies including the ongoing implementation of the Program. Emissions from sectors covered by the Program will also be reduced by the State's suite of complementary policies and objectives, such as the Renewables Portfolio Standard, the Low Carbon Fuel Standard (LCFS), and increased deployment of light-, medium-, and heavy-duty zero-emissions vehicles.

The 2022 Scoping Plan Update also identifies a need to accelerate the GHG emissions reduction target to be on track to meet California's 2045 targets. This increased stringency both pre-2030 and post-2030 relies on rapidly increasing the deployment of low-carbon energy, technology, and infrastructure across all aspects of the economy, including the use of carbon removal technologies. Private investments and State funding and incentives will all need to be leveraged this decade to realize the outcomes set forth in the 2022 Scoping Plan Update. The carbon price imparted by the Cap-and-Invest Program is a key signal supporting the necessary flow of investments to GHG emissions reduction activities in the covered sectors.

In 2025, the Legislature extended the Cap-and-Invest Program to 2045 with a pair of bills, AB 1207 and SB 840, that passed both chambers with a supermajority vote. These bills reaffirm the role of Cap-and-Invest in supporting progress toward the 2030 and 2045 GHG emissions reduction targets and include targeted changes to the Program.

The suite of Proposed Amendments in this Staff Report work collectively to reflect the statutory requirements set by the Legislature and ensure the Program provides the long-term price signal, appropriate incentives, and regulatory certainty to support the economy-wide deep decarbonization needed through mid-century. Most significantly, the Proposed Amendments revise the 2027-2030 allowance budgets to align Program stringency for 2030 and revise post-2030 allowance budgets to reflect AB 1279 targets. These proposed changes to allowance budgets would bolster the Program price signal, intensifying incentives for covered entities to invest in GHG emissions reduction activities in the near and long-term. The package of Proposed Amendments is informed by AB 1279, the 2022 Scoping Plan Update, the existing 2030 GHG emissions reduction target established by SB 32, evolving State policy, progress towards the 2030 target, and implementation experience. An overview of the Proposed Amendments is provided at the end of this chapter. Chapter II provides a more in-depth description of the purpose of the rulemaking and the problems that the proposal is intended to address.

## A. Overview of Cap-and-Invest Program

CARB initially approved the Cap-and-Trade Regulation in 2011 as the market-based mechanism authorized under AB 32 to reduce GHG emissions. The Program achieves this by establishing an economy-wide, declining cap on statewide GHG emissions from industrial facilities, in-state and imported electricity generation, and transportation and building fuel use. Overall, the Program covers about 80% of emissions in the AB 32 GHG Emission Inventory. Importantly, the Program assesses a consistent carbon price across broad sectors that contributes to both reductions in GHG emissions and harmful local air pollution, and it ensures a level playing field for all energy sources and for entities and businesses across the California economy. Other alternatives to a Cap-and-Invest Program have been considered and evaluated over the last 17 years as part of updates to the AB 32 Scoping Plan. Those include prescriptive regulations with specific mandates for each covered sector and a carbon tax on GHG emissions. The Cap-and-Invest Program is the most effective policy for providing a uniform framework to reduce GHGs across economic sectors. It also provides, among other features, compliance flexibility to reduce compliance costs to regulated entities, including free allowances to minimize emissions leakage, returns of auction revenues to Californians, especially those in frontline communities, and the ability to link with other Programs to deliver broader GHG emissions reduction. The design of the Program has also ensured almost 100% compliance rates year-over-year as the state continues to see GHG emissions reduction.

CARB issues allowances equal to a declining annual budget (i.e., the “cap”) that is set according to California’s GHG emissions reduction goals. One allowance equals one metric ton of carbon dioxide equivalent ($MTCO_2e$) using the 100-year global warming potential. Each compliance period represents either a 2-year or 3-year block in the Program. Having multiyear compliance periods allows for smoothing annual emissions variations that may result from weather impacts on energy generation and demand, variable production conditions, and unforeseen economic events. A steady decline in allowance supply over time ensures a long-term steadily increasing carbon price signal to prompt GHG emissions reduction to achieve the statewide target. Long-range budgets allow for long-term business planning for investment in low carbon energy and technology.

The Program is designed to achieve the most cost-effective statewide GHG emissions reductions. For consistency with AB 398, there are no individual or facility-specific emissions reduction requirements, which would increase the cost of achieving statewide targets. Rather, each covered entity must report and verify its GHG emissions annually and acquire and surrender compliance instruments in an amount equal to its total covered GHG emissions during each compliance period. Allowances are issued by CARB and distributed both by free allocation, to minimize GHG emissions leakage and to protect ratepayers, and by sale at quarterly auctions. Proceeds from the sale of State-owned allowances at quarterly auctions are placed into the Greenhouse Gas Reduction Fund (GGRF) and are appropriated by the Legislature during the annual budgeting process and consistent with State law to further the purposes of AB 32, most recently reflected in SB 840.

Covered entities can also meet a small portion of their compliance obligation by surrendering offset credits, which are compliance instruments that are derived from rigorously verified emissions reductions from projects in sectors outside of capped sectors. Offset credits are issued by CARB to qualifying offset projects. Consistent with allowances, each offset credit is equal to 1 $MTCO_2e$.

By virtue of the current linkage with the Cap-and-Trade System in Québec, California entities can use Québec-issued allowances and offset credits, as all compliance instruments issued by linked jurisdictions are recognized for compliance and fully fungible. A secondary market exists where allowances and offset credits may be sold and traded directly among Program participants.

The Program gives covered entities the flexibility to develop their most cost-effective compliance strategy. Covered entities may find methods to reduce GHG emissions at their own facilities, trade allowances and offset credits with other firms, and purchase allowances at auction. Through these mechanisms, the Program is designed to leverage the power of the market to find the most cost-effective methods to reach California's GHG emissions reduction goals. The ability to auction and trade allowances establishes a price signal needed to drive long-term investment in low- and zero-carbon fuels, cleaner technologies, and more efficient use of energy. The allowance price represents the market's estimation of the cost to abate carbon emissions to achieve the goal and incorporates factors such as technology cost, technology readiness, permitting challenges, and other hurdles or considerations.

The three-pronged approach of incentives, regulations, and carbon pricing in the form of a Cap-and-Invest Program has been included in every AB 32 Scoping Plan since first adoption in 2008 (CARB 2008). More recently, the 2022 Scoping Plan Update included the ongoing implementation of the Cap-and-Invest Program as part of a cost-effective and technologically feasible decarbonization path aligned with AB 1279 targets (CARB 2022a).

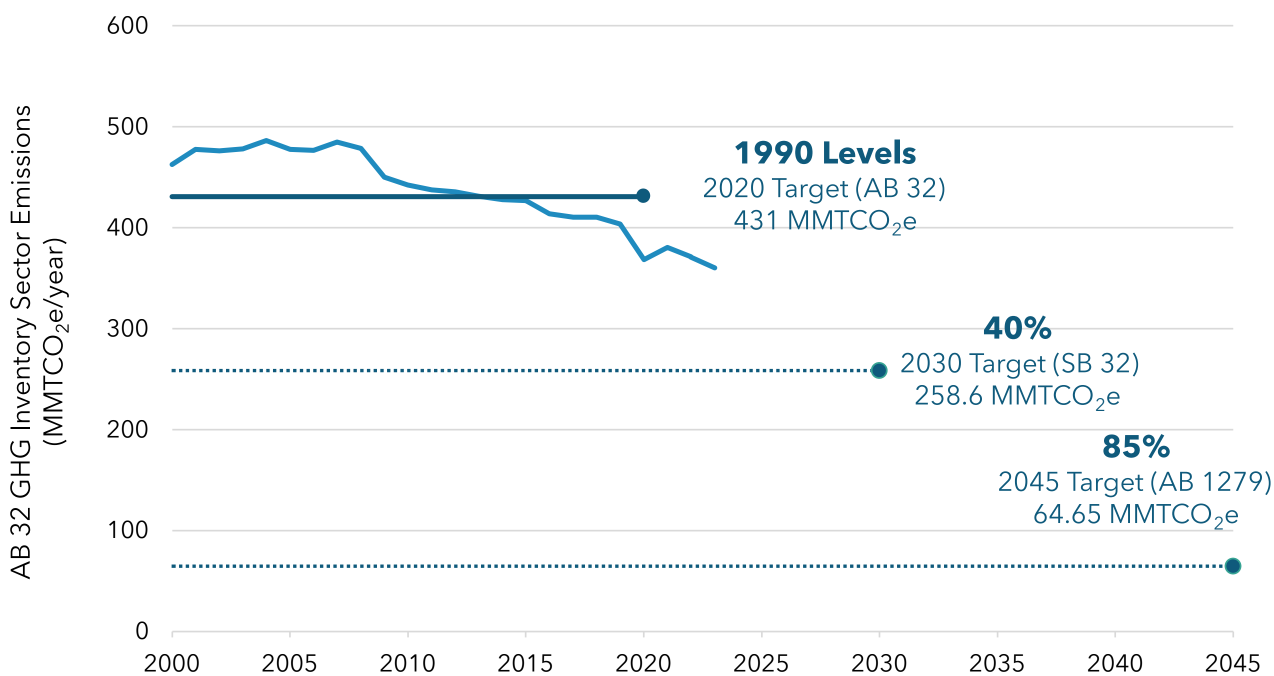
## B. History of the Cap-and-Invest Program and Climate Legislation

Climate change is one of the most serious environmental threats facing humankind, and California is already feeling its devastating effects. California committed to take action to address the threat through the adoption of AB 32, which is codified at California Health and Safety Code sections 38500 *et seq*. AB 32 requires California to reduce its statewide GHG emissions to 1990 levels by 2020, to maintain and continue GHG emissions reduction beyond 2020, to develop a comprehensive strategy to reduce dependence on fossil fuels, to stimulate investment in clean and efficient technologies, and to improve air quality and public health. It identifies CARB as the State agency charged with monitoring and regulating sources of GHG emissions that cause climate change. AB 32 also requires CARB to work with other jurisdictions to identify and facilitate the development of integrated and cost-effective regional, national, and international GHG emissions reduction programs.

Furthermore, AB 32 authorizes CARB to use a market-based aggregate emissions mechanism to reduce GHG emissions, and CARB promulgated the Cap-and-Trade Regulation pursuant to this authority. In 2016, the Legislature reaffirmed California's commitment to acting against climate change by adopting SB 32, which further directs CARB to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level no later than December 31, 2030. In addition, AB 398 amended certain provisions of AB 32 to take effect starting January 1, 2021, clarified the role of the Cap-and-Invest Program in achieving the 2030 GHG emissions reduction target, and required that GHG regulations be consistent with CARB's Scoping Plan. In passing AB 398, the Legislature, through a two-thirds supermajority vote, directed many of the design elements in the existing Regulation, while simultaneously offering strong support for the Cap-and-Invest Program as one of California's key tools for achieving the State's GHG emissions reduction targets. AB 1279 calls for reducing anthropogenic emissions by at least

85% below 1990 levels by 2045 and achieving carbon neutrality no later than 2045 and AB 1207 specifies that program wide aggregate emissions covered by the Cap-and-Invest Program should at a minimum decline aligned with the State's climate targets. Figure 3 illustrates the numerical targets in statute in the context of California's historic GHG emissions (CARB 2025b). The Program applies to emissions that currently make up approximately 80% of the emissions included in the State's AB 32 GHG Emission Inventory.

**Figure 3: California's Historic GHG Emissions and Legislative GHG Emissions Reduction Targets**




In conjunction with passing AB 398, AB 617 (C. Garcia, Chapter 136, Statutes of 2017) was passed in response to environmental justice concerns. This bill recognized the need for the State to continue to identify and effectively address concerns related to local air quality impacts, especially in the State's most vulnerable communities, and to provide more direct tools to assist the State and air districts in improving air quality. Neither AB 398 nor AB 617 alters the longstanding local air district permitting authority for stationary sources. To achieve AB 617 requirements, CARB has established the Community Air Protection Program and is taking comprehensive action with air districts, communities, and other interested parties.[15] Efforts within the Community Air Protection Program, such as community air grants to support local emissions-reduction plans, incentive funds to meet community goals, and community-focused enforcement, are primarily funded by Cap-and-Invest Program auction proceeds (CARB 2023a).

[15] *See* the *Community Air Protection Program webpage* for more information on AB 617 implementation.

Pursuant to AB 32, California's Cap-and-Trade Regulation was adopted by CARB in October 2011. The Regulation took effect January 1, 2012, and the first allowance auction occurred in November 2012. The Program began to cover emissions in January 2013 and has achieved near 100% compliance rates for every compliance event to date.[16] All facilities covered by the Program are still subject to their applicable air quality permit limits for criteria and toxic air pollutants. By establishing a declining limit on major sources of GHG emissions, the Program creates a powerful economic incentive for significant investment in cleaner, more GHG emissions-efficient technologies. The Program is one of California's primary tools for driving statewide GHG emissions reduction, and the Proposed Amendments are designed to help achieve the reductions needed to meet the targets in SB 32 and AB 1279. Companion programs, such as the AB 617 Community Air Protection Program, help ensure that community-level air quality concerns are also addressed as the State progresses toward its ambitious climate targets.

The Program is also designed to accommodate regional trading programs. Since 2007, California has been a partner in the Western Climate Initiative (WCI), an effort of U.S. states and Canadian provinces working together to implement policies to combat climate change, including through the development of a regional emissions trading system. Staff work with other WCI jurisdictions to ensure that rigorous and compatible systems are being developed. This cooperation facilitates future Program linkages with other developing GHG emissions reduction programs in the region. On January 1, 2014, California and Québec linked their respective cap-and-trade programs. On January 1, 2018, the linked California and Québec programs linked with the cap-and-trade program in Ontario, Canada, and then subsequently de-linked due to policy changes in Ontario. The Program demonstrated its flexibility to adapt to rapidly changing circumstances without incurring any adverse impacts to California regulated entities or to California's ability to achieve its 2020 target.[17]

The Regulation has been amended eight times since its inception to reflect the increased climate ambition laid out in statutes, lessons learned through implementation, linkages with other similar programs, and additional direction from the Legislature.[18]

- In 2012, CARB staff proposed two sets of amendments to the Regulation. The first set, related to Program implementation, was approved by the Board in June 2012 and took effect in September 2012. The second set, related to jurisdictional linkage with Québec, was approved by the Board in April 2013. These amendments took effect in October 2013 and specified a January 1, 2014, start date for the linkage between the California and Québec programs.
- In 2013, CARB staff proposed amendments to extend transition assistance (free allowance allocation to the industrial sector at the outset of the Program to avoid sudden or undue short-term economic impacts and to promote a transition to a low-carbon economy) for some covered entities, refine the required data collected from

[16] See compliance reports on the *Cap-and-Trade Program Data* page for more information.
[17] See *Cap-and-Trade Program Linkage* for more information.
[18] See *Cap-and-Trade Regulation* for more information.

registered participants to support market oversight, and add an additional cost-containment measure. These amendments also included a new compliance offset protocol, Mine Methane Capture, and updates to offset credit implementation and usage. The Board approved these amendments in April 2014, and they took effect July 1, 2014.

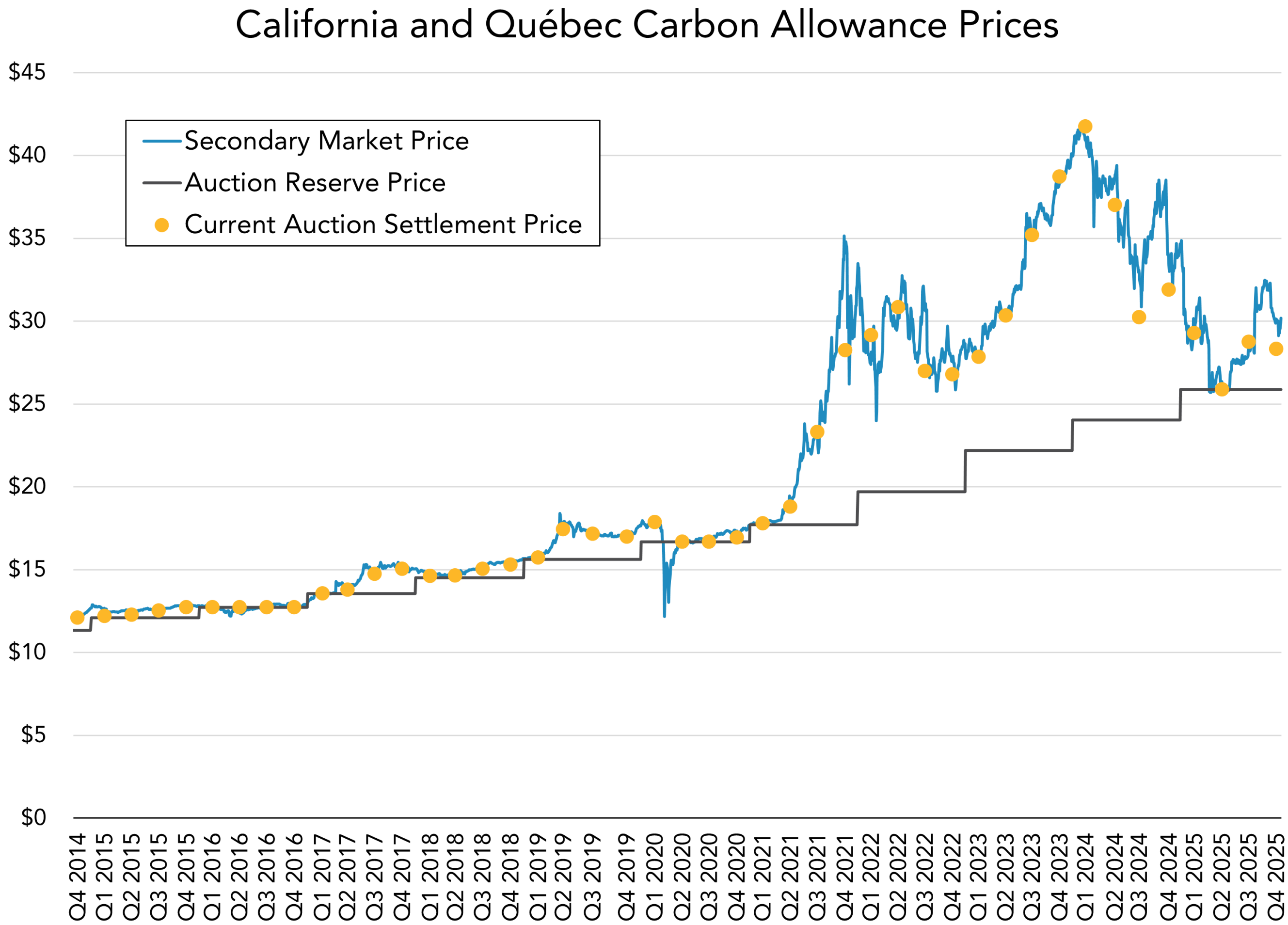
- In 2014, CARB staff proposed two sets of amendments to the Regulation. The first set clarified the quantification of production data, updated compliance offset protocols, and modified requirements related to compliance, corporate association disclosures, and offset transfer price reporting related to the transaction of market instruments. This first set of 2014 amendments was adopted by the Board in September 2014, and they took effect January 1, 2015. The second set of 2014 amendments modified the Regulation to include a new Rice Cultivation Compliance Offset Protocol and to update the U.S. Forest Compliance Offset Protocol to allow eligibility for projects in parts of Alaska. The Board adopted these amendments in June 2015, and they took effect November 1, 2015.
- In 2016, CARB staff proposed amendments to clarify compliance obligations for certain sectors; continue Program linkage with Québec beyond 2020; to link the Program with the new cap-and-trade program in Ontario beginning January 2018; to establish a post-2020 framework for caps, enabling future auction and allocation of allowances; and to continue all other provisions needed to implement the Program after 2020. The Board adopted these amendments in July 2017, and they took effect October 1, 2017.
- In 2018, CARB staff proposed two sets of amendments to the Regulation. The first set of targeted amendments clarified successor liability and alignment with linked jurisdictions. The second set of 2018 amendments implemented AB 398 requirements for the post-2020 Program, including bolstering cost-containment, reducing the role of offset credits, and prioritizing protection against emissions leakage. The Board adopted these amendments in December 2018, and they took effect April 1, 2019.

## C. Current Status of the Cap-and-Invest Program

Throughout the more than 13 years since the Board's original adoption, the basic framework of the Program has worked well and supported reductions in GHG emissions and continues to support a stable and steadily increasing price signal, as demonstrated in Figure 4 (CARB 2025c).[19]

[19] Historic allowance prices and other Program data can be found at the Cap-and-Trade Program *Data Dashboard*.

**Figure 4: Cap-and-Invest Program Allowance Prices Through Q4 2025**




Through Q4 2025, quarterly auctions have raised over $34 billion in revenues for the GGRF (CARB 2025d). Through 2024, over 73% of the $12.8 billion in funding implemented has benefited priority populations. Cumulatively, the projects funded by the GGRF, including investments in clean transportation, sustainable communities, waste diversion, and conserving or restoring natural and working lands, will reduce an estimated 116.1 million metric tons of carbon dioxide equivalent and over 112 thousand short tons of criteria air pollutants (CARB 2025e). Also, through November 2025, quarterly auctions have raised over $21.3 billion in revenues from freely allocated allowances provided to utilities for ratepayer benefit (CARB 2025d) and through 2023 nearly $11 billion has been directly returned to customers as the residential California Climate Credit (CARB 2025f, CARB 2025g). In total, the Program has returned over $23.8 billion back to Californians through bill credits or GHG emissions reduction programs.

The Program has worked in concert with other policies and regulations to help the State achieve its statutory 2020 GHG emissions reduction target several years ahead of the mandate and to continues to support declining emissions ever since (CARB 2025a). The 2025 GHG inventory shows that through 2023 statewide GHG emissions have declined to 360.4

MMT of $CO_2e$, a 21% decrease since 2000.[20] Through the fourth compliance period ending in 2023, over 2.8 billion allowances were surrendered for Program compliance, holding entities accountable for their GHG emissions (CARB 2021a, CARB 2021b, CARB 2022b; CARB 2024a). The Program currently covers over 400 facilities, including industrial facilities, electricity generators and importers, and suppliers of gasoline, diesel, and natural gas. The Program has achieved near 100% compliance rates for every compliance event to date. The Offsets Program has issued over 281 million offset credits, to 633 projects across 38 states (CARB 2025h). These projects not only provide critical GHG emissions reduction and climate benefits, they also provide many environmental, public health, and economic benefits. Of the credits issued, 44 million are for Tribal projects, and over 47 million for Alaska Native Corporation projects. Of the over 38 million credits issued the past three years, 33% are from projects offering direct environmental benefits to California's air or water quality. Direct environmental benefits requirements were integrated into the Program as part of the post-2020 extension in AB 398 and became a regulatory requirement starting in 2021. Success of the Program has been supported by the Regulation's strong and well-defined market rules, which help protect the market from manipulative and disruptive activities. Confidence in the market is evidenced by the steady increase in voluntarily associated market participants over time, which reflects steady interest in the market as it has matured (CARB MELCCFP 2023). The California Cap-and-Invest Program and Québec Cap-and-Trade System have been linked since January 2014. This linkage is made possible by consistent market rules and enables compliance instruments to be traded and recognized for compliance across the two programs.

Like so many of CARB's innovative programs, the success of California's Cap-and-Invest Program is inspiring other jurisdictions to adopt their own emissions trading systems. CARB works closely with other jurisdictions that have chosen to pursue similar programs, such as Washington State and New York State.[21] CARB also collaborates with other jurisdictions, and engage in technical exchanges with Brazil, China, Chile, Japan, New Zealand, Mexico, Panama, and Sweden, among other jurisdictions that are developing and implementing their own emission trading schemes, and collaborates with a broad range of other international actors that have an interest in carbon pricing and emissions trading. As other jurisdictions consider their own programs, CARB continues to improve Program efficiency, maintain Program integrity, and align the Program with a transition to a deeply decarbonized economy to ensure that the Cap-and-Invest Program remains a policy that is effective for California and instructive to other jurisdictions.[22]

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[20] See CARB, *California GHG Emissions from 2000-2023: Trends of Emissions and Other Indicators* (2025).

[21] *See* *Washington's Cap-and-Invest Program* and *New York's Cap-and-Invest Program* for more information.

[22] Worldwide there are currently thirty-six emissions trading systems in force and twenty-two under development or consideration. *See* *International Climate Action Partnership ETS Map* for more information.

## D. Overview of the Proposed Amendments

This section provides a broad overview of Cap-and-Trade Regulation amendments staff are proposing for adoption. Staff are proposing to amend the Regulation to reflect a range of objectives, from simple updates and revisions to improve Program implementation, to broader proposals to implement the requirements of AB 1207 to further support California's climate targets. Chapter II provides a more in-depth description of the purpose of the rulemaking and the problems that the proposal is intended to address. Chapter III provides a summary, purpose, and rationale for each proposed regulatory modification. Overall, the suite of Proposed Amendments works collectively to ensure the Program provides the long-term price signal, appropriate incentives, and regulatory certainty to support the economy-wide deep decarbonization needed through mid-century while supporting a cost-effective design.

Most significantly, staff propose more stringent allowance budgets to reflect recent updates to the GHG Emission Inventory and to ensure emissions reduction in support of State goals. Recent updates to the AB 32 GHG Emission Inventory merit a review of the allowance budgets in the context of AB's 1207 direction to the Program through 2045 and its requirements to ensure that program-wide aggregate emissions from covered sources decline with statewide climate targets (CARB 2023b).[23] These targets include the SB 32 target to reduce GHG emissions to 40% below 1990 levels by 2030 and the AB 1279 target to reduce anthropogenic emissions by 85% below 1990 levels by 2045. The 2022 Scoping Plan Update also identifies a need to increase ambition to be on track for the 2045 targets (CARB 2022a). All of these factors informed the staff proposal to adjust the 2027-2030 annual allowance budgets in Table 6-2 of the Regulation to remove approximately 118 million allowances from the market and to revise post-2030 allowance budgets to align with the 2045 target. Cumulatively through 2045, the Proposed Amendments include the same total number of allowances as analyzed in the SRIA Proposed Scenarios. The process for determining the proposed annual allowance budgets is detailed in Chapter II. These proposed changes are expected to bolster the Program price signal and increase the incentive for covered entities to invest in GHG emissions reduction activities, aligned with the accelerated pace of decarbonization called for in the 2022 Scoping Plan Update.

Additional concepts included in the Proposed Amendments are:

- Updates to market rules, in the context of budget adjustments, to support liquidity, enhance market protections, and contain costs.
- Amendments to ensure the Program appropriately covers emissions, protects ratepayers, minimizes GHG emissions leakage, and incentivizes GHG emission reductions in the evolving electricity, industrial, and transportation sectors.
- Revised methodology to account for the use of offset credits in annual budgets.
- Provide a framework for the transition of free allowances from natural gas suppliers to electrical distribution utilities.
- Technical updates to offset credit provisions to streamline implementation.

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[23] See *Frequently Asked Questions: Greenhouse Gas Emissions Inventory* for more information.

- Administrative updates to clarify and streamline Program implementation.

The Program is a system of design elements that together send a steadily increasing price signal while avoiding price shocks. As such, staff have considered changes to the design elements as part of the overall system and not in isolation, and the cumulative impacts of changes to design elements are considered in the context of the need for overall Program stability and a steadily increasing price signal.

Table 1 provides a summary of the proposed changes to the Regulation. Staff began conceptually discussing many of these items during an informal public process initiated in February 2023, and hosted a total of eight public workshops and two community meetings. The pre-rulemaking public process is detailed in Chapter XI.

**Table 1: Summary of Proposed Regulatory Amendments to the Cap-and-Trade Regulation**

| Topic | Proposed Regulatory Updates |
|---|---|
| Program Budgets | • Adjust 2027-2030 allowance budgets consistent with updated GHG Inventory<br>• Establish post-2030 allowance budgets consistent with the AB 1279 target |
| Allowance removals for offset use | • Add provisions to the Regulation to retire allowances for offset use as required by AB 1207 |
| Cost-Containment | • Add post-2030 allowances to the Allowance Price Containment Reserve<br>• Reflect AB 1207 definition of Price Ceiling Unit |
| Market Rules | • Expand and clarify the control and ownership measures used to evaluate corporate associations, including individuals with knowledge of market position, and use of a Commodity Pool Operator or Commodity Trade Advisor<br>• Clarify the beneficial holding prohibition as it relates to financing arrangements, and clarify other rules related to trading compliance instruments<br>• Adjust future compliance periods so that the last year of a compliance period aligns with statutory GHG emissions reduction target dates<br>• Clarify transfer pricing disclosure requirements related to unpriced and zero-priced transfers |
| Updates to Registration Requirements | • Clarify entity eligibility and update reporting requirements for registration, including the factors used to determine U.S. location, disclosures that support the new market rules on corporate associations, and requirements to provide supplemental documentation<br>• Clarify eligibility and requirements for covered entities and opt-in covered entities to change their entity type or exit the Program |
| Clarify and Update Administrative Requirements | • Strengthen the prohibition on sharing user credentials for the allowance tracking and auctions systems<br>• Clarify individual user registration requirements, including the notarization requirements |

| Topic | Proposed Regulatory Updates |
|---|---|
| | • Require individual users to maintain up-to-date KYC information<br>• Revise auction and reserve sale requirements, including the financial settlement date and reserve sale financial settlement process requirements<br>• Specify the timing for the evaluation of an entity's general holding account balance related to the holding limit prior to transferring allowances purchased at auction to the entity |
| Electrical Distribution Utility (EDU) and Natural Gas Supplier (NGS) Allocation | • Revise the 2027-2030 EDU allocation based on newly available data sources<br>• Specify EDU allocation for 2031-2035<br>• Add a true-up allocation mechanism for NGSs that become newly eligible for allocation<br>• Transition investor-owned NGS allocated allowances to EDUs serving residential ratepayers starting in 2029 |
| Utility Use-of-Allocated Allowance Value | • Align natural gas supplier use of allocated allowance value requirements with the 2022 Scoping Plan Update<br>• Prohibit using allocated allowance value to purchase voluntary carbon offset credits or to participate in any voluntary carbon market or external greenhouse gas emission trading system<br>• Clarify regulatory text to ensure that allocated allowance value is used for the primary benefit of California ratepayers and that expected GHG benefits are accurately captured |
| Imported Electricity | • Align definitions for CAISO Markets and Outstanding Emissions with MRR<br>• Limit the RPS adjustment to imports from PCC 0 resources after 2030<br>• Clarify REC eligibility for the RPS adjustment, reflect RPS excess procurement rules, and ensure the RPS adjustment accurately reflects the costs of compliance with the RPS for resources |
| Industrial Leakage Prevention Allowance Allocation | • Set cap-adjustment factors post-2030<br>• Revise product-based allocation benchmarks, products, and definitions for cement manufacturing, crude oil production, and transportation fuel production |

| Topic | Proposed Regulatory Updates |
|---|---|
| | • Add or modify product-based allocation benchmarks, products, and definitions to describe current in-state production for food processing and manufacturing sectors<br>• Add a new product allocation mechanism for historical production of a newly added or modified covered product<br>• Directly provide allocation to minimize GHG emissions leakage associated with Program costs in purchased electricity<br>• Provide allowance allocation to manufacturers to prevent leakage while supporting GHG emission reductions and facility decarbonization<br>• Clarify provisions related to industrial allowance allocation |
| Biomass-derived Fuels | • Clarify and revise provisions specifying the compliance obligation incurred by biomass-derived fuels and $CO_2$ emissions exemption requirements<br>• Clarify and update biomethane resource shuffling provisions<br>• Clarify and update list of biomass-derived fuels eligible for exemption |
| Limited Emissions Exemptions | • Add limited emissions exemptions for electricity generation during a state of emergency and certain fuel cells<br>• Update exemptions for emissions from natural gas supplier infrastructure<br>• Remove exemptions for exported $CO_2$ |
| CCUS Provisions | • Add a new section for future CCUS-related provisions<br>• Expand options for $CO_2$ sequestration and utilization, provided certain conditions are met |
| Offset Provisions | • Update, clarify, and add requirements for offset project implementation and administration. |
| Updated Name | • Update name from Cap-and-Trade to Cap-and-Invest per AB 1207 |

# II. The Problem that the Proposal Is Intended to Address

## A. Overview

Climate change is a serious public health and environmental threat, and California is vulnerable to resource and economic impacts from climate change. The impacts of climate change are no longer a distant threat on the horizon—they are right here, right now, with a growing intensity that is adversely affecting our communities and our environment, here in California and across the globe. The science that, decades ago, predicted the impacts we are currently experiencing is even stronger today and unambiguously tells us what we must do to limit irreversible damage: we must act with renewed commitment and focus on doing more and doing it sooner. That science is indisputable. Unless we increase ambition, we will be faced with more fire, more drought, more temperature extremes, and deadly, choking air pollution and additional rising costs to address and mitigate these catastrophic impacts. The future of our state—our communities, economy, and ecosystems—is inextricably tied to the way we respond in this decade and the partnerships we forge along the way.

The impacts of climate change fall most heavily on frontline communities that bear the brunt of extreme heat, drought, wildfires, and other effects. Low-income communities and communities of color are also disproportionately impacted by fossil fuel combustion- related air pollution and related health problems. The continued phaseout of fossil fuel combustion will advance both climate and air quality goals and will deliver the greatest health benefits to the most impacted communities. With the increasing severity and frequency of drought, wildfire, extreme heat, and other impacts, Californians just have to look out their windows to know that climate change is real and rapidly getting worse. The impacts we thought we would see in the decades to come are happening now.

As described in previous staff reports supporting updates to the Cap-and-Invest Program, projections show that the effects of climate change in California will continue to worsen without dramatic action to reduce GHG emissions (CARB 2016, CARB 2018a). It is imperative that California continues and strengthens its efforts to reduce GHG emissions to decrease the probability and intensity of these impacts. Recognizing the ambitious response needed to the threat of climate change, the Legislature and governor have set bold GHG emissions reduction targets for 2030 and 2045 and have given CARB the authority and direction to implement Programs and regulations to help achieve these targets, most recently through the passage of AB 1207. CARB's efforts to reduce GHG emissions and fight climate change are informed by its AB 32 Climate Change Scoping Plan process, which lays out a path to carbon neutrality and identifies the measures needed to achieve the State's climate goals.

To achieve the State's legislative GHG emissions reduction targets for 2030 and 2045, the requirements of AB 1207 and implement CARB's 2022 Scoping Plan Update, California needs to accelerate the pace of GHG emissions reduction statewide. The Cap-and-Invest Program, which covers sectors that produce approximately 80% of the State's GHG emissions, is a key tool to drive statewide GHG emissions reduction. In making updates to the Program, staff aim to ensure the Program imparts a robust carbon price signal, consistent with California's climate targets and the 2022 Scoping Plan Update, while meeting requirements of AB 32, AB 398 and AB 1207 that require consideration of cost-effectiveness; affordability; minimizing the risk of emissions leakage; maintaining cost-containment mechanisms; and avoiding disproportionate impacts on low-income communities. In developing the Proposed Amendments, staff also consulted with CPUC pursuant to AB 32.

## B. Adjust 2027-2030 and Post-2030 Annual Allowance Budgets

The Proposed Amendments increase Program stringency by adjusting and establishing annual allowance budgets supportive of the State's 2030 and 2045 statutory climate targets. The Proposed Amendments remove approximately 118 million allowances from the 2027-2030 annual budgets and establish post-2030 declining allowance budgets consistent with the AB 1279 target to reduce statewide anthropogenic GHG emissions by 85% by 2045. Removing 118 million allowances from 2027-2030 allowance budgets is needed to account for updates to CARB's GHG Emission Inventory. An additional 146 million allowances are removed from post-2030 budgets, which is needed to align the Program with the GHG emissions reduction trajectory needed to meet the State's 2045 GHG emissions reduction target, as set forth in the 2022 Scoping Plan Update. Cumulatively through 2045, the Proposed Amendments include the same total number of allowances as previously analyzed in the SRIA Proposed Scenarios. The approach to determining allowance removals and future annual budgets aligned with State climate goals and legislative targets is described in further detail below.

The process to establish the allowance budgets for the Proposed Amendments builds upon the allowance budget evaluations for the initial Cap-and-Trade Regulation and for the 2016 Amendments (CARB 2010a, CARB 2010b, CARB 2016). Setting annual and cumulative allowance budgets at appropriate levels to meet the State's climate targets is critical to the environmental effectiveness of the Cap-and-Invest Program. If allowance budgets are not set at a sufficient stringency, the environmental goals of the Program may not be met even if all covered sources comply with Program requirements.

The 2022 Scoping Plan Update lays out a technologically feasible and cost-effective path to carbon neutrality and recommends measures to achieve mid-century climate targets. Importantly, 2022 Scoping Plan Update modeling indicates that the State needs to increase ambition for 2030 GHG emissions reduction to align with the trajectory needed to meet the State's more aggressive 2045 climate targets (CARB 2022a). Concurrent to the development of the 2022 Scoping Plan Update, the annually updated GHG Emissions Inventory was adjusted to more fully incorporate third-party verified GHG emissions data and correct some errors. The Proposed Amendments update the Program annual allowance budgets in response to legislative direction in AB 1207, the 2022 Scoping Plan Update, and the revised GHG Emission Inventory. The proposed allowance budget updates to align the Program with the 2030 and 2045 GHG emissions reduction targets are summarized in Table 2.

**Table 2: Summary of Proposed Allowance Budget Updates Through 2045**

| Allowance Budget Adjustment | Allowances Removed Relative to Current Budgets in the Cap-and-Invest Regulation |
|---|---|
| Reflect GHG Inventory updates and align with the GHG emissions reduction trajectory identified in the 2022 Scoping Plan Update | 118 million removed from 2027-2030 |
| | 146 million removed from post-2030 |
| Align the post-2030 Program with the 85% GHG emissions reduction target for 2045 from AB 1279 | 753 million fewer than current 2031-2045 budgets, in addition to the 146 million identified above |

In total, the proposed allowance budgets contain approximately 2.1 billion allowances, cumulative from 2027-2045, compared to 3.1 billion over the same period in the current Regulation.

Staff are proposing amended Program budgets after a robust pre-rulemaking public engagement process that included public workshops where CARB staff presented and discussed multiple scenarios for potential adjustments to Program allowance budgets (CARB 2024b). The Proposed Amendments achieve the goals of:

- Providing incentives to pursue decarbonization solutions aligned with increased near-term ambition for GHG emissions reduction and supporting both the SB 32 2030 target and the 2045 target established by AB 1279;
- Enabling a smooth transition into the post-2030 Program;
- Supporting affordability and maintaining cost-containment mechanisms and protections against price volatility; and
- Balancing the distribution of free allowances across varying needs, including auctions that generate proceeds used for State priorities through the GGRF and support ratepayer protection through the California Climate Credit.

## 1. Adjustment and Establishment of Program Allowance Budgets through 2045

The 2013-2020 annual allowance budgets were established in the initial Cap-and-Trade Regulation adopted in 2011. Early year allowance budgets were established using best available data to estimate the emissions for the year that a covered source category entered the Program. The annual budgets were then set to decline linearly to the 2020 allowance budget, 334.2 million allowances, which was calculated as the 2020 statewide target multiplied by 77.5%, the percentage of emissions from the statewide GHG Emissions Inventory estimated to be covered by the Program in 2020.

In the 2016 Rulemaking, annual 2021-2030 allowance budgets were set to decline linearly from the established 2020 allowance budget to a 2030 allowance budget. The 2030 allowance budget was calculated as 77.5% of the state-wide 2030 SB 32 target, utilizing the percentage of state-wide emissions previously projected to be covered by the Program in 2020.

Staff initiated budget analyses by evaluating cumulative 2021 through 2030 allowance budgets supportive of State climate policy. The 2021 starting point (i.e., a hypothetical revised 2021 annual budget) used in these analyses reflects a downward adjustment of emissions projected by the 2017 Scoping Plan Update by 13.7 million metric tons of carbon dioxide equivalent ($MMTCO_2e$), consistent with recent updates to the GHG Emission Inventory. This approach reflects the projection of 2020 emissions that could have been used to establish the 2021 through 2030 annual budgets during the 2016 Rulemaking had the GHG Emission Inventory at the time reflected recent data and method updates. Emissions in recent versions of the annual GHG Emission Inventory are on average lower than the 2017 edition by 13.7 $MMTCO_2e$ for data years 2012 through 2015.

Staff developed linear decline scenarios from the adjusted 2021 starting point to 2030 end points consistent with a range of GHG emissions reduction scenarios. For each scenario, the Cap-and-Invest Program was estimated to cover 77% of AB 32 GHG emissions sources for 2021 through 2030 based on recent covered emissions, GHG Inventory data, and 2022 Scoping Plan Update modeling.

Staff examined potential post-2030 budgets that were consistent with each 2030 emission reduction scenario and the 2045 target set by AB 1279. Table 3 summarizes hypothetical cumulative allowance removals and cumulative 2021-2045 allowance budgets for the three GHG emissions reduction scenarios initially examined by staff. These scenarios all reflect the GHG Emission Inventory updates.

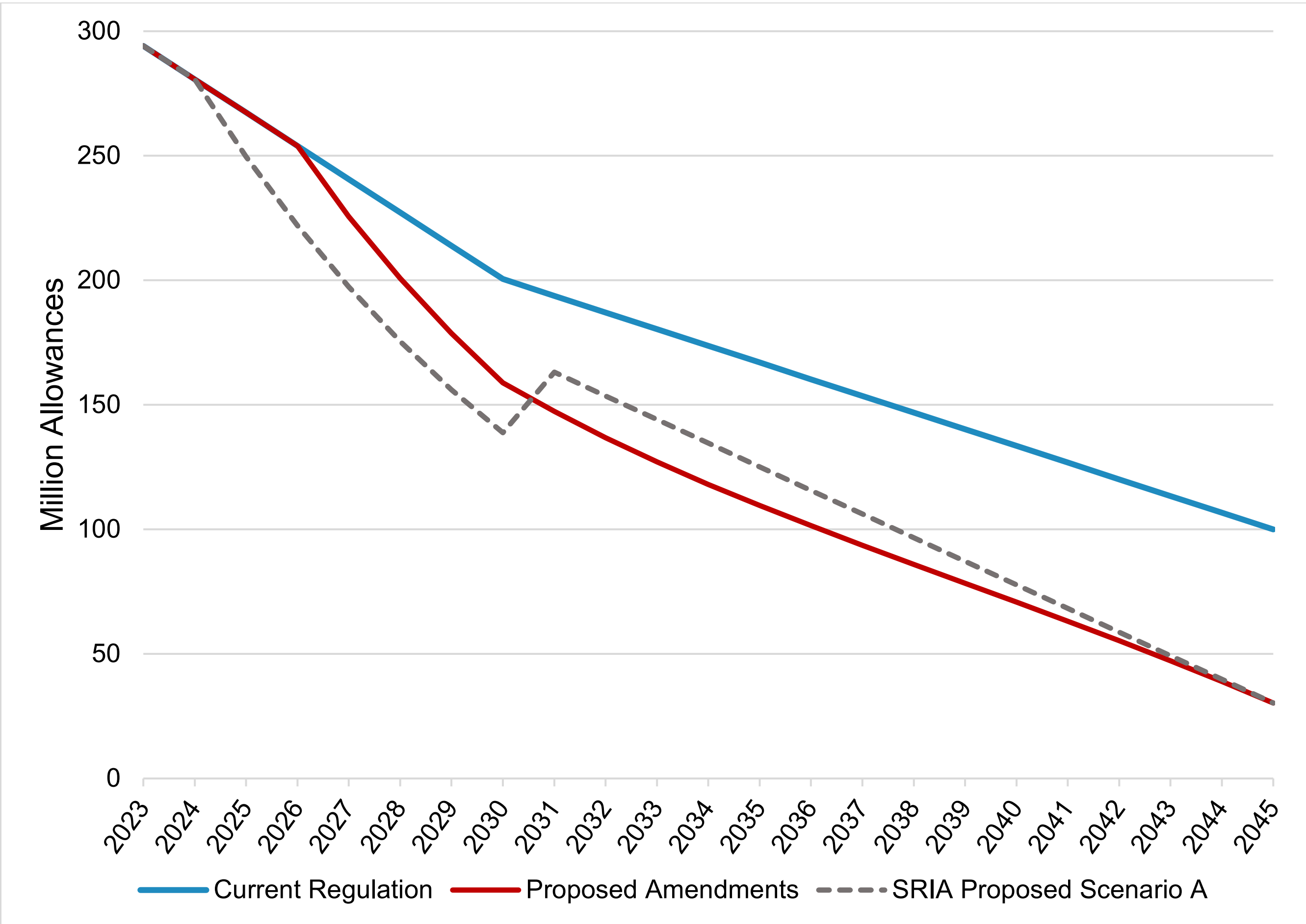
**Table 3: Cumulative allowance budget scenarios reflecting GHG Inventory adjustments and specified 2030 GHG emissions reduction targets.**

| 2030 GHG Reduction Scenario | Removals Needed to Reflect GHG Inventory Updates and GHG Reduction Scenario | Cumulative 2021-2045 Budget |
|---|---|---|
| 40% | 118 | 4,125 |
| 48% | 264 | 3,793 |
| 55% | 392 | 3,503 |

Following determination of these cumulative budgets, staff began development of this range of annual allowance budgets. For the staff analyses initiated in 2023 to develop the SRIA, annual allowance budget adjustments were made starting with budget year 2025, including SRIA

Proposed Scenario A (Appendix C).[24] The SRIA Proposed Scenario budgets result in an *increase* in annual budgets from 2030 to 2031 and annual budgets remain higher than 2030 through 2033 as seen in Figure 5.

**Figure 5: Annual Budget Scenarios through 2045**




The SRIA allowance budget scenarios are aligned with State climate targets, however the increase in annual budgets from 2030 to 2031 would have resulted in a discontinuity in cap adjustment factors, allocation, holding limits, and funds to GGRF. As noted by a variety of market participants and observers, this discontinuity could increase the risk of price volatility and uncertainty for covered entities. To decrease the potential for market disruptions, staff explored options to enable a smooth transition into the post-2030 Program. Furthermore, given

[24] The SRIA evaluated Proposed Scenarios A, B, and C, which had the same cumulative allowance budgets but differed in terms of whether allowances were removed from the auction and allocation accounts or the cost-containment accounts. As discussed in this ISOR, staff propose to maintain all allowances reserved for cost-containment and to only remove allowances used for auction and allocation, which is reflected in SRIA Proposed Scenario A. Hence, only SRIA Proposed Scenario A is discussed to provide an appropriate comparison to the other allowance budgets that were considered.

rulemaking timelines and feasibility of implementation, staff identified a need to begin allowance removals with the 2027 budget year instead of the 2025 budget year.

In developing annual allowance budgets that support State climate targets, staff must also balance all the directives of AB 32, AB 398, and AB 1207 including consideration of affordability, cost-effectiveness, economy-wide costs, overall societal benefits, impacts on price volatility, the contribution of sources to statewide GHG emissions, minimizing the risk of emissions leakage, maintaining cost-containment mechanisms, and avoiding disproportionate impacts on low-income communities. To balance these objectives, staff propose a budget scenario that removes a total of 118 million allowances from 2027-2030 annual budgets, as needed to reflect the GHG Emissions Inventory update, and removes 146 million allowances from the new post-2030 allowance budgets for total removals equaling 264 million allowances. The post-2030 allowance budgets decline to the same 2045 endpoint derived from the 85% GHG emissions reduction target in AB 1279, and cumulatively from 2021-2045. The Proposed Amendments contain the same number of allowances as analyzed in the SRIA Proposed Scenarios. The proposed allowance budgets prioritize addressing needed updates due to GHG Inventory adjustments and the cumulative allowance removals needed to achieve the 2030 and 2045 GHG emissions reduction targets while avoiding potential disruptions from steep pre-2030 budget reductions or discontinuity in the allowance budget in 2031, and are feasible to implement given rulemaking timelines.

The Cap-and-Invest Program supports achieving State climate goals by establishing cumulative budgets and emissions trajectories that are aligned with the path needed to achieve State GHG emissions reduction targets. In a well-designed market, these cumulative budgets enable a stable carbon-price signal reflective of the marginal abatement costs of GHG emissions reduction, and covered entities can plan long-term investments and compliance strategies that support achieving the State's goals.

The updated allowance budgets in the Proposed Amendments accomplish this objective by removing a total of approximately 118 million allowances from 2027 through 2030 budgets and remove an additional 146 million allowances from post-2030 budgets, which decline to a 2045 budget consistent with the AB 1279 target. This allowance removal is achieved by removing 15 million allowances from the 2027 annual budget, 26.5 million from 2028, 35.1 million from 2029, and 41.7 million from 2030. The resulting average annual cap decline is 11% from 2027-2030, approximately the same as the 11% cap decline over 2025-2030 in SRIA Proposed Scenario A. Alternatively, implementing the removal of the entire 264 million allowances identified in Table 3 by 2030 in only four budget years (versus six budget years in the SRIA) would steepen the near-term annual cap decline, which could exacerbate the post-2030 discontinuity in annual budgets, holding limits, and may result in unacceptable risks of price volatility, high consumer impacts, and emissions leakage.

Beyond the updates to annual allowance budgets to reflect updates to the GHG Inventory, there are other factors that are expected to influence the availability and price of allowances that are needed for compliance:

- The removal of allowances corresponding to the use of offset credits for compliance pursuant to AB 1207, which is discussed in Section C of Chapter II and will reduce the availability of allowances for covered entities;

- The annual release of allowances into market circulation from entity accounts due to the accelerated annual decline of the holding limit, which is discussed in Section E.3 of Chapter II and will increase the availability of allowances for covered entities; and
- The one-time release of allowances into market circulation from entity accounts due to the implementation of new corporate association group (CAG) triggers, which is discussed in Section E.3 of Chapter II and will increase the availability of allowances for covered entities through 2029 due to the proposed delayed implementation.

The release of allowances into market circulation due to the accelerated annual decline of the holding limit and the implementation of CAG triggers is expected to counterbalance the removal of allowances to reflect updates to the GHG Inventory and to account for the use of offset credits for compliance. The anticipated releases of allowances will help ensure that allowances are available to compliance entities during the 2027-2030 period when annual allowance budgets are most steeply declining. Together, the counterbalancing removals and releases of allowances are expected to provide the market with an overall steady source of allowances resulting in more steady prices and more stable auction proceeds.

### 2. Additional Benefits of Proposed Budgets

Including specific post-2030 allowance budgets is proposed pursuant to the extension of the Cap-and-Invest Program through 2045 under AB 1207 and the statutory requirement that the Program ensure that program wide aggregate emissions from covered sources, decline with California's AB 1279 2045 GHG emissions reduction targets. These Proposed Amendments also provide certainty to regulated entities on Program design at the end of this decade. To improve certainty for regulated entities, the Proposed Amendments also include the dates of quarterly auctions and reserve sales for the post-2030 Program. Post-2030 budgets will be invoked in 2028 for allowances offered in Advance Auctions, and market participants will need to plan for auction participation and compliance strategies as the Program nears end-of-decade compliance periods. Clarity now on budgets for a post-2030 Program will allow for a smooth transition into the next decade and limit potential investment uncertainty and allowance price volatility. Private investments and State funding and incentives will all need to be leveraged in the near term to realize the outcomes in the 2022 Scoping Plan Update. The regulatory certainty and carbon price imparted by establishing budgets through 2045 supports long-term planning for GHG emission reduction investments.

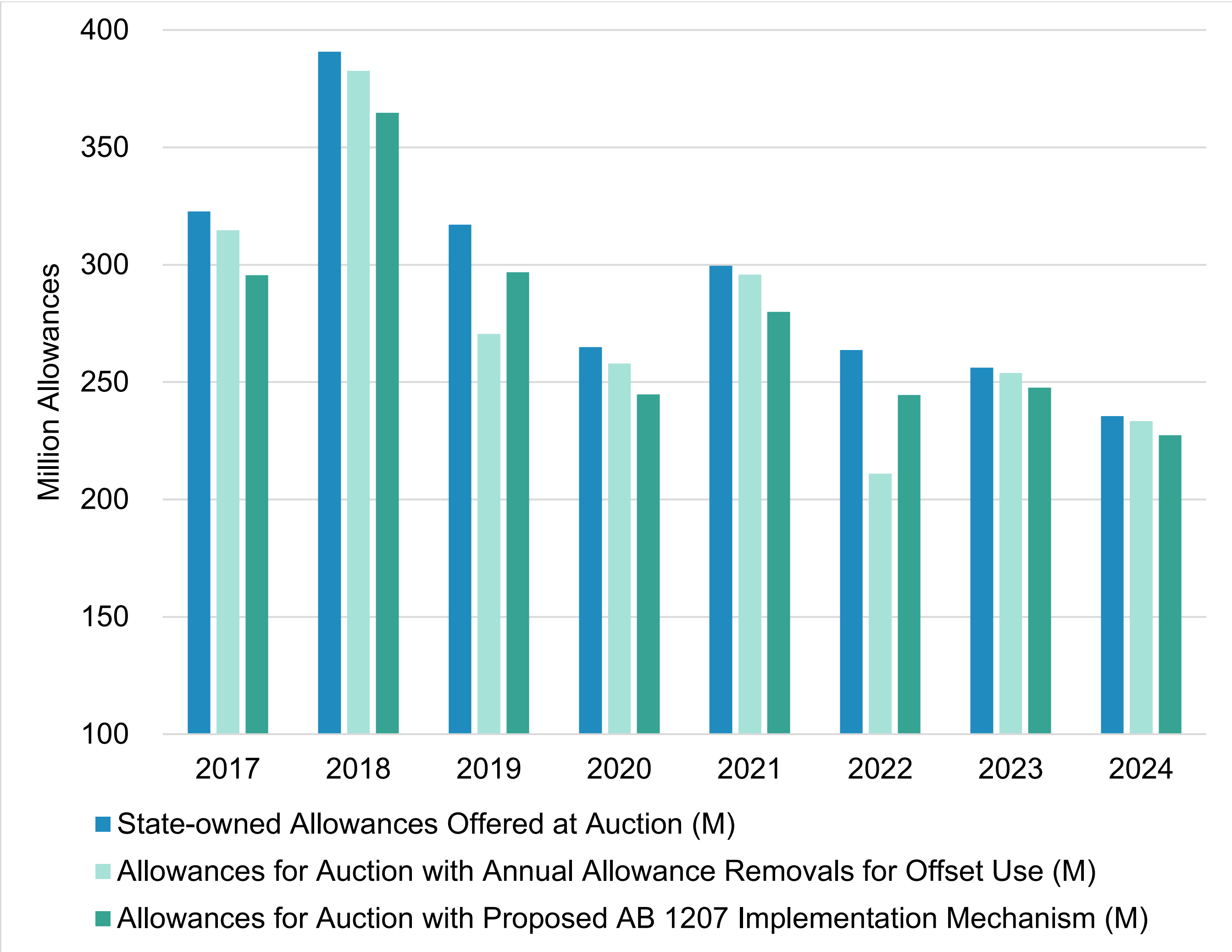
While it is critical that the Program establish a long-term carbon price signal aligned with California's GHG emission reduction ambition, the Program must still provide cost-containment as directed by AB 32, AB 398, and AB 1207. As discussed in Section D of Chapter II, cost-containment within the Program is important to provide market stability and to limit compliance costs for covered entities in the case of strong surges in short-term demand. Sales from the Allowance Price Containment Reserve (APCR) and Price Ceiling provide covered entities access to allowances at set prices during periods of price volatility, while ensuring the environmental integrity of the Program. Removing allowances from the cost-containment accounts increases the risk of price volatility and the risk of short-term price spikes above the APCR tier prices. Consistent with legislation, the Proposed Amendments maintain all allowances currently in cost-containment accounts and do not retire these allowances to achieve allowance budget removals.

## C. Allowance Removals for Offset Use

AB 1207 requires CARB to remove allowances from annual budgets corresponding to offset use for compliance. Compliance offsets are compliance instruments that can be used to meet a limited portion of an entity's compliance obligation and provide an important cost-containment element within the broader Cap-and-Invest Program. CARB issues compliance offset credits to qualifying projects that reduce or sequester GHG emissions pursuant to six Board-approved compliance offset protocols. Compliance offsets are tradable credits that represent verified GHG emissions reduction or removal enhancements from sources not subject to a compliance obligation in the Cap-and-Invest Program. A covered entity may meet up to 6% of its compliance obligation for emissions in 2026 and beyond with offset credits. Covered entities surrender compliance instruments, allowances and compliance offset credits, to meet their compliance obligations in stages. In early years of a compliance period, covered entities must surrender compliance instruments for 30% of the previous year's covered emissions. After the end of each compliance period, covered entities are required to surrender allowances and any compliance offset credits for all of the previous year's covered emissions, plus the remaining 70% of covered emissions from prior year annual obligations.

To implement the AB 1207 requirement for offset use removals, staff are proposing a potential path to mitigate predictable variability in the number of allowances that would go to auction. As part of the public workshop written comment process, similar concepts were shared by market analysts. Staff anticipate stakeholder feedback as part of the formal comment period that could clarify if the staff proposal is appropriate, or if the broader stakeholders prefer a more prescriptive approach to implementing the direction in AB 1207 as workshopped in October 2025. The Proposed Amendments may not fully address the auction variability introduced by this new statutory requirement. The staff Proposed Amendments create a new jurisdiction account (the Allowance Removals for Offset Use Account) that is managed by CARB. The Proposed Amendments populate the new account with allowances annually based on maximum offset usage for covered emissions, and retire allowances from the new account following each compliance period based on actual compliance offset usage by covered entities. This approach to implementing the allowance removals for offset used required by AB 1207 minimizes the predictable volatility in allowances available for auction due to the cycle of spikes in compliance offset use in the year following a multi-year compliance period. Historically, CARB has proactively transferred allowances from annual budgets to the Allowance Price Containment Reserve to account for offsets "under the cap" assuming that offset credit use was maximized. By changing the timing of the removal of allowances for offset use, the ripple effect through the Program results in fewer allowances going to auction every three years. This, in turn, could impact the revenues deposited into the Greenhouse Gas Reduction Fund. The Proposed Amendments attempt to address compliance offset use under the cap that minimizes the predictable cyclical swings in annual allowance auction budgets and auction proceeds that would otherwise occur. In total, under either an annual approach or the proposed approach, the same amount of allowances would be retired for compliance offset use. Figure 6 illustrates this proposed implementation mechanism using historic data on offset retirements and State-owned allowances offered at auction for 2017-2024. Note that this proposed mechanism limits the hypothetical spike in allowance retirements that would have occurred in 2019 and 2022 following the increased use of offsets for compliance during the 2018 and 2021 triennial compliance events.

**Figure 6:** Effect of Proposed AB 1207 Implementation Mechanism on Historic State-Owned Allowances Offered at Auction




## D. Update Cost-Containment Provisions in the Context of Allowance Budget Changes

### 1. Background on Cost-Containment, Price Ceiling, and APCR

Since Program inception, cost-containment has been a key consideration in the design of the Cap-and-Invest Program. Covered entities must submit allowances and offset credits to CARB to account for their GHG emissions, and by design of the Program, entities may choose the lowest-cost approach to achieving Program compliance, which can include trading allowances and offset credits with other market participants, purchasing allowances from the jurisdiction at auction, or taking steps to reduce emissions at their own facilities. Multiple cost-containment provisions of the Program have been designed to optimize cost-effectiveness, including (1) creation of offset credits, which are valued at a lower cost than allowances, (2) linkage with other jurisdictions to enhance liquidity, increase cost effective trade opportunities for covered entities and consumers, (3) multi-year compliance periods to account for variations in emission levels, (4) the establishment of an Allowance Price Containment Reserve (Reserve) with two price tiers, which allow covered entities access to allowances at set prices as a hedge against higher costs, and (5) a separate price ceiling account that establishes a maximum price at which covered entities can acquire compliance instruments to meet their compliance needs. These cost-containment mechanisms aim to limit an entity's compliance costs without compromising the environmental goals of the Program.

### 2. Proposed Changes to Price Ceiling and APCR

As described previously, cost-containment features can also minimize price volatility and provide market stability in the case of surges in short-term demand to meet immediate compliance needs.

Staff have revisited the factors influencing demand for allowances in the Program from 2013 through 2030, previously summarized in Table A.1 in Appendix D of the 2018 ISOR, when considering how cost-containment mechanisms should be updated to support a more stringent Program (CARB 2018a). Staff continue to recognize that cost-containment prices that are too low may create an unintended impact that allowances in the Reserve and price ceiling mechanism will be accessed early and the Program may not be able to constrain emissions to levels needed to achieve the 2030 target, whereas if cost-containment prices are too high it may lead to higher costs than necessary to attain the emissions reduction targets and could increase emissions leakage. Thus, in response to the adjustments to the 2027-2030 budgets, establishment of post-2030 cumulative budgets aligned with AB 1207 and AB 1279, staff are proposing the following updates to cost-containment features, which are described in more detail below:

- The addition of 1% of post-2030 allowances (roughly 13.7 million allowances) to Tier 1 of the Reserve; and
- An increase in the threshold for when CARB offers a Reserve sale.
- Update definition of Price Ceiling Unit pursuant to the requirements of AB 2017.

It is also important to note that to date no APCR sale or use of the price ceiling mechanism has been needed to support compliance. Ensuring cost-effective access to compliance options such as carbon dioxide removal and clean hydrogen, and timely access to other technologies for reducing GHG emissions, will be important as regulated companies develop strategies and investment plans to reduce their GHG emissions.

The Proposed Amendments continue the current two-tier Reserve format into the post-2030 Program and to draw on the post-2030 budgets to further supply the Reserve to maintain support for the cost-containment mechanism and to continue providing cost-effective and flexible options for compliance to covered entities. Given the increased Program stringency, staff propose placing 1% of each post-2030 annual allowance budget into Tier 1 of the Reserve. The proposed 1% allocation to Tier 1 of the Reserve reflects the fact that current allowances in the Reserve do not expire and will continue to be available to covered entities in future years. Additionally, a 1% allotment of post-2030 allowances to the Reserve provides flexibility for using remaining post-2030 allowances for other purposes, including minimizing leakage, protecting ratepayers, and auction sales. Tier 1 of the Reserve currently holds 66.8 million allowances, and Tier 2 holds 89.5 million allowances, so staff's proposal to add 1% of post-2030 allowances (about 13.7 million allowances) to Tier 1 will help to balance the distribution of allowances across the Reserve tiers, making the supply more consistent across both tiers.

In the current Regulation, a Reserve sale is offered when an auction settles at a price greater than 60% of the lowest Reserve tier price. Based on auction and secondary market observations, staff have found that this price trigger is often reached more than staff expected. Currently, with the 60% threshold, a Reserve sale must be offered to market participants even if there is no interest. Through August 2024, five Reserve sales have been offered as a result of exceeding the 60% threshold since it went into effect in 2018. None have been held because there are no qualified applicants. Staff are proposing to increase the auction settlement price threshold that triggers the offering of a Reserve sale from 60% to 80% of the lowest Reserve tier price to reduce administrative burden, while ensuring that Reserve allowances can be made available as needed. The third quarter Reserve sale will continue to be offered to covered entities, irrespective of prior auction settlement prices, and no changes to this Reserve sale offering are included in the Proposed Amendments.

Finally, the Proposed Amendments update the definition of a Price Ceiling Unit and the destination of moneys generated from the sale of Price Ceiling Units. Per AB 1207 the Legislature directed all moneys raised from the sale of Price Ceiling Units be deposited in a new fund for future Legislative appropriation. The Regulation currently requires those moneys to be expended to achieve emission reductions, on at least a metric ton for metric ton basis, that are additional, real, permanent, quantifiable, verifiable, and enforceable by the State Board. Pursuant to AB 1207, any moneys from the sale of Price Ceiling Units may be used for providing direct rebates and investments to reduce household energy costs, including incentives to transition to zero-emission vehicles and to more energy-efficient housing, among other purposes. Given the direction and requirements in AB 1207, the Proposed Amendments delete the explicit requirement that the use of moneys from the sale of Price Ceiling Units achieve GHG emissions reduction on at least a metric ton for metric ton basis. Should these moneys be generated in the future, the Legislature has flexibility to ensure the environmental integrity of the Program by funding emission reductions on at least a metric ton for metric ton basis, or use the moneys for other priorities.

## E. Update Market Rules and Registration Requirements

One of the ways that CARB ensures a competitive and fair market is by grouping affiliated entities into corporate association groups or "CAGs." Registered entities that are affiliated with each other are conservatively assumed to act in a coordinated fashion in the market, so CARB must track if entities meet certain threshold of ownership and control criteria. Members of a CAG are subject to shared holding limits and auction purchase limits, as if all members were a single entity. These market rules are vital to ensure that corporate affiliates and individuals, working in unison, are not able to control a large share of the market of compliance instruments.

Staff recognize that a decreasing allowance supply could affect market liquidity without additional changes that continue to ensure compliance entities are able to cost-effectively acquire compliance instruments. Thus, in an effort to maintain sufficient market oversight of participant activities and to support market efficiency and liquidity, staff assessed how participant behaviors might differ between entity types and how certain market activities and strategies could appear to be coordinated and cause unintended and adverse market consequences. Furthermore, based on program implementation experience and the study of business interactions, CARB staff and the third-party market monitor identified gaps in current disclosure requirements and CAG triggers that are designed to prevent sharing of market-sensitive information and potential collusive market activities. In tracking certain business relationships, The Proposed Amendments update corporate association group (CAG) rules to ensure the market continues to operate efficiently with adequate guardrails to deter and avoid manipulation, especially as the number of allowances decreases over time. Thus, the Proposed Amendments include two CAG rule changes with a delay in full implementation until January 1, 2030:

1. Update an existing control measure used to identify CAGs of registered entities, and
2. Create a new CAG based on adopting a concept that leverages existing federal requirements to track entities that share common registered commodity pool operators and commodity trading advisors.

The delay in full implementation will provide adequate time for market participants to provide the required information to CARB, for CARB staff to review and act on the newly provided information, and for the market to prepare for and adapt to the updated requirements.

### 1. CAG Trigger Update: Individual with Shared Roles

An individual with shared roles, which currently considers an employee who has access to the market positions of two or more registered entities, is one of the existing criteria used to identify CAGs. The Proposed Amendments update to this existing CAG trigger that affects any individual with shared roles and to remove a distinction between an employee and a Cap-and-Invest Consultant or Advisor. Proposed Amendments also clarify that employees or delegates of local, state, or federal regulatory agencies who have ability to gain knowledge of or access to market positions of multiple entities to perform their job duties and functions will not be considered an individual with shared roles.

The Proposed Amendments would track all individuals with knowledge of or access to market positions of multiple registered entities when determining a CAG to more fully track this measure of control and influence. Regardless of employee or contract status, staff have observed that an individual in certain roles can still, inadvertently or intentionally, facilitate coordinated behavior among those entities based on their unique knowledge or access to market position information. If an individual account representative or account viewing agent were on multiple registered entity accounts, then the entities would be subject to a CAG, regardless of role, due to immediate access to specific market position information. The Proposed Amendments limit the potential influence of an individual with shared roles to prevent coordinated market activities and enhance market protections.

The current regulation provides an exception for certain Cap-and-Invest Consultants and Advisors where they are not immediately viewed as a CAG even with shared roles, so staff are proposing to mirror this exception to create a formal exemption process that entities can apply for based on an individual's job duties and verified scope of services. Entities will need to submit a Conflict of Interest and Confidentiality Statement to CARB confirming that their information will be safeguarded by the Cap-and-Invest Consultant or Advisor.

### a) Updated Shared Role CAG Exemption

Staff recognize the important role of Cap-and-Invest Consultants and Advisors in the market and seek to continue to support their participation in the Program. To that end, the Proposed Amendments includes a narrow CAG exemption for entities using Cap-and-Invest Consultants or Advisors that meet either one of two eligibility qualifications:

1. The individual has neither any legally binding authority over a registered entity nor decision-making authority over an entity's specific market position;

   or

2. The individual provides Cap-and-Invest consulting or advisory services to only covered entities.

The first qualification applies to Cap-and-Invest Consultants or Advisors contracting with any type of registered entity. Entities using Cap-and-Invest Consultants or Advisors that are not granted direct access to the entity's tracking system account and do not have decision-making or legally binding authority over any entity's market position would be eligible to apply for a CAG exemption— these individuals with shared roles do not appear to exhibit significant control or influence over the multiple accounts they service.

The second qualification applies to Cap-and-Invest Consultants or Advisors who contract exclusively with covered entities. While a covered entity's main goal in the market is to procure compliance instruments as economically as possible to meet their emissions compliance obligation, Voluntarily Associated Entities (VAEs) often have varied goals for market participation, some with unique expertise in the securities and derivative markets. The Program enables VAE participation to add liquidity to the market and to promote cost-effective and competitive transactions; VAEs are not required to surrender instruments on an annual basis. This difference in goals and applicable program requirements can lead to VAEs having a larger role in the market that must be carefully monitored in light of a more stringent program with reduced allowance supply. Since VAEs serve a unique role in the market and are generally equipped to serve as market brokers and trade advisors, staff are creating a narrow exemption that applies only to covered entities employing a Cap-and-Invest Consultant or Advisor as a method to seek cost-effective compliance.

### 2. New CAG Trigger: Commodity Pool Operators and Commodity Trading Advisors (CPOs/CTAs)

The Proposed Amendments include a new control factor to identify CAGs based on entities that employ the same commodity pool operator (CPO) or commodity trading advisor (CTA) registered with the National Futures Association (NFA). This concept leverages federal regulations overseeing derivatives and commodity futures markets. The Commodity Exchange Act (CEA) enacted in 1936 requires certain firms and individuals conducting business in the derivatives markets to register with the Commodity Futures Trading Commission (CFTC). With few exceptions, CFTC regulations require CFTC registered firms to become NFA members (NFA 2024a). Both CPOs and CTAs are required to register with the NFA and are monitored by the CFTC because of their engagement in trading in commodity interests. Cap-and-Invest Program compliance instruments are a commodity that is physically traded only in the tracking system, but futures, options, and derivatives of compliance instruments are also commonly traded in the markets overseen by CFTC.

The Proposed Amendments include a new CAG trigger due to the level of control or influence that a CPO or CTA holds over the trade decisions or trade strategies of compliance instruments for registered entities, which may pose risks of market manipulation and coordinated activities. Compliance instruments are unique from other commodities in that they were specifically designed for compliance use by covered entities. This new market rule is intended to prevent potential collusive trading behaviors among those entities and clients employing a shared CPO or CTA and to enhance market liquidity and market efficiency.

### 3. Delayed Implementation for CAG Holding Limit Shares and Purchase Limit Shares

Staff recognize that if the Proposed Amendments to CAG rules become effective September 2026, it may cause some entities to be subject both to disclosing a new CAG and to designating new holding limit shares within the CAG. Thus, immediate implementation and enforcement of updated CAG triggers could lead to short-term price volatility if allowances held by entities were released to the market during a brief period to comply with new holding limit shares. Therefore, the Proposed Amendments delay the deadline for entities to disclose their purchase and holding limit shares to 2030 to mitigate potential price volatility.

During the April 2024 public workshop, CARB staff presented a conservative estimate that 30 million allowances may be released to the market from entity holding accounts upon implementing the CAG rule concepts (CARB 2024c). That estimate was based on information available at a snapshot in time prior to the workshop. Following the passage of AB 1207, CARB staff used more recent information to estimate the number of allowances that may be released to the market from entity holding accounts upon implementation of the proposed CAG rules based. The following describes staff’s estimate of allowances released from entity accounts to the market under the Proposed Amendments and the proposed delay in implementing the required updates to the holding limit share and the purchase limit share by entities in a newly formed CAG.

Because the proposed CAG triggers may result in new CAGs or changes to existing CAGs, staff evaluated existing regulatory requirements for holding limits and auction purchase limits. Auction purchase limits represent the maximum number of allowances that can be purchased at a Current Auction or an Advance Auction by any entity or by any group of entities in a CAG. Under the Proposed Amendments, the auction purchase limits remain the same as under the current Regulation. The holding limit is the maximum number of allowances that may be held in a CITSS account by a single entity or by a group of entities in a CAG, and it decreases each year pursuant to an equation in the current Regulation that includes the current annual allowance budget as a variable. Under the Proposed Amendments, there is no change to the equation or the approach for calculating the annual holding limit, and there is no change to the limited exemption from the holding limit. However, staff recognize that the proposed allowance budgets will accelerate the annual decline in the holding limit owing to the accelerated decline in proposed annual allowance budgets during 2027-2030. The annually declining holding limit is an essential feature of Program design, and it results in an expected flow of allowances from entities with allowance holdings at or near the holding limit to other entities, thus making allowances available for trades and for compliance use by covered entities.

Table 4 identifies both the annual holding limit based on existing annual allowance budgets and the holding limit based on annual allowance budgets in the Proposed Amendments during 2023-2030. The table only considers California's annual budget changes under the Proposed Amendments and does not include any potential changes to Québec's annual budgets.

**Table 4: Comparison of current and proposed annual allowance budget and holding limit scenarios for 2023-2030 (Million Allowances or Emissions Units)**

| Year | Scenario 1: Combined Linked Program Annual Budget under Current Regulation | Scenario 1: Entity Holding Limit under Current Regulation | Scenario 2: Combined Linked Program Annual Budget under Proposed Amendments | Scenario 2: Entity Holding Limit under Proposed Amendments |
|---|---|---|---|---|
| 2023 | 346.69 | 10,547,250 | 346.69 | 10,547,250 |
| 2024 | 332.25 | 10,181,250 | 332.25 | 10,181,250 |
| 2025 | 317.71 | 9,817,750 | 317.71 | 9,817,750 |
| 2026 | 303.08 | 9,452,000 | 303.08 | 9,452,000 |
| 2027 | 288.44 | 9,086,000 | 273.44 | 8,711,000 |
| 2028 | 273.91 | 8,722,750 | 247.41 | 8,060,250 |
| 2029 | 259.27 | 8,356,750 | 224.17 | 7,479,250 |
| 2030 | 244.64 | 7,991,000 | 202.94 | 6,948,500 |

Under the current Regulation in Scenario 1, the observed annually decreasing holding limits are expected to result in the release of allowances into market circulation from entity accounts with allowance holdings at or near the holding limit. Staff estimate that an average of 14 million allowances are released annually into market circulation due to the annual decline in holding limits under the current Regulation. Under the Proposed Amendments in Scenario 2, there will be an accelerated decrease in the annual holding limits relative to the current Regulation. Under the Proposed Amendments, staff estimate that an additional 8 million allowances on average would be annually released into market circulation due to the accelerated annual decline in holding limits that begin in 2027. Therefore, a total of 22 million allowances each year are expected for market release due to the accelerated decline in holding limits.

Staff also evaluated the proposed CAG triggers and the resulting potential release of allowances from entity accounts. Staff expect that the proposed CAG triggers will cause some entities to be subject to new CAGs or to be added to existing CAGs. These entities will then need to either update their corporate structure to avoid forming a CAG or reduce their allowance holdings as they become subject to a shared holding limit. Using the same methods that staff used to develop the information presented at the April 2024 workshop but with more recent information, staff estimate that upon the effective date of the Proposed Amendments, there would be a one-time release of about 23 million allowances into market circulation due to the proposed CAG triggers.

Staff then evaluated the market impact from an immediate implementation of the proposed CAG rules as compared to a delayed implementation. Without a delay in implementation of holding limit shares caused by the new CAG triggers, approximately 23 million allowances would enter market circulation during a brief period around when the Proposed Amendments become effective. Staff expect that the majority of entities affected by the proposed new CAG triggers will be voluntarily associated entities. These 23 million allowances would be beyond the allowances released to market circulation due to the accelerated decline in holding limits, and the release of this quantity of allowances during a brief period could lead to short-term price volatility. Therefore, to help ensure market stability through 2030, the Proposed Amendments delay implementation of the proposed CAG trigger requirements. The Proposed Amendments continue to require affected entities to identify members of a CAG to CARB within 30 days of a change, in line with the current disclosure timing requirement, but the Proposed Amendments provide entities until December 31, 2029, to disclose the percentage share of the holding limit and purchase limit assigned to each member of a CAG newly formed or updated based on the proposed CAG triggers.

This delayed deadline allows the approximately 23 million allowances to be released to market circulation over nearly three years instead of only during a brief period around when the Proposed Amendments become effective, thus mitigating potential short-term volatility. The delayed deadline also provides additional time to entities to plan and prepare for needed adjustments to allowance holdings and to potentially consider updating their corporate structure. It also provides added compliance flexibility by recognizing the timeframe during which covered entities may need to acquire allowances for compliance with emissions during 2027 and 2028 (Compliance Period 6, the first proposed two-year compliance period). The delayed deadline aims to maintain a stable market and minimize any potential allowance price volatility during a period of change associated with the Proposed Amendments.

As previously noted, staff estimate that an average of 14 million allowances are released annually into market circulation due to the annual decline in holding limits under the current

Regulation. Due to both the accelerated decline in holding limits and the new CAG triggers with delayed implementation, the annual amount of allowances released into market circulation under the Proposed Amendments is expected to roughly double during 2027-2030 relative to the current Regulation. With the delayed implementation of CAG triggers, the release of allowances is expected to be steady and in a manner that can support access to allowances needed for compliance by covered entities in the context of the proposed removals of allowances from overall annual budgets to recognize updates to the GHG Inventory and to recognize the use of offsets for compliance.

### 4. Clarifications to Beneficial Holding: Conduct of Trade Rules

Section 95921(f) of the Regulation currently prohibits a registered entity from holding allowances in its tracking system account in which a second entity has any ownership interest and prohibits a registered entity from holding allowances pursuant to an agreement that grants a second entity control over the allowances held or to be held in the registered entity's account. This section of the Regulation is referred to as the "beneficial holding prohibition." The beneficial holding prohibition is an existing market rule that is essential to market oversight and deters against market manipulation by prohibiting activities that would circumvent holding limits. Based on public feedback and in response to increased Program stringency, the Proposed Amendments further clarify some activities that would be seen as beneficial holding and to make clear that these are prohibited.

First, the Proposed Amendments add the term "beneficial holding" directly to the Regulation to more clearly explain that the market rules prohibit registered entities from holding allowances caused by ownership and transaction arrangements that create a situation of a registered entity "holding allowances on behalf" of another entity. Second, the Proposed Amendments clarify that giving final discretion, including control delegated through a contract, over the acquisition, holding, or planned disposition of allowances to a second entity outside of any direct corporate association with the registrant would be a violation of the beneficial holding prohibition. Finally, the Proposed Amendments specifically clarify that the beneficial holding prohibition does not apply to futures or forward contracts, nor does it prohibit exchange clearing holding accounts from functioning in the market.

The Proposed Amendments are intended to provide examples of types of contracts or financing agreements that would violate this prohibition, including loans and credit agreements that give control over the allowances to a secured party, or its administrator, outside of an event of default. The Proposed Amendments do not enumerate every financing agreement or ownership structure that may exist in the commodities market because staff recognize the evolving nature of a market-based program. Staff will continue to monitor emerging market activities and new agreements to ensure market participants remain compliant with market rules. To that end, staff have clarified in the Proposed Amendments that supplemental documentation must be submitted with registration information at the Executive Officer's request to allow CARB to confirm that an entity's activities conform with the beneficial holding prohibition and all other authorized conduct of trade covered in section 95921.

## 5. Clarifications to Unpriced and Zero Price Transaction Reporting

There are some unique scenarios when a transaction agreement does not contain a price for compliance instruments, and in such circumstances, entities are currently allowed to either enter a price of zero with the transfer request while disclosing the agreement type or leave the price field blank. In order to improve the accuracy and streamline the verification required for zero and unpriced transfers, the Proposed Amendments make clarifications to the Regulation to associate a specific set of transaction agreement types for zero-priced and unpriced transfers proposed in the tracking system.

For context, the Quarter 3 2024 transfers summary report identified around 7.5 million allowances transferred among market participants based on unpriced transactions compared to 85 million allowances transferred from priced transactions; in other words, around 9% of transactions recorded in that quarter were unpriced (CARB 2024d). Staff worked closely with entities last year pulling transfer contracts to ensure that there is accurate transfer reporting. However, to formalize staff's communications with entities and to reduce the administrative burden of contacting entities routinely to request and pull contract documentation for unpriced transfers, the Proposed Amendments require that entities electronically submit supporting documents to CARB when proposing an unpriced transfer. These supporting documents are necessary to support market monitoring. Staff must be able to ensure that any unpriced transfer is associated with an arm's-length transaction, where the value of the traded compliance instruments reflect the monetary value a buyer and seller have agreed upon while acting independently and in their own self-interest.

## 6. New Registration Requirements and Clarifications

As covered in the 2023 and 2024 public workshops, staff have observed increasing interest from VAEs, and the Program continues to grow as evidenced in the Program reports published quarterly on the total registered entities and market transaction data. Due to the expressed interest and types of inquiries received from potential market participants, staff have identified a need to make clear how VAEs must demonstrate that they meet registration eligibility and registration requirements, including what it means to be located in the United States. The Proposed Amendments add three new registration requirements that affect entities and the users registered to the tracking system, and separately identify some clarifications to existing registration practice and processes for all entities.

### a) New Registration Requirements

First, the Proposed Amendments specify that registered VAEs must maintain at least two account representatives each with a primary residence and a physical address for business activities in the United States. This new requirement would impact less than 2% of currently registered VAEs, which is approximately 10 accounts based on registrants listed in the Quarter 4 2024 CITSS Registrants Report (CARB 2025i). Furthermore, registered VAEs have demonstrated that they maintain at least one director or officer who is located in the United States so entities impacted by this new requirement may be able to add the U.S.-based director or officer as an account representative to maintain compliance.

Second, the Proposed Amendments add informational disclosures necessary to implement the proposed CAG triggers for all entities. In line with all other registration updates, all entities would be required to disclose to CARB within 30 days all individuals with knowledge of or access to the entity's market position and any CPO or CTA that the entity uses.

Third, the Proposed Amendments specify that changes to an individual user's Know-Your-Customer (KYC) information be disclosed to CARB through the tracking system within 60 days. This would apply to all individual users. For example, this change would require that an individual user report changes to their legal name, primary residence address, and disclose any new criminal convictions to CARB within 60 days and update their tracking system user registration and profile. Individual users would be required to submit supporting documentation and updated user registration forms necessary for CARB staff to confirm the disclosed change. Additionally, the Proposed Amendments require that the user maintain up-to-date contact information in the tracking system at all times, and specify that changes to contact information would be required to be submitted within 5 days.

### b) Clarifications to Entity Registration Requirements

The Proposed Amendments make key clarifications to existing registration requirements based on implementation experience. As the market administrator, CARB staff must be able to support market transparency through publishing periodic market reports and maintain oversight and promote efficiency by tracking the most up-to-date registration submissions. Supplemental registration information is often collected during the registration process when staff conduct due diligence checks to help ensure that every approved applicant conforms with the Program and has provided complete and accurate disclosures. Staff are amending the Regulation to specify the types of supplemental registration information necessary for CARB's oversight and monitoring of Program participants.

The Proposed Amendments also clarify that a new legal entity must establish a new tracking system account, and this can occur when there is a corporate restructure, merger, business acquisition, or change of ownership. Staff currently rely on a government issued taxpayer number or employer identification number (EIN or FEIN) as the unique legal identifier to identify a legal entity. To that end, for rare situations when a registered entity establishes a new EIN or FEIN, the Proposed Amendments clarify that an entity must apply for a new tracking system account so CARB can effectively administer the program with complete and accurate recordkeeping and reconcile each market participant to a distinct account.

Next, the Proposed Amendments clarify that signatures, date of signature, or attestations submitted for new account applications or for changes to account information should be no more than 180 days old at the time an application or a change to account information is approved by CARB. Up-to-date entity registration information and account information is important for ensuring entities' Program compliance.

Furthermore, registered entities are required to identify an acceptable physical address at the time of registration and keep that information updated. The Proposed Amendments to clarify that the physical address reported should reflect the primary location for business operations, such that an address with no employees present or a numbered box at a post office assigned to a person or organization will not be considered a valid physical address. A valid and updated physical address is important to ensure that CARB has adequate oversight of market participants and the ability to take enforcement or legal action when required.

### 7. Changes in Entity Type and Program Exit

Section 95835 of the Regulation describes the requirements for a change in facility ownership, for an entity to change its entity type, and for a registered entity to exit the Program. The Proposed Amendments clarify the timing and options available to entities that are eligible to request a change in entity type or exit the Program so that staff receive the proper confirmation to implement the corresponding set of applicable tracking system account changes.

## F. Changes to Compliance Period Duration

The Regulation currently specifies that a compliance period of three calendar years from 2020 onward. The Proposed Amendments change the duration of the compliance periods to align with California's statutory greenhouse gas emission reduction target years and are aligned with Québec's target years to ensure smooth operation of a linked market. This change will allow for timely assessment of California's climate targets and support the use of the accounting mechanism for the net flow of compliance instruments between California and Québec consistent with Article 8 of the 2017 Linkage Agreement.

The Proposed Amendments modify compliance period six and seven to be biannual and for the subsequent compliance periods to alternate between a duration of three and two calendar years. Table 5summarizes the proposed compliance period schedule starting with the sixth compliance period. During each compliance period, the annual compliance requirement will remain the same (i.e., 30% of entity's covered emissions).

**Table 5: Proposed Compliance Periods for 2027-2045**

| COMPLIANCE PERIOD | COMPLIANCE PERIOD DURATION |
|---|---|
| 6TH COMPLIANCE PERIOD | January 1, 2027 - December 31, 2028 (2 years) |
| 7TH COMPLIANCE PERIOD | January 1, 2029 - December 31, 2030 (2 years) |
| 8TH COMPLIANCE PERIOD | January 1, 2031 - December 31, 2033 (3 years) |
| 9TH COMPLIANCE PERIOD | January 1, 2034 - December 31, 2035 (2 years) |
| 10TH COMPLIANCE PERIOD | January 1, 2036 - December 31, 2038 (3 years) |
| 11TH COMPLIANCE PERIOD | January 1, 2039 - December 31, 2040 (2 years) |
| 12TH COMPLIANCE PERIOD | January 1, 2041 - December 31, 2043 (3 years) |
| 13TH COMPLIANCE PERIOD | January 1, 2044 - December 31, 2045 (2 years) |

### 1. Financial Settlement Date

The Regulation requires payments from winning bidders at an auction to be made within seven days of notifying them of the auction results. The financial settlement date is made available to the public in the auction notice published 60 days before the auction date. The Proposed Amendments clarify that the payments must be made before the financial settlement date in the auction notice. The Proposed Amendments will allow staff to adjust the payment due date to accommodate non-banking days and holidays, providing winning bidders and the financial service administrator approximately seven days to process payment for any auction. Staff also propose the same clarification for Reserve sales.

### 2. Reserve Sale Financial Settlement Process

Section 95913(j)(3) of the current Regulation states that the financial services administrator deposit proceeds upon receiving each cash payment or draws on a bid guarantee for Reserve sales. The Proposed Amendments specifies that the financial services administrator collect all payments from Reserve sale participants and make one proceeds deposit. The Proposed Amendment will align the financial settlement process for Reserve sales with the auction process.

### 3. Auction Allowance Transfers

The Regulation allows CARB to transfer allowances purchased by a winning bidder in an auction to the entity's compliance account if the transfer to the entity's general holding account will cause the entity to violate its holding limit. The process of transferring auctioned allowances to winning bidders requires multiple days for coordination with partner jurisdictions and careful internal review. Because an entity can conduct transfers to and from its general holding account at any time, the available balance beneath its holding limit can vary from day to day leading up to the official date to transfer awarded allowances that is identified in the auction notice. The Proposed Amendments specify that during the window of seven days prior to the scheduled date to transfer awarded allowances that is identified in the auction notice, staff will evaluate the general holding account balance of each winning bidder to assess if the transfer of allowances purchased at auction will cause the entity to exceed its holding limit. Staff will determine the number of allowances purchased at auction to be transferred to an entity's compliance account to avoid a holding limit violation based on this assessment. The proposed amendment will allow at least seven days for staff to calculate, coordinate across linked jurisdictions, verify, and complete the necessary transfers to winning bidders. Staff have received public feedback to add this timing and coordination activity as an explicit regulatory requirement for the Program.

## G. Update Utility Allocation for Ratepayer Benefit

### 1. Post-2026 Electrical Distribution Utility (EDU) Allocation

CARB allocates free allowances to electrical distributions utilities (EDUs) to benefit their ratepayers, consistent with the goals of AB 32. The majority of these allocated allowances are consigned to auction and the proceeds are used for the California Climate Credit and programs that reduce GHG emissions. Through 2023, EDU ratepayers have received nearly $11 billion in residential Climate Credits on electricity bills (CARB 2025f). The number of allowances allocated to each EDU is based on its anticipated Cap-and-Invest Program compliance costs or cost burden, which is calculated using each utility's demand and supply forecasts. Each EDU is assumed to meet mandated Renewables Portfolio Standard (RPS) requirements. For EDUs with industrial covered entity customers, the calculated cost burden is reduced to account for emissions associated with electricity purchased by industrial covered entities. Allocation to individual EDUs may vary from year to year, but allocation to the EDU sector as a whole declines over time due to the decarbonizing electricity supply.

To support the transition to lower-carbon electricity sources and to provide certainty to EDUs regarding ratepayer protection, CARB set the future annual EDU allowance allocation in the Regulation multiple years ahead of time. Table 9-4 of the Regulation, which was adopted in the 2016 Rulemaking, specifies the vintage 2021–2030 allowance allocations to each EDU. However, when allowance allocations are calculated in advance based on projected supply, load, and resulting cost burden, as they were for the vintage 2021-2030 allocations in Table 9-4, there is a risk that the load projections will be too high or too low compared to actual load, or that the supply projections would not reflect the actual generation mix of each utility. Depending on supply, load projections that are too low can result in under-allocation with respect to cost burden, and load projections that exceed actual load can result in over-allocation. Recent information from the California Energy Commission indicates that the existing total 2027-2030 EDU allocation may provide more allocation relative to the Program cost burden but leave some utilities that have seen increases in demand with fewer allowances than they need to address Program cost burden.

In the 2018 Final Statement of Reasons (CARB 2018b), staff indicated plans to reevaluate post-2020 allocation to EDUs, including reevaluating allocation levels to incorporate the increased RPS requirement of 60% of retail sales in 2030, as mandated by SB 100 (De León, Chapter 312, Statutes of 2018), and the most recent information related to increased load due to electrification of the transportation sector pursuant to direction from Board Resolution 17-21 (CARB 2017a). The Proposed Amendments include updates to EDU allocation from the 2027-2030 allowance budgets to account for the more ambitious RPS target for 2030 under SB 100 (60% in 2030, minus 5% to represent nonzero emissions electricity used to “firm and shape” zero-emissions electricity) and recent information available from the California Energy Commission (CEC 2023a, CEC 2024a, CEC 2025). The Proposed Amendments revised EDU allocation based on updated data using the existing methodology and are not impacted by the proposed updates to Program budgets, which impact state-owned allowances.

The Proposed Amendments also establish EDU allocations for the vintage 2031-2035 allowance budgets. Allocations post-2030 were calculated using information from the California Energy Commission (CEC 2025) and applying the SB 100 RPS targets and the SB 1020 (Laird, Chapter 361, Statutes of 2022) zero-carbon energy targets. SB 1020 requires that renewable energy and zero-carbon supply be 90% of all retail sales of electricity by December 31, 2035. In the proposed allocation calculations, which are described in detail in Appendix D-2, each EDU is assumed to achieve the 90% target by 2035, minus 5% to represent non-zero emissions electricity used to “firm and shape” zero-emissions electricity, by increasing its percentage of zero-carbon electricity by 6% per year during 2031-2035. For EDUs already achieving or exceeding this trajectory based on data provided to the California Energy Commission (CEC 2023a and CEC 2024a) about existing and projected nuclear and large hydroelectric supply, the Proposed Amendments provide annual allocation post-2030 at 2030 levels, scaled by the average annual growth factor. Electricity that is not from RPS-eligible or zero-carbon sources is assumed to come from natural gas generation. Thus, the natural gas emission factor is applied to that generation to determine the final allocation to each EDU. Additionally, staff are still evaluating whether to provide EDU allocation to any newly identified EDUs using the same methodology and comparable data sources and may propose additional language during a 15-day comment period.

### 2. Transition of Investor-Owned Utility Natural Gas Supplier Allocation to EDUs

CARB allocates free allowances to natural gas suppliers (NGSs) to benefit their ratepayers, consistent with the goals of AB 32. AB 1207 requires CARB to design the regulations in a manner that transitions support from gas corporations where appropriate to EDUs to minimize ratepayer impacts on or before January 1, 2031. Since 2018, as required by CPUC Decision 15-10-032,[25] investor-owned utility (IOU) NGSs have provided a majority of auction proceeds from the sale of allocated allowances to residential ratepayers as an annual credit called the California Climate Credit. The Proposed Amendments transition IOU NGS allocation to EDUs that have residential ratepayers beginning with allowances from the 2029 budget year. Per AB 1207, this transition does not impact industrial allowance allocation. IOUs currently use allocated allowance auction proceeds to provide the following climate credits:

- California Climate Credit – on bill credit to NGS IOU residential ratepayers
- California Climate Credit – on bill credit to EDU IOU residential ratepayers
- Small Business California Climate Credit –on bill credit to EDU IOU small business ratepayers
- California Industrial Assistance – on bill credit to EDU IOU ratepayers in eligible emissions-intensive trade-exposed industries, including:
    - EITE facilities covered by Cap-and-Invest
    - Other EITE facilities (not covered by Cap-and-Invest)

The staff Proposed Amendments include a framework to allow for implementing the direction in AB 1207, to transition NGS allowances to EDUs. This would impact the California Climate Credit provided to NGS IOU residential ratepayers. In the first year of the transition (i.e., the allocation of vintage 2029 allowances by October 24, 2028), 20% of IOU NGS allocation would be transitioned, and an additional 10% per year, thereafter. The IOU NGS allocation would be divided among EDUs with residential ratepayers using retail sales data that are reported to CARB under the MRR. EDU IOUs would be required to provide a direct climate credit(s) to residential ratepayers, as directed by the CPUC. EDU publicly owned utilities (POUs) and electrical cooperatives (COOPs) would be required to provide direct non-volumetric credits to residential ratepayers either on- or off-bill. EDU POUs and COOPs would be required to provide the residential credits from the additional allowances within three years of receiving the

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[25] See *Decision Adopting Procedures Necessary for Natural Gas Corporations to Comply with the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms*

allocated allowance value. This three-year timeframe would allow POUs and COOPs EDUs sufficient time to design systems to distribute the credit and to accumulate sufficient funds to provide a meaningful credit to residential ratepayers.

### 3. True-up Allocation for Newly Eligible NGS

CARB allocates free allowances to NGSs to benefit their ratepayers, consistent with the goals of AB 32. Under the current Regulation, NGS allocation is provided each year with allowances from the subsequent budget year. The Proposed Amendments include a new true-up mechanism to provide allowance allocation to a newly eligible NGS that incurred a compliance obligation for covered emissions in the current and prior data year but did not receive allowance allocation for those years. The NGS true-up allocation would be calculated in the same manner as the existing annual NGS allocation, which is based on 2011 NGS covered emissions and the cap-adjustment factor for each applicable budget year.

## H. Utility Use-of-Allocated Allowance Value

As described above, CARB allocates free allowances to EDUs and NGSs to benefit their ratepayers, consistent with the goals of AB 32. The number of allowances allocated to each EDU is based on its anticipated Program compliance costs or cost burden. The number of allowances allocated to each NGS each year is calculated based on its 2011 covered emissions and the cap adjustment factor, which historically has declined each year in proportion to the overall Program allowance budgets. Under the current Regulation, investor-owned electric utilities must consign all allocated allowances to auction, while publicly owned electric utilities and electrical cooperatives have the option to consign allocated allowances to auction or use them directly for Program compliance. All NGSs are required to consign a minimum percentage of their allocated allowances to auction each year, and the minimum percentage increases 5% per year until reaching 100% in 2030.

All value from allowances freely allocated to an EDU or an NGS must be used to benefit that utility's retail ratepayers, with specific limitations for the use of allocated allowance value described in the Regulation. Currently, the majority of allowance value allocated to utilities is returned to ratepayers in the form of non-volumetric California Climate Credits (CARB 2024e, CARB 2024a), and additional uses include renewable energy projects, clean transportation funding, and building electrification incentives, among others. The Proposed Amendments include several updates to requirements for the use of utility allowance value:

### 1. Changes to the prohibition on volumetric returns

The current Regulation prohibits utilities from returning allocated allowance value to customers in a volumetric manner, which the Regulation defines as a "direct distribution of allocated allowance auction proceeds to one or more of its ratepayers based on the current or recent amount of electricity, natural gas, or other relevant utility service delivered to those ratepayers, such that higher usage results in ratepayers' receipt of more funds." This prohibition has been in place to preserve the carbon price signal that is included in electricity and natural gas rates (CARB 2016). In support of energy affordability, Governor Newsom's Executive Order N-5-24 directs CARB to work with CPUC on options to maximize the effectiveness of the California

Climate Credit. In July 2025, CPUC initiated a new rulemaking, R. 25-07-013 to review and improve the residential electric California Climate Credit provided by IOU EDUs. In September 2025, AB 1207 specified requirements for IOU EDU allocated allowance value and climate credits, including crediting directly to residential customers and providing the credits in no more than four high-billed months each year to maximize customer bill affordability. In light of CARB's statutory requirement to ensure its regulations do not require inconsistent requirements with those required by the CPUC, and in recognition of the importance of electrification in meeting the State's climate targets, the Proposed Amendments remove the prohibition on non-volumetric returns for IOU EDUs. This change is made to support the CPUC's statutory requirements under AB 1207 related to residential electric climate credits and to enable CPUC to evaluate and consider the broadest range of potential options to improve the residential climate credit and support customer affordability. Once the CPUC process is complete, and there is a better understanding of how the IOU EDUs will distribute the residential electric Climate Credit going forward, CARB can reassess the need for the prohibition of volumetric returns to support the carbon price signal of the Program going forward.

The Proposed Amendments do not remove the prohibition on volumetric returns for natural gas suppliers, POU EDUs or COOPs, which are outside the scope of CPUC's rulemaking to potentially redesign the California Climate Credit for residential electric IOU ratepayers. In addition, preserving the carbon price signal in natural gas rates is important to support needed decarbonization of the natural gas sector and encourage energy efficiency and fuel-switching to electricity. Maintaining the prohibition on volumetric returns for POU EDUs and COOPs also provides a broad and consistent framework that ensures ratepayer protection through the potential direct return of proceeds while enabling local decisions by POUs and COOPs on other aspects, including climate credit amounts and the frequency and timing of credits.

### 2. Aligning NGS use of allocated allowance value with the 2022 Scoping Plan Update

For NGSs that spend a portion of their allocated allowance value on GHG emissions reduction projects, the Proposed Amendments prohibit expenditures on activities or equipment that combusts natural gas or other fossil fuels. The Proposed Amendments also remove the current option to use allocated allowance value for "other GHG emission reduction activities" to ensure that NGSs use the value of their allocated allowances only for projects that fall under the specific eligibility categories. These changes help ensure that NGS allocated allowance value is used in a manner that benefits NGS ratepayers, consistent with requirements on EDUs, and aligns with natural gas sector decarbonization measures identified in CARB's 2022 Scoping Plan Update (CARB 2022a).

### 3. Prohibiting the use of allocated allowance value for voluntary carbon offset projects

The Proposed Amendments prohibit EDUs and NGSs from using allocated allowance value to purchase voluntary carbon offset credits or to participate in any voluntary carbon market or external greenhouse gas emission trading system, as CARB cannot verify the GHG emissions benefits of voluntary offset credits or other carbon reduction products offered outside of the Cap-and-Invest Program. Paying for any costs associated with Cap-and-Invest Program compliance, including purchasing allowances or compliance offset credits, is already a prohibited use of allocated allowance value.

### 4. Additional clarifying edits

The Proposed Amendments also make several clarifications and updates to ensure that allocated allowance value, including accrued interest, is used for the primary benefit of California ratepayers and that expected GHG benefits are accurately captured as part of the existing annual reporting to CARB and support the reporting to the Legislature on use of allocated allowance value as required by AB 1207.

## I. Renewable Portfolio Standard (RPS) Adjustment

The RPS adjustment was included in the initial Cap-and-Trade Regulation and the initial Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR) to provide electricity importers an optional mechanism to recognize the cost of compliance associated with out-of-state RPS-eligible generation. Generation eligible for the RPS adjustment must be RPS-eligible, from an out-of-state source, and not directly delivered to California. To claim an RPS adjustment, an electricity importer must either (1) have ownership or contract rights to procure the out-of-state RPS-eligible generation and the associated RECs, or (2) have a contract with an entity subject to California’s RPS that meets the first requirement. The RPS adjustment is not meant to recognize avoided emissions, rather it is meant to recognize the costs associated with RPS Program compliance for importers of electricity, which are generally costs related to Portfolio Content Category (PCC) 2 and PCC 0 Renewable Energy Credits (RECs). PCC 2 (PUC code 399.16(b)(2)) are purchases of renewable energy from out-of-state resources that aren’t delivered to California and are paired with purchases of substitute energy, generally unspecified electricity imports. The RPS Program limits the amounts of PCC 2 resources that can count towards a utility's RPS requirements. PCC 0 (PUC code 399.16(d)) are purchases from RPS resources under contract prior to June 1, 2010. Typically, out-of-state PCC 0 resources don’t have a path to direct delivery to California. PCC 0 resources also represent the earliest RPS program procurements, which were executed prior to the establishment of the PCC requirements that established renewable electricity deliverability requirements pursuant to Senate Bill 2 (1X) (Simitian, 2011). The RPS adjustment does not impact CARB’s GHG Emissions Inventory, which reflects all emissions from imported electricity, rather it is solely a mechanism to reduce an electricity importer's Cap-and-Invest Program compliance obligation.

Despite being included in the Regulation since 2010, the RPS adjustment has continued to pose significant implementation challenges. These challenges include difficulty determining that electricity has not been directly delivered to California, difficulty reporting and verifying claims when a portion of generation from an RPS-eligible resource is directly delivered to California and the RPS adjustment is claimed for only a portion of the generation that is not directly delivered, and difficulty reporting and ensuring claims meet the RPS adjustment requirements where multiple entities claim an RPS adjustment for electricity from the same generator. Validation of RPS adjustment claims is further hindered both by confidentiality agreements that limit staff's ability to communicate with procurement contract counterparties, and by differences between reporting requirements for the RPS adjustment and electricity imports.

In recent years staff have addressed many of the challenges with validating RPS adjustment claims, however issues remain. Under California Energy Commission (CEC) rules, RECs can be created retroactively up to 24 months prior to the date of the request to claim use of the REC for RPS purposes to the CEC, and eligibility of RECs for RPS adjustment claims may vary depending upon locational and temporal factors, creating obstacles for staff in assessing the validity of RPS adjustment claims (CEC 2017). Discrepancies between meter readings at the busbar and REC meter readings present reconciliation problems when attempting to validate that the electricity importer has RECs representing generation from an RPS-eligible source. In addition, RECs may be withdrawn after retirement under certain circumstances, further complicating the assessment of applicable RECs for the RPS adjustment.

SB 1020, AB 1279, and SB 100 require deep decarbonization of the electricity sector, necessitating significant increases in renewable electricity that are not associated with GHG emissions, and changes to elements of the Program are needed to support these changes. Staff are proposing amendments to align the RPS adjustment with the increased stringency necessary for deep decarbonization and to alleviate the implementation challenges posed by the RPS adjustment. The Proposed Amendments limit the RPS adjustment to PCC 0 resources after the 2030 budget year, limiting the implementation challenges posed by the RPS adjustment, while giving entities certainty and time to respond to this change. Preserving the RPS adjustment for PCC 0 resources will ensure that this provision reflects early action taken on renewables procurement while supporting the deep decarbonization needed to achieve the State's goals. This approach recognizes the costs associated with the procurement of these renewable electricity resources and the fact that PCC 0 contracts were entered into before electricity deliverability requirements were established or factored into utility renewable electricity procurement decisions.

## J. Minimize Emissions Leakage for Imported Electricity

The California Independent System Operator (CAISO) manages the majority of California's electricity grid and operates wholesale electricity markets for California and other portions of Western North America. Staff are proposing changes to the Regulation to address requirements for imported electricity in light of California's decarbonization targets for the electricity sector and the California Independent System Operator's (CAISO's) planned launch of an Extended Day-Ahead Market and statutory requirements to minimize emissions leakage. These updates are necessary to ensure that the Regulation reflects California's shifting regulatory environment, can minimize emissions leakage in light of those changes and avoids gaps in the Regulation due to changes to CAISO markets.

In 2014, CAISO expanded its real-time market to other balancing authority areas (BAA), including out-of-state BAAs. This market is known as the Western Energy Imbalance Market

(WEIM).[26] The WEIM provides jurisdictions throughout the West access to CAISO's real-time market services and increases market efficiency by expanding the availability of generation to WEIM participants.

Under AB 32, CARB must account for statewide GHG emissions, including all emissions resulting from the generation of electricity delivered to and consumed in California, whether that electricity is generated in-state or imported to serve California load. In 2015, CARB found that the design of WEIM does not account for the full GHG emissions experienced by the atmosphere from imported electricity under WEIM and results in GHG emissions leakage. CARB has historically referred to these emissions as EIM Outstanding Emissions. Beginning in 2016, CAISO and CARB began coordinating to address GHG accounting limitations in the WEIM. This included implementing a "bridge solution" to account for the full GHG emissions experienced by the atmosphere from imported electricity under WEIM in 2017. The "bridge solution" was a temporary solution developed in anticipation of CAISO implementing improvements to its market at a later date. Under the "bridge solution," CARB retired unsold allowances equal to EIM Outstanding Emissions.

In 2018, CAISO made changes to its market optimization design to better reflect the availability of resources not otherwise supporting demand outside of California, thereby more accurately reflecting the GHG emissions experienced by the atmosphere from electricity imported to California under the WEIM. These changes limited the amount of electricity available to support WEIM imports to California by constraining attribution to serve California demand from individual WEIM participating resources located outside of California. While this change helped minimize emissions leakage, it did not fully address the emissions leakage concerns.

In the Cap-and-Trade Regulation 2018 amendments, CARB made changes to the approach to addressing EIM Outstanding Emissions to continue maintaining the environmental integrity of the Program (CARB 2018a). Instead of retiring unsold allowances to address EIM Outstanding Emissions, CARB started withholding allowance allocation to EDUs that both participate in CAISO markets and receive free allowance allocation (historically, these EDUs have been referred to as "EIM Purchasers") and retiring the withheld allowances that would otherwise have been allocated to EDUs. Beginning in 2019, and in each subsequent year, CARB has retired allowances that would otherwise be allocated to EIM Purchasers in an aggregate amount equal to the prior year's EIM Outstanding Emissions. The ratio of an EIM Purchaser's reduced allocation to total EIM Outstanding Emissions is equal to the ratio of its retail sales to the total retail sales of all EIM Purchasers.

CAISO has recently developed changes to its day-ahead market that will extend the option to participate in CAISO's day-ahead market services. This new market, the Extended Day-Ahead Market (EDAM) will allow for optimized commitment of electricity generation by CAISO in the day-ahead timeframe. Like in the WEIM, the EDAM will enable electricity generators in the West to opt-in to serving an area that prices GHG emissions, including California, and to reflect those costs in their energy bids into the market. EDAM will optimize transfers to GHG

[26] This rulemaking updates references in the Regulation from the "EIM" to "WEIM" to reflect the fact there are now various electricity markets with energy imbalance markets. Here we use the term EIM to refer the current Regulation text and WEIM when referring to proposed amendments.

regulation areas, including California, based on GHG bid adders and energy bids from generators in the West. The new optimization in EDAM is similar to and improves on the WEIM optimization for GHG attribution. Improvements in EDAM relative to WEIM include:

- Attributing electricity to GHG regulation areas based on state boundaries (instead of BAA boundaries);
- A day-ahead counterfactual that establishes a baseline of what dispatch would have occurred in the non-GHG regulation area absent GHG policy;
- Placing limits on resource attribution to time periods when a BAA in which the resource is located is exporting electricity; and
- Providing an opportunity to attribute capacity under contract to load serving entities in a GHG regulation area if it is economic to do so.

In December 2022, CAISO released a final proposal for EDAM (CAISO 2022), and in August 2023, CAISO submitted the tariff to implement EDAM to the Federal Energy Regulatory Commission (FERC) for approval (CAISO 2023). In December of 2023, FERC approved the relevant portions of CAISO's EDAM tariff (FERC 2023) setting the stage for an expected EDAM to launch in 2026. In this rulemaking, the Proposed Amendments updates the Regulation and MRR to reflect EDAM and the changes and improvements that are being planned for the WEIM. The proposed changes ensure coverage of all imported electricity emissions and help ensure CARB is appropriately addressing GHG emissions leakage in these markets.

*WEIM and EDAM Amendments*

To address the developments in CAISO Markets, staff are proposing to update corresponding terminology for these electricity markets in the Regulation. This includes updating references in the Regulation from "EIM" to "WEIM" and replacing "EIM Outstanding Emissions" with the term "CAISO Markets Outstanding Emissions." These proposed changes are aligned with proposed definition changes in MRR and proposed changes in MRR to the calculation of Outstanding Emissions that are designed to address leakage for electricity imports that occur via WEIM-only and EDAM (once operational). Other terminology changes are proposed to ensure that imports via the EDAM are covered and to reflect the fact that all transactions in CAISO Markets will be settled in the WEIM. Staff also propose to update the term "EIM Purchasers Emissions" to "CAISO Markets Purchaser Emissions." This broader terminology addresses emissions leakage associated with electricity imports that occur through the WEIM-only and via the EDAM.

## K. Minimize Industrial Emissions Leakage Risk and Support GHG Reductions in the Industrial and Fuels Sectors

To achieve the State's mid-century climate targets, the 2022 Scoping Plan Update indicates that industrial sources will need to rapidly accelerate GHG emissions reduction (CARB 2022a). This is expected to include production and use of low-carbon fuels, such as biofuels and low-carbon hydrogen, electrification of industrial processes, adoption of innovative low-carbon materials, integration of novel sector-specific technologies, and capture and sequestration or use of $CO_2$ emissions that cannot otherwise be abated.

The carbon price imparted by the Program is California's primary policy tool to incentivize decarbonization of in-state industrial facilities. However, the carbon price imparted by the Program may also increase the risk of emissions leakage, defined by AB 32 as a decrease in GHG emissions in-state that is offset by an increase in out-of-state GHG emissions. Emissions leakage can occur when compliance costs faced by regulated businesses are not shared by competitors outside the regulated jurisdiction. Pursuant to AB 32 and AB 1207, CARB is mandated to minimize emissions leakage risk and designed output-based allowance allocation to industrial entities to minimize leakage risk by creating an incentive for emissions-efficient in-state production. Within the Cap-and-Invest Program, industrial allocation is intended to reward facilities with low GHG emissions intensity and to promote investment in all viable GHG emission reduction activities (CARB 2010c, CARB 2013a, and CARB 2013b). Continued and updated allowance allocation to industrial sectors will help mitigate GHG emissions leakage, reward ambitious decarbonization investments, and facilitate the transition of California’s industrial sectors to a low-GHG economy aligned with reducing anthropogenic statewide emissions by 85% below 1990 levels by 2045.

The Proposed Amendments includes a suite of changes to continue to minimize emissions leakage risk and support decarbonization and innovation in California’s industrial sector and, pursuant to the requirements of AB 32, AB 398 and AB 1207. The Proposed Amendments:

- Keep the current Cap Adjustment Factors (CAF) and add new CAFs for 2032-2035
- Keep the current assistance factors of 100% through 2035
- Revise the existing product-based allocation benchmarks and certain definitions for cement manufacturing, crude oil extraction, dairy product manufacturing, and transportation fuel production sectors to ensure the Program appropriately incentivizes low-GHG production methods and provides consistent treatment for innovative methods of supplying California with fuels and materials.
- Add new covered products and definitions for product-based allocation to appropriately describe current in-state production.
- Incorporate new provisions to provide product-based allowance allocation for manufacturing a newly covered product during prior years, corresponding to the start of manufacturing the newly covered product, to minimize emissions leakage risk associated with manufacturing new or evolving products.
- Update existing allocation methods to directly provide allowance allocation to covered industrial facilities to minimize the leakage risk associated with Program costs in purchased electricity, completing the transfer of responsibility for administering this leakage protection mechanism from CPUC to CARB.
- Add a new form of industrial allocation to protect against emissions leakage and incentivize GHG emissions abatement actions. This manufacturing decarbonization incentive allocation supports leakage prevention by providing free allowances the value of which must be used for specified industrial decarbonization actions.
- Clarify other provisions related to industrial allowance allocation.

Pursuant to AB 398, the Proposed Amendments are informed by the technical work to support the AB 398 report to the Legislature on leakage risk as presented in the October 2025 workshop (CARB 2025j).

### 1. Cap Adjustment Factors and Assistance Factors

Under the Regulation, CARB provides free allowances to emissions-intensive, trade-exposed covered industry to minimize emissions leakage. The primary method for calculating free industrial allocation is the product-based allocation methodology, where a facility's allocation is equal to the assistance factor (Table 8-1 of the Regulation) multiplied by the sector specific benchmark (Table 9-1 of the Regulation) multiplied by the cap adjustment factor (Table 9-2 of the Regulation, and which decreases annually) multiplied by the facility's output as reported and verified pursuant to MRR each year. Historically, most facilities use the standard cap adjustment factor (CAF). Some facilities, those with over 50% of total emissions from process emissions and operating in a sector with both high emissions intensity and a high leakage risk classification, use the alternate cap adjustment factor, which declines each year at half the rate as the standard cap adjustment factor. This approach has meant that over time the percentage of free industrial allocation has remained a relatively consistent proportion of the overall allowance budget each year. Staff evaluated the potential impacts on industry and emissions leakage risk given the Proposed Amendments to the allowance budgets, the text in AB 1207 that removed the requirement that the CAF be set proportionally to the overall allowances budgets, and overall Legislative direction to minimize emissions leakage. While the existing approach to minimizing emissions leakage has proved effective to date, there are uncertain future economic pressures that could affect emissions leakage risk going forward, including tariffs, loss of federal funding for industrial decarbonization, and developments in emissions trading systems in other jurisdictions (CARB 2025j).

Staff evaluated the existing and emerging approaches used in other emissions trading systems and found that California's approach to industrial allocation was more stringent, which could result in an increased emissions leakage risk relative to other jurisdictions. Table 6, which reflects industrial allocation, emissions, and previous abatement responses in 2023 for a range of jurisdictions demonstrates that the ratio of industrial allocation to industrial covered emissions is lower for California than other jurisdictions. This data in Table 6 is representative of historic allocation in these jurisdictions. A number of these jurisdictions have a mix of leakage mitigation strategies that decline over time and are aligned with their respective long-term climate targets. One of these jurisdictions is the European Union, which is phasing down free industrial allocation in its emissions trading system as it implements a carbon border adjustment mechanism.

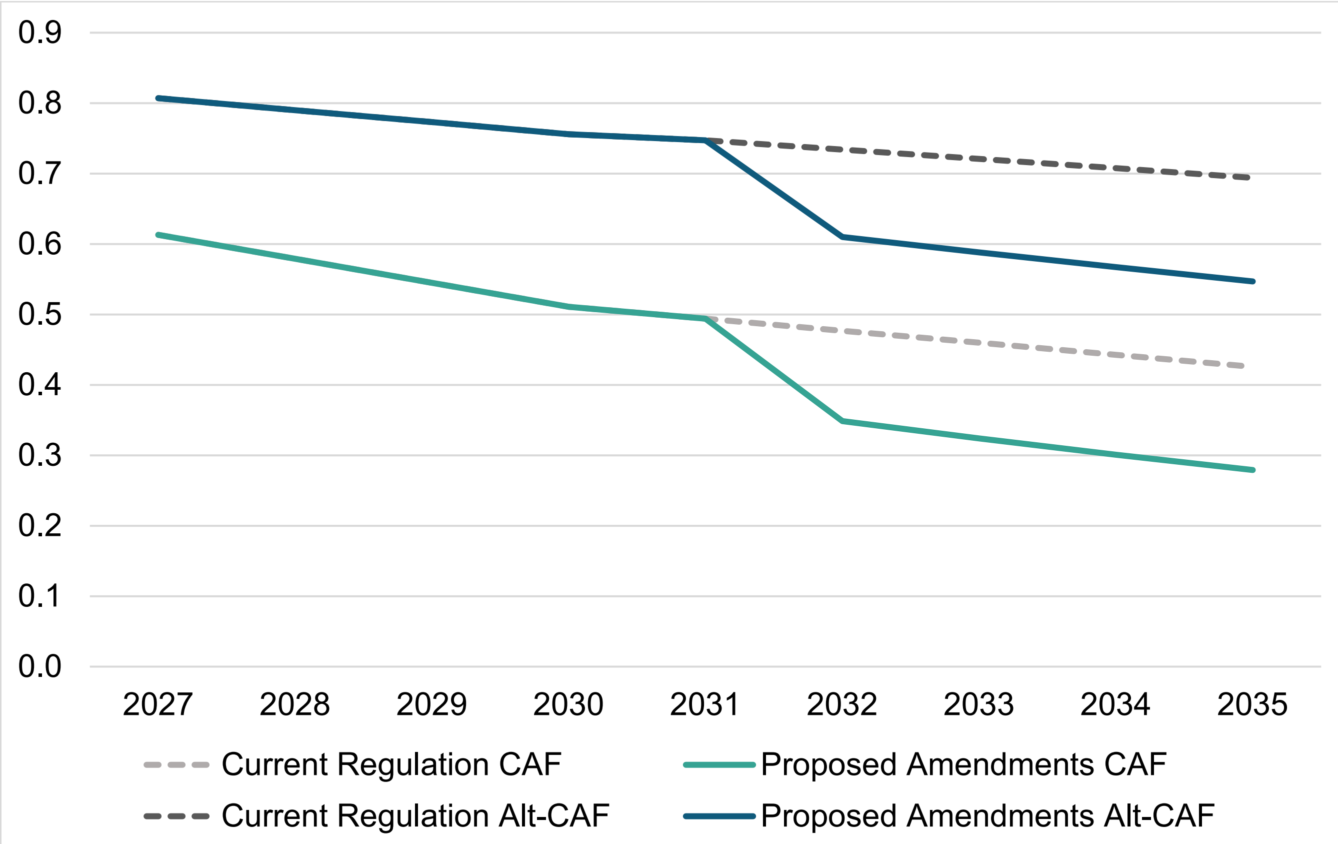
**Table 6: Ratio of Industrial Allocation to Covered Emissions in Various Jurisdictions (2023)** [27]

| Jurisdiction | 2023 Industrial Covered Emissions | 2023 Free Industrial Allowance Allocation | Ratio of Industrial Allocation to Industrial Covered Emissions (%) |
|---|---|---|---|
| California | 56,172,385 | 34,935,503 | 62% |
| Washington | 9,182,283 | 9,162,037 | ~100% |
| Québec | 19,734,923 | 19,543,087 | 99% |
| European Union | 628,571,429 | 528,000,000 | 84% |
| United Kingdom | 50,900,178 | 36,856,294 | 72% |

Given these considerations, the Proposed Amendments maintain the existing cap adjustment factors through 2031 and add new cap adjustment factors for 2032-2035 that are calculated to be proportional to the proposed overall allowance budgets using the same method that was used to calculated the CAFS for 2013-2031. The Proposed Amendments also maintain the assistance factors in Table 8-1 of the Regulation at 100% through 2035. These Proposed Amendments, when combined with the other proposed changes to industrial allocation, including updated and new product benchmarks and manufacturing decarbonization incentive allocation, balance providing near-term support to industry to adapt to the increased stringency of the Program budgets. The Proposed Amendments also do not set future cap adjustment factors and assistance factors beyond 2035 to both provide near term certainty and to allow for future changes that may be needed to reflect shifts in the economy, worldwide carbon pricing, and corresponding leakage risks.

[27] *See* CARB *Annual GHG Mandatory Reporting data* (2023) and CARB annual allocation data: *Vintage 2023 Allowance Allocation* (initial) and *Vintage 2025 Public Allocation Summary* (true-up). For this comparison, California's 2023 industrial covered emissions are limited to entities that received allocation in 2023. *Washington State's GHG Reporting Program for emissions data* (2023) and *Washington State Department of Ecology's 2023 EITE Allocation Summary*. *Québec Ministère de l'Environnement de la Lutte contre les changements climatiques, de la Faune et des Parcs's covered entity GHG data and Québec 2023 Allocation data. EU:* Sandbag, *A closer look at 2023 emissions I Publications I Sandbag* (October 2024). United Kingdom, *ETS recorded emissions* (2025) and UK ETS Registry Participants and Allocation for *Operator Holding Accounts* and *Airport Operator Holding Accounts* (2025).

**Figure 7:** Comparison of Current and Proposed CAF and Alt-CAF Schedule, 2027-2035




## 2. Product-Based Industrial Allocation

Historically, over 98% of allowance allocation to industry has been calculated using the product-based method. The product-based method is designed to minimize the risk of emissions leakage by providing an incentive for GHG emissions efficient production of materials and goods within California. For each eligible product, annual allowance allocation to a facility is dependent on the facility output of the product, as reported and verified under MRR, scaled by the applicable product benchmark, cap adjustment factor, and assistance factor. Product benchmarks represent direct on-site GHG emissions per unit of specific product including emissions associated with net steam purchases and deducting emissions associated with electricity sales. As detailed in the 2010 ISOR, use of sector-wide product benchmarks for industrial allocation is designed to reward facilities within a sector that produces a given product using relatively low-GHG emissions methods (CARB 2010a, CARB 2010c).

Since inception of the Program, staff development of product definitions and product benchmarks has relied on the one-product one-benchmark principle. Generally, the one-product one-benchmark approach:

- Avoids benchmarks and product definitions differentiated by technology, fuel mix, size, age, climatic circumstances, or raw material quality of the installations producing the product.

- Is intended to ensure that all GHG emissions-abatement options remain viable, including switches to different technologies, fuels, and feedstocks.

Most product definitions and benchmarks currently in the Cap-and-Trade Regulation were established by the 2010 and 2013 rulemakings. Staff determined appropriate product metrics based on an analysis of California's manufacturing activities and consideration of California's climate policies at the time.

California's industrial sectors are now rapidly evolving and will continue to do so as existing facilities reduce emissions, new low-GHG production methods are employed, and production shifts to low carbon fuels and materials needed to support the decarbonization of California's broader economy. Given this ongoing transition and aligned with the Program's one-product one-benchmark approach, The Proposed Amendments revise the existing product definitions and product benchmarks for cement manufacturing, crude oil extraction, and transportation fuel production sectors, to ensure the Program appropriately incentivizes low-GHG production methods and provides consistent treatment for innovative methods of supplying California with fuels and materials.

In doing so, staff are maintaining the existing leakage risk assessments and classifications for low-carbon alternative materials and manufacturing processes to produce covered products that are functionally equivalent to conventional products. CARB historically has relied on the NAICS classification system as the basis to assess emissions leakage risk for covered industrial sectors and associated manufacturing activities. However, the NAICS system is designed to define conventional industrial goods produced using conventional manufacturing processes; it does not group low-carbon alternative materials and/or processes that produce functionally equivalent products together with conventional counterparts. Applying the existing leakage assessment and classifications for low-carbon alternatives ensures equal treatment of covered products regardless of the materials and manufacturing processes employed. In addition, other proposed benchmark updates are for covered sectors that have an existing leakage risk classification, and per AB 398 assistance factor is set at 100% for all leakage risk classifications through 2030. As described above, the Proposed Amendments set the assistance factor at 100% through 3035.

### a) Cement

Cement is made by blending multiple materials, primarily limestone-based clinker that provides binding property to cement. Limestone-based clinker is the most GHG emissions-intensive material in cement, as in addition to the $CO_2$ emissions from fuel combustion to provide the high-temperature heat needed to produce it, carbon contained in limestone is also released as $CO_2$ emissions during the clinker production process. Currently, cement plants in California typically add gypsum, limestone, and small amounts of other mineral additives to limestone-based clinker to make cement. Under the current Regulation, free allocation is provided for limestone-based cement production at covered cement plants. However, cement can also be made by blending increased amounts of low-carbon alternative materials, such as alternative clinker and supplementary cementitious materials. These low-carbon alternative materials help reduce the GHG intensity of cement when they displace limestone-based clinker.

As California transitions to a decarbonized economy, it is important (1) to support increased use of low-carbon materials to make cement, and (2) to treat conventional and low-carbon cements on an equivalent basis when providing leakage protection if a low-carbon cement can be demonstrated to be functionally equivalent to conventional cement. As low-carbon alternative materials can be produced by non-incumbent cement plants and/or blended into finished cement at either a cement plant or a concrete plant, the Proposed Amendments include the following changes to the allocation framework for cement manufacturing. These changes are proposed to be effective once the Proposed Amendments are in effect:

- Add NAICS codes 212 (mining except oil and gas) and 327 (nonmetallic mineral product manufacturing) to Table 8-1 and Table 9-1 under “cement manufacturing” to enable alternative clinker producers and SCM producers in California to be potentially eligible to receive allocation if the products are covered by the Cap-and-Invest Program and used to make finished cement.
- Change the definition of “cement” to include all types of cement that meet the specification standards for or demonstrate functional equivalence to conventional cement types, such as Portland or blended cements.
- Change the definition of “adjusted clinker and mineral additives produced” to include baghouse dust and grind aids added by cement manufacturers to make cement.
- Add “finished cement” as a product eligible for allocation, and include in the definition of finished cement “adjusted clinker and mineral additives produced” and SCMs produced by entities covered by the Program that were blended by cement plants or concrete plants to make cement.
- Add requirements to the product output-based allocation calculation method to determine the amount of “Supplementary Cementitious Materials” used to make Finished Cement eligible for allocation.

### b) Transportation Fuels

By vintage 2031 allocation, the Proposed Amendments transition allocation to all liquid hydrocarbon transportation fuel producers to a liquid hydrocarbon fuel (LHF) framework based on the total production volume of motor gasoline blendstocks, diesel, jet fuel, and hydrocarbon gas liquids, as well as any functionally equivalent non-fossil hydrocarbon fuels or non-fossil hydrocarbon blending components, such as renewable diesel, renewable naphtha, and sustainable aviation fuel. The proposed LHF benchmark is technology-agnostic, aligned with the Program’s one-product one-benchmark approach, and provides consistent treatment of fossil and non-fossil transportation fuel producers.

The LHF benchmark would replace the existing complexity weighted barrel (CWB) benchmark that is currently used to allocate for petroleum refining. CWB is a process-based metric and is not calculated from production volumes of fuels. The calculation of total facility CWB for a refinery is primarily dependent on throughputs of process units scaled by CWB factors that are proportional to the energy intensity of each process unit.

Once effective, the Proposed Amendments would enable ready allocation for production of LHF. The Proposed Amendments provide emissions leakage protection for facilities in California already producing biogenic hydrocarbon transportation fuels. To enable a transition period for petroleum refineries, the Proposed Amendments do not immediately remove the CWB benchmark but limit the availability of the CWB benchmark only after vintage 2030 allowance allocation. For allocation from any given allowance budget, a facility may not receive allocation under both the CWB benchmark and the LHF benchmark. Facilities may transition from allocation under the CWB benchmark to allocation under the LHF benchmark before vintage 2031 allowance allocation but cannot at any time transition from allocation under the LHF benchmark back to allocation under the CWB benchmark.

As the transportation fuel production sector continues to evolve, long-term continuation of allocation under the CWB framework, which is not applicable to the production of non-fossil hydrocarbon fuels, would be inconsistent with the one-product one-benchmark principle. The proposed LHF allocation framework will enable common treatment of the production of conventional fossil fuels and the production of non-fossil hydrocarbon fuels when providing leakage protection for production of functionally equivalent fuels. As additional data and information about the production of biogenic hydrocarbon transportation fuels become available over time, staff will monitor the performance of the LHF benchmark, for example to ensure it is appropriately minimizing leakage risk for the production of specific biogenic fuels.

Multiple petroleum refineries in California have already converted to producing only biogenic fuels or are processing both biogenic and petroleum crude feedstocks at the same facility, sometimes in the same process units. The current Regulation is not well-positioned to allocate to these facilities, particularly fully converted biogenic facilities that produce hydrogen. These facilities are ineligible for energy-based allocation due to production of hydrogen or CWB. Since the inception of the Cap-and-Invest Program, CARB has calculated allocation to each facility pursuant to section 95891(a) by either the product-based method or the energy-based method, but not both.

Staff's proposal to add a product benchmark for LHF enables a common allocation approach for production of all functionally equivalent transportation fuels, whether produced by petroleum refining, by processing biogenic feedstocks, by co-processing of petroleum and biogenic feedstocks, or by other emerging fuel production methods. As detailed in Appendix E, staff developed the LHF benchmark using high-quality production and emissions data reported by covered facilities to MRR. Staff analyses indicate that allocation under the proposed LHF benchmark would provide a similar overall level of leakage risk protection to the petroleum refining sector as the current allocation under the CWB benchmark.

When allocating under the LHF benchmark, it will be important to ensure that all production volumes reported pursuant to MRR are appropriately associated with on-site production. Existing provisions and new proposed requirements in MRR will support appropriate reporting and verification of on-site production by liquid hydrocarbon transportation fuel producers, including continued reporting of total crude input, non-crude inputs, and products "produced elsewhere." Staff will use reported data to monitor the sector and ensure allowance allocation incents emissions-efficient production within California.

### c) Asphalt

The Proposed Amendments include a new benchmark for asphalt production to replace the existing complexity weighted barrel (CWB) allocation framework for asphalt production, effective with vintage 2031 allocation. Several petroleum refineries in California exclusively or primarily produce asphalt and not transportation fuels. Asphalt as a product is distinct from transportation fuels. Therefore, it is appropriate to benchmark asphalt production separately from liquid hydrocarbon fuel production. Aligned with implementation of the LHF benchmark, the Proposed Amendments enable allocation for production of asphalt with the adoption of the Proposed Amendments. For allocation from any given allowance budget, a facility may not receive allocation under both the CWB benchmark and the asphalt production benchmark. Facilities may transition from allocation under the CWB benchmark to allocation under the asphalt production benchmark before vintage 2031 allowance allocation but cannot at any time transition from allocation under the asphalt production benchmark back to allocation under the CWB benchmark.

### d) Crude Oil Extraction

The Proposed Amendments to allocate for crude oil extraction using a single benchmark for produced barrel of oil equivalent (BOE), eliminating the existing two-benchmark framework differentiated by production method starting with vintage year 2031. The BOE metric consolidates production of crude oil, associated gas, and dry gas into a single quantity. One barrel of crude oil produced is equal to one BOE, and produced associated gas and dry gas are converted to BOE at 5.8 MMBtu per BOE.

Currently, product-based allocation is provided for crude oil extraction using two benchmarks differentiated by production method:

- Thermal EOR Crude Oil Extraction benchmark: 0.0811 allowances/BOE
- Non-thermal Crude Oil Extraction benchmark: 0.0076 allowances/BOE

Thermal enhanced oil recovery (EOR) production is the process of injecting steam to increase the recovery of crude oil from a reservoir. Non-thermal extraction methods are defined as all extraction methods other than thermal methods. Non-thermal oil extraction encompasses both primary production, which relies upon the natural difference in pressure between the surface and underground reservoir, and a range of secondary and enhanced oil recovery techniques, such as water flooding, gas injection, and injection of pressurized liquids, that have a range of emissions intensities.

Upon adoption of the two-benchmark framework, staff committed to monitoring the evolution of the oil and gas sector in the context of climate policy (CARB 2011). In 2015, staff expressed concern that the two-benchmark framework, coupled with variations in production and reporting methods, made it difficult to ensure “consistent and equitable” allowance allocation for crude oil extraction (CARB 2015a). Staff experience continues to show that the complexity of oil field operations and geology contributes to difficulty in specifying MRR reporting and verification requirements that differentiate between thermal and non-thermal extraction, resulting in potentially inconsistent and overly broad reporting of thermal production.

As detailed in Appendix E, staff are proposing a new single benchmark for crude oil extraction using the high-quality verified data reported to MRR for the same data period used to calculate the thermal and non-thermal extraction benchmarks currently listed in Table 9-1. The recalculated benchmark for crude oil extraction eliminates the previous process-differentiated distinction, treating all crude oil extraction in the same manner. Consistent with benchmark development for all other sectors, the newly calculated single benchmark is calculated from data from California entities and reflects the GHG emissions-intensity of California production. Staff analysis indicates the proposed updated benchmark should provide a similar overall level of emissions leakage protection to the oil and gas extraction sector as the two-benchmark framework. This is expected as the new single benchmark is developed from data consistent with the data used to develop the existing non-thermal and thermal benchmarks.

Staff propose that the single benchmark for crude oil extraction be first utilized for vintage year 2031 allowance allocation. To enable a transition period for entities engaged in crude oil extraction, allowance allocation through vintage year 2030 would continue to use the existing two-benchmark framework.

#### e) Other

The following additional changes are proposed for product definitions and product-based benchmarks to support appropriate allowance allocation in a limited set of industrial sectors. These changes are proposed to be effective once the Proposed Amendments are in effect:

- A definition of “sweet whey powder” is added to the Regulation. “Sweet whey powder processing” is incorporated as part of the “deproteinized whey processing” activity in Table 9-1, and “sweet whey powder processing” is eligible for allocation is eligible under the same benchmark as “deproteinized whey processing.” Sweet whey powder is produced using similar production methods and a very similar amount of energy as deproteinized whey.
- Benchmarks for “Anhydrous Milkfat” have been added to Table 9-1 for dairy product producers (NAICS code 31151). Covered dairy producers started producing anhydrous milkfat after the current set of benchmarks for dairies were developed. Staff used the weighted average of anhydrous milkfat production and GHG emissions data for reporting years 2020, 2021, and 2022 to calculate benchmarks.
- The product definition for “Aseptic Tomato Paste” is amended to include both paste and puree. This amendment will allow facilities to report aseptic products with tomato soluble solids values below 24% but not less than 8% in the Aseptic Tomato Paste category.
- The product definitions for dehydrated products (dehydrated garlic, onion, chili pepper, spinach, and parsley) are amended to change the moisture concentrations to be on a mass basis instead of a volume basis. This change is necessary to harmonize with common practices of measuring moisture content by mass, not volume.
- The product definitions for butter and plasterboard are amended to clarify the final product eligible for product-based allocation.

- Staff are considering product-based benchmarks for additional industries. These changes would require the addition of new benchmarks to Table 9-1 and corresponding new product definitions. Any proposed amendments to add new benchmarks would be circulated for a 15-day comment period.

### 3. New Product Allocation

The Proposed Amendments add a new product allowance allocation mechanism to allocate to an industrial facility for its historical production of a newly added covered product once it has a newly added benchmark in the Regulation. This allowance allocation mechanism is needed to address the leakage risk for a facility that produced a product during a time that the product was not listed in Table 9-1 of the Regulation and was therefore not eligible for allocation. This new product allocation mechanism is only available upon the first instance of allowance allocation to a facility for the new product after the updated definition or benchmark is added to the Regulation by a formal rulemaking process.

The timing of production changes at industrial facilities is typically not synchronized with the timing of regulatory amendments to incorporate new benchmarks. For example, it can take multiple years for a facility to gather sufficient data to support incorporation of a product definition and appropriate benchmark into Table 9-1. In the interim period, such a facility can be exposed to emissions leakage risk associated with producing a product for which product-based allocation is not available. Additionally, a facility may modify a product for a variety of reasons (e.g., changing customer preferences) such that the new product falls outside of the existing Regulation product definition. This new mechanism is designed to address the leakage risk associated with producing a new product during the time from when a facility begins producing the product to when the facility can feasibly be allocated for producing that product under the Regulation.

The Proposed Amendments enable facility operators to report and verify historic production and to receive allocation for up to an additional five years of verified historical data. For example, to receive budget year 2028 new product allocation, an entity must submit by April 10, 2027, the annual production quantities of the new covered products for each year the entity requests to receive allocation. An entity may receive vintage 2028 new product allocation for up to five prior years: 2021 through 2025. A facility is then required to verify any eligible historical production data by the August 10 verification deadline. This verification of historical production data would be in addition to the required verification of the previous calendar year's production and emissions data.

### 4. Direct Allocation for Purchased Electricity in Industrial Allocation

The Proposed Amendments update the method by which value is allocated to industrial covered facilities to minimize the emissions leakage risk from Program costs embedded in purchased electricity starting with industrial allocation of vintage 2027 allowances. This type of allocation is referred to as "electricity purchases allocation." Currently, allowance allocation to industrial facilities accounts for on-site covered emissions and the emissions associated with purchased steam and excludes the emissions associated with sold electricity and steam. CARB did not include emissions associated with purchased electricity in initial product benchmarks because it was not clear how EDUs—especially the investor-owned utilities (IOU) regulated by the California Public Utilities Commission (CPUC)—would set industrial electricity rates under the Program (CARB 2010c). Instead, CARB allocated the allowances associated with those industrial purchased electricity emissions to EDUs. Since the calculation of initial energy- and product-based benchmarks during the 2010 rulemaking, CPUC has required all IOUs to pass through the cost of compliance with the Program to all ratepayers, including industrial facilities. Historically, SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012) required CPUC and the IOUs to return some of the IOU-allocated allowance value (from their allocated allowance auction proceeds) to industrial facilities. To date, CPUC has chosen to require IOUs to return this value to industrial facilities using product- and energy-based benchmarks comparable to CARB's benchmarks in the Cap-and-Trade Regulation.[28] While AB 1207 provides direction to CARB and the CPUC on residential climate credits, it does not require changes to allowance value provided to industrial facilities.

Pursuant to AB 32, CARB consults with the CPUC and CARB and CPUC have agreed that providing allowance value to minimize leakage risk should be handled directly by CARB. Having a single agency distribute this value will ensure that allocation is completed in a manner that is timely and consistent with the Regulation, and will ensure that any industrial covered facilities served by POUs and electrical cooperatives (co-op) are provided the same leakage protection as IOU customers. For emissions associated with electricity purchases by industrial customers that are not covered facilities, CARB will continue to provide allowance allocation to EDUs, and CPUC will continue to administer the distribution of value to non-covered facilities. CARB does not have a direct regulatory relationship with non-covered entities, and it is up to CPUC to determine how and when to distribute future allocated allowance value pursuant to the requirements of AB 1207.

In coordination with CARB staff, CPUC developed a process to manage the handoff of electricity purchases allocation to CARB for covered industrial facilities (CPUC 2021). The language states, "If and when the California Air Resources Board implements an adopted process to obtain sole responsibility for crediting large Electric-Intensive Trade-Exposed (EITE) facilities to minimize leakage associated with Cap-and-Invest Program costs in EITE facilities' purchased energy, the transition procedure contained in Appendix A to this decision shall be instituted."

Once CARB adopts direct electricity purchases allocation, CPUC will "direct IOUs to cease all initial assistance crediting" to covered industrial facilities. For the first two years of CARB implementation, CARB and CPUC will work together to calculate and distribute the true-up portion of the California Industry Assistance Credit. If this value is positive, CPUC will direct IOUs to provide bill credits for positive product-based year one and year two true-up allocations, which will continue existing CPUC practices. For any negative year one and year two true-up allocations, CARB would debit the true-up allocations from each facility's annual allocation.

[28] CPUC calls this type of crediting the California Industry Assistance Credit. More information can be found on the *California Industry Assistance Credit webpage*.

Transitioning this leakage prevention from CPUC to CARB would not significantly change the amount of value provided for leakage minimization. This transition would only affect how covered industrial facilities receive this value for leakage prevention. Currently, CPUC directs IOUs to provide an annual credit on electricity bills of eligible industrial facilities. Once transitioned to CARB, staff will directly provide annual allowance allocations that are similar in value to the CPUC credits. Additionally, CARB began reducing the amount of EDU allowance allocation in vintage 2021 by an amount corresponding to the increased direct allocation to eligible industrial facilities. With the reduced EDU allocation and CARB directly allocating the value to eligible industrial facilities, this direct allocation for electricity purchases is net neutral in terms of the total number of allocated allowances to both EDUs and industrial facilities.

To implement the electricity purchases allocation, the Proposed Amendments modify existing CARB industrial allocation methods to include initial and true-up electricity purchases allocation. The proposed method for calculating electricity purchases allocation closely follows the existing CPUC method, which mirrors the CARB approach for existing industrial allocation. Electricity purchases allocation is calculated by multiplying a facility’s reported production, the relevant electricity efficiency benchmark, a California electricity grid emissions factor, the relevant cap adjustment factor from Table 9-2 of the Regulation, and the relevant assistance factor from Table 8-1 of the Regulation. To implement this method, staff developed a suite of electricity efficiency benchmarks and an average California electricity grid emissions factor.

Staff calculate an average California electricity grid emissions factor benchmark to be 0.212 $MTCO_2e$/MWh dividing the total electricity grid emissions by the sum of in-state electricity generation and imported electricity and taking the weighted average of the annual grid emissions factor from 2017 to 2021. Staff used GHG emissions from the CARB GHG Emissions Inventory (CARB 2023c) and total in-state electricity generation and imported electricity CEC Energy Almanac (CEC 2023b). The 0.212 $MTCO_2e$/MWh value is used to reflect the embedded carbon costs in electricity purchases.

For electricity purchases allocation, CARB will use the same electricity efficiency benchmarks currently used by CPUC to determine California Industry Assistance Credits. In developing these benchmarks, staff followed the same practices of direct emissions benchmarks (CARB 2010c, CARB 2013a, and CARB 2013b). The electricity efficiency benchmarks were developed during 2016–2017 and updated in 2019 to reflect benchmarks that were newly added or modified in the Regulation. To ensure complementary allocation for direct emissions and emissions associated with electricity purchases, staff used the same MRR production data and data years (2008-2010) to determine electricity efficiency benchmarks as was used to calculate direct emissions benchmarks. Staff also used MRR data from these years for electricity purchase data reporting. In sectors with multiple products, staff performed detailed assessments to distribute each facility’s total energy usage among each product. In 2016, staff solicited additional information from industrial sectors with multiple products to request a breakdown of electricity usage per product. In cases where staff did not receive additional information from a facility, a proportional breakdown of electricity usage by production was used. The same overall methodology was applied when establishing electricity efficiency benchmarks as was used for direct emissions benchmarks. Electricity efficiency benchmarks were calculated at 90% of the sector average. If no facility could meet the benchmark, staff used the best-in-class approach and set the benchmark at the most efficient facility. Electricity efficiency benchmarks are added in a new column in Table 9-1 of the Regulation.

### 5. Manufacturing Decarbonization Incentive Allocation

Pursuant to the requirements of AB 1207 direction that the Program minimize emissions leakage risk and support the state's climate targets, the Proposed Amendments include a Manufacturing Decarbonization Incentive Allocation (Incentive Allocation) designed to both minimize emissions leakage risk and support decarbonization of California's manufacturing industry. California's manufacturing industry includes a diverse range of facilities, including cement plants, glass manufacturers, paper manufacturers, mining operations, metal processors, and food processors, among others. Combustion of fossil gas, other gaseous fossil fuels, and solid fossil fuels provide energy to meet three broad industry needs: electricity, steam, and process heat.

Decarbonizing manufacturers depends on displacing fossil fuel use with a mix of electrification, solar thermal heat, biomethane, low- or zero-carbon hydrogen, and other low-carbon fuels to provide energy for heat and reduce combustion emissions and reduction of process emissions through alternative materials and sequestration. The costs of some decarbonization options continue to be greater than allowance prices, contributing to an increased leakage risk for the manufacturing sector (CARB 2024f). To minimize this leakage risk, the Proposed Amendments include an allowance allocation mechanism for covered manufacturing facilities that incentivizes on-site decarbonization actions from 2027 through 2038. This allocation provision will incentivize a set of GHG emissions reduction strategies that can achieve GHG emissions reduction at facilities thereby decreasing compliance costs and reducing a facility's emissions leakage risk.

These Proposed Amendments align with the industrial strategies contained in the 2022 Scoping Plan Update (CARB 2022a) to achieve deep emissions reductions in this sector. The 12-year period for the Incentive Allocation aligns with newly proposed compliance periods, and is expected to result in substantial GHG emissions reduction, create a long-term market signal for the development and deployment of new technologies, and provide support for manufacturing facilities that lost federal funding opportunities such as those previously available under the Inflation Reduction Act.[29] The Proposed Amendments would provide annual allocation for eligible facilities and decarbonization strategies with a specified end date to provide certainty to industry and to reflect expected long-term reductions in abatement costs. This incentive allocation mechanism is also reflective of Board direction to prioritize policy discussions related to the transition of biomethane into hard-to-decarbonize sectors (CARB 2023d).

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[29] The 2019 Bipartisan Infrastructure Law and 2022 Inflation Reduction Act included large investments to decarbonize the manufacturing industry. These investments have largely been canceled by the current federal government.

### a) Facility Eligibility

The Proposed Amendments limit the eligibility for this decarbonization incentive program to California manufacturers, including cement, food processing, glass, metals, and other general stationary manufacturers. The Proposed Amendment do not provide incentive allocation allowances to energy industries such as liquid fuels providers, energy extraction, or electricity generation. Several programs cover the decarbonization of these sectors including Low Carbon Fuel Standard and Renewable Portfolio Standard.

### b) Mechanism

The Proposed Amendments allocate additional allowances for the Incentive Allocation to eligible facilities by adding a cap adjustment factor modifier (CAFM) to the product-based and energy-based allocation methodologies. In 2027, the CAFM begins at 1.2 for facilities with standard activities and 0.6 for facilities receiving the alternative cap adjustment factor, and it decreases each compliance period to maintain consistency with overall budget declines. Since the alternative cap adjustment factor is designed to decrease at half the rate of standard activities, staff choose a CAFM for alternative activities to be half of the standard CAFM. The exact amount of Incentive Allocation is unknown but could exceed a total of 40 million allowances over the proposed 12-year period. The staff Proposed Amendments use future vintage year allowances for Incentive Allocation in order to support needed emissions leakage risk protection and accelerate the deployment of low-carbon technologies in hard-to-decarbonize industrial sectors. In order to facilitate the use of Incentive Allocation allowances with a future vintage year for compliance in earlier years, the staff Proposed Amendments designate Incentive Allocation allowances as having true-up value.

### c) Eligible Project Types

The Proposed Amendments include several strategies to support deep manufacturing decarbonization with high on-going costs. The eligible strategies are: procurement of exempt biomass-derived fuels, electrification projects, low carbon hydrogen, renewable electricity generation or storage that reduces onsite fossil emissions, installation of solar or geothermal energy and procurement of electrified thermal energy. For biomethane procurement, the Proposed Amendments specify that eligible fuel purchased must be in addition to any historical procurement. For hydrogen procurement, the hydrogen must align with the Scoping Plan goals by meeting at least one of following requirements: (1) produced through a process that meets the requirements of 26 U.S.C. § 45V(b)(2)(A-D): Credit For Production of Clean Hydrogen, (2) produced from exempt biomass-derived feedstocks, or (3) produced from the electrolysis of water powered by electricity procured or produced from 100% renewable electricity. For electrification projects, electricity-powered equipment must be installed to replace or avoid onsite fossil fuel combustion. Examples of this include replacing a natural gas process heater with an electric heater, replacing a steam powered pump or blower with an electric unit, and installing an electric boiler or high temperature heat pump to offset steam production from a standard boiler or a newly installed facility with electrified equipment.

#### d) Application, Timing and Required Reporting

Each eligible facility will be required to submit an application by September 1, 2026, to receive Manufacturing Decarbonization Incentive Allocation for vintage year 2027. An eligible facility must continue to apply to receive allocation once for each compliance period on April 10 of the calendar year directly preceding the first year of a compliance period. The application will require the facility to describe how the decarbonization project meets the requirements for the Incentive Allocation, including the equipment or fuels that will be purchased, timeline, major milestones, cost estimates, and expected annual GHG emissions reduction.

To support timely use and effective oversight, each facility will have five years to spend the value of the Incentive Allocation received, and any allocation that remains unspent at the end of five years must be returned to CARB. The value will be calculated based on the average auction settlement price for the auctions held corresponding to the vintage of the allocated allowances. The Proposed Amendments also limit the use of value from Incentive Allocation allowances. In order to ensure the value of the allocation is used to reduce GHG emissions, the Proposed Amendments specify that allowance value may not be used for administrative or overhead costs. Similar to restrictions on use of value for utilities, the Incentive Allocation allowance value may also not be used for lobbying costs, employee bonuses, shareholder dividends, or costs, penalties, or activities mandated by any legal settlement, administrative enforcement action, or court order.

The year following the end of each compliance period, each facility that received Incentive Allocation will be required to report to CARB on the use of the allocated allowance value it received, including on the amount of value spent and remaining; assessment of project progress, including updated timelines, costs and milestones, as applicable; and estimated GHG emissions reduction achieved through the use of allocated allowance value.

### 6. Return of Allocation

The Proposed Amendments amend provisions on the required return of allocated allowances to clarify what events prompt a requirement to return allowance allocation to CARB. The Proposed Amendments clarify how an entity may return allowances to CARB. The Proposed Amendments clarify that the return of allocation provisions apply to all entities that receive industrial allocation and that entities must return allowance allocation for budget years or portions of budget years in which the entity did not incur a compliance obligation, whether that was because of a facility shut-down or because the facility dropped below the Program inclusion threshold.

## L. Biomass-derived fuels

The Cap-and-Trade Regulation accounts for and treats biomass-derived fuels differently than fossil-derived fuels. The Regulation has exemptions for compliance obligations from biomass-derived fuels, contingent on specific conditions being met. The Proposed Amendments clarify and revise provisions specifying the compliance obligation incurred by biomass-derived fuels and $CO_2$ emissions exemption requirements. The Proposed Amendments promote consistent understanding of Program requirements by biofuel producers and covered entities.

Throughout sections addressing biomass-derived fuels, the Proposed Amendments include the following modifications:

1. Process Emissions

Under the existing Regulation, combustion $CO_2$ emissions from certain biomass-derived fuels may be exempt from a compliance obligation if the fuel meets Program eligibility and reporting requirements. Existing biogenic $CO_2$ exemption provisions do not consistently exempt process $CO_2$ emissions, such as process $CO_2$ emitted during hydrogen production from biomethane feedstock. The Proposed Amendments address the use of biogenic fuels and feedstocks in a growing variety of applications and update the Regulation to consistently enable a potential exemption for $CO_2$ process emissions from biomass-derived fuels.

2. "Exempt biomass-derived fuels"

Section 95852.1 specifies requirements that biomass-derived fuels must meet in order for their associated $CO_2$ emissions to be exempt from a compliance obligation. In the existing Regulation, section 95852.1 is written as a double-negative (e.g., the fuels <u>aren't</u> exempt if they <u>don't</u> meet the listed requirements), including references to "non-exempt biomass" derived fuels. The Proposed Amendments restructure this section to an affirmative style (e.g., the fuels <u>are</u> exempt if they meet the following requirements), clarifying the intent of the section and providing certainty to biofuel producers and covered entities. Fuels meeting the requirements of section 95852.1 are defined as "exempt biomass-derived fuels," enabling such fuels to be clearly referred to throughout the Regulation and MRR. Proposed revisions also clarify that requirements in section 95852.1 must be met to qualify as an exempt biomass-derived fuel, but the Regulation does not prohibit the use or reporting of any biomass-derived fuel by covered entities.

3. Treatment of $CH_4$ and $N_2O$ from Combustion of Biomass-derived fuel

The Proposed Amendments clarify that $CH_4$ and $N_2O$ emissions from combustion of biomass-derived fuels incur a compliance obligation under the Program and are not eligible for exemption. Consistent with the current Regulation and Program implementation, only $CO_2$ emissions from biomass-derived fuels are eligible for exemption from incurring a compliance obligation.

The following sections provide more detail on specific amendments to the $CO_2$ emissions exemption requirements within the Regulation. The Proposed Amendments position the Program to provide consistent treatment to biomass-derived fuels as the sector experiences growth and innovation, while continuing to align with Program precedent, AB 32 directives, and State climate policy goals.

4. Other requirements for emission exemptions and emission reductions

Section 95852.1 specifies overarching requirements that all biomass-derived fuels must meet for emissions associated with their use to be exempt from incurring a compliance obligation. The Proposed Amendments move text from section 95852.1.1(b) to section 95852.1, clarifying that these requirements for an emissions exemption apply to all biomass-derived fuels. Staff propose further clarifying updates to indicate that the provisions address reductions or exemptions of emissions associated with use (i.e., combustion or consumption) of a biomass-derived fuel. This relocated and clarified prohibition on claiming an emissions exemption continues to prevent another entity from claiming biogenic $CO_2$ emissions from the use of the same biomass-derived fuel as exempt from a Program compliance obligation and also claiming emissions reductions from the same biomass-derived fuel in another program, or generation of offset credits associated with the GHG emissions resulting from the use of the exempt biomass-derived fuel.

### 1. Biomass-derived Fuel Requirements

Due to uncertainty expressed by covered entities, implementation of section 95852.1.1(a) has required substantial staff time to ensure the provisions are consistently implemented Clarifications are proposed throughout section 95852.1.1(a) based on implementation experience and aim to provide certainty for entities regarding eligibility for emissions exemptions and to reduce administrative burden.

Enabling covered entities to appropriately claim exempt biomethane is aligned with the 2022 Scoping Plan, which indicated that biomethane currently used in California's transportation section will largely be needed for hard-to-decarbonize sectors long-term (CARB 2022a).

1. Common carrier pipeline requirements

Under the current Regulation, covered entities may claim biomethane as an exempt biomass-derived fuel if matched to biomethane injected into a common carrier pipeline within the same calendar year. The Proposed Amendments specify that biomethane or biogas must be either directly delivered or injected into the common carrier pipeline in North America to be eligible as an exempt biomass-derived fuel. Staff have determined the reporting and verification needed to meet the exemption eligibility requirements are not feasible for biomethane sourced from outside of the common carrier pipeline in North America.

2. Three-year requirement

In the current Regulation, previous use of the imported biomethane during the prior three years is used to determine eligibility as an exempt biomass-derived fuel. The current text in section 95852.1.1(a) does not clearly indicate which three years are relevant. Consistent with current implementation, references to the previous "three years" are clarified to specify "the 36 months immediately before the first date of fuel delivery under contract."

3. Useful energy transfer

Depending on the source, the eligibility of biomethane to be an exempt biomass-derived fuel may be determined based on previous "useful energy transfer." Useful energy transfer is not clearly defined within the Regulation, and may not include all productive uses of biomethane. Section 95852.1.1(a) is modified to use previous "useful output" as the factor used to determine eligibility of biomethane as an exempt biomass-derived fuel. As defined, "useful output" is inclusive of both energy transfer and use as a chemical product feedstock, such as for a feedstock in hydrogen production. Acknowledgment of the potential for biomethane to be consumed both as a feedstock or for combustion is aligned with amendments to consistently treat combustion $CO_2$ emissions and process $CO_2$ emissions.

4. New eligibility options for biomethane as an exempt biomass-derived fuel

The Proposed Amendments add two new potential options for biomethane to be eligible for exemption from a compliance obligation.

If the end-use of biomethane from a given source transitions from the transportation sector within California to a stationary source covered by the Program, staff experience indicates that it may be difficult for the covered facility to acquire documentation to determine and verify eligibility of the fuel under existing provisions in section 95852.1.1(a). Under the current Regulation, for any current biomethane to be eligible for exemption, an entity would likely have to verifiably determine any use of the fuel in the three years prior to first use within California. Biomethane projects often pass through multiple project developers and owners, with the resulting biomethane contracted to varying distinct entities over time. These circumstances often make it extremely difficult for current project operators and contracting entities to determine previous use of biomethane from a specific source. For fuel with verifiable long-standing use in California (e.g. Low Carbon Fuel Standard or RPS), but without previous recognition within the Program, staff have determined it is appropriate to provide alternate exemption criteria.

The Proposed Amendments also provide an option for fuel from a source within a linked jurisdiction. Section 95852.1.1(a) is designed to limit emissions leakage associated with biomethane or biogas. However, the emissions leakage risk for a fuel source within a linked jurisdiction is minimized, as programs within linked jurisdictions impart a consistent carbon price.

## 2. List of Biomass-derived Fuels Eligible for Exemption

The Regulation specifies biomass-derived fuels for which resulting $CO_2$ emissions may be eligible for an exemption from a compliance obligation. Only fuels specifically listed in section 95852.2(a) are eligible to qualify as an exempt biomass-derived fuel. Staff are proposing modifications to the list of eligible fuels based on implementation experience and the growing variety of available biomass-derived fuels. Staff's proposed modifications improve clarity, consistent with the current Regulation and Program implementation, and update the list of eligible biomass-derived fuels to reflect the evolving biofuels sector. These updates will provide necessary certainty for entities, reduce the administrative burden of the Program, and address emissions from emergent biomass-derived fuels.

Specifically, the list of biomass-derived fuels eligible for an exemption in section 95852.2(a) is updated as follows:

- Add biogenic motor gasoline blendstocks and other biogenic fuels, aligned with the Program's current treatment of biomass-based diesel. Biogenic motor gasoline blendstocks and other biogenic fuels are co-products of renewable diesel production and biogenic motor gasoline blendstocks are now being produced for use in the California transportation sector.
- Add "other biogenic gases, including gases sold in compressed or liquefied forms" to the existing specification for biomethane and biogas, enabling consistent treatment of gaseous biogenic fuels under the Program. With the rapid evolution of the biofuels sector, a growing variety of biogenic gases may be used beyond the already existing uses of biomethane and biogas.

- Further specify eligibility of agricultural materials. Further specifying that agricultural waste and residues are eligible for exemption, and not all agricultural crops, is consistent with the Program’s approach to focus solid and gaseous biomass-derived fuel exemptions toward waste materials. All current uses of agricultural wastes that are eligible to qualify as an exempt biomass-derived fuel (e.g., wood waste from orchard prunings or almond hulls) are not impacted by this update. This update does not alter eligibility of currently reported uses of biomass-derived fuels by covered entities.
- Add biochar as exempt from a compliance obligation when used as a fuel, if it is derived from certain materials that are already eligible for exemption. Biochar is an emergent biomass-derived fuel that may be derived from woody wastes, such as orchard prunings or material removed for forest fire fuel reduction. Biochar fuel may meet the needs of some high-heat industrial processes (such as clinker production) unlike the woody biomass-derived fuels that are already eligible for exemption under the current Regulation.
- Remove the exemption for the fossil denaturant portion of fuel ethanol, enabled by corresponding updates in MRR which will ensure the portion of fossil denaturant within fuel ethanol is accurately reported. Consistent with the Program’s treatment of other supplied fossil fuels, this update ensures coverage of emissions from combustion of fossil fuels reported pursuant to MRR.
- To improve clarity for reporting and verification of transportation fuels pursuant to MRR, liquid biomass-derived transportation fuels eligible for exemption are moved to and consolidated in section 95852.2(a)(8). Treatment of renewable diesel, biodiesel, and the biogenic fraction of fuel ethanol under the Regulation is unchanged.

## M. Limited Emissions Exemptions

### 1. Electricity Generation During a State of Emergency

Extreme heat events can strain the State’s electricity infrastructure and overwhelm the State power supply. During an extreme heat event in 2022, the Governor proclaimed a State of Emergency to allow increased energy production (Newsom 2022). The Proposed Amendments would prevent a non-covered electricity generating facility from becoming a covered entity due to the emissions associated with an increase in energy production during a State of Emergency declared by the Governor. Under this change, the emissions during the State of Emergency would be excluded when evaluating whether an electricity generator exceeded the 25,000 $MTCO_2e$ inclusion threshold. Staff estimate that this new provision could potentially apply to approximately twenty facilities.

### 2. Fuel cells

Fuel cells are electrochemical devices that produce electricity directly from a fuel without any combustion. The lack of combustion allows these units to potentially operate at higher efficiencies than combustion generators and with zero or near-zero criteria air pollution. Some fuel cells operate directly on hydrogen and generate zero GHG emissions when operating;

however, most large stationary fuel cells currently operate on natural gas and generate GHG emissions when operating.

The Board directed staff in Resolution 18-51 to develop a methodology to exempt fuel cells through 2030 (CARB 2018c). Staff propose a limited exemption for fuel cell emissions, and as a result, the facilities that meet the criteria and will not have a compliance obligation through 2030.

Board Resolution 18-51 (CARB 2018c) includes the following direction on developing an exemption for emissions from fuel cells: (1) the fuel cell must be connected to existing natural gas infrastructure, and (2) there are demonstrated local air quality benefits. The Proposed Amendments include three requirements to support following this direction:

- A facility operator must demonstrate that its fuel cell installation did not require additional natural gas infrastructure outside of the facility boundary unless the new infrastructure is necessary for direct biomethane utilization.
- To demonstrate local air quality benefits, the Proposed Amendments require applicants to include a demonstration of the emission benefits from installation of its fuel cell units. This may be either be a description of the replacement of an existing on-site electricity generation unit with a cleaner fuel cell or engineering estimates showing that the fuel cell emissions are comparatively lower than the average grid emissions.
- A facility operator must apply for the exemption of fuel cell emissions by April 10 of calendar year “t” for which the exemption to apply in year “t-1.” The application must include, among other information, a demonstration that no additional natural gas infrastructure was needed for the fuel cell.

To remain exempt, a facility would need to continue to meet these requirements and continue reporting and verifying its data through MRR. Emissions associated with natural gas use at these facilities would be covered emissions for the upstream natural gas suppliers, which will pass through compliance costs for these emissions to customers not directly covered by the Program.

### 3. Vented and Fugitive Methane Emissions Associated with NGS

The Program assesses a compliance obligation for emitting one metric ton of covered $CH_4$ commensurate with the high GWP of methane, which is 25 times higher than the GWP of $CO_2$. Emissions of relatively small amounts of methane to the atmosphere have a disproportionate near-term impact on climate change, and CARB has prioritized reducing and accounting for methane and other high-GWP emissions.[30]

Due to the imperative to appropriately account for and incent reductions in methane emissions, the Proposed Amendments refine the exemption for vented and fugitive emissions from natural gas suppliers (NGS) associated transmission compression and distribution infrastructure

[30] See *Short-Lived Climate Pollutants | California Air Resources Board*

(section 95852.2(b)(3)). This exemption was originally included to prevent potential double-counting associated with NGS covered emissions (CARB 2011). In the current Regulation, the compliance obligation for natural gas suppliers is calculated as the emissions resulting from full combustion or oxidation of all fuel delivered to end users in California less the fuel delivered to covered entities. The Proposed Amendments modify the method for determining the compliance obligation for NGS to also subtract from fuel delivered to end users any fuel for which the natural gas supplier separately incurs a compliance obligation associated with blowdown, fugitive, or vented emissions reported pursuant to sections 95152(e) or 95152(i) of MRR. This change addresses potential double-counting associated with NGS covered emissions.

Staff propose to refine the exemption for vented and fugitive emissions from NGS associated infrastructure, aligning emissions exemptions for vented and fugitive methane emissions across all segments and facilities within the natural gas production and distribution sector. The Proposed Amendments maintain other equipment- and method-specific exemptions for vented and fugitive emissions within section 95852.2(b) of the Regulation, and an exemption is added for emissions associated with pipeline dig-ins, which is a source type unique to the natural gas distribution segment, as the current reporting methods may not be sufficiently accurate. Staff estimate that this proposed amendment will result in minimal increases to compliance obligations of NGS.

## N. Compliance Offset Program

The compliance offset program is an important cost-containment mechanism within the overall Cap-and-Invest program that achieves cost-effective emissions reductions while providing environmental and additional co-benefits. CARB-issued compliance offset credits represent a GHG emission reduction or GHG removal enhancement of one metric ton of carbon dioxide equivalent. Compliance offset credits are generated only from projects at non-capped sources that meet the requirements in one of the six Board-adopted protocols and the requirements of the Cap-and-Trade Regulation. Credits are issued for GHG emissions reduction or removals that meet the AB 32 criteria of being real, additional, quantifiable, permanent, verifiable, and enforceable by CARB. Credits may be used to meet a limited portion of a covered entity’s compliance obligation. In addition to providing GHG benefits, the compliance offset program has also expanded private investment in projects that support other State priorities for natural and working lands climate action and short-lived climate pollutant reductions.

The compliance offset program is designed to meet legislative criteria, to provide robust yet conservative quantification methods, and to include rigorous monitoring, reporting, and verification requirements. At a workshop in November of 2022, staff presented overarching background on the Compliance Offset Program (CARB 2022c).

The Proposed Amendments modify provisions in the compliance offset program to improve clarity, enhance the effectiveness of the Program, to incorporate the latest information and data, and to streamline implementation. The Proposed Amendments are summarized below.

SB 840 requires CARB to, no later than January 1, 2029, update all existing compliance offset protocols to ensure that the compliance offset protocols reflect the best available science after consideration of compliance offset protocols in other carbon markets, crediting mechanisms established under Article 6.4 of the Paris Agreement, academic research, and industry best practices (HSC §38562.3(b)). No updates to the Compliance Offset Protocols are being proposed in this rulemaking. CARB is in the process of acquiring additional resources as part of the legislative budgeting process beginning with the 2026-2027 fiscal year to implement these provisions.

AB 1207 also directs CARB to consider developing additional compliance offset protocols, including carbon dioxide removal. No new protocols are included in the Proposed Amendments; however, carbon dioxide removal has an important role in achieving the State's climate targets and the Proposed Amendments facilitate future incorporation of carbon dioxide removal as described in section O below.

### 1. Offset Project Listing

The Proposed Amendments clarify a registry's role in reviewing offset project listing information for completeness. The Proposed Amendments also clarify that a registry may not approve a listing until the Offset Project Operator and, if applicable, Authorized Project Designee have completed their registration in the Cap-and-Invest Program. Staff also propose amendments to clarify and streamline offset project renewal. Amendments modify and clarify the deadlines for the renewal listing information and streamline what must be submitted.

### 2. Offset Project Monitoring and Reporting

Using monitoring equipment that is updated and accurate for offset project monitoring is important to ensure GHG and carbon stock estimates that are consistent with the protocols. The Proposed Amendments clarify what constitutes monitoring equipment (e.g., software such as carbon stock growth models) and update the requirements for maintaining the monitoring equipment.

The existing Regulation does not provide needed clarity on project requirements during the period when credits are no longer being sought but monitoring and reporting is still required. Staff propose a new subsection to clearly identify reporting and verification requirements for sequestration projects during their post-crediting monitoring period. Unless terminated, a sequestration project is required to monitor, report, and verify for 100 years after their final offset credit issuance. A sequestration project in its monitoring period has the same general requirements as in its crediting period. It must continue to monitor and report annually, and it must undergo verification at least once every six years. A project enters its monitored period after its final crediting period, and it may enter its monitored period earlier if the Offset Project Operator notifies CARB and the offset project registry. The amendments related to the monitoring period do not add new reporting and verification requirements. Rather, these amendments add clarity and, in some cases, provide additional options for project developers to satisfy regulatory requirements

### 3. Offset Project Verification

The Proposed Amendments amend the verification requirements improve clarity and support effective verification. Over the past decade, CARB staff have worked with offset project registries, offset project operators, and offset project verifiers to ensure offset credits are subjected to robust third-party verification. Informed by past practice and experience, CARB staff are proposing a number of improvements to offset project verification meant to (1) clarify verification requirements for specific project types to enhance efficacy of verification and reduce confusion and delays in offset project verification, (2) enhance the existing verification requirements to provide additional certainty that environmental benefits are being realized, including evaluating the extent to which planned management activities for providing Direct Environmental Benefits to the State of California (DEBS) that were previously approved are actually implemented, and (3) streamline or remove verification provisions that provided limited benefit to the offset program.

### 4. Offset Credit Invalidation

The Proposed Amendments remove references to invalidation of early action credits since the 8-year invalidation window for all early action credits is now closed.

The Proposed Amendments change the invalidation period start date to the date ARB offset credits are issued. Currently the invalidation period begins on the final day of the reporting period, so an appreciable portion of the invalidation period may have passed by the time offset credits are issued. This is particularly true for U.S. Forest projects, which may defer verification for up to six years. Staff find this change necessary as the date that verification is considered complete is the date when ARB Offset Credits are issued.

The Proposed Amendments also clarify that the invalidation period is reduced only after CARB's approval of the subsequent verification. The Proposed Amendments add a requirement that for the invalidation period to be reduced, not only must the verification body differ between the first and second verifications but also that all verification team members must differ. This would prevent a verification body from hiring or using the same verifiers used by the previous (different) verification body to verify the project a second time and have that second verification reduce the invalidation period. The invalidation period can be reduced by a subsequent verification only if the two offset verification teams are independent of each other. The proposed amendment ensures that there is no overlap between the verification teams.

### 5. Offset Project Registries and Registry Offset Credits

CARB staff are proposing updates, which will improve the timeliness and effectiveness of future program implementation, to current requirements for offset project registries and registry offset credits. The goal of these changes is to improve clarity on requirements for offset project registries and to also improve CARB's access to offset project data and reports that are currently available to the offset project registries. The Proposed Amendments include clarifying changes to timelines for reports and appeals when an Offset Project Registry denies the issuance of registry offset credit, clarifying changes for Offset Project Registry responsibilities for reviewing verifications, additional requirements for submittal of the detailed verification report and Offset Project Data Reports to CARB, and streamlining of some reporting requirement for long-standing offset project registries.

## 6. Additional Amendments

Staff propose several additional amendments to clarify and streamline implementation. Amendments include adding and modifying several timelines and deadlines that have caused confusion or modifying timelines in ways that will improve program implementation. These include adding a deadline for submitting a request for issuance of ARB offset credits after registry offset credit issuance; extension to a one-year deadline for cancelling registry offset credits after ARB offset credit issuance if CARB is conducting an invalidation investigation; and removing the 45-day timeline for CARB staff review.

Proposed Amendments provide a process for an Authorized Project Designee to remove itself from a project instead of needing the Offset Project Operator to remove it. In recognition that sometimes business relationships deteriorate, both Offset Project Operator and Authorized Project Designee are now empowered to end the Regulation's recognition of their relationship in operating a given offset project.

Proposed Amendments move regulatory text prohibiting a Livestock offset project from receiving both CARB offset credits and Low Carbon Fuel Standard credits within the same reporting period into subarticle 13 from its current location in section 95852.1.1(b).

Staff also propose several amendments related to forest provisions of the regulation. Amendments aim to provide additional information to ensure accurate post-disturbance data is used to determine compensation from both the forest project owner, for the intentional reversals and from the Forest Buffer Account for unintentional reversals. The Proposed Amendments also clarify what documentation needs to be provided for reversals and clarifies timelines and deadlines.

Proposed Amendments include new requirements for Offset Project Operator's selling real property that contains a sequestration offset project. The Offset Project Operator is required to disclose specific information to the new forest owner regarding the project and the associated legal obligations, financial obligations, and liability prior to the sale or transfer of the property or any portion of a registered offset project. The disclosures and information will help ensure that the party acquiring the property is informed and understands the commitments of the project and the limitations on the land. These requirements also ensure that new project owners understand their ongoing and long-term monitoring, reporting, and verification requirements for the offset project and the consequences if the project terminates because the reporting and verification or other requirements are not met. Proposed Amendments also clarify that for offset credit issuance to forest projects on Alaska Native Corporation lands, the risk rating for public or tribal lands will be used to determine the contribution to the Forest Buffer Account.

Proposed Amendments update the conflict-of-interest provisions for providing offset verification services to sequestration offset project to enable verification bodies to hire and retain personnel with needed expertise while maintaining an acceptable conflict-of-interest level when providing verification services for sequestration projects.

Proposed Amendments update and add several definitions used in the compliance offset program.

## O. CCUS Provisions

SB 905 directs CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon capture, utilization, and sequestration (CCUS) and carbon dioxide removal (CDR) projects and technology. In anticipation of implementation of SB 905, staff created new section 95852.3 to address the treatment of utilized or sequestered carbon dioxide in the Program. Additionally, provisions in section 95852(g), which address a potential reduction in a compliance obligation for $CO_2$ suppliers and existing regulatory text on potential future reduction of compliance obligations from CCUS, have been moved to new section 95852.3. This proposed change provides a consolidated space for current and future CCUS provisions in the Program. The Proposed Amendments also remove the word geologic from the description of sequestration to include potential future carbon sequestration methodologies that are not geological sequestration and remove an exemption from a compliance obligation for exported $CO_2$. The 2010 FSOR indicates the exemption for exported $CO_2$ was included primarily because the potential $CO_2$ emissions would occur out of state. Currently, exempting or not exempting exported $CO_2$ would have very little impact on covered emissions. Removing this exemption is consistent with CARB's point of regulation for carbon dioxide suppliers, at the point source of emission creation.

Consistent with the existing Regulation, to be eligible for a reduction in compliance obligation, any utilization or sequestration will need to meet Board-approved quantification methods and will need to be incorporated into the Cap-and-Trade Regulation in a future rulemaking. The quantification methodology will include a permanence standard of at least 100 years (100 years would be equivalent to the existing Carbon Capture and Sequestration Protocol for the Low-Carbon Fuel Standard). The Proposed Amendments also specify that any methodology will need to be consistent with SB 905. CCUS projects will also need to meet any applicable requirements developed under the SB 905 implementation process.

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

## Global Changes throughout the Proposed Amendments

The proposed global changes in this section are minor updates that do not alter current requirements under the Regulation.

**Updated Program Name**

### Purpose

The Proposed Amendments change "Cap-and-Trade" to "Cap-and-Invest" throughout the Regulation.

### Rationale

These changes are necessary because the Legislature specified its intent in AB 1207 that the name of the Program be changed from Cap-and-Trade to Cap-and-Invest and the Proposed Amendments are implementing this desired change. Changing the Program name to Cap-and-Invest recognizes the Program's cost-effective, market-based approach to reduce emissions of greenhouse gases and the direct and indirect investments of generated proceeds into programs and projects that further reduce GHG emissions, strengthen the economy, improve public health and the environment, and provide meaningful benefits to the most disadvantaged communities and low-income communities and households (HSC section 38501(b)(5)).

## Section Renumbering

### Purpose

Many subsections of the Proposed Amendments are renumbered to reflect the addition or deletion of other subsections. These subsection numbering changes are denoted in subsection headings throughout this document. A subsection heading denoted as "new" reflects how it is numbered under the Proposed Amendments.

### Rationale

Section numbering changes are non-substantive and are needed to maintain consistent organization of regulatory requirements under the Proposed Amendments.

## Tracking System Name Change

### Purpose

The Proposed Amendments change "Compliance Instrument Tracking System Service (CITSS)" to "Tracking System" to remove the application-specific reference.

### Rationale

The "Compliance Instrument Tracking System Service (CITSS)" could be replaced by a new application. The term "Tracking System" is now used as the generic reference to a Cap-and-Invest Program tracking system or registry application in order to encompass any new application.

## Updating References to CARB

### Purpose

In many places throughout the Regulation, references to "ARB" are updated to refer to "CARB," which is the agency's preferred acronym.

### Rationale

These changes are necessary to reflect the preferred and commonplace abbreviation of the California Air Resources Board. These changes are non-substantive and do not affect any regulatory requirements.

## Section 95802. Definitions.

### <u>“Adjusted Clinker and Mineral Additives Produced” Definition [new]</u>

#### Purpose

“Adjusted Clinker and Mineral Additives Produced” definition is modified to include baghouse dust and grind aids for the purpose of product-based industrial allowance allocation.

#### Rationale

This modification is necessary to add clarity on the types of materials covered by this definition. Baghouse dust and grind aids are materials currently blended by cement plants with clinker and other mineral additives to make cement. This change ensures that they are included in the definition and support product-based industrial allowance allocation for these materials as part of cement.

### <u>“Allocated allowance value,” “allowance value,” or “value” Definition [new]</u>

#### Purpose

A new definition “allocated allowance value,” “allowance value,” or “value” is added to the Regulation for the purpose of allowance allocation to electrical distribution utilities, natural gas suppliers and university and public service facilities.

#### Rationale

This new definition is proposed to clarify the meaning of allocated allowance value, as used to describe requirements relating to the value derived from allowances allocated to electrical distribution utilities, natural gas suppliers, universities, and public service facilities. For electrical distribution utilities and natural gas suppliers, this term is defined to include both the proceeds received from consigning allocated allowances to auction, and any interest accrued from unspent auction proceeds, because interest is monetary value derived from the free allocation of allowances and is therefore subject to the spending requirements on allocated allowance value in sections 95892 and 95893. Additionally, for natural gas suppliers and publicly owned electric utilities and electrical cooperatives, this includes the value of allowances that are deposited for compliance. For universities and public service facilities, the monetary value of allocated allowances is calculated pursuant to the existing method prescribed in section 95891(d)(3)(A), because universities and public service facilities do not consign allocated allowances to auction and thus there are no allocated allowance auction proceeds or corresponding interest earned on allocated allowance proceeds. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

### <u>“Aseptic tomato paste” Definition</u>

#### Purpose

“Aseptic tomato paste” definition is modified to include both tomato paste and tomato puree for the purpose of product-based industrial allowance allocation.

**Rationale**

This amendment is required to enable operators of tomato processing facilities to report aseptic paste products for product-based industrial allowance allocation with tomato soluble solids that are below the 24% threshold defined in the tomato paste definition but above the 8% threshold defined in the tomato puree definition.

**<u>"Asphalt Production" Definition [new]</u>**

**Purpose**

A new definition for "Asphalt Production" is added for the purpose of product-based industrial allowance allocation. Asphalt production is defined as the processing required to produce asphalt and road oils from petroleum and unfinished petroleum derivatives. The modification of asphalt produced from offsite petroleum refining, such as by blending or asphalt blowing, is not considered asphalt production.

**Rationale**

The definition of "asphalt production" is added because a new product-based benchmark for this activity is being added to Table 9-1. This definition is necessary to differentiate asphalt from other petroleum products that will receive allowance allocation under a proposed liquid hydrocarbon fuel product-based allocation benchmark in section 95891.

**<u>"Auction System" Definition [new]</u>**

**Purpose**

A new definition "Auction System" is added to refer to the application that facilitates the auctioning and sale of compliance instruments by CARB.

**Rationale**

This new definition is necessary because "auction system" is a new term being used in Proposed Amendments to section 95834 and Appendix D, and defining that term provides clarity as to the application of those proposed provisions.

**<u>"Biorefinery" Definition [new]</u>**

**Purpose**

A new definition for "Biorefinery" is added to define this new term added in the Proposed Amendments.

**Rationale**

The current Regulation includes a definition and requirements for petroleum refineries but lacks a definition for biorefineries. This proposed amendment is needed to align with changes to MRR and is part of a suite of amendments to extend applicable regulatory requirements for petroleum refineries to biorefineries.

## “Butter” Definition

### Purpose

The definition of “Butter” is amended to align with the MRR definition of “Butter” for the purpose of product-based industrial allowance allocation.

### Rationale

This change is necessary to ensure that the production of Butter that is reported under MRR is for the same product for which allowances are allocated under the Cap-and-Trade Regulation’s product-based industrial allocation benchmark.

## “CAISO Markets” Definition [new]

### Purpose

A new definition of “CAISO Markets” is added to define this new term added in these Proposed Amendments to support coverage of emissions from the electricity sector and measures to address emissions leakage.

### Rationale

The addition of CAISO Markets is necessary to reflect that all current and future CAISO-operated electricity markets are included in the definitions of “CAISO Markets Purchaser” and “electricity importers,” and are included in CAISO Markets Outstanding Emissions. This change is in alignment with proposed changes to MRR sections 95102(a) and 95111(h).

## “CAISO Markets Outstanding Emissions” Definition [new]

### Purpose

A new definition of “CAISO Markets Outstanding Emissions” is added to define this new term added in these Proposed Amendments to support coverage of emissions from the electricity sector and measures to address emissions leakage.

### Rationale

This new definition is needed to reflect the development of the EDAM, a new CAISO market. The current Regulation refers to Outstanding Emissions from CAISO Markets as “EIM Outstanding Emissions.” The proposed change is to replace this term with “CAISO Market Outstanding Emissions” to reflect the expansion of CAISO’s markets and alignment with proposed changes to MRR sections 95102(a) and 95111(h).

## “CAISO Markets Purchaser” or “CAISO Purchaser” Definition [new]

### Purpose

A new definition of “CAISO Markets Purchaser” or “CAISO Purchaser” is added to define this new term added in these Proposed Amendments to support coverage of emissions from the electricity sector and measures to address emissions leakage.

**Rationale**

This new definition is needed to reflect the development of EDAM, a new CAISO market. The Regulation previously referred to an Electrical Distribution Utility that purchases electricity from CAISO Markets as an “EIM Purchaser,” this term is now replaced by “CAISO Markets Purchaser” or “CAISO Purchaser” to reflect the expansion of CAISO’s markets and alignment with proposed changes to MRR sections 95102 (a) and 95111(h).

**“CAISO Markets Purchaser Emissions” Definition [new]**

**Purpose**

A new definition of “CAISO Markets Purchaser Emissions” is added to define this new term added in these Proposed Amendments to support coverage of emissions from the electricity sector and measures to address emissions leakage.

**Rationale**

This new definition is needed to reflect the development of EDAM, a new CAISO market. The Regulation previously referred to emissions associated with electricity purchases from CAISO Markets as “EIM Purchaser Emissions,” and this term is now replaced by “CAISO Markets Purchaser Emissions” to reflect the expansion of CAISO’s markets and alignment with changes to MRR sections 95102(a) and 95111(h).

**“CAISO Scheduling Coordinator” Definition [new]**

**Purpose**

A new definition of “CAISO Scheduling Coordinator” is added to define this new term added in these Proposed Amendments to support coverage of emissions from the electricity sector and measures to address emissions leakage.

**Rationale**

This addition is necessary to include Participating Resource Scheduling Coordinators for EDAM as well as WEIM. The definition of CAISO Scheduling Coordinator includes scheduling coordinators in both WEIM and EDAM and replaces the prior term “EIM Participating Resource Scheduling Coordinator.” This change is aligned with proposed changes to MRR sections 95102(a) and 95111(h).

**“Cement” Definition**

**Purpose**

The definition of “Cement” is modified to specify and broaden the types of cement that are included in the definition and eligible for product-based industrial allowance allocation. The Proposed Amendments incorporate by reference the following performance standards by the American Society for Testing and Materials (ASTM): Portland cement (defined by the ASTM C 150), hydraulic blended cement (defined by the ASTM C 595), and performance-based standard (defined by ASTM C1157).

**Rationale**

This definition change is needed to broaden the definition of cement to include conventional cement types and cements that use low-carbon materials to support product-based industrial allowance allocation to provide emissions leakage risk protection for all cement that meets equivalent performance standards. The incorporated ASTM performance standards are widely used by the industry for conventional cement and enable allowance allocation to ensure that non-conventional low-carbon cements that satisfy equivalent performance standards are treated equally as conventional cement.

**"Conservative" Definition**

**Purpose**

The definition of “Conservative” is modified to clarify this overarching principle for compliance offset projects as it relates to the calculation or measurement of GHG emissions reduction or GHG removal enhancements.

**Rationale**

The updated definition of “Conservative” clarifies that the principle of conservativeness applies to assumptions, emission factors, and methodologies for the measurement and calculation of carbon stocks in both the baseline and during the life of the project, and that when assessing the GHG removal or reduction benefits of an offset project the program will err on the side of understating, not overstating, the environmental benefits/outcomes. It also clarifies that how the principle of conservatism is applied depends upon the reason and context in which the net GHG emission reductions and removal enhancements are calculated.

**“Correctable Error” Definition [new]**

**Purpose**

A new definition of “Correctable error” is added to clarify what constitutes a correctable error in the context of compliance offset project verification.

**Rationale**

A new definition of “Correctable error” is needed to better delineate what constitutes such correctable errors in section 95977.1(b)(3)(M). Offset project operators and verifiers have expressed some confusion as to what constitutes a correctible error, and so this new definition is necessary to make correctable error rules more transparent in the Regulation and to ensure that associated provisions in section 95977.1 (b)(3)(M) are better understood and enforced.

## <u>“Crude Oil Extraction” Definition [new]</u>

### Purpose

A new definition of “Crude Oil Extraction” is added to define this term in the Proposed Amendments for the purpose of product-based industrial allowance allocation.

### Rationale

The new definition of “Crude Oil Extraction” is necessary to reflect the addition of a new row in Table 9-1 for the activity “crude oil extraction” with benchmark units “barrel of oil equivalent” (BOE) for the purpose of product-based industrial allowance allocation. This new definition is needed to allocate for crude oil extraction using a single benchmark for produced barrel of oil equivalent (BOE) starting in 2031.

## <u>“Dehydrated chili pepper,” “Dehydrated garlic,” “Dehydrated onion,” “Dehydrated parsley,” and “Dehydrated spinach” Definitions</u>

### Purpose

Definitions for “Dehydrated chili pepper,” “Dehydrated garlic,” “Dehydrated onion,” “Dehydrated parsley,” and “Dehydrated spinach” are modified to amend the moisture concentrations from a volume metric to a mass metric for the purpose of product-based industrial allowance allocation.

### Rationale

These changes are necessary to harmonize with common practices of measuring these products’ moisture content by mass, not volume, for product-based industrial allowance allocation.

## <u>“Electricity Importers” Definition</u>

### Purpose

The definition of “Electricity Importers” is amended to reflect the development of a new CAISO market, EDAM by removing references to “EIM” and “EIM Participating Resource Scheduling Coordinator” and replacing them with “CAISO Markets” and “CAISO Scheduling Coordinator,” respectively, and to align the Regulation with Proposed Amendments to MRR section 95102(a).

### Rationale

These changes are necessary to include imports of electricity that will occur in the Extended Day-Ahead Market in the definition of “Electricity Importers” and to align with changes to MRR sections 95102(a), 95111(b)(2)(E)(1), and 95111(h) to reflect both CAISO Markets.

## <u>“Energy Imbalance Market” or “EIM” Definition [deleted]</u>

### Purpose

The definition of “Energy Imbalance Market” or “EIM” is removed as it has been replaced with a new term and is no longer needed.

**Rationale**

This removal is necessary to standardize references to the Energy Imbalance Market and to align with proposed changes to MRR section 95102(a). This definition is replaced by the term “Western Energy Imbalance Market” or “WEIM.”

**“Energy Imbalance Market Outstanding Emissions” or “EIM Outstanding Emissions” Definition [deleted]**

**Purpose**

The definition of “Energy Imbalance Market Outstanding Emissions” or “EIM Outstanding Emissions” is removed as it has been replaced with a new term and is no longer needed.

**Rationale**

This removal is necessary to reflect changes in CAISO markets, including the development of EDAM, to mitigate leakage risk from electricity imports that will occur via EDAM, and to align with corresponding changes in MRR. The definition is replaced by the term “CAISO Markets Outstanding Emissions.”

**“Energy Imbalance Market Participating Resource Scheduling Coordinator” or “EIM Participating Resource Scheduling Coordinator” Definition [deleted]**

**Purpose**

The definition of “Energy Imbalance Market Participating Resource Scheduling Coordinator” or “EIM Participating Resource Scheduling Coordinator” is removed as it has been replaced with a new term and is no longer needed.

**Rationale**

This removal is necessary to reflect changes in CAISO markets, including the development of EDAM, to mitigate leakage risk from electricity imports that will occur via EDAM, and to align with corresponding changes in MRR. The definition is replaced by the term “CAISO Scheduling Coordinator.”

**“Energy Imbalance Market Purchaser” or “EIM Purchaser” Definition [deleted]**

**Purpose**

The definition of “Energy Imbalance Market Purchaser” or “EIM Purchaser” is removed as it has been replaced with a new term and is no longer needed.

**Rationale**

This removal is necessary to reflect changes in CAISO markets, including the development of EDAM, to mitigate leakage risk from electricity imports that will occur via EDAM, and to align with corresponding changes in MRR. The definition is replaced by the term "CAISO Markets Purchaser."

### "Energy Imbalance Market Purchaser Emissions" or "EIM Purchaser Emissions" Definition [deleted]

**Purpose**

The definition of "Energy Imbalance Market Purchaser Emissions" or "EIM Purchaser Emissions" is removed as it has been replaced with a new term and is no longer needed.

**Rationale**

This removal is necessary to reflect changes in CAISO markets, including the development of EDAM, to mitigate leakage risk from electricity imports that will occur via EDAM, and to align with corresponding changes in MRR. The definition is replaced by the term "CAISO Markets Purchaser."

### "Enterer" Definition

**Purpose**

The definition of "Enterer" is revised to include an entity that imports into California a transportation fuel, other than LPG or biomass-derived LPG, that is listed in Table 2-5 of MRR, rather than an entity that imports into California motor vehicle fuel, diesel fuel, ethanol, biodiesel, non-exempt biomass-derived fuel, or renewable fuel.

**Rationale**

This amendment is needed to align the "Enterer" definition with changes in MRR. The revised definition now includes importers of new transportation fuels, such as biomass-derived RBOB. Importers of LPG and biomass-derived LPG are excluded from the "Enterer" definition because they are classified in MRR as suppliers of natural gas liquids (NGL) and are subject to reporting requirements in MRR section 95122, rather than suppliers of transportation fuels (including enterers) that are subject to reporting requirements in MRR section 95121. This revision also explicitly names MRR in the last sentence to be clearer as to which "regulation" an enterer is reporting under.

### "Extended Day-Ahead Market" or "EDAM" Definition [new]

**Purpose**

A new definition of "Extended Day-Ahead Market" or "EDAM" has been added to define this new term added in these Proposed Amendments to support coverage of emissions from the electricity sector and measures to address emissions leakage.

**Rationale**

This new definition is necessary to reflect the development of a new CAISO Market, EDAM, and to support mitigation of emissions leakage risk from electricity imports occurring via EDAM by aligning the definition with that in MRR.

**<u>“Finished Cement” Definition [new]</u>**

**Purpose**

A new definition of “Finished Cement” is added” to define this new term added in these Proposed Amendments as a product definition used to calculate the amount of product-based industrial allowance allocation for cement pursuant to section 95891.

**Rationale**

This new definition of “Finished Cement” is necessary to recognize alternative low-carbon clinker and supplementary cementitious materials as products eligible for product-based allocation under the product-based industrial allocation cement manufacturing benchmark pursuant to section 95891.

**<u>“Fuel ethanol” Definition [new]</u>**

**Purpose**

A new definition of “Fuel ethanol” is added to define this new term added in these Proposed Amendments and to define fuel ethanol aligned with the definition within MRR.

**Rationale**

Fuel ethanol is currently not defined in the Regulation, which is different than other biogenic fuels, such as renewable diesel and biodiesel, which are defined. A definition for fuel ethanol is needed to provide clarity to regulated entities and ensure consistent treatment under MRR and the Cap-and-Trade Regulation.

**<u>“Fuel supplier” Definition</u>**

**Purpose**

The definition of “fuel supplier” is revised to streamline language and incorporate suppliers of biomass-derived natural gas or natural gas liquids.

**Rationale**

This change is needed to align the definition for “fuel suppliers” with the categories of entities that currently report, or are being proposed to report, fuel supplier data under sections 95121 and 95122 of MRR, including suppliers of biomass-derived fuels.

**<u>“Imported Electricity” Definition</u>**

**Purpose**

The definition of “Imported Electricity” is revised to reflect the development of a new CAISO market.

**Rationale**

The definition of “Imported Electricity” is amended to reflect the development of a new CAISO market, EDAM, and to align the Regulation with Proposed Amendments to MRR section 95102(a).

**“Importer of Fuel” Definition**

**Purpose**

The definition of “Importer of Fuel” is revised to remove language applying the definition to importers of LPG, compressed natural gas (CNG), and liquefied natural gas (LNG).

**Rationale**

This change is necessary to align the Cap-and-Invest Program with Proposed Amendments to MRR, which is updating the point of regulation for imported LPG and simplifying how the point of regulation is defined for imported LPG, CNG, and LNG. This change impacts GHG emissions reporting, ensuring more complete and consistent reporting for these emissions. It does not change the coverage of the emissions from this sector under the Cap-and-Invest Program.

**“Incident Management Team” Definition [new]**

**Purpose**

The definition of “Incident Management Team” is added to define this new term added in these Proposed Amendments to complement the new definition of “Response to Wildfire” for the purpose of compliance offsets.

**Rationale**

This definition is necessary because the “response to wildfire” definition indicates that documentation from an incident management team is required to be submitted if a reversal occurs. This definition clarifies what an incident management team is and what they do.

**“Incident Action Plan” Definition [new]**

**Purpose**

The definition of “Incident Action Plan” is added to define this new term added in the Proposed Amendments to complement the new definition of “Response to Wildfire” for the purpose of compliance offsets.

**Rationale**

This definition is necessary because the “response to wildfire” definition indicates that documentation from an incident management team is required to be submitted if a reversal occurs. This definition clarifies what an incident action plan is and what it contains.

**“Intentional Reversal” Definition**

**Purpose**

The definition of “Intentional Reversal” is amended to simplify and clarify what is considered an intentional reversal for the purpose of compliance offsets.

**Rationale**

In the definition, the text “except as provided below” is deleted and replaced with a more direct definition of unintentional reversal for clarity. Because this definition is for “Intentional Reversal,” text about intentional backburn being unintentional is removed and included under the “Response to Wildfire” definition. The language about two consecutive Adverse Offset Verification Statements after the end of the crediting period resulting in an intentional reversal is deleted as it was not clear what the verification or compensation requirements would be. The Adverse Offset Verification language is proposed to be modified so that projects that don’t receive a Positive Offset Verification Statement over 15 consecutive reporting periods in the monitoring period, will be terminated under 95977(d)(1).

### “Intrastate Pipeline” Definition

**Purpose**

The definition for “Intrastate Pipeline” is revised to exclude facility operators that both (1) report facility GHG emissions under MRR and (2) own or operate an interconnection pipeline that connects their facility with an interstate pipeline, as well as facility operators that jointly own or operate an interconnection pipeline to an interstate pipeline with other facilities.

**Rationale**

This change is necessary to align the Cap-and-Trade Regulation with proposed MRR amendments to avoid double-counting of emissions and to ensure that GHG emissions from the natural gas distributed from an intrastate pipeline is reported under MRR by the operator of the pipeline, unless the operator is also reporting the same emissions from their interconnected facility or facilities.

### “Liquid Hydrocarbon Fuel” Definition [new]

**Purpose**

A new definition of “Liquid Hydrocarbon Fuel” is added to define this new term added in these Proposed Amendments for the purpose of product-based industrial allocation.

**Rationale**

Proposed Amendments to Table 9-1 add an entry for “liquid hydrocarbon fuel.” This corresponding new definition of “Liquid Hydrocarbon Fuel” is needed to define the term to facilitate product-based industrial allowance allocation.

### “Operational Control” Definition

**Purpose**

The definition of “Operational Control” is amended to remove language constraining the definition to facilities and to specify that the second sentence of the definition applies to facility operators. The second sentence specifies who has operational control of a facility when there is shared authority.

**Rationale**

These changes are needed to align with proposed changes to MRR and to specify that the definition of operational control applies to all entities, including suppliers, rather than just facilities. These revisions are also needed to clarify who has operational control in cases where authority is shared among multiple facility operators.

## “Petroleum Refinery” Definition

**Purpose**

The definition for “Petroleum refinery” is amended to remove the term “refinery” as a synonym for petroleum refinery.

**Rationale**

This change is needed for consistency with other Proposed Amendments to the Cap-and-Trade Regulation and MRR that extend applicable requirements for petroleum refineries to biorefineries.

## “Physical Address” Definition

**Purpose**

A new definition “Physical Address” is added where physical address means an address of physical presence where an employee, director, officer, or owner conducts day-to-day business activities. A physical address for an entity reflects the primary location at which its business operations occur. A numbered box at a post office assigned to a person or organization is not a physical address.

**Rationale**

The new definition for “Physical Address” is necessary to support both Proposed Amendments to VAE registration eligibility and implementation of current registration requirements. Registered entities must demonstrate an acceptable physical address where day-to-day business operations primarily occur. Staff must be able to verify the accuracy of the registration information submitted against external and independent sources, incorporation and governance documents, lease agreements, utility bills, and other business filings with the Secretary of State.

## “Pipeline Quality Natural Gas” Definition

**Purpose**

The definition of “Pipeline Quality Natural Gas” is amended to use an annual weighted average for the determining if the defining characteristics are met.

**Rationale**

This change is needed to align the Cap-and-Trade Regulation with Proposed Amendments defining “Pipeline Quality Natural Gas” in MRR. This amendment is needed to provide certainty to regulated entities regarding compliance obligations for pipeline quality natural gas.

**“Plasterboard” Definition**

**Purpose**

The definition of “Plasterboard” is amended to clarify that trimmings are not included in reportable “plasterboard" for the purpose of product-based industrial allocation.

**Rationale**

During the final stage of plasterboard manufacturing, the excess material is trimmed or cut from the ends of the board and is either disposed of or reintroduced into the manufacturing process. The Cap-and-Trade Regulation product-based industrial allocation benchmark was developed based on saleable plasterboard; trimmings that are removed during the final step are not considered saleable and are therefore removed from the definition.

**“Price Ceiling Unit” Definition**

**Purpose**

The definition of “Price Ceiling Unit” is amended to specify where moneys generated from the sale of Price Ceiling Units will be deposited and to remove language related the purpose of and requirements for expenditures of those moneys.

**Rationale**

These changes are necessary to reflect changes to where the moneys from sale of price ceiling units are deposited and how they will be used, as prescribed in AB 1207. In AB 1207, the Legislature established the new California Climate Mitigation Fund for all moneys generated by Price Ceiling Sales. The Legislature also specified it will determine future appropriation of those moneys for the purposes detailed in HSC section 38562(c)(2)(A)(ii)(II). Previous to the direction in AB 1207, the moneys were to be used only to buy reductions on a ton per ton basis to ensure environmental integrity of the Program.

**“Rack” Definition**

**Purpose**

The definition of “Rack” is amended to specify that rack includes delivery mechanisms from both petroleum refineries and biorefineries.

**Rationale**

This change is necessary to broaden the definition of “Rack.” The current regulation defines “Rack” as a mechanism for delivering transportation fuel or diesel from a refinery. With the revised definition, the source of the transportation fuel includes both petroleum refinery and biorefinery, which aligns with proposed definitional changes in these regulatory amendments and the proposed changes to MRR.

## “Renewable Liquid Fuels” Definition [deleted]

### Purpose

The definition of “Renewable Liquid Fuels” is deleted to remove a term that is not needed.

### Rationale

The definition of renewable liquid fuels is deleted because the term is not used in the Regulation, and it is therefore unnecessary to include in the Regulation.

## “Renewed Crediting Period” Definition [new]

### Purpose

A new definition of “Renewed Crediting Period” is added to clarify the term for the purpose of compliance offsets.

### Rationale

The change is necessary to clearly identify regulatory concepts for the purpose of compliance offsets. The current Regulation defines both “Crediting Period” and “Initial Crediting Period” but not “Renewed Crediting Period.” With the addition of new definition of “Renewed Crediting Period,” both types of Crediting Periods are now clearly defined.

## “Response to Wildfire” Definition [new]

### Purpose

A new definition of “Response to Wildfire” is added to better align terminology with existing fire policy and wildfire management strategies and tactics that incorporate ignitions for the purpose of compliance offsets. The current Regulation applies the term “intentional back burn” in the context of forest offset project reversals, and that term is replaced by the more general term “Response to Wildfire.”

### Rationale

The new definition of “Response to Wildfire” is necessary to more directly align regulatory requirements with wildfire management terminology and policy. The term encompasses a number of actions, including the pre-existing term intentional backburn but also recognizes additional wildfire response actions such as establishment of fire lines and firebreaks that may be necessary. The actions included in the “Response to Wildfire” definition and the impact of those actions on carbon stocks are unplanned and are part of the suite of losses to GHG emissions reduction and GHG removal enhancements that are attributed to a wildfire’s impact; thus, to the extent any such actions result in a reversal of carbon stocks, properly documented actions can be considered an unintentional reversal, while undocumented or unauthorized actions will be considered intentional. Those actions and their consequences must be verifiably documented as part of that response to wildfire, as outlined in the definition.

**<u>"Salvage Harvest" Definition [new]</u>**

### Purpose

A new definition "Salvage Harvest" is added to support new salvage harvest related provisions in section 95983 and similar existing provisions in applicable Compliance Offset Protocols in which salvage harvest is not defined.

### Rationale

The definition of "Salvage Harvest" from the 2015 U.S. Forests Compliance Offset Protocol (CARB 2015b), which is aligned with corresponding provisions on salvage treatments in the California Forest Practice Rules (14 CCR Section 913.3(b), 933.3(b), 953.3(b)), is necessary to add to the Regulation because new provisions in section 95983(c)(3) require any logs delivered to a mill because of salvage treatments to be included in the reversal estimate when an unintentional reversal occurs. The definition is thus needed for clarity.

**<u>"Supplementary Cementitious Materials" Definition</u>**

### Purpose

A new definition of "Supplementary Cementitious Materials" is added to clarify types of mineral additives added to make cement and improve its properties through hydraulic or pozzolanic activity for the purpose of product-based industrial allowance allocation.

### Rationale

This new definition of "Supplementary Cementitious Materials" is necessary to support including supplementary cementitious materials as a type of material within the definition of "finished cement" for the purpose of product-based industrial allowance allocation.

**<u>"Supplier" Definition</u>**

### Purpose

The definition of "supplier" is revised to be inclusive of suppliers of biomass-derived fuels and suppliers of imported LPG and to also apply to multiple entities held under common ownership or common control.

### Rationale

The proposed change to the definition of "supplier" is needed to align with proposed changes to MRR. This amendment is needed to clarify that the definition of supplier is inclusive of suppliers of biomass-derived fuels to ensure that GHG emissions from biomass-derived equivalents of CARBOB are accounted for under the Program. This change is one of several changes being made to align with changes to MRR to better capture GHG emissions from novel and low carbon fuels. It is also needed to reflect changes to the MRR point of regulation for suppliers of imported LPG to better capture emissions from this sector and to clarify that suppliers can be an entity or multiple entities under common control or common ownership.

**<u>“Sweet Whey Powder” Definition [new]</u>**

### Purpose

A new definition of “Sweet whey powder” is added to enable product-based industrial allowance allocation under a new dairy sector product benchmark.

### Rationale

The definition of “Sweet whey powder” is necessary to define a new covered industrial product, corresponding with a new dairy sector product benchmark, manufactured by one or more covered entities and is modified from a definition from the U.S. Dairy Export Council (U.S. Dairy Export Council 2018).

**<u>“Tracking System” Definition</u>**

### Purpose

The definition “Tracking System” is modified to remove the application-specific reference to the Compliance Instrument Tracking System Service, or CITSS.

### Rationale

This definition is modified because “Compliance Instrument Tracking System Service (CITSS)” is an application-specific name. CITSS could be replaced by a new application, which would then not comport with the current regulatory language should it remain. The term “Tracking System” is the generic term used to refer to a cap-and-invest tracking system or registry application.

**<u>“Unintentional Reversal” Definition</u>**

### Purpose

This definition of “Unintentional Reversal” is modified to simplify and clarify what is considered an unintentional reversal for the purpose of compliance offsets.

### Rationale

Changes to the definition of “Unintentional Reversal” include removing language regarding the comparison of actual and baseline standing dead carbon stock estimates for project termination determinations as this does not define an unintentional reversal. The modification also incorporates language that was previously in the definition of “Intentional Reversal,” which identifies prescribed fire and intentional backburn actions that can lead to an unintentional reversal. Prescribed fire and intentional backburn actions are now captured under the new and broader term “Response to Wildfire.” A reversal due to an authorized response to wildfire or due to an authorized (usually permitted) implementation of a prescribed fire is also considered an unintentional reversal. Authorization or permitting by the legally authorized state or local government agency must be documented for any carbon stock losses related to prescribed fire to be considered an unintentional reversal.

**“Useful Output” Definition [new]**

**Purpose**

A new definition “Useful Output” is added to define this term in the Proposed Amendments to support use of the term in the revised section 95852.1.1(a)(2).

**Rationale**

Amendments throughout section 95852.1.1(a)(2) incorporate the term “useful output,” which is used to concisely refer to energy production or use as a feedstock for chemical production but does not include fuel venting or destruction.

**“Western Energy Imbalance Market” or “WEIM” Definition**

**Purpose**

The definition of “Western Energy Imbalance Market” or “WEIM” is added to define this new term added in these Proposed Amendments and replace the definition of “Energy Imbalance Market,” which is deleted.

**Rationale**

The term “Energy Imbalance Market” is replaced by “Western Energy Imbalance Market” throughout the Regulation to reflect the full name of the CAISO market and to align terminology with MRR.

**“Wildland Fire Decision Support System” or “WFDSS” Definition [new]**

**Purpose**

The definition of “Wildland Fire Decision Support System” is added to complement the new definition of “Response to Wildfire” which specifically references use of documentation from the Wildland Fire Decision Support System (WFDSS) as one option for how to justify the course of action taken for the purpose of compliance offsets.

**Rationale**

This definition is necessary because the “response to wildfire” definition indicates that documentation from the Wildland Fire Decision Support System (WFDSS) is one of three forms of documentation used to substantiate that the actions taken properly meet the definition of “response to wildfire.” This definition is necessary to clarify what the WFDSS is for the purpose of compliance offsets.

## Section 95803. Submittal of Required Information.

**95803(c) [new]**

**Purpose**

This subsection is added to specify that entities must submit information to the Executive Officer electronically, unless otherwise specified in the Regulation.

**Rationale**

Various sections of the Regulation require entities to submit information to the Executive Officer. This subsection is necessary to specify that the default format for submitting information is electronically to the Executive Officer, unless the Regulation specifies an alternate format or submittal requirements. Electronic submittal of information is generally more cost-effective for entities than submitting hard copies, and this proposed change helps streamline CARB’s review and digital tracking of submitted information.

## Section 95811. Covered Entities.

**<u>95811(a)(10)</u>**

**Purpose**

The proposed amendment adds the operator of a biorefining facility as a covered entity.

**Rationale**

The current Regulation specifically covers petroleum refineries in its own subsection. This change is needed to align with other Proposed Amendments to clarify that biorefineries are covered entities in the same category as petroleum refineries so that all types of refineries are treated consistently under the Regulation.

**<u>95811(e)(3)</u>**

**Purpose**

The proposed amendment updates the covered entity that incurs a compliance obligation for GHG emissions from imported liquefied petroleum gas (LPG) to the entity that supplies imported LPG into California, as defined under MRR.

**Rationale**

This change is needed to align the Cap-and-Invest Program with corresponding changes to MRR, which updates the point of regulation for imported LPG to an LPG receiving facility that supplies imported fossil or biomass-derived LPG at its facility for distribution in California. This change, in conjunction with corresponding changes to MRR, ensures more complete and consistent reporting of GHG emissions associated with imported LPG. It does not change the coverage of the emissions from this sector under the Cap-and-Invest Program.

## Section 95812. Inclusion Thresholds for Covered Entities.

**<u>95812(c)(1)(A) [new]</u>**

**Purpose**

New section 95812(c)(1)(A) is added to provide a limited exemption of emissions from fossil fuel powered fuel cells that meet specified requirements during 2025 through 2030. This section specifies that such emissions will not count toward the inclusion threshold of section 95812(c)(1) during this period.

**Rationale**

To support and incentivize emissions reductions via the installation of large fuel cells, staff propose an exemption for facilities that would not be covered facilities "but for" their investment in efficient fuel cells. Fuel cells that meet the requirements of this section are determined to reduce local air pollutant emissions, benefiting the facility with efficient power generation and the local community with improved air quality. The timing allows for new fuel cells to apply in the year after their first operation, and if eligible, to be exempt starting in the first year of operation.

**<u>95812(c)(1)(A)1. [new]</u>**

**Purpose**

New section 95812(c)(1)(A)1. is added to require that a facility with a fuel cell unit must electronically submit information to the Executive Officer by April 10 of year "t" for the limited exemption of emissions from fuel cells to be applied starting in year "t-1." For example, a facility must apply by April 10, 2027, report and verify emissions and electricity generation for data year 2026, and, if eligible, the facility will not have a compliance obligation starting with 2026 emissions.

**Rationale**

This section is needed to provide a deadline to apply for the limited fuel cell emissions exemption.

**<u>95812(c)(1)(A)1.a. [new]</u>**

**Purpose**

New section 95812(c)(1)(A)1.a. is added to require that an application for the limited fuel cell emissions exemption must include a description demonstrating that the installation of the fuel cell did not require additional natural gas infrastructure beyond the facility boundary. New infrastructure is allowed if it is necessary for direct biomethane utilization.

**Rationale**

This section is needed to provide data to ensure that the facility meets the requirement of Board Resolution 18-51 (CARB 2018c) that installation of the fuel cell did not require additional natural gas infrastructure.

**<u>95812(c)(1)(A)1.b. [new]</u>**

**Purpose**

New section 95812(c)(1)(A)1.b. is added to require the applicant for the limited fuel cell emissions exemption to demonstrate local air quality benefits. Demonstration of this requirement may include a description of a replacement of an on-site electricity generation unit with a cleaner fuel cell or engineering estimates of decreased grid emissions due to installation of the fuel cell.

**Rationale**

This section is needed to meet Board Resolution 18-51 (CARB 2018c), which recommends that fuel cell emissions be exempt where there are demonstrated local air quality benefits.

**95812(c)(1)(A)1.c. [new]**

**Purpose**

New section 95812(c)(1)(A)1.c. is added to require the applicant for the limited fuel cell emissions exemption to attest under penalty of perjury that the information submitted is true, accurate, and complete.

**Rationale**

This section is needed to ensure that data and information submitted for the determination of eligibility for the limited fuel cell emissions exemption is based on data that is true, accurate, and complete and to provide enforcement authority in cases where data may not be true, accurate, or complete.

**95812(c)(2)(A)1. [new]**

**Purpose**

This section specifies that emissions from an electricity generating facility during a state of emergency that is declared by the Governor are excluded from the facility’s annual covered emissions when comparing to the applicability threshold.

**Rationale**

Extreme heat events can strain the state’s electricity infrastructure and overwhelm the state power supply. During a recent extreme heat event in September 2022, the Governor proclaimed a State of Emergency to allow increased energy production (Newsom 2022). The addition of this section would prevent a non-covered electricity generating facility from becoming a covered entity due to energy production during a State of Emergency declared by the Governor. Under this change, the emissions during the State of Emergency would be excluded when evaluating whether an electricity generator exceeded the 25,000 $MTCO_2e$ inclusion threshold.

## Section 95814. Voluntarily Associated Entities and Other Registered Participants.

**95814(a)(5)**

**Purpose**

The proposed change replaces the word 'located' with the phrase 'able to demonstrate their location' in reference to a VAE applicant's requirement to have a United States presence.

**Rationale**

The change is necessary to support the addition of new subsections 95814(a)(5)(A)-(B). VAE applicants must be located in the United States and staff are proposing changes such that these entities and individuals be able to demonstrate their physical location in the United States. The change in phrasing is necessary for clarification. Under the proposed change, a VAE is eligible to register only if it can demonstrate that it meets all of the U.S. location-based factors in a manner that can be verified through business documents and staff's due diligence checks.

**95814(a)(5)(A) [new]**

**Purpose**

Staff are proposing to add new registration requirements and eligibility factors to determine an applicant's U.S. presence, whereby the new subsection requires that the entity must employ an individual with authority to make legally binding decisions on behalf of the entity that is located in the United States, and maintain at least two account representatives, each with a U.S. physical address for business activities and a U.S. primary residence. This requirement will become effective January 1, 2028.

An individual who registers as a VAE and elects to serve in a combined representative role pursuant to section 95830(c)(4) must comply with the United States location requirement and is not required to have another individual designated as an account representative and is not required to have two account representatives in the United States.

**Rationale**

The addition of this subsection is needed to guarantee that the key individuals responsible for an entity's trade and market activities are present within the United States and can be reached as needed. Specifically, this updated provision is intended to ensure that an entity registering as a VAE has a business presence in the United States and subject to the enforcement jurisdiction of CARB in the event of any violation of the Regulation. This added requirement supports market monitoring work, including outreach and compliance assistance efforts.

Staff find that this new requirement would only impact approximately 10 currently registered VAE accounts. The effective date of January 1, 2028, gives affected registered entities lead time to employ and designate additional U.S. based director/officers and account representatives in order to comply with this new VAE registration requirement.

As individuals who register for a VAE account for themselves are not required to maintain a second representative on their registry account, the requirement to have a second U.S. based representative does not apply to them and therefore the individual is not required to employ two account representatives located in the United States. However, with the proposed amendment, the individual must be physically located themselves in the United States that will be determined by their primary residence and physical address as defined in section 95802.

**95814(a)(5)(B) [new]**

**Purpose**

This new subsection mandates that a voluntarily associated entity (VAE) must have a physical address as defined in section 95802, must demonstrably conduct business in the United States, and must have a file or identification number from a United States Secretary of State, if applicable, to be considered "located in the United States."

**Rationale**

This change clarifies registration requirements and what is meant by "located in the United States." The Regulation already requires that a VAE must be located in the United States, but staff are aware through program implementation that information alone about an entity's incorporation is insufficient for demonstrating business presence and location in the United States. Therefore, the Proposed Amendments require that the entity meet the new definition proposed for "physical address," and entities would need to demonstrate that other location-based factors are met as specified in sections 95802 and 95814(a)(5)(A), including employing a director/officer in the U.S., establishing at least U.S.-based account representatives, and submitting registration information such as the entity's rental agreement, a utility bill, or a county/state/federal business filing for verification.

Additionally, an entity would need to submit confirmation of an active status with a Secretary of State within the United States, if applicable. This confirmation enables CARB to verify that an entity applying for the Program has obtained its own legal status and demonstrated an acceptable business standing to conduct business with an incorporating state agency with which it has filed.

## Section 95821. Compliance Instruments Issued by Approved Programs.

**95821 (c)**

**Purpose**

This section is amended to remove the reference to section 95990 about the recognition of early action offset credits and replaces it with reference to the definition of the "Program for Recognition of Early Action Offset Credits."

**Rationale**

This amendment is necessary to align with the proposed deletion of section 95990.

## Section 95830. Registration with ARB.

**95830(c)**

### Purpose

This section is modified to clarify that a registrant must maintain up-to-date registration information by submitting updated information to CARB within 30 days of a change as specified in section 95830(e).

### Rationale

The proposed change improves clarity of the regulatory requirements and enables staff to monitor and track the most up-to-date information for market participants. Registered entities are already required to file registration changes and corporate disclosures within 30 days or upon request by staff. The proposed change clarifies an existing requirement and identifies clear deadlines for registered entities to submit updated registration information to CARB in a timely manner.

**95830(c)(1)(A)**

### Purpose

The language “date and place of incorporation, and a business number assigned by the incorporating agency” is deleted to eliminate redundancy and confusion given the proposed changes to subsection 95830(c)(1)(D).

### Rationale

This change is necessary because the language that describes the incorporation information that must be submitted to CARB has been modified in subsection 95830(c)(1)(D), making the language here redundant.

**95830(c)(1)(B)**

### Purpose

This amendment requires an entity to submit additional contact information for an entity’s directors, officers, and any other individual with authority to make legally binding decisions on behalf of the entity. This amendment also requires an entity to submit to CARB during its registration process additional contact information for partners with over 10% control over the partnership, including any individual or entity doing business as the limited partner or general partner. The additional contact information that must be provided is a phone number, physical work address, mailing address, and an email address.

### Rationale

Currently, contact information is disclosed through the Corporate Associations and Structure Form #3 that is used to apply for an entity account or to submit updated information for an existing account. CARB already requires the disclosure of contact information, including the names and addresses for directors, officers, and owners, and the proposed change would specify which addresses are required as well as require other contact information to be provided to CARB such as the individual's phone number and email address.

The amendment is necessary to clarify the type of contact information that must be submitted to CARB to improve consistent information collection, and to allow CARB staff to properly notify and communicate with key owners, directors, and officers of the entity. Any individual with legally binding authority for an entity is viewed as an individual authorized to represent the entity, designate additional representatives to serve on the tracking system account, make decisions to bind the entity, and has responsibility to ensure the entity complies with Program requirements. In the event that staff are unable to reach the authorized account representatives by phone or email, staff must be able to reach an individual with legally binding authority for the entity to identify new account representatives and to authorize any other needed changes to the account. The proposed change provides staff additional means for contacting individuals with legally binding authority for an entity.

**95830(c)(1)(D)**

### Purpose

The Proposed Amendment removes the current requirement in section 95830(c)(1)(D) to submit the business number assigned to the entity by the California Secretary of State. The Proposed Amendment instead requires the submission of the "date and place of business registration with a Secretary of State within the United States" in updated section 95830(c)(1)(D). The Proposed Amendment clarifies that registering entities must provide the date and place of business registration with the California Secretary of State or another Secretary of State within the Unites States. The amendments also add the option to provide an "active file number" associated with a Secretary of State business status certificate or registration instead of an "ID number" assigned by a Secretary of State, if applicable. The Proposed Amendment requires that an entity that is unable to incorporate with a U.S. Secretary of State must submit a Certificate of Status or a Certificate of Good Standing from a U.S. Secretary of State. The Proposed Amendment adds an exemption from this requirement for certain entities that must register in the Cap-and-Invest Program and are foreign, government-operated, or tribe-operated.

### Rationale

This change is necessary to clarify entity registration requirements. The option to provide an "active file number" is added as there are Secretary of State agencies that assign a file number instead of an ID number to a registering business.

The Proposed Amendments help Staff to verify that entities, such as voluntarily associated entities, are located in the United States and are authorized by a Secretary of State to do business. An active filing with a Secretary of State supports CARB registration verification practices that ensure an entity's conformance with the Program. These changes are aligned with the requirements in new subsection 95814(a)(5)(B), which clarifies the criteria used to determine if an entity maintains a physical address in the United States. An active business registration with a Secretary of State means that an entity has a valid active legal business that is authorized to do business in the United States. This information is necessary for CARB staff to confirm that a registering entity, particularly a voluntarily associated entity that is not required to participate in the Cap-and-Invest Program, is in compliance with all state regulations, including the filing of necessary reports and payment of fees. Additionally, these changes are necessary because the Secretary of State business filing may be used when necessary to contact the Agent for Service of Process, and to take appropriate enforcement action if the entity is found to be in violation of the Regulation.

For entities that are unable to incorporate and prevented from organizing and filing as a corporation under state or federal law, a separate requirement is added to provide a Certificate of Status or Certificate of Good Standing from a Secretary of State within the United States. Staff are aware that there are some entities that are exempt from business registration with a Secretary of State, but perhaps chartered under existing federal law. To address this, the Proposed Amendments specify that if an entity is able to submit a Certificate of Good Standing or Certificate of Status filed with a Secretary of State, then such an entity would be eligible to meet this registration requirement.

With these Proposed Amendments, Staff seek to ensure that covered entities and opt-in covered entities are able to comply with registration requirements, including entities that are foreign or government-operated and therefore not able to register with a Secretary of State. The Proposed Amendments clarify that these types of entities that must register for the Cap-and-Invest Program because they have a compliance obligation based on verified covered emissions are not required to submit the business registration information that is otherwise required by this subsection.

**95830(c)(1)(J)**

### Purpose

This Proposed Amendment requires a registered entity to disclose not only employees with knowledge of or access to market position information of the entity, but all individuals with knowledge of or access to market position information of the entity. For each applicable individual, the name, a phone number, physical address of workplace, an email address, and employer must be disclosed to CARB—this information is needed to identify and support the new proposed CAG trigger for individuals with shared roles. Government employees of local, state, or federal regulatory agencies with the ability to gain knowledge of or access to the information pursuant to any applicable local, state, or federal rules, orders, or decisions, are not required to be disclosed.

### Rationale

For purposes of disclosure requirements for individuals with knowledge of or access to market position information of an entity, the Proposed Amendments remove any potential distinction between directors/officers, employees, advisors, and consultants, and clarify that these types of individuals must continue to be disclosed to CARB when they have knowledge of or access to the market position information of the entity. The Proposed Amendments support market oversight and ability for CARB staff to identify and track new corporate association groups. This new registration information directly relates to the proposed changes in section 95833(a)(6) if two or more entities employ or contract with the same individual with shared roles, such that the individual has knowledge of or access to those entities' market position information. Individuals with knowledge of or access to market position information for two or more registered entities have the ability to coordinate activities for these accounts, so such individuals must be disclosed and monitored. Entities would be required to disclose this information about each individual and their employer regardless of the individual's type of affiliation to the entity or the individual's employment status as a paid or unpaid employee, volunteer, or consultant/advisor position. The additional requirement to disclose the individual's employer supports Staff's ability to conduct market oversight and examine corporate associations. A contracted individual may have the potential for knowledge of a second entity's market position through their employer. Additionally, an individual may have multiple jobs whereby they work for multiple entities subject to the Cap-and-Invest Program. It is, therefore, important for Staff to understand the affiliation of each individual with knowledge of market position information.

Staff have added requirements that exclude disclosure of any employee of local, state, or federal regulatory agencies who has the ability to gain knowledge of or access to the market position information pursuant to applicable rules, orders, or decisions. CARB staff do not expect such individuals to pose risks to market integrity or have ability to coordinate behaviors and activities for market participants.

**95830(c)(1)(K)**

**Purpose**

The word 'and' is removed from the end of this subarticle.

**Rationale**

This change is necessary as additional subarticles are being added after 95830(c)(1)(L).

**95830(c)(1)(L)**

**Purpose**

Ther period at the end of this subarticle is replaced with a semicolon.

**Rationale**

This change is necessary as additional subarticles are being added after 95830(c)(1)(L).

**95830(c)(1)(M) [new]**

**Purpose**

New section 95830(c)(1)(M) requires registrants to disclose the use of any commodity pool operator (CPO) or commodity trading advisor (CTA) that is actively registered with the National Futures Association (NFA). The proposed requirement includes disclosure of names and contact information, including phone numbers and email addresses of registered CPOs and CTAs.

**Rationale**

The proposed new disclosure requirements support market oversight and ability for CARB staff to identify and track new corporate association group control measures. This new registration information directly relates to the proposed changes in section 95833(a)(7) if two or more entities use a common CPO/CTA. CPO/CTA relationships are not required to be disclosed under the current Regulation, but this new proposed section requires that these relationships be disclosed going forward to support new proposed criteria for determining direct corporate associations among entities. These additional disclosure requirements are important to prevent coordinated market activities, to strengthen market oversight, and to mitigate concerns related to potential beneficial holding of compliance instruments.

**95830(c)(1)(N) [new]**

**Purpose**

This new subsection identifies the supplemental registration information that must be submitted to CARB to determine whether the entity's participation in the Program conforms with the Regulation. This requirement applies to every voluntarily associated entity (VAE) applying for the Program, except for VAEs registering exclusively to hold offset credits that elects to use the corporate disclosure exemption pursuant to section 95833(c)(2). For covered entities, this supplemental registration information would be required only upon request by the Executive Officer on an as needed case-by-case basis.

The amendments clarify that applicants and registrants need to submit founding and governing agreements, fund prospectus, loan or financing documents, a description of planned market activities, the amount of initial capital funds, the projected capital the entity plans to invest in the carbon market, the source of funds, a statement of compliance with section 95921(f), and other documentation as needed by CARB to determine eligibility and conformance with the Regulation. Other documentation not listed can be requested by the Executive Officer as needed on a case-by-case basis to ensure that the entity conforms with various requirements of the Program. Supplemental information submitted to CARB must be accompanied with a signed and dated attestation from an account representative.

**Rationale**

The Proposed Amendments require that supplemental registration information be submitted to CARB so staff can verify information and conduct due diligence checks. Based on implementation experience, staff recognize that governance documents, contractual agreements, prospectus documents, and other financial materials and statements about investment plans are necessary for staff to review to understand the corporate structure and associations disclosed by market participants, and that this information is necessary for effective market monitoring and oversight. The proposed changes allow CARB staff to collect material information about an entity's expected market behavior and activities.

For Voluntarily Associated Entities (VAEs), staff are proposing a similar existing disclosure exemption for VAE applicants that intend to only hold offset credits. These subset of VAEs are already exempt from disclosing corporate associations since holding and purchase limits do not apply to offsets.

For covered entities, staff are proposing that in specific instances where further documentation or updated documentation are necessary to verify that registration information is complete and accurate, then the Executive Officer, on a case-by-case basis and dependent on the specific circumstances at hand, will request further information to be provided to CARB within 30 days. Since covered entities are required to register for a tracking system account in order to procure and hold compliance instruments to meet their compliance obligation, staff propose to only evaluate supplemental registration information when necessary to confirm an entity or applicant's conformance with requirements of the Cap-and-Invest Program.

Entities must ensure that all supplemental information submitted to CARB is true, accurate, and complete. Thus, the proposed changes require an entity to submit information accompanied with an attestation from an account representative.

**95830(c)(9) [new]**

### Purpose

This new subsection describes a change to registration requirements whereby all signatures and dates on registration documents or attestations must be recent and no more than 180 days old. If any signatures or dates on registration forms or attestations are older than 180 days, then the submission will be rejected.

### Rationale

This new section is necessary to clarify existing registration practices and implementation processes. This change ensures that registration information, and supplemental materials submitted to CARB are up to date. This proposed requirement is similar to the 3-month timing allowed for an individual to submit a bank statement for user registration as described in section 95834(b)(4)(A).

The account registration process often requires staff to follow-up with applicants regarding information submitted to CARB that is either missing or cannot be validated, and this communication cycle can result in some information that has been submitted to CARB changing by the time the account is ready to be approved. Since missing or inaccurate registration information can cause processing delays, staff believe that accepting information and attestations that are recent and dated no more than 180 days old balances the need to ensure the accuracy and timeliness of the information submitted for review.

**95830(e)(1)**

### Purpose

The proposed changes clarify the types of information that must be submitted to CARB within 30 calendar days of any change. All information that must be provided upon initial registration must also be submitted to CARB within 30 days of any subsequent change in the information, and the one-year timing for disclosing changes to employee information is removed.

The current reference to section 95830(c)(1)(E) that requires disclosure of a Government issued taxpayer or Employer Identification Number is removed in this section and instead proposed to be a separate registration disclosure requirement in proposed new section 95830(e)(5).

References to section 95830(c)(1)(J) are updated to require that contact information for an individual with knowledge or access to a market position be submitted within 30 days; the current reference to employee contact information is removed. Proposed Amendments also change the timing for disclosure of this information to within 30 calendar days of any change instead of the current timeframe “within one year.”

A reference to section 95830(c)(1)(L) is added to specify that registrants must disclose any change to the Cap-and-Trade Consultants and Advisors information required pursuant to section 95923 within 30 calendar days of any change.

A reference to section 95830(c)(1)(M) is added so that registrants must disclose any change to information related to a relationship with a commodity pool operator (CPO) or commodity trading advisor (CTA) within 30 calendar days of a change.

A reference to section 95830(c)(1)(N) is added so that registrants must disclose any change to supplemental registration information within 30 calendar days of a change.

A reference to section 95914(c)(3)(C) is added so that registrants must disclose any change to the information in section 95914(c)(3)(C) within 30 calendar days of a change to that information, including if the Consultant or Advisor is no longer retained to provide auction bidding services. Further, the Consultant or Advisor must also update their own information provided to CARB as identified in section 95914(c)(3)(C).

**Rationale**

These changes to section 95830(e)(1) to require updated registration information from entities ensure that staff have access to the most recent information for monitoring the market and ensuring continued conformance with the Cap-and-Trade Regulation. The proposed changes are necessary to identify new corporate association groups (CAG) and are aligned with existing 30-day disclosure deadlines that apply to changes to facility ownership, identification of new directors/officers, and Cap-and-Trade Consultants or Advisors.

It is necessary to remove the reference to section 95830(c)(1)(E) because Federal Employer Identification Number (FEIN) requirements are proposed in new section 95830(e)(5), such that if an entity is assigned a new FEIN by the federal government, then that entity is required to apply for a new tracking system account and is not able to submit that information as an update to an existing account.

Reducing the timing for disclosures related to section 95830(c)(1)(J) from one year to 30 days is necessary to ensure timely tracking of corporate associations and to implement the new proposed CAG trigger.

A reference to section 95830(c)(1)(L) on individuals serving as Cap-and-Trade Consultants and Advisors is added in the registration section for clarity so that all registration information is in the same section. This requirement is not new and is the same requirement as described in section 95923(c)(3) where an entity is currently required to disclose to the Executive Officer a change to the information disclosed on Consultants or Advisors within 30 days.

The 30-day timing for disclosing changes to information submitted pursuant to section 95830(c)(1)(M) is needed to support market oversight since the information is also used to determine CAGs. This requirement is needed to track actively registered CPOs and CTAs used by registered entities and ensure the timely reporting of a change to this information.

The 30-day timing for disclosing changes to information submitted pursuant to section 95914(c)(3)(C) is needed to ensure effective market monitoring and oversight. Since Cap-and-Trade Consultants or Advisors providing auction bidding strategies have knowledge of market-sensitive information, tracking any changes in the status of a Consultant of Advisor, including the termination of a Consultant of Advisor, is crucial to support market oversight.

**95830(e)(5) [new]**

### Purpose

This new section requires a registered entity to apply for a new tracking system account and receive a new tracking system account identification number if they are issued a new government-issued taxpayer or Employer Identification Number or a U.S. Federal Tax Employer Identification Number (FEIN).

### Rationale

This new section is necessary to clarify existing registration practices and implementation processes. This proposed change allows CARB to accurately track each separate legal entity and individual registered to the Cap-and-Invest Program. Staff use the government-issued taxpayer or Employer Identification Number as a unique legal identifier. This change will eliminate potential confusion and ensure that each distinct legal entity is accurately tracked in the Program and bolster market oversight.

**95830(e)(6) [new]**

### Purpose

New section 95830(e)(6) describes the signature and date requirements for submitting registration forms and attestations and for reporting account changes. The requirement states that all signatures and dates on registration forms and attestations must be no more than 180 days old. If any signatures or dates are older than 180 days on CARB forms and attestations that are provided pursuant to section 95832(a), then the submission will be rejected.

### Rationale

Up-to-date entity registration information and account information is important for ensuring entities' Program compliance. Thus, registration information, contractual agreements, and supplemental materials submitted to CARB must be current and accompanied with attestations that are no more than 180 days old. This proposed requirement reinforces current registration practices and review processes to ensure the accuracy and timeliness of the information submitted for review upon initial registration and when an account is submitting changes.

## Section 95831. Account Types.

**95831(b)(9) [new]**

### Purpose

This new subsection establishes the Allowance Removal for Offset Use Account.

### Rationale

This section is necessary to support the allowance transfers and retirements conducted pursuant to the mechanism described in section 95871(j). This new holding account allows for removing the projected number allowances from future annual allowance budgets required by AB 1207 before retiring from the holding account the actual number of allowances corresponding to compliance offset use in the previous compliance period.

## Section 95832. Designation of Representatives and Agents.

**95832(f)(4)**

### Purpose

The Proposed Amendments clarify the requirement to maintain a minimum of two active account representatives on an entity tracking system account at all times. Section 95832(f)(4) is expanded to include one subsection 95832(f)(4)(A) to clarify the requirements that apply to account representative designation and enforcement actions that may be taken by CARB.

An individual registrant may continue to serve in a dual capacity as both the primary account representative and alternate account representative pursuant to section 95830(c)(4), and that individual will continue to have the option to add other account representatives as desired but is not required to do so. There is no proposed change to the designation or maintenance of account representatives for a VAE that is an individual.

### Rationale

This change is necessary for clarification, and the current requirement for an entity to maintain two account representatives at all times remains the same. The proposed change clarifies that these representatives must be active, meaning that their contact information is up-to-date, and they are available to act on behalf of the entity in a timely manner based on Program deadlines, such as an auction deadline or compliance deadline. If CARB cannot reach a tracking system user within a reasonable timeframe because the user's contact information is not up-to-date or the user is no longer employed by the entity, then this individual would not be considered an "active" account representative.

Staff have found that an account representative can have an "active" status in the tracking system, but in actuality the individual may no longer be employed by the entity. While such an individual may still be able to represent an entity, staff view this situation as a failure of the individual to meet the user registration requirements, including the terms and conditions that the individual agreed to in order to use the tracking system account, and keep requisite contact information up to date.

### 95832(f)(4)(A) [new]

**Purpose**

The new subsection describes the situation where an entity no longer maintains any active representatives as described in section 95832(a). It explains that an entity's director, officer, or any other individual with authority to make legally binding decisions on behalf of the entity as disclosed to CARB pursuant to section 95830(c)(1)(B) is required to identify and replace new account representatives in accordance with section 95832(a).

**Rationale**

The proposed changes are necessary for clarity. The word "maintains" was added to replace "designate" to clearly note that registered entities must continue to have a minimum of two active representatives at all times, pursuant to section 95832(a). The word "active" was added to mirror changes to 95832(f). The current requirement for an entity's director or officer to disclose new representatives does not change with these amendments.

## Section 95833. Disclosure of Corporate Associations.

### 95833(a)(1)

**Purpose**

The Proposed Amendments clarify the existing text and application of "the indicia of control," and how both ownership and control factors are used to identify corporate associations. No changes are being proposed to the definition for "corporate association;" a corporate association exists when one entity has an ownership interest in or control over a second entity.

**Rationale**

The amendments are necessary to avoid any confusion, and there are no changes to existing program requirements. These indicia listed in subsections 95833(a)(1)(A)-(F) are collectively used to determine if a corporate association exists among entities and multiple indicia may apply simultaneously. The indicia of control or ownership, or both, are collectively monitored and evaluated when staff assess the relationship of a registered entity to a second entity that includes the tracking of ownership and ownership interest.

### 95833(a)(6)

**Purpose**

The proposed changes update an existing corporate association group (CAG) trigger that applies when there is a common individual with access to two or more entities' market position information. Staff are proposing to expand the scope of this "individual with shared roles" CAG trigger to include any individual with knowledge of or access to market positions of multiple registered entities and proposing to remove any distinction between an employee and a Cap-and-Trade Consultant or Advisor. Entities for which an individual has shared roles will have a direct corporate association, unless every registered entity has applied for and been approved for a Shared Role Exemption.

The Proposed Amendments provide an exception for any employee or delegate of local, state, or federal regulatory agencies who has ability to gain knowledge of or access to market positions of multiple entities to perform their job duties and functions.

**Rationale**

The proposed change expands the scope of this current CAG trigger to apply to any individual with shared roles, except for government employees, to improve market oversight and ensure a competitive and fair market. The Proposed Amendments are intended to limit the potential influence of an individual with shared roles to prevent coordinated market activities and enhance market protections.

Entities are already required to disclose individual employees and Cap-and-Trade Consultants or Advisors with knowledge of or access to market position through the tracking system for two or more registered entities. However, staff have observed that despite these classifications of employment or compensation, individuals with shared roles may, inadvertently or intentionally, facilitate coordinated trades and market activities due to their specialized knowledge or access to the tracking system for multiple accounts. The Proposed Amendments would mean that any shared account representative or account viewing agent on multiple registered entities' tracking system accounts would trigger a CAG among those registered entities, without any exception, due to a common individual having immediate access and knowledge of those entities' market position information.

Staff are also proposing a narrow exemption in new section 95833(c)(3) for entities to apply for called the Shared Role Exemption. To ensure against potential coordinated behaviors and activities from entities that use an individual with shared roles, all member entities must apply for and be approved for the Shared Role Exemption. Entities will need to submit a Conflict of Interest and Confidentiality Statement to CARB confirming that their information will be safeguarded by the Cap-and-Trade Consultant or Advisor.

Employees and delegates of local, state, or federal regulatory agencies that may have knowledge of or access to the market position information of multiple entities' accounts are not subject to this shared role CAG disclosure due to the nature of their job where these individuals may have privileged and restricted rights to access confidential business information.

**95833(a)(6)(A)-(B) [deleted]**

**Purpose**

Sections 95833(a)(6)(A)-(B) are deleted. The proposed changes remove the existing distinction between an employee and a Cap-and-Trade Consultant or Advisor access to market position information when determining a direct corporate association due to an individual with shared roles.

**Rationale**

These sections are no longer necessary given the amendments to section 95833(a)(6), which expand the "individual with shared roles" to include any individual with knowledge of or access to market positions of multiple registered entities, regardless of their status as an employee or contractor, when determining a direct corporate association. The Proposed Amendments remove the existing distinction between an employee and a Cap-and-Trade Consultant or Advisor to enhance market protections.

**95833(a)(7) [new]**

**Purpose**

New section 95833(a)(7) adds a new CAG requirement that registered entities that contract with the same commodity pool operator (CPO), or commodity trading advisor (CTA) are subject to a direct corporate association. The proposed text explains that CPOs and CTAs are individuals or entities that are actively registered with the National Futures Association (NFA).

The NFA is an independent self-regulatory organization to which the Commodity Futures Trading Commission (CFTC) has delegated registration responsibility pursuant to the federal Commodities Exchange Act (7 U.S.C. § 7 et seq.). Any CPOs or CTAs actively registered with the NFA will be subject to this requirement regardless of pool exemption status under 17 CFR § 4.7. CPOs or CTAs not registered with the NFA are not subject to this requirement.

**Rationale**

The new section is needed to add a new CAG requirement leveraging federal regulations overseeing derivatives and commodity futures markets to track another form of control. Staff are proposing to establish a direct corporate association due to a shared CPO or CTA to prevent potential coordinated activities and ensure market integrity. The Cap-and-Invest Program's compliance instruments are considered a commodity that is both physically traded within the tracking system and through derivative markets by CPOs and CTAs.

The Commodity Exchange Act (CEA) enacted in 1936 requires certain firms and individuals conducting business in the derivatives markets to register with the CFTC. With few exceptions, CFTC regulations require CFTC registered firms to become NFA members. According to the NFA, a CPO is an individual or organization that operates a commodity pool and solicits funds for that commodity pool for the purpose of trading futures or options. Separately, a CTA is an individual or organization that, for compensation or profit, advises others, directly or indirectly, as to the value of or the advisability of trading futures contracts, options on futures, or swaps (NFA 2024a). All registered CTAs who manage or exercise discretion over customer accounts or provide commodity trading advice based on, or tailored to, the commodity interest or cash market positions of particular clients must be NFA Members (NFA 2024b). Both CPOs and CTAs are regulated by the CFTC and the NFA because of their engagement in trading commodity interests so staff are proposing to mirror this same oversight and tracking of CPOs and CTAs, and entities using the same CPOs and CTAs would create a CAG.

**95833(c)(3) [new]**

**Purpose**

The new section 95833(c)(3) allows entities to apply for a Shared Role exemption where entities approved by the Executive Officer for this exemption are not required to disclose direct corporate association information. This new Shared Role Exemption identifies both an application process and qualifying factors that must be met by the individual with shared roles for the Executive Officer to approve the exemption from a direct corporate association pursuant to section 95833(a)(6). Every registered entity that would be in a CAG due to an individual with shared roles must be approved for the Shared Role Exemption for the exemption to take effect.

**Rationale**

The new section is needed to create a narrow CAG exemption from the proposed update to the CAG trigger for individuals with shared roles. This Shared Role Exemption supports Cap-and-Trade Consultants or Advisors and their services so they may keep providing generalized services to market participants without direct access to the tracking system, and these amendments allow covered entities to continue to contract with consultants helping with compliance planning efforts and market strategies.

An application process for the Shared Role Exemption ensures that staff verify that an individual meets the qualification factors and that every entity in the CAG has been approved for the exemption in order for the exemption to take effect. If a registered entity does not get approved for the Shared Role Exemption, then all registered member entities would be subject to a CAG because either the individual with shared roles does not meet one of the two exemption qualifications, or the individual with shared roles has the potential to share market position information among multiple entities.

**95833(c)(3)(A) [new]**

**Purpose**

The new section describes the process for how an entity may apply for an exemption from a direct corporate association due to an individual Cap-and-Trade Consultant or Advisor with shared roles. To apply for the Shared Role Exemption, a registered entity must submit four items to CARB:

(1) the name of the Cap-and-Trade Consultant or Advisor accurately disclosed pursuant to section 95923,
(2) the specific exemption qualification met by the individual,
(3) a contractual agreement or the employment terms and conditions that describe the individual's roles and responsibilities, and
(4) a Conflict-of-Interest and Confidentiality Attestation under penalty of perjury signed by an account representative pursuant to section 95833(c)(3)(A)1.

The Executive Officer will approve an entity's application for the Shared Role Exemption after verifying that one of the two qualifications in section 95833(c)(3)(B)1. and 2. is met by the individual Cap-and-Trade Consultant or Advisor, and after verifying that the entity has submitted a valid Conflict-of-Interest and Confidentiality Attestation. At any time, the Executive Officer maintains the authority to request a copy of the conflict-of-interest policies and procedures and confidentiality policies and procedures within 10 days pursuant to section 95803.

**Rationale**

The new section is needed to specify application requirements for the Shared Role Exemption and ensure that the entity has enacted conflict-of-interest and confidentiality practices in place for the Cap-and-Trade Consultants or Advisors disclosed pursuant to section 95923 who have shared roles to support effective market oversight and monitoring activities.

For approval of the Shared Role Exemption, staff must be able to verify that the entity has safeguards in place and confirm their Cap-and-Trade Consultants or Advisors are not acting for their own financial interests or the financial interests of other persons with which they are affiliated. Staff must also be able to verify that an entity maintains the proper internal controls and information sharing practices when employing Cap-and-Trade Consultants and Advisors with shared roles to ensure against coordinated practices and protect against manipulative behaviors. An entity must submit the contractual agreement or the employment terms and responsibilities of the individual with shares roles for staff to verify that the individual meets one of two exemption qualifications. Maintaining the Executive Officer's authority to request a copy of the registered entity's conflict-of-interest and confidentiality policies and procedures at any time allows staff to conduct necessary due diligence checks as needed.

**95833(c)(3)(A)1. [new]**

### Purpose

This proposed new section provides the new Conflict-of-Interest and Confidentiality Attestation that a director/officer of a registered entity accurately disclosed pursuant to section 95830(c)(1)(B) must sign and submit to complete an application for the Shared Role Exemption pursuant to proposed new section 95833(c)(3). The attestation confirms that the named individual Cap-and-Trade Consultant or Advisor will neither gain access to a tracking system account, nor engage in any activities, analyses, or discussions that would result in sharing the entity's market position information with any other entity or individual.

Additionally, the attestation statement confirms that the Cap-and-Trade Consultant or Advisor meets one of two exemption qualifications:

(1) the individual has neither legally binding authority over any of the entities that they serve nor decision-making authority over the market positions of any of the entities that they serve; or
(2) the individual provides Cap-and-Trade consulting services pursuant to section 95979(b)(2) to covered entities or opt-in covered entities only.

Further, the attestation confirms that the entity has conflict-of-interest and confidentiality policies and procedures in place, and that these Cap-and-Trade Consultants or Advisors will adhere to these policies and procedures and are prohibited from sharing the entity's market position information with any other entity or individual.

### Rationale

This new section provides the specific attestation language that must be signed under penalty of perjury to ensure the individual adheres to the required standards through a legally enforceable mechanism and has the authority to make legally binding decisions on behalf of the entity. The proposed new Conflict-of-Interest and Confidentiality Attestation requirement will ensure that the entity has safeguards in place to prevent an individual with shared roles accurately disclosed pursuant to section 95923, from gaining access to the entity's tracking system account, and from sharing the entity's market position information with other entities or individuals for their own financial interests or the financial interests of other persons they are affiliated with.

The proposed change requires the registered entity to confirm that its consultants or advisors have been advised that they are prohibited from sharing market position information about their account with any other entity or individual, and that the entity maintains conflict-of-interest and confidentiality practices and procedures that will be adhered to by these contracted individuals.

The Conflict-of-Interest and Confidentiality Attestation provides accountability for entities applying for the Shared Role Exemption to manage their market position information with added safeguards, while providing flexibility in a manner that should not jeopardize market integrity for entities that do not choose to apply for the Shared Role Exemption because the entities and their consultants or advisors do not wish to follow these attestation requirements and submit additional documentation to CARB.

## 95833(c)(3)(B) [new]

### Purpose

This proposed new section describes two qualifications for the Shared Role Exemption. An entity is eligible for this narrow exemption, when at least one of two qualifications proposed in new subsections 95833(c)(3)(B)1. and 2. are met by each individual Cap-and-Trade Consultant or Advisor with shared roles.

In addition, there are two situations identified whereby the individual with shared roles will not be considered to meet the qualifications for the Shared Role Exemption, and the entity will be subject to a CAG. First, an entity will remain subject to a direct corporate association because the individual Cap-and-Trade Consultant or Advisor will not be considered to qualify for the Shared Role Exemption if the individual has a user account in the tracking system. Second, an entity will remain subject to a direct corporate association because the individual Cap-and-Trade Consultant or Advisor will not be considered to qualify for the Shared Role Exemption if the individual provides services to the registered entity that are outside of scope of section 95979(b)(2) of the Cap-and-Trade Regulation or section 95133(b)(2) of the Mandatory Reporting Regulation.

### Rationale

This new section identifies when an entity will be eligible or ineligible for a Shared Role Exemption based on the individual Cap-and-Trade Consultant or Advisor's ability to meet one of two qualifications. These qualifications support a conservative approach that adds necessary guardrails against market activities and strategies that could appear to be coordinated.

An entity will not be approved for the Shared Role Exemption and will be subject to a CAG if the associated Consultant or Advisor has a user account in the tracking system because of the amount of control and information that this individual possesses. Under the current Regulation, to apply for an entity account on behalf of the entity or to be designated to represent or view an entity's account, individuals must first obtain a user account. With this market-sensitive information, individuals with shared roles can potentially act for their own financial interests and influence market activities in a coordinated manner. Cap-and-Trade Consultants or Advisors should still be able to provide their services to entities without access to the tracking system as they can still have knowledge of entities' market position and still remain eligible for the Shared Role Exemption.

An entity will not be approved for the Shared Role Exemption if the consultant or advisor provides services listed outside section 95979(b)(2) of the Cap-and-Trade Regulation or section 95133(b)(2) of the Mandatory Reporting Regulation because that individual is not considered as a Cap-and-Trade Consultant or Advisor who needs to be disclosed pursuant to section 95923. Instead, that individual would be viewed as having the potential to exert control or influence across multiple entities, rather than providing a limited scope of services tracked by CARB. Staff have observed that certain individuals such as subcontractors providing ancillary support services to Cap-and-Trade Consultants or Advisors possess a degree of market power and influence that affects entities' behavior. Since those services are not required to be disclosed to CARB, staff cannot rule out a potential for market manipulation or coordinated activities facilitated by these individuals. To deter potential market manipulations, the Proposed Amendments that the entity will be ineligible for the Shared Role Exemption if an individual consultant or advisor provides services beyond the scope of services already listed in section 95979(b)(2) of the Cap-and-Trade Regulation and section 95133(b)(2) of the Mandatory Reporting Regulation.

**95833(c)(3)(B)1.-2. [new]**

### Purpose

These proposed new subsections 95833(c)(3)(B)1. and 2. describe the two qualifications, at least one of which must be met by an individual Cap-and-Trade Consultant or Advisor with shared roles for an entity to be approved for a Shared Role Exemption. The individual with shared roles must 1) have neither legal binding authority over any entities that they serve nor decision-making authority over the entity's market position, or 2) must provide Cap-and-Trade consulting services to covered entities, opt-in covered entities, or both.

### Rationale

The first qualification exemption applies to any entity type. Entities using Cap-and-Trade Consultants or Advisors that have neither decision-making authority over market position information, nor legally binding authority over an entity, are then eligible to apply for the Shared Role Exemption because these individuals would not be able to exert significant control or influence over the multiple accounts they service. For example, individuals providing administrative services, accounting, or auditing services should qualify for the Shared Role Exemption as they likely would not exert control or influence over the entities they serve. The original scope of services identified for a "Cap-and-Trade Consultant or Advisor" was focused on those individuals assisting with offset projects and offset verification services. Over the years, the scope of disclosures has included individuals providing services for “brokering in, advising on, or assisting in any way in carbon or GHG-related markets” for all entity types, not just offset project operators. Through implementation, staff have observed that these individuals are making transactions and/or legally binding decisions on behalf of multiple entities, so staff have proposed this exemption qualification to limit their potential control. VAEs employing transaction advisors or managers of allowance holdings on behalf of the entities they serve will not qualify for the Share Role Exemption because staff cannot rule out a potential for market manipulation and would potentially create a prohibited beneficial holdings situation. Staff find the updates necessary to limit the ability for these individuals to coordinate market activities across the multiple registrants and clients they may serve.

The second qualification applies to Cap-and-Trade Consultants or Advisors who contract exclusively with covered entities to provide flexible compliance planning options and strategies for procuring compliance instruments as economically as possible. Covered entities must surrender allowances annually to CARB to meet their compliance obligation, whereas VAEs do not have this same requirement. While some covered entities may not have the desire or resources to maintain in-house staff for Cap-and-Invest Program compliance planning or market trading and, therefore, may opt to contract with an outside consultant to serve those function, VAEs often have the resources to serve as market brokers and traders to help provide liquidity in the market and facilitate the buying and selling of allowances.

**95833(e)(2)**

### Purpose

This section is modified to remove the text “or 95833(a)(6)(B)” since section 95833(a)(6)(B) is proposed to be deleted and no longer relevant to the context of disclosure of corporate associations.

### Rationale

The proposed change is needed to remove an irrelevant section citation that is not needed due to the deletion of section 95833(a)(6)(B) that is no longer relevant for disclosure of corporate associations.

**95833(f) [new]**

### Purpose

The proposed change is to add the descriptive title of “Phased-in Deadline for Direct Corporate Associations Purchase and Holding Limit Share Disclosures.”

### Rationale

New section 95833(f) is necessary to specify a delayed deadline option for entities to disclose their purchase and holding limit shares as a result of changes to direct corporate associations pursuant to the proposed sections 95833(a)(6) or (a)(7).

**95833(f)(1) [new]**

### Purpose

New section 95833(f)(1) is added to establish a delayed deadline for identifying purchase limit shares and holding limit shares for direct corporate associations established pursuant to sections 95833(a)(6) or (a)(7). The Proposed Amendments specify that a registered entity that is newly in a direct corporate association with another registered entity pursuant to sections 95833(a)(6) or (a)(7) prior to January 1, 2030, will have 30 calendar days to disclose the information pursuant to sections 95833(d)(1)(A)-(D), which is the standard timing for identifying such business relationships. Then, such a registered entity will have until December 31, 2029, to disclose their holding limit shares and purchase limit shares pursuant to section 95833(d)(1)(E).

### Rationale

The Proposed Amendments keep the current 30-day disclosure timing requirement to support continued market monitoring efforts and delay the required disclosures of holding limit shares and purchase limit shares. The Proposed Amendments provide a delayed deadline until December 31, 2029 for disclosing holding limit shares and purchase limit shares so that entities are given flexibility in compliance options. Staff expect that nearly all entities affected by the proposed updates to CAG triggers in sections 95833(a)(6) and (a)(7) are voluntary associated entities and not covered entities. Affected entities will have the option to disclose purchase limit share and holding limit share information immediately to CARB or to wait until December 31, 2029—this approach provides affected entities time to either change their corporate affiliation, restructure, or redistribute and adjust compliance instrument holdings in response to the updated CAG requirements. The January 1, 2030 deadline aligns with the full compliance period deadline for the proposed new Compliance Period 6 (2027-2028), where entities must meet their full compliance period 6 compliance obligation on November 1, 2029. Staff estimate that an additional 23 million allowances may be collectively released by market participants due to the combination of the normal annual decrease in holding limits and the proposed updates to CAG triggers in sections 95833(a)(6) and (a)(7). Staff expect that this additional supply may help mitigate compliance costs for entities that must meet their full compliance period compliance obligation due on November 1, 2029 in the context of more stringent annual allowance budgets at that time. The delayed deadline also adds to market stability and reduces the potential for price volatility as a result of the Proposed Amendments.

With the Proposed Amendments, registered entities already in a CAG prior to January 1, 2030, will remain subject to their existing holding limit shares and purchase limit shares, until new applicable holding limit shares and purchase limit shares take effect for any new direct corporate association identified pursuant to new sections 95833(a)(6) and (a)(7).

**95833(f)(2) [new]**

### Purpose

New section 95833(f)(2) is added to specify that new direct corporate associations or changes to this existing information pursuant to section 95833(a)(6) or (a)(7) must be disclosed to CARB pursuant to sections 95833(d)(1)(A)-(E), including the applicable purchase and holding limit shares for the CAG. This information must be disclosed by registered entities in accordance with the standard disclosure deadline schedule specified in section 95833(e) after the December 31, 2029, phased-in deadline for disclosing purchase and holding limit shares ends. Once the Proposed Amendments are approved, the new effective holding limit share and the purchase limit share distribution for each CAG will take effect starting on January 1, 2030.

**Rationale**

The new section is needed to impose a clear deadline for disclosure of direct corporate associations pursuant to section 95833(a)(6) or (a)(7) and the purchase and holding limit share information for these CAGs that are identified effective January 1, 2030, and thereafter. In addition, disclosures on corporate association following the standard disclosure deadline scheduled contained in section 95833(e) are necessary to aid in timely market monitoring efforts, such as identifying the existence of any corporate association relationships, and to ensure that market participants comply with market rules pertaining to account holding limits and auction purchase limits.

## Section 95834. Know-Your-Customer Requirements.

**95834(a)(5) [new]**

**Purpose**

New subsection 95834(a)(5) is proposed to ensure that users do not share their user identification and password for their tracking system and auction system accounts with anyone. Sharing user account login information for the tracking system or auction system is a violation that can result in loss of the user's access. Further, staff are clarifying the current user terms and conditions stipulating that CARB may take necessary enforcement actions against the individual, including civil or criminal prosecution based on applicable state, provincial, or federal law.

**Rationale**

Staff are proposing this new subsection for clarity and enforceability of the Regulation. User credential sharing is already prohibited in Appendix B (CITSS User Terms and Conditions) of the Regulation and will continue to apply to the tracking and auction systems used to operate the Cap-and-Invest Program. By stating the user credential sharing prohibition in the main body of the Regulation, CARB is ensuring that the tracking system rules are clear for all applicants and registrants. Additionally, these changes disclose to all applicants and registrants that violating this provision can, depending on the circumstances at hand, result in loss of access to the tracking or auctions systems and civil or criminal prosecution. The security of the tracking and auction systems is paramount for a well-functioning Program, and so it is particularly necessary to ensure regulated entities are aware of the potential consequences for jeopardizing that security.

**95834(d)(1)**

**Purpose**

This section is amended to clarify the notarization requirements for documents that must be submitted to CARB during the user registration process by including references to subsections 95834(b)(2), (4), and (6).

**Rationale**

The changes are necessary to clarify that an individual is required notarize one of their proof of identity documents, which include proof of residence address, proof of open bank account, and proof of identity card, driver's license, or passport which are mentioned in the referenced subsections.

**95834(d)(2)**

**Purpose**

This section is amended to clarify what information should be provided by the notary public on the notarized documents. The amendments require a signature from the notary public and a date of notarization. Additionally, notarization without a notary stamp or seal if the jurisdiction where the notary public is commissioned does not require one will be allowed.

**Rationale**

The changes are necessary to clarify the information that should be included with the notarization. Section 95834(d)(2) of the current Regulation requires the notarization to include the notary stamp or seal, the notary public's name, the county or state of the notary public's place of business, and the commission expiration date. This provision is intended to account for differences in notarization requirements, which can vary by state. Not all notary publics in the United States are required to provide a notary stamp or seal as a form of authentication, so a notary public may not acquire the stamp or seal. the Proposed Amendments require a signature from the notary public to ensure the notarization is authenticated. Section 95834 (d)(1) of the current Regulation requires one of the documents submitted pursuant to section 95834 be notarized no more than three months before submittal. To ensure this provision is met, the Proposed Amendments require a date of notarization on the notarized document. These changes are necessary to specify the required information on the notarized document for verification purposes.

**95834(d)(4)**

**Purpose**

The proposed amendment replaces 'at least every two years' with 'upon request' as it relates to the frequency at which the Executive Officer may request a re-verification of a user's KYC documents. Current users of the tracking system or auction system would be required to resubmit updated documentation and redo their Know-Your-Customer check with CARB upon request of the Executive Officer.

**Rationale**

The change clarifies that KYC documentation reverification does not occur at set times. This change is consistent with current Program implementation. Requests by the Executive Officer for re-verification occur on a case-by-case basis. A reverification of Know-Your-Customer documents allows CARB to confirm the identity of individuals who are authorized to represent the registry account.

**95834(e) [new]**

### Purpose

This section is added to require that individuals maintain up to date Know-Your-Customer and tracking system user information after initial user registration. New section 95834(e)(1) requires users to disclose updates to information listed in sections 95834(b)(1)-(3) within 60 days of the change occurring. New section 95834(e)(2) requires users to disclose any new criminal conviction declared in any jurisdiction constituting a felony under U.S. federal law or California law, or the equivalent thereof to CARB within 60 days. New Section 95834(e)(3) requires users to update their contact information (mailing address, phone number or email address) within 5 days of the change occurring. New Section 95834(e)(4) allows the executive office to revoke access to the tracking system if the user fails to maintain their user registration or Know-Your-Customer information.

### Rationale

The addition of this new section is necessary to allow CARB to monitor and ensure effective enforcement oversight of all individuals in the Program. An individual user in the tracking system is responsible for maintaining their user registration information, including all required Know-Your-Customer information submitted at the time of registration and in the tracking system. A change in the user personal information, such as their name, residence address, date of birth and criminal conviction record may require the individual to submit supporting documentation to CARB pursuant to Section 95834(d)(4). Therefore, staff propose to allow 60 days for the user to submit these updates. The user is already required in Appendix B (CITSS User Terms and Conditions) of the Regulation to maintain their contact information such as telephone number and e-mail address. It is important for the user to maintain their contact information to receive timely communication from the tracking system or jurisdiction staff. Staff propose to only allow 5 days for these updates.

## Section 95835. Changes to Entity Type and Reassignment of Facilities Already Registered to Different Entity Accounts.

**95835(c)(2)(A)**

### Purpose

The Proposed Amendments remove the reference to opt-in covered entities in this section for clarity.

### Rationale

Opt-in covered entities are not currently eligible for a change in entity type under this provision, as opt-in covered entities do not have covered emissions over 25,000 metric tons of $CO_2e$ by definition. Covered emissions for an opt-in covered entity would not fall below that inclusion threshold, and so the reference to opt-in covered entities in this section is unnecessary and removed for clarity. Opt-in covered entities are eligible for a change in entity type pursuant to section 95835(c)(1)(A) or section 95835(c)(2)(B).

**95835(c)(2)(B)**

### Purpose

The Proposed Amendments specify that after a covered entity or opt-in covered entity has met the shutdown and cessation requirements of sections 95101(i) and 95101(c) of MRR they may request a change in entity type pursuant to the deadlines in 95835(e) Additionally, text stating that fuel suppliers and electric power entities are not eligible for a change in entity type under this provision. In this situation, a covered entity or opt-in covered entity is eligible for a change in entity type pursuant to the deadlines in section 95835(e)(1). Such an entity may choose to exit the Program entirely or remain in the Program as a VAE.

### Rationale

This change is necessary to support market participation and liquidity. Any entity that has met the facility shutdown and reporting cessation requirements of MRR is not mandated to exit the Program. The entity may choose to remain in the Program as a VAE including fuel suppliers or electric power entities. This change will match the regulatory text with current practice as it relates to entities that are eligible to remain in the Program.

**95835(c)(2)(C)**

### Purpose

The Proposed Amendments remove the reference to electric power entities (EPE), as EPEs are proposed to be addressed separately in new section 95835(c)(2)(D). The section is amended to allow fuel suppliers that have ceased reporting under MRR and either have covered emissions less than 25,000 metric tons of $CO_2e$ per year during one entire compliance period or have met the reporting cessation requirements due to a facility shut down under 95101(i) of MRR to be eligible for a change in entity type and remain in the Program as a VAE.

### Rationale

This change is necessary to match regulatory language with current practice. Currently, fuel suppliers that have met the reporting cessation requirements of section 95101(i) of MRR have been granted eligibility for a change in entity type to remain in the Program as either an opt-in covered entity or a voluntarily associated entity—these entities are not mandated to close their accounts to exit the Program. To support market participation and the liquidity that these entities may bring as a VAE, any entity that was previously covered by the Program and has met all requirements to exit the Program should be eligible to voluntarily remain in the market.

**95835(c)(2)(D) [new]**

### Purpose

The proposed section updates language regarding electric power entities (EPE) and their eligibility to change their entity type from a covered entity. An EPE that has either reported annual covered emissions less than the emissions inclusion threshold in section 95812(c)(2) and 95812(d)(2) during one entire compliance period and has met the reporting requirements of section 95101(h) or has met the reporting cessation requirements due to a facility shut down under 95101(i) of MRR, is eligible for a change in entity type.

**Rationale**

This change is necessary to ensure clarity in the regulatory language. Section 95835(c)(2)(A) specifies that a covered entity that reports covered emissions less than 25,000 metric tons of $CO_2e$ during one entire compliance period is eligible for a change in entity type. Since electric power entities may have a threshold for inclusion in the Cap-and-Invest Program of zero metric tons of $CO_2e$ for imported electricity, the provision for change in entity type in section 95835(c)(2)(A) would not apply. Since this requirement does not apply to electric power entities (EPE), staff recognize that there must be a method for an EPE to be eligible for a change in entity type without being required to exit the Program. The proposed change adds a subsection to clarify the options for an EPE to change their entity type. Currently, an EPE that has met the reporting cessation requirements of section 95101(i) of MRR has been granted the option for a change in entity type to remain in the Program as either an opt-in covered entity or a voluntarily associated entity—these entities are not mandated to close their accounts to exit the Program. To support market participation and the liquidity that these entities may bring as a VAE, any entity that was previously covered by the Program and has met all requirements to exit the Program should be eligible to voluntarily remain in the market.

**<u>95835(e)(1)(A)</u>**

**Purpose**

For clarity, the proposed changes provide a September 30 deadline by which opt-in covered entities that have opted out of the program but choose to remain in the Cap-and-Invest Program as a VAE must request to change their entity type.

**Rationale**

These changes are necessary to ensure that former opt-in-covered entities have a clear deadline by which they must submit a request to change their entity type to a VAE if they wish to remain in the Program. The September 30 deadline for requesting an account status change comes after the Mandatory Reporting Regulation’s verification deadline to ensure that the former opt-in covered entity is not covered in the current compliance period because of emissions that were above the Program’s inclusion threshold. If the deadline is missed, the entity is viewed by staff to have failed to update its registration information, then staff may restrict or revoke the tracking system account pursuant to section 95830(e)(4) for an entity that fails to update its registration in a timely manner.

**<u>95835(e)(1)(D)</u>**

**Purpose**

For clarity, the Proposed Amendments add a reference to 95913(g) that describes the opt-out process for opt-in covered entities and adds the words “separately” and “to exit” around the phrase “make a request.”

**Rationale**

This change is necessary for clarity. Section 95835(e)(1) describes deadlines for entities to request a change in entity type or exit the Program if they are eligible. This section applies to all entity types. The changes clarify that for an opt-in covered entity that has already requested and has been approved by staff to opt out of the opt-in covered entity program pursuant to 95813(g), these entities will have until September 30 of the first calendar year immediately after the end of a compliance period to submit a request a to exit the Program entirely. Receiving approval to opt out of the opt-in covered entity program does not constitute a complete request to exit the Cap-and-Invest Program. More information is required to close the entity’s tracking system account pursuant to the existing requirements described in section 95835(f).

**95835(f)(3)**

**Purpose**

The Proposed Amendments add more detail where an entity that wishes to close its account must submit a written request to CARB. Subsection (f)(3) is changed to describe that an entity may request that their tracking system account be closed once all associated holding accounts are empty. The request must include specific items which are listed in sections 95835(f)(3)(A)-(E). The required elements of the request include a signed attestation by an account representative, a reason for closure, and confirmation that account balances are zero. CARB will keep account representatives on the account to access historical reports and information, unless representatives identify in their request that they no longer wish to be associated with the entity account.

**Rationale**

This change is necessary to clarify the regulatory language. Currently, the Regulation does not specify the requirements for an entity to request account closure. The proposed changes clarify the current practice for account management, where staff have requested and received written confirmations from entities and their account representatives requesting to exit the Program.

A written confirmation is necessary to ensure that CARB has received proper authorized from a representative to change the account status and that there is no remaining account balance of compliance instruments. As with all submissions related to an entity’s account, a signed attestation will be required with the request to close the account to ensure enforcement ability should information be submitted that is false, inaccurate, or incomplete. These changes also provide CARB with specific parameters to deny a request for account closure, particularly if the entity does not meet a requirement within Article 5.

**95835(g) [new]**

### Purpose

The Proposed Amendments add a section describing how a VAE already registered in the program must have their entity type converted to a covered entity should they meet the eligibility requirements based on covered emissions and become subject to a compliance obligation pursuant to subarticle 7. The entity must change its entity type by updating its registration information within 30 days of reporting its emissions to MRR.

### Rationale

This addition is necessary to clarify current practice. Covered entities may not enter the program until after they have submitted their report of emissions over the inclusion threshold to CARB pursuant to MRR. Entities that generate emissions over the emissions inclusion threshold described in section 95812 but have not yet reported those emissions may want to enter the Program earlier, as a voluntarily associated entity, to begin acquiring, trading, or banking compliance instruments to strategically plan for compliance obligation requirements and mitigate compliance costs. CARB is adding this specific provision to formally enable entities to voluntarily enter the Program to maintain the same tracking system account should the registered VAE then become a covered entity that has exceeded the emissions inclusion threshold of section 95812.

## Section 95840. Compliance Periods.

**95840(d)-(e)**

### Purpose

Sections 95840(d) and 95840(e) are proposed to be amended to include the exact dates and duration of the fourth and fifth compliance period, which are unchanged from current requirements, where these compliance periods run from January 1, 2021, to December 31, 2023, and January 1, 2024, to December 31, 2026, respectively. Staff are removing requirements that identify the set of two-year compliance periods for the fourth and subsequent compliance periods if the U.S. EPA had approved California’s plan for compliance with the Federal Clean Power Plan.

### Rationale

The amendments are necessary for clarity and relevance. In 2019, the U.S. EPA repealed the Federal Clean Power Plan (U.S. EPA 2024). Therefore, regulatory language describing the Cap-and-Invest Program if the Federal Clean Power Plan went into effect is not needed and not relevant. The Proposed Amendments clarify the applicable compliance period dates by identifying the current dates and duration of the fourth compliance period, which began on January 1, 2021, and ended on December 31, 2023. The proposed changes also specify the dates and duration of the fifth compliance period, which began on January 1, 2024, and will end on December 31, 2026, which is necessary for clarity and consistency with the rest of the amendments to section 95840.

**95840(f)-(g) [new]**

**Purpose**

The proposed new sections establish the duration of the sixth compliance period, which would run from January 1, 2027, to December 31, 2028, and the seventh compliance period, which would run from January 1, 2029, to December 31, 2030.

**Rationale**

The Proposed Amendments maintain multi-year compliance periods while aligning with key dates to demonstrate progress to achieving statewide GHG emission reduction targets. With staff's proposal to revise the 2027-2030 allowance budgets to increase Program stringency, staff believe that 2-year compliance periods continue to modulate annual variability to provide compliance flexibility, while enabling the timely assessment of the State's climate targets and supports he application of the accounting mechanism for the net flow of compliance instruments between California and Québec.

Linked jurisdictions jointly produce a "Net Flow Calculation Report" after each full compliance period compliance event accounting for any net transfer of compliance instruments across jurisdictions and the implications for meeting its own GHG emission targets. Given that 2030 is a key GHG emission reduction target year for both California and Québec, there is a need to have 2030 be the last year of a compliance period to facilitate assessment of emissions relative to the climate targets.

**95840(h)-(i) [new]**

**Purpose**

The proposed new sections establish the durations of the eighth compliance period and subsequent compliance periods. The eighth compliance period would run from January 1, 2031, to December 31, 2033. After the eighth compliance period, compliance period durations would alternate between two years and three years.

**Rationale**

To support assessment of the State's climate targets post-2030 while increasing Program compliance accountability for covered entities, the Proposed Amendments adjust the duration of the compliance periods to align the final year of a compliance period with California's AB 1279 2045 GHG emission reduction target and linked jurisdictional GHG targets in 2040. After the eighth compliance period, staff are proposing that compliance periods alternate between three years and two years to establish a regular cadence. This overall cadence of compliance periods also provides California and linked jurisdictions with the opportunity to complete the net flow accounting mechanism and support evaluating jurisdictional progress in a manner that is aligned with climate targets.

## Section 95841. Annual Allowance Budgets for Calendar Years 2013-2050.

**Purpose**

The section title is amended to read Annual Allowance Budgets for Calendar Years 2013-2045.

**Rationale**

The section title is updated to reflect corresponding updates to section 95841(b) and Table 6-2. The Proposed Amendments remove section 95841(b), which specified allowance budgets during 2031-2050, and amend Table 6-2 to specify allowance budgets through 2045.

**<u>95841(a)</u>**

**Purpose**

Section 95841(a) currently specifies that allowance budgets for 2013 to 2031 are set as described in Table 6-1 and Table 6-2. The section is amended to specify that allowance budgets for 2013 to 2045 are as described in Table 6-1 and Table 6-2, consistent with updates to Table 6-2.

**Rationale**

The Proposed Amendments revise Table 6-2 to specify allowance budgets through 2045. The update to section 95841(a) is needed to be consistent with the allowance budget years specified by Table 6-2.

**<u>95841(b) [deleted]</u>**

**Purpose**

Section 95841(b) is removed. This section provides an equation that specifies allowance budgets for budget years 2032 through 2050 and is deleted as it is no longer applicable.

**Rationale**

The Proposed Amendments revise Table 6-2 to specify allowance budgets through 2045. The equation to calculate annual allowance budgets that is specified within section 95841(b) is no longer applicable and is therefore removed.

**<u>Table 6-2</u>**

**Purpose**

The current Table 6-2 specifies allowance budgets for budget years 2021 through 2031. Proposed Amendments to Table 6-2 revise existing annual allowance budgets for 2027-2031 and establish annual allowance budgets for 2031-2045, replacing existing budgets in section 95841(b). The title of Table 6-2 is amended to indicate that it specifies annual allowance budgets for 2021-2045.

**Rationale**

Table 6-2 is amended to specify annual allowance budgets from 2027 through 2045 that are supportive of the State's 2030 and 2045 statutory climate targets. Setting informed Program allowance budgets through 2045 is critical to providing the needed near- and long-term price signals to achieve the State’s midcentury climate targets.

CARB established the annual 2021-2030 allowance budgets in regulatory amendments adopted in 2017 to align with the 2017 Scoping Plan Update, which focused on achieving the SB 32 GHG emissions reduction target of 40% below 1990 levels by 2030 (CARB 2017b). In 2022, AB 1279 established targets for reducing statewide anthropogenic GHG emissions to at least 85% below 1990 levels by 2045 and to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update indicates that the State needs to increase the pace of near-term GHG emissions reduction to align with the trajectory needed to meet the State’s more aggressive 2045 climate targets (CARB 2022a). Concurrent to the development of the 2022 Scoping Plan Update, the annually updated GHG Emissions Inventory was adjusted to more fully incorporate third-party verified GHG emissions data and correct some errors. The Proposed Amendments update the Program annual allowance budgets in response to legislative direction in AB 1207, the 2022 Scoping Plan Update, and the revised GHG Emission Inventory.

The Proposed Amendments remove approximately 118 million allowances from the 2027-2030 annual budgets. The Proposed Amendments remove 15 million allowances from the 2027 annual budget, 26.5 million allowances from the 2028 budget, 35.1 million from the 2029 budget, and 41.7 million from the 2030 budget. These removals result in a consistent 11% year-over-year decline in the annual allowance budget from 2027 to 2030.

The Proposed Amendments to Table 6-2 also establish post-2030 budgets that decline from the amended 2030 annual budget to a 2045 budget consistent with the AB 1279 target. The 2045 allowance budget target was calculated by using the 2022 Scoping Plan Scenario modeling estimate of 2045 covered sector emissions multiplied by the ratio of 2021 covered emissions from MRR to the 2021 emissions from the 2022 Scoping Plan Scenario within covered sectors (i.e., electric power, transportation, industrial, residential and commercial). This method is consistent with the method for calculating the 2020 cap in the initial 2010 rulemaking (CARB 2010b).

## Section 95852. Emission Categories Used to Calculated Compliance Obligations.

### 95852(b)(1)(B)

### Purpose

References to EIM are updated to WEIM to align with amendments to MRR section 95102(a). Text is added to include specified emissions from electricity imports that will occur through EDAM in the calculation of first deliverers emissions with a compliance obligation.

### Rationale

These changes are necessary to ensure that electricity imports that will occur through EDAM are covered by the Regulation and to align the terminology used in the Regulation with MRR. The changes ensure that emissions from specified source electricity imported via EDAM are included in the calculation of specified emissions.

**<u>95852(b)(4)(B)</u>**

### Purpose

The first change adds the full name of the "California Public Utilities Code" instead of "CPUC" where it is referenced in the text for clarity. The second change removes a redundant reference to the reporting timeline for Renewable Portfolio Standard (RPS)adjustment claims that is specified in section 95111(g) of MRR. The third change requires that RECs must be eligible to meet RPS compliance requirements to qualify for the RPS adjustment.

### Rationale

These changes are necessary to clarify a reference to the California Public Utilities Code, remove redundancy between MRR and the Cap-and-Trade Regulation, align the Regulation with the August 10 reporting deadline in MRR, and clarify the reporting deadline for RECs required to claim the RPS adjustment.

The RPS adjustment was developed to recognize the costs of RPS compliance, specifically for firmed and shaped renewables under portfolio content category (PCC) 2 or PCC 0 of the RPS. New text in section 95852(b)(4)(B) clarifies that the RECs associated with the electricity claimed for the RPS adjustment must be eligible for compliance with the RPS, including meeting any applicable RPS excess procurement rules, which went into effect in 2021 and prohibit excess procurement from PCC 2 RECs in one compliance period from being used in a subsequent compliance period (CPUC 2024). Staff will work with the CEC and CPUC to determine RPS eligibility for the purpose of RPS adjustment eligibility. This clarification ensures that the RPS adjustment is used as intended – to reflect the costs of compliance of these resources with the RPS and not to otherwise reduce the Cap-and-Invest Program compliance costs for imported electricity.

**<u>95852(b)(4)(F)</u>**

### Purpose

The current Regulation allows an electricity importer to claim the RPS adjustment to reduce its compliance obligation for RPS eligible out-of-state sources of electricity where the electricity is not directly delivered. The first change restricts the use of the RPS adjustment for sources of electricity that meet the requirements of sections 95852(b)(4)(A)-(E) to RECs representing electricity generated during January 1, 2013 through December 31, 2030. The second change requires that RECs representing electricity generated after December 31, 2030 must meet the requirements in Public Utilities Code (PUC) section 399.16(d), also known as PCC 0, and as applicable section 399.30(c)(3), which applies to publicly owned utilities and requires consistency with PUC section 399.16. The third change adds the full name of the "California Public Utilities Code" instead of "CPUC" where it is referenced in the text for clarity.

### Rationale

These changes are necessary to disallow the RPS adjustment for PCC 2 sources of electricity for the 2031 data year and all subsequent years and to clarify a reference to the California Public Utilities Code. Restricting eligibility for the RPS adjustment to RECs generated from eligible PCC 0 resources as set forth in PUC 399.16(d) limits reporting and implementation challenges experienced under the current regulation and aligns with the deep decarbonization necessary to achieve the AB 1279 targets and the SB 100 and SB 1020 requirements for zero-carbon energy supply. Staff will work with the CEC and CPUC, as applicable to determine RPS eligibility for the purpose of the RPS adjustment eligibility. Phasing in the requirement that RECs must be PCC 0 to eligible for the RPS adjustment after 2030 preserves the mechanism to reduce the compliance obligation of electricity importers that took early action on commitments to renewable resources while reflecting increased Program stringency.

**95852(c)**

### Purpose

In the current Regulation, the compliance obligation for natural gas suppliers is calculated as the emissions resulting from full combustion or oxidation of all fuel delivered to end users in California less the fuel delivered to covered entities. The proposed change modifies the method for determining the compliance obligation for natural gas suppliers to also subtract from fuel delivered to end users any fuel for which the natural gas supplier separately incurs a compliance obligation associated with blowdown, fugitive, or vented emissions reported pursuant to sections 95152(e) or 95152(i) of MRR.

### Rationale

The change is necessary to ensure that the compliance obligation for natural gas suppliers accounts for natural gas associated with covered blowdown, vented, and fugitive emissions in the volume of natural gas reported as supplied to end users. In the current Regulation, section 95852(c) does not need to account for covered blowdown, vented, and fugitive emissions, as these emissions are exempt under section 95852.2(b)(3). The Proposed Amendments remove the broad exemption for vented and fugitive emissions from NGS associated infrastructure in section 95852.2(b)(3), aligning emissions exemptions for vented and fugitive methane emissions across all segments and facilities within the natural gas production and distribution sector. With the proposed change to section 95852.2(b)(3), this change to section 95852(c) is necessary to prevent any double-counting of a compliance obligation for a supplier of natural gas.

**95852(c)(3)**

### Purpose

The “and” is removed from the end of the provision to support changes to the calculation of the compliance obligation for suppliers of natural gas.

### Rationale

This change is necessary to enable a new specification for calculating the compliance obligation for suppliers of natural gas, added to section 95852(c)(4).

**95852(c)(4) [new]**

**Purpose**

The existing section 95852(c)(4) is renumbered to section 95852(c)(5). The proposed language added to new section 95852(c)(4) states that CARB will determine the volume natural gas reported delivered to end users in California and associated metric tons of $CO_2e$ for which the natural gas supplier separately incurs a compliance obligation associated with blowdown, fugitive, or vented emissions.

**Rationale**

The provisions added to section 95852(c)(4) are necessary to support the proposed amendment to section 95852(c), which accounts for natural gas associated with covered blowdown, vented, and fugitive emissions in the volume of natural gas reported as supplied to end users. The language added to section 95852(c)(4) is needed for CARB to determine the amount of emissions associated with covered blowdown, vented, and fugitive emissions that, with the removal of the broad exemption for vented and fugitive emissions from NGS associated infrastructure from section 95852.2(b)(3), would now otherwise be double-counted in the covered emissions associated with fuel delivered to end users in California by the natural gas supplier. The language added to section 95852(c)(4) aligns with the provision in section 95852(c)(2) which specifies that CARB shall calculate the GHG emissions for natural gas delivered to covered entities that are customers of the natural gas supplier so those emissions can be deducted from the natural gas supplier's compliance obligation.

**95852(c)(4) [new 95852(c)(5)]**

**Purpose**

Former section 95852(c)(4) is renumbered to section 95852(c)(5). This section specifies that the Executive Officer will calculate the compliance obligation for suppliers of natural gas based on the supplier's reported emissions less CARB's calculated emissions from natural gas deliveries to covered entities. This section is modified to specify that calculated emissions in section 95852(c)(4) are also subtracted from the natural gas supplier's reported emissions.

**Rationale**

This section is renumbered to reflect the addition of a new provision in section 95852(c)(4). Modifications to the language are needed to support the proposed amendment to section 95852(c), which accounts for natural gas associated with covered blowdown, vented, and fugitive emissions in the volume of natural gas reported as supplied to end users. As proposed, section 95852(c)(4) identifies the GHG emissions associated with combustion of the volume of natural gas delivered to end users in California, for which the natural gas supplier separately incurs a compliance obligation associated with blowdown, fugitive, or vented emissions.

**95852(e)(2)**

**Purpose**

This section describes how the compliance obligation for imported liquefied petroleum gas (LPG) is determined. This section is amended to specify that suppliers of imported LPG incur the compliance obligation for the GHG emissions associated with LPG imported into California.

**Rationale**

This change is needed to align the Cap-and-Invest Program with corresponding proposed changes to MRR, which update the point of regulation for imported LPG to an LPG receiving facility that supplies imported fossil or biomass-derived LPG at its facility for distribution in California. This change, in conjunction with corresponding changes to MRR, ensures more complete and consistent reporting of GHG emissions associated with imported LPG. It does not change the coverage of the emissions from this sector under the Cap-and-Invest Program.

**95852(g)**

**Purpose**

This section describes how the compliance obligation for a Carbon Dioxide Supplier or $CO_2$ Supplier is determined. This section is amended to delete the language specific to sequestered $CO_2$, so it can be moved to new section 95852.3(a). In the new text in section 95852.3(a), the exemption for exported $CO_2$ is deleted and the word "geologic" is also deleted.

**Rationale**

The change is necessary to consolidate regulatory text related to sequestered or utilized carbon dioxide into a common location within the Regulation, new section 95852.3(a). Additionally, this change removes exemptions for exported $CO_2$. Currently, exempting or not exempting exported $CO_2$ would have very little impact on covered emissions in the Program and removing this exemption is aligned with the Program's overall framework for regulating sequestered $CO_2$. Removing the word "geologic" preceding sequestered $CO_2$ allows for non-geologic methods of sequestration to be considered for future Board approved CCUS quantification methodologies.

**95852(i)(3) [deleted]**

**Purpose**

Section 95852(i)(3) is removed. This section specified that $CO_2$ emissions from biomass-derived fuels are included in the calculation of a compliance obligation, unless the biomass-derived fuel is listed in section 95852.2(a).

**Rationale**

This removal is necessary as section 95852(i)(3) [deleted] is duplicative of section 95852(i)(4) [new 95852(i)(3)]. Section 95852(i)(4) [new 95852(i)(3)] specifies that $CO_2$ emissions from biomass or biomass-derived fuels are included in the calculation of a compliance obligation, unless the biomass or biomass-derived fuel meets the requirements of section 95852.1, which contains a reference to section 95852.2(a).

**95852(i)(4) [new 95852(i)(3)]**

**Purpose**

Former section 95852(i)(4) is renumbered to section 95852(i)(3). This section specifies that $CO_2$ emissions from combustion or consumption of biomass or biomass-derived fuels are included in the calculation of a compliance obligation, unless the biomass or biomass-derived fuel meets the requirements of section 95852.1. The section is modified to clarify that both combustion and consumption of biomass or biomass-derived fuels may result in covered $CO_2$ emissions.

**Rationale**

This section is renumbered to reflect the deletion of current section 95852(i)(3). The modification is needed so that the provision appropriately applies the exemption requirements in section 95852.1 for biomass and biomass-derived fuels to all associated $CO_2$ emissions, inclusive of both combustion and consumption (i.e., process) $CO_2$ emissions.

**95852(l)**

**Purpose**

This section describes "CAISO Markets Outstanding Emissions," "CAISO Markets Purchaser Emissions." Amendments to this section update references to "EIM Purchaser Emissions," "EIM Outstanding Emissions", and "EIM Participating Resource Scheduling Coordinators" to reflect the development of EDAM. Amendments to this section also updates a reference directly to "EIM" to reflect the full name of the market, "WEIM."

**Rationale**

Changes to this section are necessary to reflect the development of the CAISO EDAM. The term "EIM Outstanding Emissions" has been replaced by "CAISO Markets Outstanding Emissions" to reflect changes in CAISO markets, including the development of EDAM, to mitigate leakage risk from electricity imports that will occur via EDAM, and to align with corresponding changes in MRR. The term "EIM Purchaser" has been replaced by "CAISO Markets Purchaser" and "EIM Purchaser Emissions" has been replaced by "CAISO Markets Purchaser Emissions" to reflect the development of the EDAM and the electricity imports that will occur via EDAM and to align with changes in MRR. Where "EIM Participating Resource Scheduling Coordinators" is referenced in this section, the text has been updated to "CAISO Scheduling Coordinators" to include scheduling coordinators for EDAM as well as WEIM. The amendments to these terms clarify that the Regulation is not exclusive to the WEIM and applies to all CAISO Markets. Where "EIM" is directly referenced in this section, the text has been updated to "WEIM" to align with how it is referenced in MRR and the full name of this market.

**95852(l)(1) [deleted]**

**Purpose**

Section 95852(l)(1) is deleted as it applies to past WEIM Outstanding Emissions requirements and text from section 95852(l)(3) has been moved in its place.

**Rationale**

The current section 95852(l)(1) directs the Executive Officer to retire vintage 2022 allowances equal to the amount of WEIM Outstanding Emissions in 2018, is no longer applicable. This section is not needed since it only applies to past retirement for CAISO Markets Outstanding Emissions. The text from section 95852(l)(3) replaces 95852(l)(1), as it describes the method of accounting for CAISO Markets Outstanding Emissions for 2021 and subsequent years. Language in this section has been updated to reflect EDAM by replacing “EIM Outstanding Emissions” and “EIM Purchaser Emissions” with “CAISO Markets Outstanding Emissions” and “CAISO Markets Purchaser Emissions” respectively.

**95852(l)(2) [deleted]**

**Purpose**

Section 95852(l)(2) is deleted as it applies to past WEIM Outstanding Emissions requirements.

**Rationale**

The current section 95852(l)(2), which directs the Executive Officer to retire vintage 2023 allowances equal to the amount of WEIM Outstanding Emissions from January 1, 2019 through March 31, 2019 and to retire vintage 2021 allowances from the Allocation Holding Account for WEIM Outstanding from April 1, 2019 through December 31, 2019, is no longer applicable. This section is not needed since it only applies to the past and allowance retirement for CAISO Markets Outstanding Emissions which has already occurred.

**95852(l)(3) [new 95852(l)(1)]**

**Purpose**

Section 95852(l)(3) is renumbered to section 95852(l)(1) to reflect deletion of current sections 95852(l)(1)-(2), “EIM Purchaser Emissions” is replaced by “CAISO Markets Purchaser Emissions,” and in multiple instances “EIM Outstanding Emissions” is replaced with “CAISO Markets Outstanding Emissions” to reflect the development of EDAM.

**Rationale**

Section 95852(l)(1) and section 95852(1)(2) contained text that are no longer applicable to the current method of accounting for CAISO Markets Outstanding Emissions because they applied to WEIM Outstanding Emissions for data years 2018 and 2019, which have already occurred. Language has been updated to account for the development of a new CAISO market, EDAM, by replacing references to “EIM Outstanding Emissions” and “EIM Purchaser Emissions” with “CAISO Markets Outstanding Emissions” and “CAISO Markets Purchaser Emissions” respectively.

## Section 95852.1. Compliance Obligations for Biomass-Derived Fuels.

### Purpose

Section 95852.1 specifies requirements that biomass-derived fuels must meet for specified emissions to be exempt from incurring a compliance obligation.

Modifications are made throughout section 95852.1 and subsections 95852.1(a)-(c) for clarity. This section is currently written as a double-negative and is restructured to an affirmative style. The section is revised to clearly refer to fuels that meet the requirements in subsections 95852.1(a)-(c) as "exempt biomass-derived fuels."

Modifications are made in section 95852.1 to clarify that only biogenic $CO_2$ emissions, and not other GHG emissions such as combustion $CH_4$ or $N_2O$ as measured in metric tons $CO_2e$, can be exempted from a compliance obligation. Current language references combustion emissions resulting from use of biomass-derived fuels as potentially exempt, but not process emissions. The revised language applies an exemption from a compliance obligation to all $CO_2$ emissions from exempt biomass-derived fuels, inclusive of both process $CO_2$ emissions and combustion $CO_2$ emissions.

Language regarding the reporting of combustion emissions from biomass-derived fuels in MRR is deleted from the first sentence of section 95852.1.

Language is added to section 95852.1 to require that an entity claiming the use of an exempt biomass-derived fuel must have sole ownership of the fuel and any emissions exemption or emissions reduction associated with the use of the exempt biomass-derived fuel. The language added to section 95852.1 replaces the language removed from section 95852.1.1(b), which similarly limited the claim and transfer of certain environmental attributes for exempt biomass-derived fuels.

### Rationale

The current section 95852.1 is written as a double-negative (e.g., the fuels aren't exempt if they don't meet the listed requirements), including references to "non-exempt biomass" derived fuels, which is difficult to understand. The Proposed Amendments restructure this section to an affirmative style (e.g., the fuels are exempt if they meet the following requirements) to clarify the intent of the section. Also, defining biomass-derived fuels meeting the requirements of section 95852.1 as "exempt biomass-derived fuels" enables such fuels to be clearly referred to throughout the Cap-and-Trade Regulation and MRR.

The revisions also address the potential for biomass-derived fuels to generate both combustion $CO_2$ and process $CO_2$ emissions. The current language in section 95852.1 only references combustion emissions resulting from use of biomass-derived fuels. $CO_2$ emissions can also result from non-combustion transformations of biomass-derived fuels. For example, use of biomethane as a hydrogen production feedstock results in biogenic $CO_2$ process emissions from the steam-methane reformation process. The proposed amendment refers to $CO_2$ emissions, enabling the Program to appropriately provide consistent treatment for all $CO_2$ emissions from biomass and biomass-derived fuels. The modified language also clarifies that only biogenic $CO_2$ emissions, and not $CH_2$ or $N_2O$ emissions, are potentially exempt from a compliance obligation, consistent with the requirements of section 95852(i) of the current Regulation.

The text deleted from the first sentence of section 95852.1 was redundant, because MRR already requires reporting and verification of emissions from combustion of biomass-derived fuels. The proposed change in the does not alter any requirements for determining compliance obligation exemptions for biomass-derived fuels.

The language added to section 95852.1 requires that an entity claiming the use of an exempt biomass-derived fuel must have sole ownership of the fuel and any emissions exemption or emissions reduction associated with the use of the exempt biomass-derived fuel, replacing the existing requirements in current section 95852.1.1(b). The existing requirements in section 95852.1.1(b) were intended "prevents another source from claiming the benefits realized or using the benefits to fulfill a compliance obligation, or for any other purposes," as described in the 2010 FSOR (CARB 2011). Section 95852.1 specifies overarching requirements that all biomass-derived fuels must meet for emissions associated with their use to be exempt from incurring a compliance obligation. Moving the text on use of environmental attributes from section 95852.1.1(b) to section 95852.1 clarifies that these requirements for an emissions exemption apply to all biomass-derived fuels. This clarification is aligned with the original intent of section 95852.1.1(b). The moved language continues to protect environmental integrity when a Program emissions exemption associated with use of exempt biomass-derived fuel is claimed.

The language added to section 95852.1 addresses reductions or exemptions of emissions associated with use (i.e., combustion or consumption) of a biomass-derived fuel. This prohibition on claiming an emissions exemption continues to prevent another entity from claiming biogenic $CO_2$ emissions and also the use of the same biomass-derived fuel as exempt from a Program compliance obligation or from claiming emissions reductions or generation of offset credits associated with the GHG emissions resulting from the use of the exempt biomass-derived fuel.

The current prohibition and this proposed text allows an entity that claims the use of an exempt biomass-derived fuel to reduce its compliance obligation to use the same environmental attribute (i.e., exempt biogenic emissions) to generate benefits or credits in a program distinct from the Cap-and-Invest Program and distinct from accounting of GHG emissions such as meeting the requirements of SB 1440. An entity that uses biomass-derived fuel to reduce its compliance obligation may also generate benefits or credits, attributed to use of the biomass-derived fuel, associated with tracking the carbon intensity or renewable content of supplied fuels and energy. The proposed regulatory text continues to allow recognition of the exempt biomass-derived fuel in the carbon intensity calculation for an LCFS fuel production pathway or in the generation of Renewable Energy Credits, which may be used to comply with the RPS Program. Both of these programs support complementary GHG emissions reduction in specific California sectors.

However, an entity that uses a biomass-derived fuel to reduce its Cap-and-Invest compliance obligation may not also claim the use of that biomass-derived fuel and displacement of fossil fuel to generate any offset credit, because that credit could then be transferred to another entity and used to reduce the other entity's accounting of its own GHG emissions.

95852.1(a)

**Purpose**

The subsection is currently written as a double-negative. The Proposed Amendments revise this section to be an affirmative requirement for a fuel to qualify as an exempt biomass-derived fuel.

**Rationale**

The current subsection is written as a double-negative which is difficult to understand. The proposed amendment clarifies this subsection to an affirmative style (e.g., the fuels are exempt if they are listed) to clarify the intent and requirements of the subsection.

95852.1(b)

**Purpose**

Proposed Amendments revise this section to be an affirmative requirement for a fuel to qualify as an exempt biomass-derived fuel. The section is currently written as a double-negative. The reference to combustion of fuels is also eliminated.

**Rationale**

The current section is written as a double-negative which is difficult to understand. The proposed amendment clarifies requirements of this subsection by amending it to an affirmative style (e.g., the reported fuel must meet the applicable eligibility requirements) to clarify the intent of the section.

95852.1(c)

**Purpose**

Proposed Amendments revise this section to be an affirmative requirement for a fuel to qualify as an exempt biomass-derived fuel. The section is currently written as a double-negative. This section requires reporting and verification under MRR as a requirement for a fuel to qualify as an exempt biomass-derived fuel. Language is added to clarify that a fuel must be reported as exempt “in an emissions data report that has received a positive or qualified positive emissions data verification statement” under MRR to qualify as an exempt biomass-derived fuel.

**Rationale**

The current section is written as a double-negative, which is difficult to understand. The proposed amendment clarifies requirements of this subsection by amending it to an affirmative style. The requirement to receive a positive emissions data verification statement, and not only report under MRR, aligns with requirements throughout the Regulation that only verified emissions data report are considered for determination of compliance obligations.

## Section 95852.1.1. Eligibility Requirements for Biomass-Derived Fuels.

**Purpose**

Section 95852.1.1 provides specific requirements for certain biomass-derived fuels to qualify as an exempt biomass-derived fuel. The section title is revised to add the word “exempt” before biomass-derived fuels to clarify that the requirements in section 95852.1.1 are only to qualify as an exempt biomass-derived fuel and are not required for non-exempt biomass-derived fuel. Within the Regulation, biomass and biomass-derived fuels are collectively referred to as biomass-derived fuels.

**Rationale**

The Regulation does not prohibit the use or reporting of any biomass-derived fuel by covered entities. The Regulation does specify certain requirements for biomass and biomass-derived fuels to qualify as an exempt biomass-derived fuel. An entity has a compliance obligation for every metric ton of $CO_2e$ emissions from biomass and biomass-derived fuels, except for $CO_2$ emissions from exempt biomass and biomass-derived fuels. The addition of “exempt” to the title of section 95852.1.1 clarifies that the requirements are only to qualify as an exempt biomass-derived fuel.

**<u>95852.1.1(a)</u>**

**Purpose**

Section 95852.1.1(a) provides clarity on compliance obligation exemptions for biomass-derived fuels given their biogenic nature and also establishes consistent treatment of biomass-derived fuels that are exempt. Modifications to section 95852.1.1(a) align with revisions made to section 95852.1:

- Specific references to combustion $CO_2$ emissions are removed.
- References to a verified emissions data report pursuant to MRR and section 95131(j) of MRR are removed.
- Wording is added to clarify that section 95852.1.1(a) is only applicable to fuel “sourced from outside of California.”

The phrase “to be eligible as an exempt biomass-derived fuel” is added to clarify that requirements in section 95852.1.1(a) must be met to qualify as an exempt biomass-derived fuel, but do not prohibit the use or reporting of any biomass-derived fuel by covered entities.

A requirement is also added to section 95852.1.1(a) specifying that biomethane or biogas must be “directly delivered or injected into the common carrier pipeline in North America” to be eligible as an exempt biomass-derived fuel.

**Rationale**

Exemptions from a compliance obligation for $CO_2$ emissions associated with biomass-derived fuels must be applied consistently to combustion $CO_2$ emissions and process $CO_2$ emissions. As such, any references to combustion $CO_2$ emissions in requirements for exempt biomass-derived fuels must be removed.

Data reporting and verification requirements are incorporated into section 95852.1(c) and apply to all exempt biomass-derived fuels. The language in section 95852.1.1(a) on data reporting and verification requirements is duplicative of the text now in section 95852.1(c) and is therefore removed.

In the current Regulation, section 95852.1(b) specifies that section 95852.1.1(a) is only applicable to biomass-derived fuel sourced from outside of California. The language added to section 95852.1.1(a) clarifies that the subsection is applicable only to fuel sourced outside of California, consistent with the current Regulation, and provides clarity and certainty to covered entities.

The Regulation does not prohibit the use or reporting of any biomass-derived fuel by covered entities. The addition of the phrase "to be eligible as an exempt biomass-derived fuel" clarifies that requirements in section 95852.1.1(a) must be met to qualify as an exempt biomass-derived fuel, but do not limit the use or reporting of any biomass-derived fuel by covered entities.

Language is added to section 95852.1.1(a) to specify that biomethane or biogas sourced from outside California must be "either directly delivered or injected into the common carrier pipeline in North America" to be eligible as an exempt biomass-derived fuel. As covered entities continue to reduce emissions, a growing number of covered entities may pursue emissions reductions by contracting for biomethane and biogas. Staff have determined that the reporting and verification needed to confirm meeting the requirements in section 95852.1.1(a) are not feasible for biomethane that is delivered from outside of the common carrier pipeline in North America. This limitation has no impact on existing contracts for exempt biomethane reported by covered entities.

**95852.1.1(a)(2)**

### Purpose

Pursuant to section 95852.1.1(a)(2), applicable biomethane or biogas must meet one of the listed criteria to be eligible for exemption. The requirements and criteria within section 95852.1.1(a)(2) are designed to ensure exempt biomethane or biogas can be accurately tracked and reported. Modifications are made throughout section 95852.1.1(a)(2) to improve clarity and ensure consistent interpretation and implementation:

- The requirement that an "entity claiming the biomass-derived fuel must be the first entity to contract for the biomass-derived fuel" is removed.
- To improve Program consistency, references to "three years" throughout section 95852.1.1(a)(2) are modified to specify "the 36 months before the first date of fuel delivery under contract." In the current Regulation, fuel use in the previous three years is used to determine eligibility as an exempt biomass-derived fuel.
- The term "useful output" is incorporated throughout section 95852.1.1(a)(2). "Useful output" includes energy production or use as a chemical product feedstock, but does not include fuel venting or destruction, as added to the definitions in section 95802. In the current Regulation, previous production of useful energy transfer is used to determine eligibility of as an exempt biomass-derived fuel.

### Rationale

The existing language and structure of section 95852.1.1(a)(2) lacks clarity and has required substantial investment of staff time to ensure the provisions are consistently implemented. Modifications throughout section 95852.1.1(a)(2) are made based on implementation experience and will provide necessary clarity and certainty for entities and will reduce the administrative burden.

The requirement that an "entity claiming the biomass-derived fuel must be the first entity to contract for the biomass-derived fuel" is removed. Staff have determined that, beyond provisions in sections 95852.1.1(a)(2)(A) and 95852.1.1(a)(2)(B), this requirement does not provide significant benefits to program environmental integrity but does increase the difficulty of reporting and verifying the exemption eligibility of biomethane.

References to the previous "three years" are modified to specify "the 36 months before the first date of fuel delivery under contract." In the current Regulation, fuel use in the previous three years is used to determine eligibility as an exempt biomass-derived fuel, but the current language does not clearly indicate which three years. This lack of clarity has resulted in confusion among covered entities and third-party verifiers when reporting and verifying exempt biomass-derived fuels. A more specific time-frame is necessary to ensure consistent implementation of the Program.

Under section 95852.1.1(a)(2), eligibility as an exempt biomass-derived fuel is determined based on previous "useful energy transfer." Useful energy transfer is not clearly defined within the Regulation, resulting in confusion. Section 95852.1.1(a)(2) is modified to employ previous "useful output" to determine eligibility as an exempt biomass-derived fuel. A definition of "useful output" is added to section 95802. The incorporated definition of "useful output" is consistent with the current section 95852.1.1(a)(2), where venting and destruction is not useful energy transfer or useful output. As defined, useful output is inclusive of both energy transfer and use as a chemical product feedstock, such as use of biomethane as a feedstock for hydrogen production. Acknowledgment of the potential for biomass-derived fuel to be either consumed as a feedstock or used for combustion is aligned with amendments in section 95852(i) and section 95852.1 to consistently treat combustion $CO_2$ emissions and process $CO_2$ emissions.

**95852.1.1(a)(2)(A)-(B)**

### Purpose

Section 95852.1.1(a)(2)(A) is revised to allow fuel from sources that have not produced useful output in the previous 36 months to be eligible as an exempt biomass-derived fuel. The intent of this eligibility criteria is currently in existing section 95852.1.1(a)(2)(B).

Section 95852.1.1(a)(2)(B) is revised so that if fuel from the source has produced useful output in the previous 36-months, only the amount of fuel used above the 36-month baseline is eligible as an exempt biomass-derived fuel. This eligibility criteria is currently in existing section 95852.1.1(a)(2)(A).

### Rationale

Revisions to incorporate useful output are proposed to conform with the changes in section 95852.1.1(a)(2) above and the new definition of "useful output" in 95802. These changes support the use of consistent definition for useful output and are needed to clarify eligibility requirements. References to the previous “three years” are modified to specify “the 36 months before the first date of fuel delivery under contract.” In the current Regulation, fuel use in the previous three years is used to determine eligibility as an exempt biomass-derived fuel, but the current language does not clearly indicate which three years. This lack of clarity has resulted in confusion among covered entities and third-party verifiers when reporting and verifying exempt biomass-derived fuels. A more specific time-frame is necessary to ensure consistent implementation of the Program.

In the current Regulation, section 95852.1.1(a)(2)(A) provides eligibility criteria where the fuel source has provided useful output in the previous three years and section 95852.1.1(2)(B) provides eligibility criteria where the fuel source has not provided useful output. In the revised text, the intent of both sections 95852.1.1(a)(2)(A) and 95852.1.1(a)(2)(B) is preserved but the order is reversed so that section 95852.1.1(a)(2)(A) provides eligibility criteria where the fuel source has not provided useful output and section 958521.1(a)(2)(B) provides eligibility criteria where the fuel source has provided useful output in the in the previous three years. Staff believe this revised structure will improve consistency of stakeholder interpretation.

**<u>95852.1.1(a)(2)(C) [new]</u>**

**Purpose**

This new provision provides a new option for biomethane or biogas to be potentially eligible for exemption. If the fuel has been used to produce useful output in California in each of the three previous years, then the average useful output in California over the three previous years is eligible to be exempt pursuant to section 95852.1.

**Rationale**

If biomethane or biogas transitions from end-uses in the California transportation sector to end uses by stationary source facilities covered by the Program, staff implementation experience indicates that it may be difficult for covered entities to acquire sufficient documentation to determine and verify eligibility of the fuel under section 95852.1.1(a)(4). Section 9582.1.1(a)(4) provides eligibility for fuel that was previously eligible under section 95852.1.1(a)(1)-(3) if the verifier is able to trace the fuel to a previously eligible contract. For fuel with verifiable long-standing use in California, but without previous recognition within the Program, staff have determined it is appropriate to provide alternate exemption criteria to support continued use of those fuels to reduce emissions. Staff included a three-year baseline period in section 95852.1.1(a)(2)(C) to be consistent with the three-year baseline period used throughout section 95852.1.1(a)(2), and to support the transition of biomethane that has been used in a different sector (e.g. transport or electricity) for at least three years. Including a three-year baseline period reduces the risk of covered entities purposely using section 95852.1.1(a)(2)(C) to qualify biomethane fuel as exempt without actually supporting the transition of the existing biomethane resources from a different sector into stationary source use.

**<u>95852.1.1(a)(3)</u>**

**Purpose**

Section 95852.1.1(a)(3) is revised to replace the term “useful energy transfer” with the term “useful output,” consistent with revisions to 95852.1.1(a)(2).

**Rationale**

Useful energy transfer is not clearly defined within the Regulation, resulting in confusion. Consistent with other changes in this section, this subsection is modified to use the term “useful output” to determine eligibility as an exempt biomass-derived fuel. A definition of “useful output” is added to section 95802. The incorporated definition of “useful output” provides clarity and is consistent with the current section 95852.1.1(a)(2), where venting and destruction is not useful energy transfer or useful output. As defined, useful output is inclusive of both energy transfer and use as a chemical product feedstock, such as use of biomethane as a feedstock for hydrogen production. Acknowledgment of the potential for biomass-derived fuel to be either consumed as a feedstock or used for combustion is aligned with amendments in section 95852(i) and section 95852.1 to consistently treat combustion $CO_2$ emissions and process $CO_2$ emissions.

**<u>95852.1.1(a)(4)</u>**

**Purpose**

Section 95852.1.1(a)(4) provides exemption eligibility for fuels that can be traced to a contract previously eligible for exemption under section 95852.1.1(a)(1)-(3). The terms “source” and “amount” are added to the existing language to clarify that both the source of the fuel and the amount of the fuel must be traced to a previously eligible contract.

**Rationale**

Exemption criteria within section 95852.1.1(a)(1)-(3) specify eligible amounts of fuels from a certain source. Consistent with section 95852.1.1(a)(1)-(3), the revision to section 95852.1.1(a)(4) emphasizes that the fuel <u>source</u> and <u>amount</u> must be traced to a fuel source and amount that was previously eligible under section 95852.1.1(a)(1)-(3). This modification provides clarity to covered entities and third-party verifiers.

**<u>95852.1.1(a)(5) [new]</u>**

**Purpose**

This new provision provides a new option emission exemption for biomethane or biogas sourced from a jurisdiction operating an external GHG emission trading system to which California has linked pursuant to subarticle 12, then the fuel is eligible to be exempt pursuant to section 95852.1.

**Rationale**

The new provision enables biogas or biomethane sourced from a linked jurisdiction to be eligible for exemption pursuant to section 95852.1, regardless of previous use of the fuel. This is appropriate, as section 95852.1.1(a) provisions are designed to limit emissions leakage and emissions leakage risks are minimized within a linked jurisdiction, as a program within a linked jurisdiction would impart a carbon price consistent with the California Cap-and-Invest Program.

**95852.1.1(b) [deleted]**

### Purpose

Section 95852.1.1(b) is removed. This section limits the claim and transfer of any emissions reduction attributed to the use of an exempt biomass-derived fuel. This language is moved to section 95852.1 and clarified.

### Rationale

To protect the environmental integrity of the Program, an entity claiming the use of exempt biomass-derived fuel to reduce a Program compliance obligation must have sole ownership of the fuel and any emissions exemption or emissions reduction associated with the use of the exempt biomass-derived fuel. Section 95852.1.1(b) was intended to limit the claim and transfer of the avoided fossil fuel combustion environmental attribute for any biomass-derived fuels with emissions that are recognized as exempt in the Cap-and-Invest Program. However, section 95852.1.1 is designed to provide requirements for specific types of exempt biomass-derived fuels. Section 95852.1 provides the broad requirements that any biomass-derived fuel must meet to have its associated $CO_2$ emissions recognized as exempt from a Program compliance obligation. Provisions to limit the transfer of environmental attributes for claimed exempt biomass-derived fuels are appropriately moved to section 95852.1 and clarified.

## Section 95852.2. Emissions Without a Compliance Obligation.

### Purpose

Section 95852.2 lists specific sources and fuel types for which emissions may be eligible for an exemption from a compliance obligation.

Consistent with updates to section 95852.1, modifications are made throughout section 95852.2 to clarify that only biogenic $CO_2$ emissions, and not $CH_2$ or $N_2O$ emissions, are potentially exempt from a compliance obligation. Current language references combustion emissions resulting from use of biomass-derived fuels as potentially exempt. The revised language also applies to all $CO_2$ emissions from exempt biomass-derived fuels, inclusive of process $CO_2$ emissions and combustion $CO_2$ emissions.

### Rationale

The revisions address the potential for biomass-derived fuels to generate both combustion $CO_2$ and process $CO_2$ emissions. The current language in section 95852.2 only references combustion emissions resulting from use of biomass-derived fuels. $CO_2$ emissions can also result from non-combustion transformations of biomass-derived fuels. For example, use of biomethane as a hydrogen production feedstock results in biogenic $CO_2$ process emissions from the steam-methane reformation process. The revision refers to $CO_2$ emissions, enabling the Program to appropriately provide consistent treatment for all $CO_2$ emissions from biomass and biomass-derived fuels. The modified language also clarifies that only biogenic $CO_2$ emissions, and not $CH_2$ or $N_2O$ emissions, are potentially exempt from a compliance obligation, consistent with the requirements of 95952(i).

**<u>95852.2(a)</u>**

### Purpose

Section 95852.2(a) lists specific biomass-derived fuels for which associated $CO_2$ emissions may be eligible for an exemption from a compliance obligation. This section is modified to clarify that associated $CO_2$ emissions are eligible for an exemption only if the fuel is an exempt biomass-derived fuel pursuant to section 95852.1.

Modifications and updates are made throughout section 95852.2(a) to:

- improve clarity, consistent with the current Regulation and Program implementation, and
- update the list of biomass-derived fuels that are eligible for exemption

### Rationale

Section 95852.1 specifies requirements that biomass-derived fuels must meet for $CO_2$ emissions to be exempt from incurring a compliance obligation. $CO_2$ emissions from a biomass-derived fuel listed under section 95852.2 are only eligible for exemption if the fuel meets all requirements of section 95852.1 to qualify as an exempt biomass-derived fuel. However, a fuel must be listed under section 95852.2(a) to be eligible to qualify as an exempt biomass-derived fuel.

Modifications throughout section 95852.2 are made based on implementation experience and the growing variety of available biomass-derived fuels. These updates will provide necessary certainty for entities, reduce the administrative burden of the Program.

**<u>95852.2(a)(3)</u>**

### Purpose

This section is modified to further specify that agricultural materials eligible to qualify as an exempt biomass-derived fuel includes agricultural wastes and residues and not all agricultural crops.

### Rationale

Under the current Regulation, all emissions from biomass-derived fuels incur a compliance obligation by default. Only specific fuels listed in section 95852.2(a) may qualify as an exempt biomass-derived fuel. It is necessary to provide further specification to section 95852.2(a)(3) to continue ensuring that CARB can evaluate a biomass-derived fuel before authorizing a fuel to qualify as an exempt biomass-derived fuel. Updating section 95852.2(a)(3) to further specify only agricultural waste and residues are eligible for exemption is consistent with the requirements in current sections 95852.2(a)(1), 95852.2(a)(2), 95852.2(a)(4), 95852.2(a)(7), and 95852.2(a)(8).

All current uses of agricultural wastes that are eligible to qualify as an exempt biomass-derived fuel (e.g., wood waste from orchard prunings or almond hulls) are not impacted by this update.

This update does not alter eligibility of currently reported uses of biomass-derived fuels by covered entities.

**95852.2(a)(5) [deleted]**

**Purpose**

This section lists biodiesel as eligible to qualify as an exempt biomass-derived fuel and also defines biodiesel. The existing section is deleted, and the exemption for biodiesel is moved to and consolidated within section 95852.2(a)(8), which lists all liquid transportation fuels that are eligible for exemption.

**Rationale**

Section 95852.2(a)(5) provided a detailed definition and description of biodiesel. For clarity and consistency, the definition of biodiesel is added to the definitions in section 95802 and aligned with the definition of biodiesel provided in MRR.

Treatment of biodiesel under the Regulation is unchanged, as biodiesel will continue to be eligible to be an exempt biomass-derived fuel by being listed under section 95852.2(a) within section 95852.2(a)(8). There also is no functional change to what fuels qualify as biodiesel under the Regulation; all applicable specifications are included in the definition of "biodiesel" in section 95802.

**95852.2(a)(6) [deleted]**

**Purpose**

This section lists fuel ethanol as eligible to qualify as an exempt biomass-derived fuel and also defines fuel ethanol. The existing section is deleted and the exemption for the biogenic portion of fuel ethanol is moved to and consolidated within section 95852.2(a)(8), which lists all liquid transportation fuels that are eligible for exemption.

**Rationale**

The current section 95852.2(a)(6) provides a detailed definition and description of fuel ethanol. For clarity and consistency, the definition of fuel ethanol is added to the definitions in section 95802 and aligned with the definition of fuel ethanol in MRR.

Treatment of the biogenic fraction of fuel ethanol under the Regulation is unchanged, as fuel ethanol will continue to be eligible to be an exempt biomass-derived fuel by being listed under section 95852.2(a) within section 95852.2(a)(8). The exemption for the fossil denaturant portion of fuel ethanol is deleted from the Regulation, enabled by corresponding updates in MRR that will ensure the portion of fossil denaturant within fuel ethanol is reported. Consistent with the Program's treatment of other supplied fossil fuels, the update ensures coverage of emissions from combustion of fossil fuels reported pursuant to MRR.

**95852.2(a)(6) [new]**

**Purpose**

This section adds biochar as a fuel eligible to qualify as an exempt biomass-derived fuel when used as a fuel if the biochar is derived from any material listed in sections 95852.2(a)(1)-(3), 95852.2(a)(4)(B), or 95852.2(a)(5).

**Rationale**

Biochar is a form of charcoal produced from biomass. Biochar is an emergent biomass-derived fuel that may be able to replace fossil fuel in meeting the needs of some high-heat industrial processes, such as clinker production. Staff have determined that biochar produced from solid waste materials or forest materials that are harvested for the purpose of forest fire fuel reduction or forest stand improvement may qualify as an exempt biomass-derived fuel. To protect the environmental integrity of the Program and to protect against unintended consequences, such as emissions leakage from releasing stored carbon in standing forests, biochar produced from other forest materials is not eligible for exemption.

**95852.2(a)(8) (new 95852.2(a)(7))**

**Purpose**

Former section 95852.2(a)(8) is renumbered to section 95852.2(a)(7). This section is also modified to add “and other biogenic gases, including gases sold in compressed or liquefied forms” as eligible for exemption in addition to biomethane and biogas, which were already specified.

**Rationale**

With the evolution of the biofuels sector, a growing variety of biogenic gases in addition to biomethane and biogas may be used. This update provides consistent treatment of all biogenic gases under the Program, including gases sold in compressed or liquified fuels such as biogenic butane. This update will provide certainty for entities, reduce the administrative burden of the Program, and address emissions from emergent biomass-derived fuels. This modification does not alter eligibility of currently reported uses of biomass-derived fuels by covered entities.

**95852.2(a)(8)(A) [new 95852.2(a)(7)(A)]**

**Purpose**

Proposed Amendments clarify that only biogenic gases derived from animal waste, plant waste, and other organic waste are eligible to qualify as an exempt biomass-derived fuel. The section previously stated “all animal, plant, and other organic waste” was eligible, with the term waste applying to each of the terms animal, plant, and organic.

**Rationale**

The existing language within section 95852.2(a)(8)(A) is a point of confusion. As indicated in the 2010 Rulemaking and consistent with Program implementation, section 95852.2(a)(8)(A) only refers to waste materials (CARB 2011). This update will provide necessary certainty for entities and reduce the administrative burden of the Program.

**95852.2(a)(8) [new]**

**Purpose**

All liquid biomass-derived transportation fuels eligible to qualify as an exempt biomass-derived fuel are moved to and consolidated in section 95852.2(a)(8). New sections 95852.2(a)(8)(A)-(C) list fuels currently specified in section 95852.2(a): renewable diesel, biodiesel, and fuel ethanol. Section 95852.2(a)(8)(D) adds biogenic motor gasoline blendstocks as a biomass-derived fuel eligible to qualify as an exempt biomass-derived fuel.

**Rationale**

To improve clarity for reporting and verification of transportation fuels pursuant to MRR, liquid biomass-derived transportation fuels eligible for exemption are moved to and consolidated in section 95852.2(a)(8). Treatment of renewable diesel, biodiesel, and the biogenic fraction of fuel ethanol under the Regulation is unchanged. Biogenic motor gasoline blendstocks are a co-product of renewable diesel production and are now being produced for use in California transportation fuel. Addition of biogenic motor gasoline blendstocks to section 95852.2(a) is aligned with the Program's current treatment of biomass-based diesel.

**95852.2(a)(9) [deleted]**

**Purpose**

This section lists renewable diesel as eligible to qualify as an exempt biomass-derived fuel. The existing section is deleted and the exemption for renewable diesel is moved to and consolidated in section 95852.2(a)(8), which lists all liquid transportation fuels that are eligible for exemption.

**Rationale**

To improve clarity for reporting and verification of transportation fuels pursuant to MRR, liquid biomass-derived transportation fuels eligible for exemption are consolidated in section 95852.2(a)(8). Treatment of renewable diesel under the Regulation is unchanged, as renewable diesel will continue to be eligible to be an exempt biomass-derived fuel by being listed under section 95852.2(a) within section 95852.2(a)(8).

**95852.2(a)(9) [new]**

**Purpose**

This section specifies that the biogenic fraction of fuels that are produced as co-products of exempt biomass-derived liquid hydrocarbon fuels as listed in section 95852.2(a)(8) qualify as an exempt biomass-derived fuel.

**Rationale**

This section is necessary to maintain consistent treatment of biomass-derived fuels that are derived solely through the production of other exempt biomass-derived liquid hydrocarbon fuels. The production of exempt liquid hydrocarbon fuels like renewable diesel has necessary co-products like motor gasoline feedstocks and other liquid hydrocarbon fuels. This change ensures that these co-products are treated the same as the exempt liquid hydrocarbon fuels listed in section 95852.2(a)(8).

**95852.2(b)(3)**

**Purpose**

The existing language in section 95852.2(b)(3) is removed and replaced with an exemption for reported emissions associated with pipeline dig-ins. The removed language provided a broad exemption for vented and fugitive emissions from NGS associated transmission compression and distribution infrastructure.

**Rationale**

Emissions of relatively small amounts of methane to the atmosphere have a disproportionate near-term impact on climate change, and CARB has prioritized reducing and accounting for methane and other high-GWP emissions. The Proposed Amendments refine the exemption for vented and fugitive emissions from NGS associated infrastructure, aligning emissions exemptions for vented and fugitive methane emissions across all segments and facilities within the natural gas production and distribution sector. An exception is proposed for pipeline dig-ins which is a source type unique to NGS distribution and transmission pipelines as the current reporting methods may not be sufficiently accurate.

The exemption for pipeline dig-ins refines the exemption for vented and fugitive emissions from NGS associated infrastructure to prevent unnecessary renumbering of following provisions within section 95852.2(b).

**95852.2(b)(14) [deleted]**

**Purpose**

Section 95852.2(b)(14) is removed. This section provides an emissions exemption for process emissions from fuel cells powered by biomass-derived fuels.

**Rationale**

The specific exemption for biogenic process emissions for fuel cells powered by biomass-derived fuels is no longer necessary given modifications to sections 95852.1 and 95852.2, which enable exemption of biogenic $CO_2$ emissions from any exempt biomass-derived fuels.

## Section 95852.3. Compliance Obligations for Utilized or Sequestered Captured Carbon Dioxide. [new]

**95852.3(a) [new]**

**Purpose**

This new section adds a location for provisions regarding the recognition of utilized or sequestered $CO_2$ for reducing a compliance obligation. It provides a location for the language moved from section 95852(g). Additionally, the new text now specifies that emissions reductions will need to meet at least a 100-year permanence standard. The new text also specifies that any methodology must be consistent with the requirements of SB 905 (Section 39741.1 of the Health and Safety Code), which establishes the Carbon Capture, Removal, Utilization and Storage Program. The exemption for exported $CO_2$ is also deleted and the word “geologic” is deleted from the prior section 95852(g) the word “utilized” is added to this new section.

**Rationale**

This new section is necessary to hold provisions regarding recognition of utilized or sequestered $CO_2$ for reducing a compliance obligation in a central location. Additionally, this moved text removes an exemption from a compliance obligation for exported $CO_2$. The 2010 FSOR indicates that this exemption for exported $CO_2$ was included primarily because the potential $CO_2$ emissions would occur out of state. Removing this exemption for exported $CO_2$ preserves the environmental integrity of the Program and is consistent with CARB’s point of regulation for carbon dioxide suppliers, which is at the point source where the emissions are created. Currently, exempting or not exempting exported $CO_2$ would have very little impact on covered emissions in the Program. Removing the word “geologic” preceding sequestration allows for methods of sequestration other than geologic sequestration to be considered for future Board-approved CCUS quantification methodologies and future incorporation into the Cap-and-Trade Regulation. Addition of the word “utilized” allows for uses of captured $CO_2$ to be considered for a future Board-approved quantification methodology and future incorporation in the Cap-and-Trade Regulation. The methodology will need to ensure that the emissions reductions meet at least a 100-year permanence standard for permanence and maintains the existing requirements that the methodology will need to ensure reductions are real, quantifiable, verifiable and enforceable. The also proposed amendment adds a requirement that the future methodology must be consistent with SB 905 to specify how these requirements will be connected to the Carbon Capture, Removal, Utilization, and Storage Program.

## Section 95856. Timely Surrender of Compliance Instruments by a Covered Entity.

**95856(h)(1)(A)**

**Purpose**

The proposed change would clarify the order of offset credit retirement, with oldest credits retired first and subject to the offset quantitative usage limit. The offset quantitative usage limit is the maximum percentage of the compliance obligation that can be met with offset credits pursuant to section 95854.

**Rationale**

This change is necessary for clarity and consistent with other program requirements. The 8% quantitative usage limit identified in the current Regulation is no longer applicable. The quantitative usage limit changed from 8% to 4% at the start of the fourth compliance period, which began in 2021 as described in section 95854(b). The quantitative usage limit will then be set at 6% for the 2026 data year of the fifth compliance period and subsequent compliance periods. This change clarifies the maximum number of offset credits that the Executive Officer will retire from an entity's compliance account for an annual compliance obligation during the first two data years of the fifth compliance period and the last data year of the fifth compliance period. The change also clarifies the offset quantitative usage limit identified in section 95854 for the sixth and subsequent compliance periods in section 95840(f) thru (i) that are also proposed for updates.

**95856(h)(1)(D)**

### Purpose

This section is modified to add references to subsections 95891(g) and 95893(a)(1), which is proposed Incentive Allocation true-up value and proposed allocation true-up mechanism for newly eligible natural gas suppliers, respectively.

### Rationale

This change is necessary so that any true-up allowances received by industrial facilities for Incentive Allocation pursuant to subsection 95891(g) or a natural gas supplier pursuant to subsection 95893(a)(1) are treated consistently with other forms of true-up allocation and can be used to fulfill an annual compliance obligation.

**95856(h)(2)(D)**

### Purpose

This section is modified to add references to subsections 95891(g) and 95893(a)(1), which is proposed Incentive Allocation true-up value and proposed allocation true-up mechanism for newly eligible natural gas suppliers, respectively.

### Rationale

This change is necessary so that true-up allowances received by received by industrial facilities for Incentive Allocation pursuant to subsection 95891(g) or a natural gas supplier pursuant to section 95893(a)(1) are treated consistently with other forms of true-up allocation and can be used to fulfill a full compliance period compliance obligation.

## Section 95859. Federal Clean Power Plan Requirements. [deleted]

**95859(a)-(e) [deleted]**

### Purpose

Section 95859 lays out provisions of the Cap-and-Invest Program to support California's plan for compliance with the Federal Clean Power Plan of 2015, and Proposed Amendments delete this section in its entirety. As provided in the 2016 ISOR, these requirements were added "… so that the Cap-and-Invest Program can serve as the mechanism for the State's compliance with the federal Clean Power Plan … " (CARB 2016).

### Rationale

The removal of section 95989 clarifies the Regulation. In 2019, the U.S. EPA repealed the Federal Clean Power Plan (U.S. EPA 2024). Regulatory language describing the Cap-and-Invest Program if the Federal Clean Power Plan is in effect is not needed given the repeal.

## Section 95871. Disposition of Allowances from Vintage Year 2021 and Beyond.

**<u>95871(a)</u>**

### Purpose

The section is modified to specify the disposition of allowances to the Allowance Price Containment Reserve for the post-2030 Program. For vintage years 2031 through 2045, the Executive Officer will transfer allowances to the Allowance Price Containment Reserve (Reserve) as specified in Table 8-3.

### Rationale

This change is necessary to identify the allowances from the vintage 2031-2045 budgets that will be available for sale from the Reserve. Staff believe the number of allowances moved to the Reserve each year post-2030 balances the need for cost containment in the context of a more stringent Program with the other important purpose for which allowances are used, such as minimizing leakage, protecting utility ratepayers, and auctioning for equitable distribution and price transparency.

**<u>95871(c)</u>**

### Purpose

The purpose of the first and last change is to delete the text which limits EDU allocation through 2030. Additionally, a new reference to section 95892(a) is added to provide allocation of additional allowances to EDUs to their limited use holding accounts on the same timeline as EDU allocation.

### Rationale

This section in the current Regulation only allocated to EDUs through 2030. The first and last change will allow CARB to continue allocating to EDUs beyond 2030. The addition of section 95892(a) provides CARB with a mechanism to allocate additional allowances to EDUs following the same timeline as the EDU allocation.

**<u>95871(h)</u>**

### Purpose

The Proposed Amendments add a reference to new subsection 95871(j) Allowance Removals for Offset Use. Subsection 95871(h) designates the remaining allowances that are available for auction after allowances are allocated for other specific purposes.

## Rationale

This change is necessary to account for the allowances removed for offset use, as required by AB 1207 and as specified in new subsection 95871(j), when designating the allowances available for auction.

**<u>95871(j) [new]</u>**

## Purpose

The Proposed Amendments implement the requirement in AB 1207 (HSC section 38562(c)(2)(E)(iii)) to remove allowances from annual budgets corresponding to compliance offset use. This section references a new account, the Allowance Removal for Offset Use Account, which is newly established in section 95831(b)(9) to hold allowances removed from annual budgets through the duration of a compliance period until after the full compliance period compliance event when the amount of compliance offsets used for a given emissions year can first be determined and subsequently retired from the account corresponding to actual offset use in the compliance period. This section specifies that CARB shall conduct this annual allowance removal, and any necessary true-up adjustment in the year following a compliance period, by no later than December 8.

## Rationale

This section is necessary to establish the procedures to implement the new requirement in AB 1207 that allowances must be removed corresponding to compliance offset use. The procedure retires the allowances in a manner that minimizes volatility in the allowances offered for auction that might otherwise occur due to the spike in compliance offset use in years where covered entities fulfill multi-year compliance obligations as opposed to annual compliance obligations. The proposed implementation mechanism:

1. Establishes a new holding account;
2. Each year removes the maximum number of allowances that may need to be retired from the upcoming annual budget and places them in the holding account;
3. After each full compliance period, retires a number of allowances from that holding account that is equal to actual compliance offset use for emissions obligations during that compliance period, and
4. Makes the allowances that were not retired from the holding account after a compliance period available for subsequent auctions of current vintage allowances.

Staff propose a December 8 deadline for the annual allowance transfer process to allow sufficient time between the early November compliance event and publishing of MRR covered emissions and the publication of auction information for the following budget year that occurs annually each December under section 95911.

**<u>95871(j)(1) [new]</u>**

## Purpose

The Proposed Amendments specify the formula for calculating the number of allowances to initially remove from the upcoming allowance budget year "t," which corresponds to the maximum compliance offset use for the previous year's ("t-2") covered emissions. The proposed calculation multiplies the total covered emissions reported and verified in MRR for the emissions year that is two years prior to the allowance budget year by the quantitative usage limit for compliance offsets for that same year.

**Rationale**

This section is necessary to establish the methodology for the Executive Officer to determine how many allowances to initially remove from the subsequent year's allowance budget each year and place in the holding account for potential retirement to recognize compliance offset use. The proposed calculation incorporates the most recent MRR emissions data that will be publicly available at the time of this allowance transfer (by December 8 each year), and the quantitative usage limit for compliance offsets which is set at 0.06 for each future budget year in section 95854(b). The proposed calculation represents the maximum number of compliance offset credits expected to be used to fulfill covered emissions for a given data year.

The Proposed Amendments also address the predictable variability in the number of allowances available for auction each year that would otherwise occur if allowances equal to the total number of offsets used for compliance in the prior year were immediately retired from the next year's allowance budget. Covered entities surrender compliance instruments, allowances and offset credits, to meet their compliance obligations in stages. In early years of a compliance period, covered entities must surrender compliance instruments for 30% of the previous year's covered emissions. After each full compliance period, covered entities are required to surrender compliance instruments for all of the previous year's covered emissions, plus the remaining 70% of covered emissions from prior years. This results in a predictable increase in compliance offset use at the end of each compliance period.

The following sections 95871(j)(2)-(3) establish a process for making the allowances that were not retired from the holding account available for subsequent auctions of current vintage allowances.

**<u>95871(j)(2) [new]</u>**

**Purpose**

The Proposed Amendments establish a true-up procedure beginning in 2029 for returning allowances from the Allowance Removal for Offset Use Account to auction in future budget years, if allowances were transferred to the account in excess of the actual number of compliance offsets surrendered for compliance obligations in the previous compliance period.

**Rationale**

This section is necessary to ensure that the proposed implementation mechanism for removing and retiring allowances from future annual budgets corresponding with compliance offset use, as required by AB 1207, does not retire more allowances than needed to match actual compliance offset use during the previous compliance period, which may occur if covered entities use fewer compliance offset credits than the maximum amount allowed by the quantitative usage limit. This section is implemented beginning in 2029 because that is the year following the first full compliance period occurring after the adoption of the Proposed Amendments. This section is implemented after calculating the annual transfer of allowances for vintage year “t” under 95871(j)(1), i.e. the compliance period true-up calculation is inclusive of the annual transfer calculation, because allowances transferred for year “t” correspond to offsets surrendered in year “t-1,” which correspond to emissions year “t-2,” which is the final emissions year of the previous compliance period.

**95871(j)(2)(A) [new]**

**Purpose**

This section specifies that the calculation in section 95871(j)(2) excludes any compliance offsets used to fulfill a compliance obligation for covered emissions prior to the 2026 emissions year.

**Rationale**

This section is necessary to limit allowance removals for compliance offset use to only the compliance offsets representing covered emissions obligations that occurred after the passage of AB 1207. In 2027, covered entities will surrender allowances and compliance offsets to fulfill compliance obligations for the fifth compliance period covering emissions years 2024-26. 2024 and 2025 emissions obligations were incurred prior to the first emissions year following the passage of AB 1207, and thus the corresponding compliance offsets used for those emissions are outside the scope of the AB 1207 requirement to remove allowances from future budgets corresponding with compliance offset use.

**95871(j)(2)(B) [new]**

**Purpose**

This section specifies that the calculation in section 95871(j)(2) excludes any compliance offsets surrendered for the applicable emissions years that were invalidated during the previous compliance period.

**Rationale**

This section is necessary to ensure that allowances are not removed for compliance offset credits that are invalidated pursuant to section 95985. Invalidated offsets cannot be used to fulfill a covered entity’s compliance obligation and thus are not subject to the requirement in AB 1207 to remove allowances from future budgets corresponding with compliance offset use. Not accounting for invalidated offsets in this calculation would result in removing more allowances than necessary under AB 1207.

**95871(j)(3) [new]**

**Purpose**

This section specifies the mechanism for returning allowances calculated under section 95871(j)(2) to the Auction Account and designating these allowances for sale over the next three calendar years.

**Rationale**

This section is necessary for returning allowances from the Allowance Removal for Offset Use Account in excess of the actual number of allowances needed to match compliance offset use during the previous compliance period. Staff propose dividing these excess allowances equally across Current Auctions during the next three calendar years to limit the impact of this transfer on the number of allowances available for auction when conducting the allowance retirements required by AB 1207.

**95871(j)(4) [new]**

**Purpose**

This section specifies that any remaining allowances in the Allowance Removal for Offset Use Account after conducting the true-up process described in sections 95871(j)(2)-(3) will be transferred to the Retirement Account.

**Rationale**

This section is necessary for completing the process of allowance retirements for compliance offset use as required by AB 1207. Conducting the allowance transfer to the Retirement Account after the true-up step described in sections 95871(j)(2)-(3) is initiated ensures that the correct number of allowances corresponding to compliance offset use are retired from the Program budgets and that CARB staff can complete this transfer process by the December 8 deadline established in section 95871(j).

**Table 8-1**

**Purpose**

Table 8-1 is moved from section 95870 to section 95871.

Assistance factors are set for 2031-2035.

"Support Activities for Air Transportation" was modified to correct a typographical error.

"NAICS code 212, Mining (except oil and gas) for Supplementary Cementitious Materials" and "NAICS code 327, Nonmetallic Mineral Product Manufacturing for Supplementary Cementitious Materials" were added under the leakage classification for "Cement Manufacturing" to recognize in-state Supplementary Cementitious Materials production to make Finished Cement as part of the activities to produce cement.

The following activities were added to sectors with existing leakage risk categories:

- Crude Oil Extraction was added to high leakage risk category under Crude Petroleum and Natural Gas Extraction,

- Anhydrous Milkfat Processing was added to the medium leakage risk category under Dairy Product Manufacturing,
- Deproteinized Whey and Sweet Whey Powder Processing was added to medium leakage risk category under Dairy Product Manufacturing,
- Asphalt Production was added to the medium leakage risk category under Petroleum Refineries, and
- Liquid Hydrocarbon Fuel was added to the medium leakage risk category under All Other Basic Organic Chemical Manufacturing.
- Sweet whey powder processing is added to the medium leakage risk category under Dairy Product Manufacturing.

**Rationale**

This change is necessary to reflect that Table 8-1 contains assistance factors for budget years 2021-2035.

Assistance factors are set at 100% for 2031-2035 to provide Program certainty and protect against the risk of emissions leakage. In 2017, the Legislature set assistance factors at 100% through 2030 in AB 398, and this was recently reaffirmed by the Legislature in AB 1207. The Proposed Amendments extend the 100% assistance factors for all emissions-intensive, trade-exposed industrial sectors through 2035. This timing is aligned with the Proposed Amendments that set cap adjustment factors through 2035. The assistance factor is a factor in the calculation of free industrial allocation to protect against the risk of emissions leakage, and the Proposed Amendments maintain the assistance factors at 100% to minimize emissions leakage risk across all covered industrial sectors as Program stringency increases.

The modifications of “Support Activities for Air Transportation” is necessary to correct the spelling of “activities.”

The addition of “NAICS code 212, Mining (except oil and gas) for Supplementary Cementitious Materials” and “NAICS code 327, Nonmetallic Mineral Product Manufacturing for Supplementary Cementitious Materials” were necessary to provide the same level of leakage minimization assistance to lower carbon cement with increased amount of SCMs as conventional cement.

The activities added to sectors with existing leakage risk categories are needed to provide leakage protection for the manufacturing of products with new or modified benchmarks listed in Table 9-1.

**<u>Table 8-3 [new]</u>**

**Purpose**

Table 8-3 is added to designate vintage 2031-2045 allowances to the Allowance Price Containment Reserve. The number of allowances allocated to the APCR is 1% of each annual budget pursuant to the proposed change to section 95913(h)(1)(F).

**Rationale**

This change is necessary to identify the allowances from the vintage 2031-2045 budgets that will be available for sale from the two-tier Reserve. The number of allowances moved to the Reserve each year post-2030 balances the need for cost containment in the context of a more stringent Program with the other important purpose for which allowances are used, such as minimizing leakage, protecting utility ratepayers, and auctioning for equitable distribution and price transparency. To date, no allowances have been sold from the Reserve, as no Reserve sales have been held.

## Section 95890. General Provisions for Direct Allocations.

**95890(c)**

### Purpose

The Proposed Amendments delete the reference to Table 9-3a, which is for past allocation to the City of Shasta Lake and is no longer needed.

### Rationale

The reference to Table 9-3a is proposed to be deleted for consistency because other amendments propose to delete Table 9-3a, which designates allocation to the City of Shasta Lake for 2016 to 2020 and is therefore no longer needed.

**95890(k)**

### Purpose

Proposed Amendments to section 95890(k) remove a reference related to compliance obligations, add a reference to section 95871(d) on post-2020 industrial allocation, and clarify that an entity that receives any industrial allocation (whether by the energy-based method or product-based methos) must return allowances if the provisions of the section are applicable.

### Rationale

Proposed Amendments to section 95890(k) are needed to remove an incorrect reference to section 95835. Staff believe that the text intended to reference section 95853, but note that since “compliance obligation” is a term defined in section 95802, there is no need to reference any other section in this regulatory text. Other amendments to section 95890(k) are needed to clarify that allowance allocation from budget years 2013 through 2020 and from budget years after 2020 is subject to return when an industrial covered entity or industrial opt-in covered entity ceases to operate under an eligible NAICS code/sector or industrial activity. Finally, changes are needed to make clear that the return of allocation applies to all entities that receive industrial allocation, whether that industrial allocation is made eligible pursuant to the industry sector (as defined by NAICS code and NAICS sector definition) they operate under that is listed in Table 8-1 or made eligible pursuant to an activity they perform that is listed in Table 8-1. It is appropriate to return allocation provided to minimize emissions leakage risk in cases where there are no Program compliance costs, and therefore no increased leakage risk, due to the Program.

**95890(k)(1)**

**Purpose**

The amendments to section 95890(k)(1) clarify that an entity must return allowances pursuant to this provision of the Regulation, if applicable, regardless of the type of industrial allocation (whether by the energy-based method or product-based method).

**Rationale**

The amendments to section 95890(k)(1) are needed to make clear that the return of allocation applies to all entities that receive industrial allocation, whether the facility is eligible for industrial allocation pursuant to its industry sector it operated under (as defined by the NAICS code and NAICS sector definition in Table 8-1) or pursuant to the activity it performs (as defined in Table 8-1).

**95890(k)(4)**

**Purpose**

Proposed Amendments to section 95890(k)(4) allow an entity to return allocation to CARB by placing allowances in its holding account (in addition to its compliance account), and the changes make clear that only current vintage allowances may be returned.

**Rationale**

The amendments to section 95890(k)(4) are needed to give entities greater flexibility in returning allocated allowances to CARB. The change that specifies that only current vintage allowances may be returned to CARB is needed to ensure that entities do not return future vintages allowances to CARB. Returned allowances are auctioned, and there is no mechanism for auction of additional future vintage allowances beyond what is outlined in section 95910(c)(2) of the Regulation.

## Section 95891. Allocation for Transition Assistance and Leakage Minimization.

**95891(b): Product Output-Based Allocation Calculation Methodology.**

**Purpose**

Section 95891(b) is modified to include allocation to minimize emissions leakage risk associated with industrial facility electricity purchases. For each product, annual facility allowance allocation depends on the facility output scaled by the assistance factor, benchmark, and cap adjustment factor. The product-based allocation equation is modified to add two factors: electricity purchases initial allocation and electricity purchases true-up. The electricity purchases initial allocation begins with budget year 2027 and the electricity purchases true-up allocation begins with budget year 2029. New benchmarks for electricity purchases are added to Table 9-1 and used in the calculation of electricity purchases initial allocation and electricity purchases true-up allocation. An electricity grid emissions factor of 0.212 $MTCO_2e/MWh$ is used in conjunction with electricity benchmarks to calculate the portion of allocation for electricity purchases.

The Proposed Amendments include a modifier to the cap adjustment factor to increase its product-based allocation to incentivize decarbonization if the facility is eligible for the Incentive Allocation pursuant to 95891(g). Proposed Amendments add this cap adjustment factor modifier to the equations for product-based initial allocation and true-up allocation.

Cement

Proposed Amendments to section 95891(b) also modify activities related to producing Finished Cement through changes to variable "$O_{a,\,t\text{-}2}$," the output for activity "a" in year "t-2" in the equation for product output-based allocation. When applied to Finished Cement, "$O_{a,\,t\text{-}2}$" this section is amended to include specific requirements for the output of Supplementary Cementitious Materials used to make Finished Cement eligible for allocation.

**Rationale**

This change is needed to provide industrial leakage protection for carbon costs embedded in purchased electricity. Prior to this change, this type of leakage protection was primarily addressed by the California Public Utility Commission's (CPUC) Industry Assistance Program to industrial customers of investor-owned utilities. After discussions with CPUC and interested parties, going forward CARB will provide industrial allocation to address the leakage risk associated with Cap-and-Invest Program costs that are passed through in covered industrial facilities' electricity rates. Having CARB provide such allowance allocation to all industrial covered facilities will ensure that covered industrial customers of publicly owned utilities and electrical cooperatives are provided the same leakage protection that covered industrial customers of investor-owned utilities were provided through CPUC's Industry Assistance Program. The Proposed Amendments use an average statewide grid emissions factor for all eligible facilities. Staff calculated this grid emissions factor as the total electric power emissions from the electricity sector during 2017-2021 divided by the total in-state electricity generation and imported electricity during the same period. Staff used GHG emissions from the CARB GHG Inventory (CARB 2023c) and generation and imported electricity from the CEC Energy Almanac (CEC 2023b). The proposed change to include the cap adjustment factor modifier is needed to provide a mechanism to receive the Incentive Allocation that is described in section 95891(g).

Cement

The Proposed Amendments related to Finished Cement are necessary to enable allocation of allowances for covered and opt-in covered entities that produce Supplementary Cementitious Materials (SCM) used to make Finished Cement. Modifying the benchmark for cement to include SCMs enables a common allocation approach for the production of cement and provides incentives for adoption of the lowest GHG equivalent products consistent with the Program's one-product, one-benchmark principle. As SCMs can be used by cement producers or by downstream cement users to make Finished Cement, the proposed text allows cement producers to receive allocation for the amount of SCMs delivered from covered or opt-in covered SCM producers and used to make Finished Cement. The Proposed Amendments also enable covered and opt-in covered SCM producers to receive allocation for the amount of SCMs produced and used to make Finished Cement that was not otherwise reported by cement producers as being used to make Finished Cement. The proposed text requires the Executive Officer to reconcile data provided by both parties in order to avoid counting the production and use of the same unit of SCMs twice.

**95891(b)(1) [new]**

**Purpose**

The proposed section provides a one-time new product true-up allocation when a new covered product is added to the Regulation or when a product definition in the Regulation is substantially changed, the product was not previously eligible for product-based allocation, and the facility did not receive energy-based allocation in year t-3 or prior.

The equation to calculate new product true-up allocation is split into two parts: one-time new product allocation corresponding to direct on-site emissions, and one-time new product electricity allocation corresponding to electricity purchases. The one-time new product electricity allocation true-up is only available for budget year 2030 and after.

**Rationale**

The proposed new provision is necessary to provide a mechanism to address the leakage risk for a covered facility that produced a product during a period when the product was not eligible for product-based allocation for the product and the facility did not receive energy-based allocation. Additionally, a facility may modify a product for any of several reasons (e.g., changing customer preferences) such that the new product falls outside of the previous Regulation definition for that product. Thus, for the initial years of conducting a new activity, a covered facility may receive no allowance allocation for producing a new product that lacks a benchmark or a proper definition in the Regulation. The inability of current allowance allocation mechanisms to accommodate new industrial products could disincentivize product innovation and industrial growth.

The one-time new product electricity allocation provision is similarly proposed to address the leakage risk associated with electricity purchases during the period when a facility produces a product but did not receive allocation for that production. The new product electricity allocation is only available beginning with budget year 2030. The provision will only be available to provide true-up allocation for production during 2027 and later years because CARB will allocate for electricity purchases beginning in budget year 2027.

**95891(b)(1)(A) [new]**

**Purpose**

The proposed new section adds requirements that a facility must meet to receive the one-time new product true-up allocation. In addition, it specifies the timing of the requirements. To receive budget year 2028 new product true-up allocation, an entity must submit data pursuant to MRR by April 10, 2027, the annual production quantities for all years the entity requests to receive allocation up to five prior years: 2021 through 2025 inclusive. If an entity does not submit data by April 10, 2027, to receive budget year 2028 allocation, an entity may submit data through MRR by April 10, 2028, the production quantities for all years the entity requests to receive allocation up to five prior years: 2022 through 2026 inclusive. The timing of this provision may be updated in future rulemakings as needed to cover new products or definitions and provide corresponding future one-time new product allocation.

**Rationale**

The proposed text is necessary to specify when a facility operator must submit data on historic annual production to potentially be eligible for new product true-up allocation from a given budget year. The date is chosen to align with the MRR reporting deadline per section 95103(e) of MRR.

**95891(b)(1)(B) [new]**

**Purpose**

The proposed new section adds requirements that a facility must meet to receive the one-time new product allocation. The section adds the requirement that a facility operator must have the reported historic annual production amounts of a new covered product verified by the verification deadline set for in MRR section 95103(f) per the requirements of MRR section 95131(j).

**Rationale**

The proposed text is necessary to ensure reported historic annual production data needed to implement the new product true-up allocation are verified pursuant to MRR requirements.

**95891(b)(1)(C) [new]**

**Purpose**

The proposed new section specifies that a facility that previously reported CWB production in year “i” is ineligible to receive one-time new product allocation for either LHF production or asphalt production in year “i.”

**Rationale**

The Proposed Amendments are necessary to clarify that a facility is not eligible to receive one-time new product allocation for a newly added product if it was already provided allocation for an existing product that is inclusive of the newly added product. The existing benchmark for CWB is designed to account for all processes and production occurring at a facility, inclusive of production of LHF and asphalt. A facility that was already provided allocation for reported CWB production has already received allocation to address emission leakage risk associated with LHF and asphalt production. Therefore, the facility is ineligible for one-time new product allocation associated with LHF or asphalt production.

**95891(b)(2) [new]**

**Purpose**

The proposed section provides a two-year true-up mechanism to transfer assistance crediting in the form of California Industry Assistance for large Emission-Intensive Trade-Exposed (EITE) facilities (facilities emitting more than 25,000 metric tons $CO_2e$ per year) from California Public Utility Commission (CPUC) to CARB.

**Rationale**

The proposed section is required to execute CPUC Decision 21-08-026 (CPUC 2021) and support a managed transfer of the administration of electricity purchases allocation from CPUC to CARB. Decision 21-08-026 specifies that CARB and CPUC will work during the two-year transition period after CARB starts providing initial electricity purchases allocation to calculate the true-up portion of the CA Industry Assistance Credit. If the true-up portion for a facility is positive during this two-year period, CPUC will direct IOUs to provide a credit. If the true-up portion is negative during this two-year period, CARB will deduct this value from the initial electricity purchases allocation. Appendix A of CPUC Decision 21-08-026 specifies processes during the two years needed to transition from CPUC to CARB the crediting to minimize leakage risk in electricity purchases.

**<u>95891(b)(3) [new]</u>**

**Purpose**

The proposed section supports the consistent transition of facilities engaged in petroleum refining from product-based allocation based on CWB production to product-based allocation based on production of LHF and asphalt. The section specifies that for any budget year, if a facility receives product-based allocation for CWB production the facility may not also receive allocation for production of LHF or asphalt. The section also specifies that a facility may not receive allocation for CWB production if the facility previously received allocation for LHF production or for asphalt production.

**Rationale**

The Proposed Amendments transition allowance allocation to transportation fuel producers to be based only on production of LHF by vintage 2031 allocation. The Proposed Amendments in Table 9-1 enable allocation for produced barrels of LHF and barrels of asphalt with the adoption of the Proposed Amendments. To enable a transition period for petroleum refineries, which are currently allocated based on CWB production, the CWB benchmark is not immediately removed, but modified to be available through vintage 2030 allowance allocation. The proposed language in section 95891(b)(3) ensures that petroleum refineries will not receive double allocation for the same production. Section 95891(b)(3) specifies that through vintage 2030 allocation, a petroleum refinery may receive allocation based on either CWB production or produced barrels of liquid hydrocarbon fuel and asphalt. Starting with vintage 2031 allocation, the Proposed Amendments in Table 9-1 only enable allocation for production of LHF and asphalt and do not allow allocation for CWB production.

To promote a consistent transition towards vintage 2031 allocation, section 95891(b)(3) also specifies that once a facility is allocated for production of LHF or asphalt, the facility may not receive allocation for CWB production in following years.

## Table 9-1: Product-Based Efficiency Benchmarks

### Purpose

New benchmarks for electricity purchases are proposed for all products in Table 9-1. The word "emissions" was deleted from the title of the table. The heading for the "Benchmark" column was changed to specify that each benchmark is in units of allowances per benchmark unit. The heading for the new "Electricity Benchmark" is added to clarify that each electricity benchmark is in units of megawatt hours (MWh) per benchmark unit. Each entry in the existing "Benchmark Units" has the term "Allowances" deleted to enable the benchmark units to apply to both the direct emissions benchmarks and the electricity benchmarks.

Changes to the product-based benchmarks in Table 9-1 are proposed for several activities.

- The new activity "sweet whey powder processing" is added to the existing deproteinized whey processing benchmark in Table 9-1 to enable allocation for this activity.
- The existing activities "Thermal EOR Crude Oil Extraction" and "Non Thermal Crude Oil Extraction" are modified to apply through only vintage 2030 allowance allocation, and not beyond. A new activity "crude oil extraction" is added to Table 9-1 with benchmark units "barrel of crude oil equivalent" (BOE), and it is specified that the activity applies only for vintage 2031 allowance allocation and beyond.
- The existing activity "petroleum refining" with benchmark units of "complexity weighted barrel" is modified to apply through only vintage 2030 allowance allocation, and not beyond. New entries for the activities "petroleum refining" and "liquid hydrocarbon fuel production" are added to Table 9-1, each with benchmark units of "barrel of liquid hydrocarbon fuel."
- The new activity "asphalt production" is added to Table 9-1 with benchmark units of "barrel of asphalt and road oil."
- The new activities "Mining (except oil and gas) for Supplementary Cementitious Materials "and "Nonmetallic Mineral Product Manufacturing for Supplementary Cementitious Materials" are added to Table 9-1 as part of Cement Manufacturing sector to enable allocation for this activity.
- The benchmark unit for cement is also modified to "Finished Cement" to enable cement allocation for this activity.
- The new activity "anhydrous milkfat processing" is added is added to Table 9-1 with benchmark units of "short ton of anhydrous milkfat."
- Outdated benchmarks (i.e., those denoted by "through vintage 2018 allocation") are deleted. The text "vintage 2019 allocation and beyond" is deleted from multiple activities.
- "Short ton Granulated-Refined Sugar" was modified to correct a typographical error.

### Rationale

The proposed new electricity product benchmarks are necessary with the addition of electricity purchases to the calculations of product-based allocation. The Proposed Amendments use the same electricity efficiency product benchmarks currently used by CPUC to determine California Industry Assistance Credits. In developing these product benchmarks, staff followed the same practices of direct emissions benchmarks (CARB 2010c, CARB 2013a, and CARB 2013b). The electricity efficiency product benchmarks were developed during 2016–2017 and updated in 2019 to reflect benchmarks that were newly added or modified in the Regulation. Electricity product benchmarks are set at the sector level weighted average multiplied by 90%. If no individual facility is more efficient than the electricity benchmark, then the electricity benchmark is set at the most efficient facility (i.e., the best-in-class facility). Data years used to calculate electricity benchmarks are 2008-2010 and aim to reflect typical operation. When a sector includes multiple products, staff solicited facility operators during the benchmark development process to submit additional data to disaggregate energy use among products.

The word “emissions” is deleted from the title of the table to reflect the inclusion of both GHG emissions benchmarks and electricity benchmarks. The column headings are changed to clarify benchmarks units for direct emissions benchmarks (allowances / benchmark units) and electricity benchmark (MWh / Benchmark units) in Table 9-1.

Rationale for proposed changes to the product-based benchmarks in Table 9-1 are provided below:

- Sweet whey powder processing is added to the deproteinized whey powder processing benchmark because this product is produced using a very similar process and greenhouse gas emissions profile to the process and profile for deproteinized whey powder. Both products are produced on the same equipment and cannot be produced at the same time.
- The existing benchmarks for activities “Thermal EOR Crude Oil Extraction” and “Non Thermal Crude Oil Extraction” are proposed for phase-out, with the last use proposed for vintage 2030 allowance allocation. Staff experience implementing this two-benchmark framework for crude oil extraction shows that the complexity of oil field operations and geology contributes to difficulty in specifying MRR reporting and verification requirements that differentiate between thermal and non-thermal extraction. The Proposed Amendments allocate for crude oil extraction using a single-benchmark for produced barrel of oil equivalent (BOE), eliminating the existing two-benchmark framework differentiated by production method. The Proposed Amendments specify that the single benchmark for crude oil extraction be first utilized for vintage year 2031 allowance allocation. Allowance allocation through vintage year 2030 would continue to use the existing two-benchmark framework. Within the oil and gas sector, immediate application of the single benchmark is not necessary to enable allocation to new methods of crude oil extraction.
- The Proposed Amendments allocate to transportation fuel producers based on production of "barrel of liquid hydrocarbon fuel", which would replace the existing CWB benchmark that is currently used to allocate for the activity of “petroleum refining.” The modifications to Table 9-1 enable ready allocation for production of LHF with the adoption of the Proposed Amendments. This approach provides emissions leakage risk protection for facilities in California already producing biogenic hydrocarbon transportation fuels. To enable a transition period for petroleum refineries, which are currently allocated based on output “complexity weighted barrel”, the CWB benchmark is not immediately removed, but modified to be available through vintage 2030

allowance allocation. As discussed above in section 95891(b)(3), petroleum refineries may transition to reporting and allocation for production of LHF before vintage 2031 allowance allocation.

The Proposed Amendments enable a common allocation approach for production of all functionally equivalent transportation fuels, whether by petroleum refining, biogenic fuel production, co-processing of petroleum and biogenic feedstocks, or by other emerging fuel production methods. The proposed LHF benchmark provides a consistent treatment of fossil and biomass-derived transportation fuel producers.

- The new activity “asphalt production” with benchmark units “barrel of asphalt and road oil” is necessary to allocate to several petroleum refineries in California exclusively or primarily producing asphalt and not transportation fuels. These facilities are currently allocated under the CWB framework, which accounts for asphalt production. The LHF benchmark, which the Proposed Amendments replace the CWB benchmark, provides allocation for production of fossil and biomass-derived hydrocarbon transportation fuels. Asphalt and road oil are distinct products from highly refined transportation fuels and require minimal processing of crude oil. It is appropriate to benchmark asphalt production separately from LHF production. The modifications to Table 9-1 enable allocation for asphalt production with the adoption of the Proposed Amendments. Aligned with implementation of the LHF benchmark, and as discussed above in section 95891(b)(3), petroleum refineries may transition to reporting and allocation for production of asphalt before vintage 2031 allowance allocation.
- The addition of “Mining (except oil and gas) for Supplementary Cementitious Materials “and “Nonmetallic Mineral Product Manufacturing for Supplementary Cementitious Materials” to Table 9-1 is necessary to enable allocation to Supplementary Cementitious Materials used for Finished Cement.
- It is necessary to modify the benchmark unit for cement allocation to “Finished Cement” in Table 9-1 to recognize alternative low-carbon clinker and to allow for covered and opt-in covered Supplementary Cementitious Materials (SCMs) and used to make cement to be eligible for cement allocation. SCMs are used to displace clinker to lower GHG emissions intensity of cement while meeting the product requirements.
- A new activity “anhydrous milkfat” processing is needed in Table 9-1, as a milk-producing covered facility in dairy sector started producing it.
- Outdated benchmarks, i.e. those denoted with “through vintage 2018 allocation,” were removed because they are no longer eligible for use. The text “vintage 2019 allocation and beyond” is no longer necessary as these benchmarks are now current and do not require this definition.
- The modification of “Short ton Granulated-Refined Sugar” is necessary to correct the capitalization of “Short.”

**<u>95891(c): Energy-Based Allocation Calculation Methodology.</u>**

### Purpose

Section 95891(c) is modified to include allocation for electricity purchases. The allocation equation for each type of energy-based allocation is modified to add electricity purchases to the allocation calculation. The compliance period three true-up was deleted. The cap adjustment factor in the calculation of energy-based allocation is amended to, if eligible, include the cap adjustment factor modifier from the Incentive Allocation.

**Rationale**

This change is needed to provide industrial leakage protection for carbon costs in purchased electricity. Prior to this change, this type of leakage protection was addressed by the California Public Utility Commission's Industry Assistance Program. After discussions with CPUC and interested parties, going forward CARB will provide this industrial allocation for this type of leakage to industrial covered facilities. Having CARB provide such allowance allocation to all industrial covered facilities will ensure that covered industrial customers of publicly owned utilities are provided with the same leakage protection as those served by investor-owned utilities. The deletion of the compliance period three true-up is necessary as it is no longer applicable.

**95891(c)(2)(A) [deleted]**

**Purpose**

Section 95891(c)(2)(A) is deleted to conform with other changes to the section for the purpose of opting into the Program.

**Rationale**

This section is deleted as the regulatory requirements for opt-in covered entities preclude the option to opt into the Program prior to operation.

**95891(c)(2)(B) [new 95891(c)(2)(A)]**

**Purpose**

Section 95891(c)(2)(B) is renumbered to be 95891(c)(2)(A). This section is modified to include allocation for electricity purchases. The cap adjustment factor in the calculation of energy-based allocation is amended to, if eligible, include the cap adjustment factor modifier from the Incentive Allocation.

**Rationale**

This change is needed to provide industrial leakage protection for carbon costs in purchased electricity. Prior to this change, this type of leakage protection was addressed by the California Public Utility Commission's Industry Assistance Program. After discussions with CPUC and interested parties, going forward CARB will provide this industrial allocation for this type of leakage to industrial covered facilities. Having CARB provide such allowance allocation to all industrial covered facilities will ensure that covered industrial customers of publicly owned utilities are provided with the same leakage protection as those served by investor-owned utilities. The change to add the cap adjustment factor modifier is needed to provide a mechanism to receive the Incentive Allocation.

**95891(c)(2)(C) [new 95891(c)(2)(B)]**

**Purpose**

Section 95891(c)(2)(C) is renumbered to be 95891(c)(2)(B).

**Rationale**

This modification is necessary to keep consistent numbering.

**95891(c)(2)(D) [new Section 95891(c)(2)(C)]**

**Purpose**

Section 95891(c)(2)(D) is renumbered to be 95891(c)(2)(C). This section is modified to include electricity purchases in the baseline calculation.

**Rationale**

This modification is reflective of incorporating allocation for electricity purchases into the energy-based allocation methodology.

**95891(c)(3)**

**Purpose**

Section 95891(c)(3) is modified to reference renumbered 95891(c)(2)(C).

**Rationale**

This modification is necessary to correctly reference a renumbered subsection.

**95891(d)**

**Purpose**

Staff are proposing numerous edits to the requirements for the use of allocated allowance value by universities and public service facilities, including updates to the annual use of allocated allowance value reporting requirements.

**Rationale**

These proposed changes are necessary to clarify the current regulatory text to ensure that the value from allowances allocated to universities and public service facilities is used in a manner that is consistent with the goals of AB 32. These changes are also necessary to align the use of allowance value requirements for universities and public service facilities with similar requirements applied to the use of allowance value by electrical distribution utilities and natural gas suppliers.

**95891(d)(3) [new]**

**Purpose**

Current section 95891(d)(3) is renumbered to 95891(d)(4). New section 95891(d)(3) is added to establish and clarify the requirements for use of allocated allowance value by universities and public service facilities.

Section 95891(d)(3)(A) clarifies how the monetary value of allocated allowances is calculated.

Section 95891(d)(3)(B) establishes a deadline for the use of allocated allowance value.

Section 95891(d)(3)(C) delineates several uses of allocated allowance value that are specifically prohibited.

**Rationale**

New section 95891(d)(3) is necessary to ensure that the use of allocated allowance value by universities and public service facilities is consistent with the goals of AB 32. In line with the broad purpose of AB 32 and the Cap-and-Invest Program, the value of allowances allocated to a university or public service facility must be used to reduce the university or public service facility's GHG emissions. The proposed regulatory text clarifies that there must be GHG benefits from these expenditures while allowing the flexibility to use the value for a range of GHG-reduction projects across a university's covered campuses.

Section 95891(d)(3)(A) specifies that the value of allocated allowances corresponds to the average settlement price for the four auctions held during the vintage year of the allowances. Since universities and public service facilities do not directly consign allocated allowances to auction, this provision is needed to clarify the monetary value covered by the requirements in section 95891(d), and sets this value at the fair approximate market price of these allowances for the year of allocation.

Section 95891(d)(3)(B) sets a ten-year deadline for the use of university and public service facility allocated allowance value, which is necessary to provide the regulatory impetus for spending these funds in a timely manner. Having a ten-year spending deadline aids CARB in providing effective oversight of this allowance value and is consistent with the requirements for electrical distribution utility and natural gas supplier use of allocated allowance value in sections 95892(d) and 95893(d).

Section 95891(d)(3)(C) lists specific uses of allowance value that are prohibited, which aligns with similar requirements applied to the use of allowance value by electrical distribution utilities and natural gas suppliers.

Section 95891(d)(3)(C)(1) specifies that allowance value cannot be spent on regulatory compliance costs associated with the Cap-and-Invest Program, as the intended purpose of university and public service facility allocation is to provide transition assistance while maintaining an impetus to further reduce facility GHG emissions in line with statutory GHG targets for 2030 and 2045.

Section 95891(d)(3)(C)(2) is necessary to prohibit the use of allowance value for purchasing carbon offsets or for participating in any voluntary carbon market or external greenhouse gas emission trading system. CARB cannot ensure or verify the GHG emissions benefits of any offset or other carbon product offered outside of the Cap-and-Invest Program. Additionally, using allowance value to purchase Cap-and-Trade compliance offsets is a cost of complying with the Regulation and thus already is an ineligible use of allowance value per section 95891(d)(3)(C)(1). This change clarifies that purchasing voluntary carbon offsets is also a prohibited use.

Finally, section 95891(d)(3)(C)(3) is necessary to clarify several uses of allowance value that are not aligned with the intended purpose of allowance allocation for universities and public service facilities (i.e., to further reduce the facility's GHG emissions). Allowance allocation is not provided to universities and public service facilities to benefit employees or subsidize legal costs, nor is it provided to assist these entities' lobbying efforts, regardless of the goals or content of those efforts.

**95891(d)(3) [new 95891(d)(4)]**

### Purpose

Current section 95891(d)(3) is renumbered to section 95891(d)(4) and contains numerous revisions and new subsections which establish and clarify reporting requirements for the use of allocated allowance value by universities and public service facilities. Section 95891(d)(4) specifies the date of the annual report submittal and clarifies allowance value accounting for the purpose of the annual report.

Section 95891(d)(4)(A) requires the annual report to include the amount of any remaining allowance value from prior years.

Section 95891(d)(4)(B) requires the report to include the total value of allowances received in the prior calendar year, and deletes existing text describing how this value is calculated.

Section 95891(d)(4)(C) requires the report to include the total allowance value spent in the prior calendar year and the amount of allowance value that remains unspent.

Section 95891(d)(4)(D) requires the report to include a description of the nature and purpose of each use of allocated allowance value during the prior calendar year, including how each use reduced the university or public service facility's GHG emissions.

### Rationale

Section 95891(d)(4) specifies that the annual report on use of allocated allowance value is due by June 30 each year, which is consistent with CARB's current implementation of the reporting requirements. Since the initial report was due on June 30, 2016, and the current text specifies that reports are submitted on an annual cycle, it logically follows that the subsequent reports would be submitted by June 30 each year. This paragraph also replaces the word "any" with the word "all" and adds the phrase "during the previous calendar year," which clarifies that the annual report covers all value of allocated allowances received and spent by the university or public service facility, rather than just value received and spent during the prior year. This clarification is necessary to enable effective tracking of all allowance value, since universities and public service facilities are not required to spend all allowance value received in a given year. Finally, this paragraph deletes the indicated purpose of the annual report, i.e. to "achieve additional environmental and economic benefits for California," since this phrasing is ambiguous. Instead, the more specific purpose and limitations for the use of allowance value are now articulated in section 95891(d)(3).

The subsections of section 95891(d)(4) specify specific elements that must be included in the annual use of allocated allowance value report: accurate accounting of allowance value received and spent during the year, any allowance value remaining in prior years, and a description of what uses of allowance value occurred and how these uses comply with the limitations set forth in section 95891(d)(3).

Section 95891(d)(4)(A), which requires accounting of unspent allowance value from prior years, is necessary to track compliance with the new spending deadline in section 95891(d)(4)(B) and to ensure that all allowance value received is used in a manner that complies with the Regulation.

Section 95891(d)(4)(B) clarifies that the report must include the value of allowances received during the previous calendar year, which is necessary for accurate accounting of allowance value and to delineate single-year allowance value from any value accumulated over previous years. Additional text clarifying how this value is calculated is now included in section 95891(d)(3)(A).

Section 95891(d)(4)(C), which requires accounting of allowance value spent in the previous year and any allowance value that remains unspent, is necessary to track compliance with the new spending deadline in section 95891(d)(4)(B) and to ensure that all allowance value received is used in a manner that complies with the Regulation.

Finally, section 95891(d)(4)(D) specifies the descriptive information that must be included in the report, which is necessary to ensure that allowance value is spent within the limitations of section 95891(d)(3) and aids CARB's tracking and oversight. In line with section 95891(d)(3), this section also emphasizes that the value of allowances allocated to universities and public service facilities is intended to further reduce facility GHG emissions, in accordance with the goals of AB 32.

**95891(g) [new]**

### Purpose

The Proposed Amendments add an allocation provision for the purpose of providing allowances for decarbonization activities at eligible manufacturing facilities to prevent emissions leakage. This manufacturing decarbonization incentive allocation is provided starting with budget year 2027 through 2038. The mechanism to provide this allocation is a cap adjustment factor modifier specified in new Table 9-2a that will be added to the applicable cap adjustment factors for the specific manufacturing sectors receiving product-based and energy-based allocation. This new subsection also specifies that the allowances for Incentive Allocation will be provided from the vintage years specified in Table 9-2a and specifies that these future vintage allowances will have true-up value.

### Rationale

This provision is added for the purpose of minimizing emissions leakage risk by providing allowances to incentivize GHG emissions reduction actions at manufacturing facilities. Since the cost of a number of manufacturing decarbonization activities continues to be greater than the allowance price, this allocation provision will incentivize a set of GHG emissions reduction strategies that can achieve GHG emissions reduction at facilities thereby decreasing compliance costs and reducing emissions leakage risk. The 12-year period for this manufacturing decarbonization incentive allocation aligns with newly adopted compliance periods in section 95840, and is expected to result in substantial GHG emissions reduction, create a long-term market signal for the development and deployment of new technologies, and provide increased support for manufacturing facilities that lost federal funding opportunities. The Proposed Amendments designate future vintage allowances for Incentive Allocation in Table 9-2a. This approach is needed in order to support needed emissions leakage risk protection and accelerate deployment of low-carbon technologies in hard-to-decarbonize industrial sectors, while balancing the full range of near-term Program priorities including affordability, ratepayer protection, and State-owned allowance proceeds. The Proposed Amendments in this section specify both that the vintage allowances that will be provided for Incentive Allocation are from the budget years listed in Table 9-2a and that those allowances will have true-up value. This is needed in order to support the near-term use of Incentive Allocation for compliance. The Regulation specifies that only current vintage or older allowances may be used for compliance unless those allowances have true-up value pursuant to sections 95856(h)(1)(D) and 95856(h)(2)(D). By designating Incentive Allocation as having true-up value, the Proposed Amendments facilitate the use of the allocation for current compliance needs.

**95891(g)(1) [new]**

**Purpose**

New section 95891(g)(1) is added to introduce the eligibility criteria for the Incentive Allocation.

**Rationale**

This provision is necessary to specify which facilities are eligible to receive this allocation.

**95891(g)(1)(A) [new]**

**Purpose**

New section 95891(g)(1)(A) is added to require that an eligible facility must also be eligible for product-based or energy-based allocation.

**Rationale**

This provision is necessary since this allocation provision is supporting the leakage prevention allocation methodologies by adding a cap adjustment factor modifier to industrial product-based and energy-based allocation. Limiting this allocation provision to facilities that are already eligible for industrial product-based or energy-based allocation ensures that this provision is used by covered entities that qualify for assistance to minimize the risk of emissions leakage.

**95891(g)(1)(B) [new]**

**Purpose**

New section 95891(g)(1)(B) is added to require that an eligible facility operates in certain manufacturing sectors as reported and verified in MRR for year t-2.

**Rationale**

The eligibility for the Incentive Allocation provision is limited to California manufacturers including cement, food processing, glass, metals, and other general industrial stationary sources. The Proposed Amendments do not provide Incentive Allocation allowances to energy industries such as liquid fuels providers, energy extraction, and electricity generation. Several programs in California's portfolio of climate programs support the decarbonization of these sectors including the Low Carbon Fuel Standard and Renewable Portfolio Standard. Consistent with the current requirements for industrial allowance allocation, an eligible facility must have reported and verified operating in an eligible sector for the most recent available emissions data year in MRR at the time of application (year "t-2") so that CARB can accurately evaluate the facility's eligibility.

**<u>95891(g)(1)(C) [new]</u>**

**Purpose**

New section 95891(g)(1)(C) is added to specify the additional criteria for a manufacturing facility to be eligible for Incentive Allocation.

**Rationale**

This provision is necessary to clarify that eligibility for Incentive Allocation depends on adherence to criteria set forth in the following subsections, which include requirements for application and reporting processes, limitations on categories of eligible spending on facility GHG emissions reduction projects, and spending the value of incentive allowances within a specified timeframe.

**<u>95891(g)(2) [new]</u>**

**Purpose**

New section 95891(g)(2) is added to specify the allowable GHG emission reduction activities that are eligible to be funded using the value of Incentive Allocation allowances.

**Rationale**

This provision is necessary to determine which decarbonization strategies are eligible to receive this allocation and ensure that eligible spending categories support facility GHG emissions reduction are aligned with CARB's 2022 Scoping Plan Update.

**<u>95891(g)(2)(A) [new]</u>**

**Purpose**

New section 95891(g)(2)(A) is added to detail the GHG emission reduction strategy of and requirements for purchasing biomass-derived fuels for Incentive Allocation.

### Rationale

The Proposed Amendments specify that eligible biomass-derived fuels meet the Program's exempt fuels requirements and be in addition to any historical biomethane procurement over the previous three years that is unrelated to this Incentive Allocation. This provision ensures that any biomass-derived fuels purchased using the value of Incentive Allocation allowances are aligned with the criteria for such fuels to be recognized as exempt from a compliance obligation under section 95852.1, and that Incentive Allocation allowance value only supports GHG emissions reduction from additional biomass-derived fuel use.

**95891(g)(2)(B) [new]**

### Purpose

New section 95891(g)(2)(B) is added to detail the GHG emission reduction strategy of electrified equipment for Incentive Allocation. Eligible project costs in this category include both capital costs and electricity costs.

### Rationale

Electrified equipment can reduce a facility's covered GHG emissions and leakage risk by reducing or eliminating heating needs currently or historically met by combustion of fossil fuels. Incentive allocation may be used for both the costs of the equipment and the costs of electricity to power the electrified equipment, because producing heat using grid electricity may result in higher energy costs than producing heat using fossil fuels. The Proposed Amendments require that eligible electrification projects must result in reduced or avoided onsite combustion of fossil fuels, which ensures that the electrified equipment supports GHG emissions reduction.

**95891(g)(2)(C) [new]**

### Purpose

New section 95891(g)(2)(C) is added to detail the GHG emission reduction strategy of hydrogen procurement for Incentive Allocation. Section 95891(g)(2)(C)(1-3) details the three different eligibility criteria for hydrogen procurement.

### Rationale

To be eligible, the hydrogen procured must meet one of the following criteria: 95891(g)(2)(C)(1) – low carbon hydrogen that has received the Internal Revenue Service (IRS) 45V clean hydrogen production tax credit, 95891(g)(2)(C)(2) – low carbon hydrogen that is produced from renewable feedstocks, or 95891(g)(2)(C)(3)(c) – low carbon hydrogen that is produced using renewable electricity. The existing IRS 45V tax credit provides a specific benchmark for ensuring that hydrogen purchased with the value of Incentive Allocation allowances was produced with significantly lower GHG emissions than fossil-based hydrogen produced using steam-methane reformation. In cases where the federal tax incentive was not claimed for low-carbon hydrogen, or in future years should the tax credit not be available, criteria (2) and (3) provide two additional eligibility pathways (electrolysis using renewable electricity and exempt biomass-derived fuel feedstocks) that, like the IRS tax credit criteria, ensure the incentivized hydrogen results in GHG emissions reduction.

**<u>95891(g)(2)(D) [new]</u>**

**Purpose**

New section 95891(g)(2)(D) is added to detail the GHG emission reduction strategy of renewable electricity generation or storage for Incentive Allocation.

**Rationale**

Onsite renewable electricity generation or storage projects can reduce facility GHG emissions and energy costs by either reducing current grid electricity use or complementing the installation of electrified equipment that fulfills facility heating needs without the use of fossil fuels. The Proposed Amendments require that eligible renewable electricity generation or storage projects result in reduced or avoided onsite combustion of fossil fuels, which ensures that this use of Incentive Allocation supports GHG emissions reduction at the facility.

**<u>95891(g)(2)(E) [new]</u>**

**Purpose**

New section 95891(g)(2)(E) is added to detail the GHG emission reduction strategy of solar thermal or geothermal energy generation for Incentive Allocation.

**Rationale**

Solar thermal or geothermal energy generation can reduce facility GHGs and energy costs by directly fulfilling facility heating needs with thermal energy from concentrated solar or geothermal resources rather than use of fossil fuels. The Proposed Amendments require that eligible solar thermal or geothermal energy generation projects must result in reduced or avoided onsite combustion of fossil fuels, which ensures that this use of Incentive Allocation supports facility GHG emissions reduction.

**<u>95891(g)(2)(F) [new]</u>**

**Purpose**

New section 95891(g)(2)(F) is added to detail the GHG emission reduction strategy of electrified thermal energy procurement for Incentive Allocation.

**Rationale**

Thermal energy produced using electricity can reduce facility GHG emissions by fulfilling facility heating needs that are currently met by using fossil fuels. A facility may use the value of incentive allowances to purchase thermal energy using electricity for onsite use. The Proposed Amendments require that eligible electrified thermal energy procurement must result in reduced or avoided onsite combustion of fossil fuels, which ensures that this use of Incentive Allocation supports GHG emissions reduction.

**<u>95891(g)(3) [new]</u>**

**Purpose**

New section 95891(g)(3) specifies how the value of Incentive Allocation allowances is calculated for the purposes of this section.

**Rationale**

This provision is necessary to determine the monetary value of Incentive Allocation allowances allocated to an eligible facility that must be spent on eligible GHG emissions reduction projects pursuant to section 95891(g)(2), within the five-year spending deadline set in section 95891(g)(7). Calculating this value using the average auction settlement price in the vintage year of the allowances ensures that this value is publicly transparent and is consistent with other monetary valuation of allowances in the Regulation, such as in section 95891(d)(3)(A).

**<u>95891(g)(4) [new]</u>**

**Purpose**

New section 95891(g)(4) lists specific prohibitions for the use of Incentive Allocation allowance value.

**Rationale**

This provision is necessary to ensure that the use of Incentive Allocation allowance value is not used for activities inconsistent with the GHG emissions reduction and leakage minimization purposes.

**<u>95891(g)(4)(A) [new]</u>**

**Purpose**

New section 95891(g)(4)(A) prohibits the use of Incentive Allocation allowance value for administrative or overhead costs.

**Rationale**

This provision is necessary to ensure that the value of Incentive Allocation allowances is used to reduce the facility's use of fossil fuels, consistent with the approaches outlined in section 95891(g)(2), which lowers the facility's GHG emissions, Program compliance costs, and emissions leakage risk. Focusing the value of incentive allocation on the costs of equipment and low-carbon fuels and electricity, excluding administrative or overhead costs, ensures cost-effective use of the incentive allocation value and resulting GHG emissions reduction.

**<u>95891(g)(4)(B) [new]</u>**

**Purpose**

New section 95891(g)(4)(B) prohibits the use of incentive allowance value for lobbying costs, employee bonuses, shareholder dividends, or costs, penalties, or activities mandated by any legal settlement, administrative enforcement action, or court order.

**Rationale**

This provision is necessary to ensure that the value of Incentive Allocation allowances is used to reduce the facility's use of fossil fuels, consistent with the approaches outlined in section 95891(g)(2), and that it is not used to benefit employees or subsidize legal costs, nor is it used to assist these entities' lobbying efforts, regardless of the goals or content of those efforts. The specific prohibitions listed in this section ensures that Incentive Allocation value is not used for activities inconsistent with the GHG emissions reduction and leakage minimization purposes of this allocation and is aligned with prohibited uses of allocated allowance value for electrical distribution utilities and natural gas suppliers, as set forth in section 95892(d)(7)(D) and 95893(d)(7)(C), respectively.

**95891(g)(5) [new]**

**Purpose**

New section 95891(g)(5) and its subsections are added to specify application deadlines for each compliance period. Section 95891(g)(5)(A) requires facilities to apply to the Executive Officer by September 1, 2026 to receive manufacturing decarbonization incentive allocation for budget years 2027 and 2028. Afterward, facilities must apply for any subsequent compliance period by April 10 of the calendar year prior to the first year of the given compliance period, as specified by subsections (B)-(E).

**Rationale**

This provision is necessary to specify the deadlines to apply for this allocation in advance of the allocation distribution. These dates provide staff with sufficient time to respond to facilities to approve, deny, or request additional information. The initial deadline for budget year 2027 and 2028 allocation is set to September 1 instead of April 10 to accommodate regulatory timelines and to provide additional time for eligible facilities to plan their initial projects and application materials.

**95891(g)(6)(A) [new]**

**Purpose**

New section 95891(g)(6) contains application requirements for manufacturing decarbonization Incentive Allocation. Section 95891(g)(6)(A) is added to require facilities to describe in their application which of the strategies outlined in section 95891(g)(2) will be implemented, including details regarding the project timeline, milestones, cost estimates, and expected annual GHG emissions reduction.

**Rationale**

This provision is necessary to provide the information necessary to evaluate whether the project described in a facility's application meets the eligibility criteria in section 95891(g)(2).

**95891(g)(6)(B) [new]**

**Purpose**

New section 95891(g)(6)(B) is added to require facilities to provide in their application the projected changes in the facility's use of applicable fossil fuels or alternative fuels, including three years of historical procurement data for eligible biomass-derived fuels.

**Rationale**

This provision is necessary for facilities to substantiate the projected GHG emissions reduction achieved by the use of incentive allowance value using quantitative energy and fuel volumes. This data provides a specific benchmark for determining whether the value of Incentive Allocation allowances is used in accordance with the project description and the list of eligible projects in section 95891(g)(2), and for a point of comparison when evaluating project reports submitted after the completion of a compliance period pursuant to section 95891(g)(7).

**95891(g)(7) [new]**

**Purpose**

New section 95891(g)(7) is added to require facilities receiving Incentive Allocation to submit a report following the end of the applicable compliance period describing how the project has progressed and the status of the incentive allowance value.

**Rationale**

This provision is necessary to provide the information needed to ensure that Incentive Allocation allowance value is used to reduce facility GHG emissions and minimize emissions leakage risk in accordance with the eligible project categories listed in section 95891(g)(2). The reporting deadline is set at June 30 to align with the current annual reporting deadline for electrical distribution utilities and natural gas suppliers set in sections 95892(e) and 95893(e), respectively. While electrical distribution utilities and natural gas suppliers report on the use of allowance value every year, staff propose requiring facilities receiving manufacturing decarbonization Incentive Allocation to report only after the completion of the applicable compliance period, since eligibility for this allocation is determined in advance for an entire compliance period, and to minimize administrative workload for facilities that already submitted an application upfront and for staff in reviewing project applications and reports. The required contents of this report as listed in subsections (A)-(E) align with the existing requirements for use of allowance value reports submitted by electrical distribution utilities and natural gas suppliers, as applicable.

**95891(g)(7)(A) [new]**

**Purpose**

New section 95891(g)(7)(A) is added to require reporting on the use of Incentive Allocation allowance value to include an assessment of the project relative to the approved project application, including updates relevant to project timeline, costs, and milestones achieved.

**Rationale**

This provision is necessary so that the submitted report provides the information necessary to assess whether the project is adhering to the approved application, within the spending deadline established in section 95891(g)(8), and is achieving GHG emissions reduction pursuant to the allowable uses section 95891(g)(2).

**95891(g)(7)(B) [new]**

**Purpose**

New section 95891(g)(7)(B) is added to require reporting on the use of Incentive Allocation allowance value to include monetary value of any unspent Incentive Allocation allowance value remaining from prior years.

**Rationale**

This provision is necessary to track compliance with the five-year spending deadline established in section 95891(g)(8).

**95891(g)(7)(C) [new]**

**Purpose**

New section 95891(g)(7)(C) is added to require reporting on the use of incentive allowance value to include the monetary value of Incentive Allocation allowances received by the facility during the previous compliance period.

**Rationale**

This provision is necessary to ensure the facility has correctly assessed the value of manufacturing decarbonization Incentive Allocation allowances provided by CARB that must be used for eligible GHG emissions reduction projects.

**95891(g)(7)(D) [new]**

**Purpose**

New section 95891(g)(7)(D) is added to require reporting on the use of Incentive Allocation allowance value to include the monetary value of Incentive Allocation allowances spent during the previous compliance period and the monetary value of Incentive Allocation allowances remaining unspent at the end of the previous compliance period.

**Rationale**

This provision is necessary to track how much of the Incentive Allocation allowance value received during the previous compliance period was spent on eligible projects and how much Incentive Allocation allowance value remains to be spent before the five-year spending deadline established in section 95891(g)(8).

**95891(g)(7)(E) [new]**

**Purpose**

New section 95891(g)(7)(E) is added to require reporting on how each use of Incentive Allocation allowance value complies with the applicable requirements of 95891(g).

**Rationale**

This provision is necessary to ensure that Incentive Allocation allowance value is spent in a manner that complies with the eligible categories of facility GHG emissions reduction projects specified in section 95891(g)(2) and does not violate the restrictions of section 95891(g)(4).

**95891(g)(7)(E)1. [new]**

**Purpose**

New section 95891(g)(7)(E)1. is added to require reporting on the use of Incentive Allocation allowance value to include a description of how each use of Incentive Allocation allowance value complies with the requirements for GHG emissions reduction projects specified in section 95891(g)(2) and the monetary value of Incentive Allocation allowances spent on each use.

**Rationale**

This provision is necessary to have the information necessary to assess whether each use of Incentive Allocation allowance value adheres to the requirements of section 95891(g)(2) and (4).

**95891(g)(7)(E)2. [new]**

**Purpose**

New section 95891(g)(7)(E)2. is added to require reporting on the use of Incentive Allocation allowance value to include contract documentation verifying the procurement of eligible fuels or thermal energy during the previous compliance period, if the facility is pursuing one of those activities.

**Rationale**

This provision is necessary to provide the necessary information to substantiate that the facility procured eligible fuels pursuant to section 95891(g)(2), as described in their approved project application, and to confirm the monetary value of Incentive Allocation allowances spent on those fuels and how much Incentive Allocation allowance value remains unspent. This will help ensure compliance with section 95891(g)(2) and (4).

**95891(g)(7)(E)3. [new]**

**Purpose**

New section 95891(g)(7)(E)3. is added to require reporting on the use of Incentive Allocation allowance value to include an estimate of the GHG emissions reduction benefits resulting from the project.

Subsections a. through d. describe specific required components of this GHG emissions reduction benefits calculation.

**Rationale**

This provision is necessary to provide the information necessary to substantiate whether the use of incentive allowance value resulted in GHG emissions reduction in accordance with eligible project categories specified in section 95891(g)(2). This requires reporting of the proportion of project costs covered by the use of Incentive Allocation allowance value and a comparison of expected GHG emissions with and without the use of Incentive Allocation allowance value, which supports an accurate and holistic attribution of GHG emissions reduction benefits to the use of Incentive Allocation allowance value and aligns with the GHG emissions reduction calculations required for electrical distribution utilities and natural gas suppliers in sections 95892(e)(5) and 95893(e)(5), respectively.

Subsection a. requires the GHG calculation to include quantitative information on fuel use, including the heat content in MMBtu of avoided natural gas use and any increases in alternative fuels or electricity due to implementing the approved project, which is necessary to translate changing fuel volumes due to the use of Incentive Allocation allowance value into changes in facility GHG emissions.

Subsection b. requires the GHG calculation to include GHG emission factors for applicable fuels, as reflected in the facility's MRR reporting, which is necessary to translate changing fuel volumes due to the use of Incentive Allocation allowance value into changes in facility GHG emissions in a manner that is consistent with the GHG emissions reporting and verification requirements established in MRR.

Subsection c. requires the GHG calculation to include the expected time frame over which the emissions reductions will occur, which is necessary to calculate the expected lifetime GHG emissions reduction associated with project expenditures that occurred during the previous compliance period.

Subsection d. requires the GHG calculation to reflect the percentage of total project costs covered by the use of Incentive Allocation allowance value, which is necessary to ensure the calculated GHG emissions reduction benefits are appropriately attributed to the use of the Incentive Allocation allowance value and are not double-counted with any other source of project funding.

**95891(g)(8) [new]**

**Purpose**

New section 95891(g)(8) is added to require the return of manufacturing decarbonization incentive allowances that were not used to fund eligible GHG emissions reduction projects after five years following the vintage year or the allowances, or upon facility closure if applicable.

**Rationale**

This provision is necessary to ensure that the value of Incentive Allocation allowances is used to reduce facility GHG emissions and minimize emissions leakage. In the event that an approved project application is not implemented as planned, or if a facility did not need the full value of Incentive Allocation allowances received to implement the approved project, the facility is not penalized but also is required to return the equivalent number of unused allowances to CARB rather than using them for compliance or any other purpose. The five-year spending deadline described in this section is necessary to ensure that the value of Incentive Allocation allowances is spent in a timely manner and achieves near-term facility GHG emissions reduction. The spending deadline also enables CARB to provide effective project oversight for the use of Incentive Allocation allowance value and ensures that projects are implemented in line with the approved application. This section also requires Incentive Allocation allowances to be returned to CARB in the event of a facility closure, in line with the existing requirements and timeline for return of allocation in section 95890(k), which similarly ensures that incentive allowances are used for the intended GHG emissions reduction purpose.

## 95891(g)(8)(A) [new]

### Purpose

New section 95891(g)(8)(A) is added to specify the procedures for returning unused Incentive Allocation allowances to CARB.

### Rationale

This provision is necessary to clarify the process for returning allowances in the event of a facility closure or if the value of Incentive Allocation allowances remains unspent as of the five-year spending deadline. This approach aligns with the existing requirements for return of allocation in section 95890(k)(4), aligns the return of allowances with the general compliance deadline (November 1), and establishes that violations will be assessed pursuant to section 96014 if a facility fails to return allowances as required by this section, which would undermine the GHG emissions reduction and leakage minimization purpose of manufacturing decarbonization Incentive Allocation provided under section 95891(g).

## Table 9-1a: NAICS Codes Ineligible for Manufacturing Decarbonization Incentive Allocation. [new]

### Purpose

New Table 9-1a is added to define which sectors are not eligible for the manufacturing decarbonization Incentive Allocation.

### Rationale

The Proposed Amendments limit the eligibility for this decarbonization incentive program to California manufacturers including cement, food processing, glass, metals, and other general stationary sources. The Proposed Amendments do not provide incentive allowances to energy industries such as liquid fuels providers, energy extraction, and electricity generation. Several programs in California's portfolio of climate programs support the decarbonization of these sectors including Low Carbon Fuel Standard and Renewable Portfolio Standard.

**Table 9-2: Cap Adjustment Factors for Allowance Allocation**

### Purpose

The Proposed Amendments add cap adjustment factors (CAF) for 2032 to 2035. The standard CAF declines from 0.494 in 2031 to 0.279 in 2035, which is proportional to the decrease in proposed annual allowance budgets from 2031-2035 in Table 6-2. The alternate CAF decreases from 0.747 in 2031 to 0.547 in 2035, which reflects half the annual rate of decline for the proposed allowance budgets in Table 6-2.

The footnote is modified to correct a typographical error.

### Rationale

The standard CAF and alternate CAF determine annual allowance allocation to applicable covered entities and must be re-examined in the context of decreasing overall Program allowance budgets through 2045, the need to protect against emissions leakage risk and support affordability for California consumers. Historically, standard CAF is designed to decrease at same rate as the overall Program allowance budget, and the alternate CAF declines at half the annual rate as the standard CAF, which provides enhanced leakage protection to a limited group of industrial sectors. With overall Program budgets increasing in stringency to support the State's GHG emissions reduction goals, it is imperative that CARB continue to balance all key Program considerations such as ensuring cost-effectiveness, protecting against emissions leakage risk, benefitting utility ratepayers, and reducing emissions. The Proposed Amendments do so by providing near-term support for emissions leakage by maintaining existing CAFs through 2031 and aligning CAFs with overall budgets starting in 2032, ensuring that the Program is well positioned to support the range of Program priorities post-2030.

The modification of the footnote is necessary to correct the spelling of "activities."

**Table 9-2a: Cap Adjustment Factor Modifier and Alternate Cap Adjustment Factor Modifier for Manufacturing Decarbonization Incentive Allocation.**

### Purpose

New Table 9-2a is added to establish the cap adjustment factor modifier and alternate cap adjustment factor modifier used to determine the number of allowances provided to an eligible facility for Manufacturing Decarbonization Incentive Allocation. Table 9-2a also establishes the vintage years that will be used for this allowance allocation.

### Rationale

The Proposed Amendments set the cap adjustment factor modifier and alternate cap adjustment factor modifier at 1.2 and 0.6, respectively, for the sixth compliance period, and steadily decrease these modifiers in each subsequent compliance period until reaching 0.4 and 0.2, respectively, in the tenth compliance period. Staff propose these modifiers to achieve the multiple goals of the manufacturing decarbonization Incentive Allocation, including incentivizing early action to reduce facility GHGs, providing sufficient value to unlock capital-intensive electrification or low-carbon fuel projects for industrial sectors as identified in CARB's 2022 Scoping Plan Update, minimizing the risk of emissions leakage in consideration of a steadily-increasing carbon price signal, and ensuring that the number of Incentive Allocation allowances provided to eligible facilities represents an approximately consistent proportion of the overall annual allowance budgets and does not compromise other Program priorities.

The alternate cap adjustment factor modifier is half the cap adjustment factor modifier in each year because the alternative cap adjustment factor decreases annually at half the rate of the standard cap adjustment factor in Table 9-2. This approach balances the total industrial allocation assistance available to eligible facilities, recognizing the current higher level of assistance provided to specified emissions-intensive, trade-exposed sectors receiving the alternate cap adjustment factor in Table 9-2.

No manufacturing decarbonization Incentive Allocation is provided after 2038 because the five-year spending deadline established in section 95891(g)(7) would allow spending on eligible GHG emissions reduction projects through December 31, 2043, and facilities are not expected to need continued Incentive Allocation upon achieving the GHG emissions reductions envisioned by the Scoping Plan as part of achieving a statewide 85% GHG emissions reduction relative to 1990 levels by 2045.

Table 9-2a also specifies the vintage years of allowances that will be used for the Incentive Allocation. Future vintage allowances are utilized in order to support needed emissions, further minimize leakage risk, and accelerate the deployment of low-carbon technologies in hard-to-decarbonize industrial sectors, while balancing the full range of near-term Program priorities, including affordability, ratepayer protection, and the sale of State-owned allowances.

## Section 95892. Allocation to Electrical Distribution Utilities for Protection of Electricity Ratepayers.

**95892(a)(1) [deleted]**

### Purpose

The reference to 2013-2020 allocation is deleted as it is in the past and no longer needed.

### Rationale

The reference to 2013-2020 allocation is deleted because this timeframe has passed and information on the historic allocation to electrical distribution utilities is not needed.

**95892(a)(2) [new 95892(a)(1)]**

### Purpose

Section 95892(a)(2) is renumbered to be section 95892(a)(1).

The reference to Table 9-4 is updated to Table 9-3.

**Rationale**

The first modification is necessary to keep consistent numbering.

The second change is needed because a table was deleted in Subarticle 9, so the subsequent tables must be renumbered.

**<u>95892(a)(2) [new]</u>**

**Purpose**

New section 95892(a)(2) specifies that the amount of allowances allocated to each EDU from budget years 2031-2035 shall be the amount shown in new Table 9-4.

**Rationale**

This section is needed to specify allowance allocations to individual EDUs from budget years 2031-2035. A description of the calculations that are used to determine these proposed allocation amounts is found in Appendices D-1 and D-2.

**<u>95892(a)(3)</u>**

**Purpose**

This section directs the retirement of an Electrical Distribution Utility's allowance allocation in an amount equal to their CAISO Markets Purchaser Emissions for each budget year. The amendments update references to EIM Purchaser Emissions and EIM Purchasers to CAISO Markets Purchaser Emissions and CAISO Markets Purchasers respectively. The second change replaces the reference to 95852(l)(2)-(3) because both of these sections have been deleted.

**Rationale**

These changes are necessary to reflect changes in CAISO markets including the development of EDAM and need to mitigate leakage risk for electricity imports that will occur through EDAM and to align with name changes in MRR for CAISO Markets Purchaser Emissions. References exclusive to WEIM in this section have been replaced by CAISO Markets to reflect the development of EDAM and to align with changes to MRR that calculates emissions leakage risks that includes future transactions that will occur through EDAM. Allowance retirement for CAISO Markets Purchaser Emissions will be the same manner as WEIM Purchaser Emissions but will now address electricity imports and corresponding emissions leakage risk in the EDAM and WEIM.

**<u>95892(a)(4)</u>**

**Purpose**

The purpose of this new section is to specify that the additional allowances that are transitioned from IOU NGSs to EDUs as required by AB 1207 will be allocated to EDUs that have residential ratepayers and that are not also a publicly owned NGS. The allocation to each

EDU will be based on their share of retail sales, as reported to MRR. These allowances will be placed in each EDU's limited use holding account.

**Rationale**

This change is necessary to implement the requirements of AB 1207, to describe how the additional allowances will be allocated, and to specify which EDUs will receive the additional allowances. The Proposed Amendments use retail sales to divide the additional allowances because this data is already reported to CARB and verified pursuant to the MRR, and this data generally scales with the volume of electricity provided to residential customers of each applicable EDU. EDUs that are also publicly owned NGSs are not eligible for the additional allocation to EDUs because they retain their NGS allocation.

**95892(d)**

**Purpose**

In subsections 95892(d)(1), 95892(d)(2), 95892(d)(3), 95892(d)(3)(D), 95892(d)(4), 95892(d)(5), 95892(d)(7)(B), 95892(d)(7)(D), and 95892(d)(8) the words "proceeds" or "auction proceeds" are changed to "value" or "allocated allowance value" to clarify requirements on use of allocated allowance value.

The words "auction proceeds and" are deleted from this subsection.

**Rationale**

The words "proceeds" or "auction proceeds" are changed to "value" or "allocated allowance value" for clarity and consistency with other references to "allocated allowance value" in section 95892(d). In these instances, "allocated allowance value" or "value" is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207. Additionally, a definition of "allocated allowance value," "allowance value" or "value" has been added to section 95802 to provide further clarity to regulated entities.

The words "auction proceeds and" are deleted because the proposed definition of "allowance value" already includes auction proceeds, and thus it is redundant to include this.

**95892(d)(3)**

**Purpose**

The word "California" is added to describe the ratepayers that must benefit from allocated allowance value.

**Rationale**

The word "California" is added to clarify that allocated allowance value must be used for the primary benefit of California ratepayers, consistent with the goals of AB 32. The number of allowances allocated to each EDU is based on its anticipated Cap-and-Invest Program compliance costs, which is assessed at the electricity source and on electricity imports into California. CARB allocates allowances to EDUs to specifically benefit their California ratepayers that pay Cap-and-Trade compliance costs passed through in electricity rates.

**95892(d)(3)(D)**

**Purpose**

The Proposed Amendments remove the non-volumetric requirement for IOU returns to ratepayers and preserve it for POUs and COOPs.

**Rationale**

Since 2017, all utilities have been prohibited from providing return of allocated allowance value in a volumetric manner. In July 2025, CPUC initiated a new rulemaking, R. 25-07-013, to review and improve the electric California Climate Credit for IOUs. In light of CARB's statutory requirement to ensure the Regulations do not require inconsistent requirements with those required by the CPUC, the Proposed Amendments remove the prohibition on non-volumetric returns for IOU EDUs. This change maintains the prohibition on volumetric returns for POUs and COOPs, which are not subject to CPUC oversight, providing a broad consistent framework for the direct return of proceeds to ratepayers while enabling local decisions by POUs and COOPs on other aspects including climate credit amounts, frequency, and timing of credits.

**95892(d)(4)**

**Purpose**

The word "public" is added to describe educational programs, and the word "reductions" is added for clarity and consistency in the requirements on use of allocated allowance value.

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B).

**Rationale**

The word "public" is added to clarify the purpose of educational programs funded by EDU allocated allowance value. This change clarifies that EDUs cannot use allocated allowance value for internal research or data gathering purposes and describe this activity as an "education program." Public-facing education programs intended to directly reduce ratepayer GHG emissions (e.g., through promoting energy conservation opportunities) with clear educational goals are aligned with the requirements that the use of allowance value provides GHG benefits, as required by section 95892(d)(3).

The word "reductions" is added for clarity and consistency. The description of eligible educational programs in section 95892(d)(4) references the requirement in section 95892(d)(5) which specifies that EDUs must demonstrate the GHG "reductions" of applicable uses of allocated allowance value.

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B) to reflect the addition of a new provision in section 95892(e).

**<u>95892(d)(5)</u>**

### Purpose

The word “proceeds” is replaced with “allocated allowance value” or “value” to clarify requirements on use of allocated allowance value.

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B) for consistency with other changes in this section.

### Rationale

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(d). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B) to reflect the addition of a new provision in section 95892(e).

**<u>95892(d)(7)(C) [new]</u>**

### Purpose

This subsection is added to clarify that allocated allowance value cannot be used to purchase voluntary carbon offsets or to participate in other carbon markets.

### Rationale

The addition of this subsection is necessary to prohibit the use of allowance value for purchasing voluntary carbon offsets or for participating in any voluntary carbon market or external greenhouse gas emission trading system. CARB cannot ensure or verify the GHG emissions or ratepayer benefits of any offset, allowance, or other carbon product offered outside of the Cap-and-Invest Program. Additionally, using allowance value to purchase Cap-and-Trade compliance offsets and allowances is a cost of complying with the Regulation and thus already is an ineligible use of allowance value per section 95892(d)(7)(B).

**<u>95892(d)(7)(D) [new 95892(d)(7)(E)]</u>**

### Purpose

The Proposed Amendments here specify that the prohibition on volumetric returns is prohibited for POUs and COOPs, thereby excluding IOUs from the requirement. Additionally, the words “auction proceeds” are changed to “auction proceeds and interest” to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

Regarding the first change, historically, all utilities have been prohibited from providing returns of allocated allowance value in a volumetric manner. In July 2025, CPUC initiated a new rulemaking, R. 25-07-013, to review and improve the electric California Climate Credit for IOUs. In light of CARB's statutory requirement to ensure the Regulations do not require inconsistent requirements with those required by the CPUC, the Proposed Amendments remove the prohibition on non-volumetric returns for IOU EDUs. This change maintains the prohibition on volumetric returns for POUs and COOPs, which are not subject to CPUC oversight, providing a broad consistent framework for the direct return of proceeds to ratepayers while enabling local decisions by POUs and COOPs on other aspects including climate credit amounts, frequency, and timing of credits.

The second update is necessary to clarify that the requirements of this subsection apply to auction proceeds and the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

**95892(d)(8)**

**Purpose**

The word "proceeds" is replaced with "allocated allowance value" or "value" to clarify requirements on use of allocated allowance value.

"A third-party program administrator overseeing the use of the allocated allowance value on behalf of the EDU" is added to describe another type of account that is owned or controlled by the EDU.

The words "in a non-volumetric manner" are removed, and a reference to 95892(d) is added to direct the regulated community to the existing requirements regarding returns to ratepayers.

**Rationale**

The words "proceeds" or "auction proceeds" are changed to "value" or "allocated allowance value" for clarity and consistency with other references to "allocated allowance value" in section 95892(d). In these instances, "allocated allowance value" or "value" is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of "allocated allowance value," "allowance value" or "value" has been added to section 95802 to provide further clarity to regulated entities. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

Regarding the second change, the current text requires that allocated allowance value must be spent by ten years after the vintage year of the allowances and specifies that, to be spent, the value must not remain in any account owned or controlled by the EDU or its corporate associates. The current text does not explicitly extend the definition of “spent” to third-party program administrators that receive and spend allowance value on behalf of an EDU while not being direct corporate associates of the EDU. Clarifying that the 10-year deadline also applies to program administrators is necessary to ensure that all EDU allocated allowance value is spent on eligible projects that benefit ratepayers and reduce GHG emissions. This clarification also supports oversight of the use of allocated allowance value.

Regarding the third change, historically, utilities have returned allocated allowance value in a non-volumetric manner**.** The Proposed Amendments remove the prohibition on non-volumetric returns for IOU EDUs, and maintain the prohibition on volumetric returns for POUs and COOPs, which are not subject to CPUC oversight, providing a broad consistent framework for the direct return of proceeds to ratepayers while enabling local decisions by POUs and COOPs on other aspects including climate credit amounts, frequency and timing of credits. This specific change adds reference to the section describing these requirements for returns to ratepayers.

**<u>95892(d)(9)</u>**

**Purpose**

The purpose of this new section is to require EDUs to provide the value of additional allowances to their residential customers as periodic direct returns as specified in subsection 95892(d)(3)(D) and to specify that POUs and COOPs must provide non-volumetric credit(s), either on- or off-bill, by December 31 of the year three years after the vintage year of the allowances.

**Rationale**

This new section is necessary to explain how the value of additional allowances shall be distributed as direct credit(s) to residential ratepayers. Currently, NGSs provide the value of consigned allowances to residential ratepayers as periodic non-volumetric direct returns in the form of an on-bill climate credit. In transitioning the value from NGS to EDUS, the Proposed Amendments require that all EDUs likewise provide the value of additional allowances to residential ratepayers as a climate credit. In addition, AB 1207 specifies that the provision of additional allowances to EDUs shall not be construed to impact allocation to EITE industry. The Proposed Amendments ensure this by requiring that the additional allowances be provided to residential ratepayers. POUs are required to provide residential ratepayers a non-volumetric credit to support preservation of the carbon price signal. A three-year timeframe relative to the vintage year of the allowances is specified for POUs to provide credits back to their ratepayers, because in early years of the transition, the percentage of NGS allocation provided to POU and COOPs and the resulting estimated value of a potential climate credit is small. Providing POU and COOPs with a three-year spending limit balances the time needed to design a credit program, the administrative burden of providing the credit, and providing a meaningful credit to residential ratepayers. On or off-bill is specified for the POUs and COOPs to enable POUs to implement this requirement by providing a direct return either through their existing billing systems or as a separate direct payment to residential ratepayers. The three-year limitation is not proposed for IOU EDUs because they already provide residential ratepayers with periodic climate credits and the value the additional allowances can be added to the existing climate credits.

**95892(e)**

**Purpose**

In subsections 95892(e), 95892(e)(5), 95892(e)(5)(A), 95892(e)(5)(B), 95892(e)(5)(B)2.b., 95892(e)(5)(B)4., and 95892(e)(5)(C) the word “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(e). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

**95892(e)(1)**

**Purpose**

The phrase “including any accrued interest” is added to this section to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

This text is necessary to clarify that the requirements of this subsection apply to auction proceeds and the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

**95892(e)(3)**

**Purpose**

In two instances, the words “auction proceeds” are changed to “auction proceeds and interest” to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

This update is necessary to clarify that the requirements of this subsection apply to auction proceeds and the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

**95892(e)(4) [new]**

### Purpose

The purpose of this new subsection is to require investor-owned utilities to annually report the amount of allowance value that is encumbered or set-aside for use in clean energy and efficiency and transmission projects but remains unspent at the end of the calendar year.

### Rationale

This update is necessary to ensure that investor-owned utilities provide accurate reporting of allowance value that is set aside for clean energy and efficiency and transmission projects. The word transmission is added because in AB 1207 the Legislature designates 5% of IOU EDU allocated allowance value from 2026-2031 to be provided to California Infrastructure and Economic Development Bank (I-Bank) for the California Transmission Accelerator Revolving Fund Program established pursuant to Government Code sections 63049.71 to 63049.73 for transmission projects. Use of allocated allowance proceeds by the I-Bank would also be subject to the reporting provisions on use of allocated allowance value and is therefore added to these Proposed Amendments to specify as such. Through 2024, approximately $695M remains encumbered for these uses and accurate reporting is needed to ensure that CARB can track the use of these funds and ensure that they are spent in a manner that complies with the other requirements of this section, including the 10-year spending deadline in section 95892(d)(8) (CARB 2025f).

**95892(e)(4) [new 95892(e)(5)]**

### Purpose

The words “auction proceeds” are changed to “value” and the words “which were spent” are deleted to clarify requirements on reporting of use of allocated allowance value.

### Rationale

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(e). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

The second change is necessary to delete redundant language.

**95892(e)(4)(A) [new 95892(e)(5)(A)]**

### Purpose

The words "auction proceeds" are changed to "value" to clarify requirements on use of allocated allowance value and new text is added to require reporting of the number of ratepayers that received a direct return of allocated allowance value.

### Rationale

The words "proceeds" or "auction proceeds" are changed to "value" or "allocated allowance value" for clarity and consistency with other references to "allocated allowance value" in section 95892(e). In these instances, "allocated allowance value" or "value" is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of "allocated allowance value," "allowance value" or "value" has been added to section 95802 to provide further clarity to regulated entities. This change also supports reporting to the Legislature on use of electrical distribution utility allocated allowance value as required by AB 1207.

The second change is necessary to aid CARB's oversight on the use of allocated allowance value use for direct return of allowance value to ratepayers to ensure that EDU allocated allowance value is used in conformance with the requirements of the Regulation.

**95892(e)(4)(B)2.b. [new 95892(e)(5)(B)2.b.]**

### Purpose

The date of publication of CARB's California Climate Investments Quantification Methodology Emission Factor Database Documentation is changed from August 2018 to January 2024 (CARB 2024g) and a reference to the accompanying Appendix A: Sustainable Communities and Clean Transportation is added (CARB 2024h), to reflect current information.

### Rationale

The revised publication date is necessary to ensure the most recent emission factors are used for calculating GHG emissions benefits. Additionally, the emission factor database documentation now includes accompanying appendices. Therefore, reference to Appendix A: Sustainable Communities and Clean Transportation, is added for completeness.

**Table 9-3 [deleted]**

### Purpose of Table 9-3

Table 9-3, which contains the 2013-2020 allocation to electrical distribution utilities is deleted as it covers past allowance allocation and is no longer needed in the Regulation.

### Rationale of Table 9-3

Table 9-3, which contains the 2013-2020 allocation to electrical distribution utilities, is deleted because the timeframe has passed and information on the historic allocation to electrical distribution utilities is not needed.

**Table 9-3 [new]**

### Purpose

This change makes updates to the EDU allocation 2027 through 2030 to reflect updated information. In addition, Table 9-4 is renumbered to be Table 9-3. Additionally, the name of the utility Golden State Water Company (Bear Valley Electric Service) is changed to Bear Valley Electric Service, Inc.

### Rationale

When allowances are allocated in advance, as they were in the 2016 rulemaking for the 2021-2030 allocation, there is a risk that the load projections will be too high or too low or that the supply projections would not reflect the actual generation mix. The updated allocation for 2027 through 2030 reflects the new SB 100 RPS targets (i.e., 60% in 2030) and updated information from the California Energy Commission (CEC 2023a, CEC 2024a, CEC 2025).

A description of the calculations used to determine the allocation amounts is found in Appendix D-1 and D-2. Table 9-4 is renumbered to be Table 9-3 because a table was deleted in Subarticle 9, so the subsequent tables must be renumbered. The name of the utility Golden State Water Company (Bear Valley Electric Service) is changed to Bear Valley Electric Service, Inc. because the legal name of this entity has been changed.

**Table 9-3A [deleted]**

### Purpose of Table 9-3A

Table 9-3A, which contains the 2013-2020 allocation to City of Shasta Lake is deleted as it covers past allowance allocation and is no longer needed in the Regulation.

### Rationale of Table 9-3A

Table 9-3A, which contains the 2013-2020 allocation to City of Shasta Lake, is deleted because the timeframe has passed and information on the historic allocation to City of Shasta Lake is not needed.

**Table 9-4 [new]**

### Purpose

The addition of this table provides the EDU allocation from 2031 through 2035.

### Rationale

This new table is needed to specify allowance allocations to individual EDUs from budget years 2031-2035. The EDU allocation for budget years 2031-2035 reflects the load projections from the California Energy Commission (CEC 2025) and the SB 100 and SB 1020 targets for renewable and zero-carbon resources. A description of the calculations that used to use to determine these proposed allocation amounts is found in Appendix D-1 and D-2.

## Section 95893. Allocation to Natural Gas Suppliers for Protection of Natural Gas Ratepayers.

**95893(a)**

**Purpose**

The word “exclusively” is replaced with “primary” and the word “California” is added to describe ratepayers that must benefit from allocated allowance value.

**Rationale**

The word “exclusively” is replaced with “primary” for consistency with sections 95893(d)(3) and 95893(d)(7), which specify that natural gas supplier allocated allowance value must be used for the primary benefit of retail natural gas ratepayers.

The word “California” is added to clarify that allocated allowance value must be used for the primary benefit of California ratepayers, consistent with the goals of AB 32.

**95893(a)(1) [new]**

**Purpose**

This subsection is added to provide a true-up mechanism for natural gas suppliers that become newly eligible for allowance allocation.

**Rationale**

CARB allocates free allowances to natural gas suppliers to benefit their ratepayers, consistent with the goals of AB 32. Per section 95871(g), NGS allocation is provided each calendar year from the subsequent year’s allowance budget (e.g., 2027 NGS allocation is provided in 2026). However, under the current Regulation, an NGS that becomes newly eligible for NGS allocation may not receive allocation for each year in which it incurred a compliance obligation. For example, an NGS that becomes a covered entity due to an increase in covered emissions beyond the applicability threshold of 25,000 MTCO2e in section 95812(c)(4) may initially incur a compliance obligation for covered emissions from the current and prior calendar year, but would only receive allowance allocation for the subsequent year. Thus, a new NGS allocation true-up mechanism is necessary to ensure ratepayers receive benefit in all years in which an NGS incurs a compliance obligation. This proposed true-up allocation is only provided during the first budget year “t” of eligibility for NGS allocation, and is calculated in the same manner as the standard annual NGS allocation in section 95893(a) for each of the years “t–1” and “t–2” in which the NGS incurred a compliance obligation.

**95893(b)(1)(A)**

**Purpose**

The purpose of the newly added text is to describe that NGS allocation will be limited to the amounts that are not transitioned to EDUs.

**Rationale**

This change is necessary to specify that the NGS allocation that is transitioned to EDUs, as directed by AB 1207, will be from the allocation that would have been destined for NGS consignment. Thus, the amount available for NGS compliance remains the same.

**95893(b)(1)(A)1.**

**Purpose**

The purpose of this new subsection is to describe how NGS allocation will be transitioned to EDUs over time as required by AB 1207. Beginning in 2029, 20% of the IOU NGS allocation will be transitioned to EDUs, and 10% annually thereafter until all IOU NGS allocation is transitioned to EDUs. These allowances will be provided to EDUs from the pool of allowances required to be consigned each year by IOU NGSs.

**Rationale**

This change is necessary to implement the new requirement of AB 1207 to transition NGS allocation to EDUs, and to describe the amounts of allowances that will be subtracted from NGS allocation each year. Beginning the transition in 2029, after the sixth compliance period as proposed in section 95840, and slowly phasing in the transition by 10% each year minimizes volatility in compliance costs and ratepayer impacts for NGS while simultaneously increasing support for EDU ratepayers as required by AB 1207.

**95893(d)**

**Purpose**

In subsections 95893(d)(1), 95893(d)(2), 95893(d)(3), 95893(d)(3)(B), 95893(d)(4), 95893(d)(5), 95893(d)(7)(C), and 95893(d)(8) the word “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” to clarify requirements on use of allocated allowance value.

The words “auction proceeds and” are deleted from this subsection to clarify requirements on use of allocated allowance value.

**Rationale**

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(d). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities. The words “auction proceeds and” are deleted because the proposed definition of “allowance value” already includes auction proceeds, and thus it is redundant to include this language.

**95893(d)(3)**

**Purpose**

The word “California” is added for clarity, to describe ratepayers that must benefit from allocated allowance value.

**Rationale**

The word “California” is added to clarify that allocated allowance value must be used for the primary benefit of California ratepayers, consistent with the goals of AB 32.

**95893(d)(3)(A)**

**Purpose**

The changes to section 95893(d)(3)(A) specify that natural gas supplier allowance value not directly distributed to ratepayers must be used to either 1) incentivize or directly install equipment that substitutes electricity for natural gas or other fossil fuels, or 2) fund energy-efficiency improvements in buildings. The text also specifies that the allowance value cannot be used for the installation of new equipment that combusts natural gas or other fossil fuels.

**Rationale**

In conjunction with the deletion of section 95893(d)(3)(B), the edits to section 95893(d)(3)(A) are intended to limit the use of natural gas supplier allowance value to projects that align with the path to decarbonization of natural gas uses outlined in CARB’s 2022 Scoping Plan Update.

**95893(d)(3)(B) [deleted]**

**Purpose**

Section 95893(d)(3)(B) is deleted to disallow this use of allocated allowance value and to make allocated allowance value consistent with the CARB’s 2022 Scoping Plan Update (CARB 2022a).

**Rationale**

In conjunction with the changes to section 95893(d)(3)(A), section 95893(d)(3)(B) is deleted to limit the use of natural gas supplier allowance value to projects that align with the path to decarbonization of natural gas uses outlined in CARB’s 2022 Scoping Plan Update (CARB 2022a).

**95893(d)(4)**

**Purpose**

The word “public” is added to describe educational programs, and the word “reductions” is added for clarity and consistency in requirements for use of allocated allowance value.

The reference to section 95892(e)(4)(B) is changed to section 95892(e)(5)(B).

**Rationale**

The word “public” is added to clarify the purpose of educational programs funded by natural gas supplier allocated allowance value. Natural gas suppliers cannot use allocated allowance value for internal research or data gathering purposes and describe this activity as an “education program,” as doing so would result in highly uncertain, non-demonstrable GHG emissions benefits. In contrast, a public-facing education program intended to directly reduce ratepayer GHG emissions (e.g., through promoting energy conservation opportunities) produces much clearer GHG benefits, as required by section 95893(d)(3).

The word “reductions” is added for clarity and consistency. The description of eligible educational programs in section 95893(d)(4) references the requirement in section 95893(d)(5) which specifies that natural gas suppliers must demonstrate the GHG “reductions” of applicable uses of allocated allowance value.

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B) to reflect the addition of a new provision in section 95892(e).

**<u>95893(d)(5)</u>**

**Purpose**

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B).

The word “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” to clarify requirements for use of allocated allowance value.

**Rationale**

The reference to 95892(e)(4)(B) is changed to 95892(e)(5)(B) to reflect the addition of a new provision in section 95892(e).

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(d). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities.

**<u>95893(d)(7)(B) [new]</u>**

**Purpose**

This subsection is added to clarify that allocated allowance value cannot be used to purchase voluntary carbon offsets or to participate in other carbon markets.

**Rationale**

The addition of this subsection is necessary to prohibit the use of allowance value for purchasing voluntary carbon offsets or for participating in any voluntary carbon market or external greenhouse gas emission trading system. CARB cannot ensure or verify the GHG emissions or ratepayer benefits of any offset, allowance, or other carbon product offered outside of the Cap-and-Invest Program. Additionally, using allowance value to purchase Cap-and-Invest compliance offsets and allowances is a cost of complying with the Regulation and thus already is an ineligible use of allowance value per section 95893(d)(7)(A).

**<u>95893(d)(7)(C) [new 95893(d)(7)(D)]</u>**

**Purpose**

The words “auction proceeds” are changed to “auction proceeds and interest” to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

This update is necessary to clarify that the requirements of this subsection apply to auction proceeds and the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation.

**<u>95893(d)(8)</u>**

**Purpose**

The word “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” to clarify requirements on use of allocated allowance value.

“A third-party program administrator overseeing the use of the allocated allowance value on behalf of the natural gas supplier” is added to describe another type of account that may contain allocated allowance value.

**Rationale**

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(d). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities.

Regarding the second change, the current text requires that allocated allowance value must be spent by ten years after the vintage year of the allowances and specifies that, to be spent, the value must not remain in any account owned or controlled by the natural gas supplier or its corporate associates. The current text does not explicitly extend the definition of "spent" to third-party program administrators that receive and spend natural gas supplier allowance value on behalf of a natural gas supplier while not being direct corporate associates of the natural gas supplier. Clarifying that the 10-year deadline also applies to program administrators is necessary to ensure that all natural gas supplier allocated allowance value is spent on eligible projects that benefit ratepayers and reduce GHG emissions. This clarification also supports oversight of the use of allocated allowance value.

**95893(e)**

**Purpose**

In subsections 95893(e), 95893(e)(5), 95893(e)(5)(A), 95893(e)(5)(B), 95893(e)(5)(B)(2)(c), 95893(e)(5)(B)(4), and 95893(e)(5)(C) the word "proceeds" or "auction proceeds" are changed to "value" or "allocated allowance value" to clarify requirements on reporting of use of allocated allowance value.

Text is added to discontinue the requirement for investor-owned NGSs to report their use of allowance value after they have reported a zero balance for one year, but not before June 30, 2037.

**Rationale**

The words "proceeds" or "auction proceeds" are changed to "value" or "allocated allowance value" for clarity and consistency with other references to "allocated allowance value" in section 95892(d). In these instances, "allocated allowance value" or "value" is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of "allocated allowance value," "allowance value" or "value" has been added to section 95802 to provide further clarity to regulated entities.

This new text is needed to sunset the requirement for IOU NGSs to report their use of allowance value to CARB, once they have a zero balance, as these entities will no longer have allowance value to report once all allocation is transitioned to EDUs pursuant to the requirements in AB 1207. This should not occur before June 30, 2037, since IOU NGSs will receive allocated allowances in 2036.

**95893(e)(1)**

**Purpose**

The phrase "including any accrued interest" is added to this section to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

This text is necessary to clarify that the requirements of this subsection apply to auction proceeds and the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation.

**<u>95893(e)(3)</u>**

**Purpose**

In two instances, the words “auction proceeds” are changed to “auction proceeds and interest” to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

This update is necessary to clarify that the requirements of this subsection apply to auction proceeds and the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation.

**<u>95893(e)(4) [new]</u>**

**Purpose**

The purpose of this new subsection is to require investor-owned utilities to annually report the amount of allowance value that is set-aside for GHG emissions reduction projects but remains unspent at the end of the calendar year.

**Rationale**

This update is necessary to ensure that investor-owned utilities provide accurate reporting of allowance value that is set aside for clean energy and efficiency projects. Accurate reporting is needed to ensure that CARB can track the use of these funds and ensure that they are spent in a manner that complies with the other requirements of this section, including the 10-year spending deadline in section 95893(d)(8).

**<u>95893(e)(4) [new 95893(e)(5)]</u>**

**Purpose**

The words “auction proceeds” are changed to “value” and the words “which were spent” are deleted to clarify requirements on reporting of use of allocated allowance value.

**Rationale**

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(d). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities.

The second change is necessary to delete redundant language.

**95893(e)(4)(A) [new 95893(e)(5)(A)]**

### Purpose

The words “auction proceeds” are changed to “value” and new text is added to require reporting of the number of ratepayers that received a non-volumetric return.

### Rationale

The words “proceeds” or “auction proceeds” are changed to “value” or “allocated allowance value” for clarity and consistency with other references to “allocated allowance value” in section 95892(d). In these instances, “allocated allowance value” or “value” is the more appropriate term because it also includes the interest earned on allocated allowance auction proceeds. Interest earned on allocated allowance auction proceeds is value resulting from the allocation of allowances and is therefore subject to the requirements of the Regulation. Additionally, a definition of “allocated allowance value,” “allowance value” or “value” has been added to section 95802 to provide further clarity to regulated entities.

The second change is necessary to aid CARB’s oversight of non-volumetric returns such as the California Climate Credit and to ensure that NGS allocated allowance value is used in conformance with the requirements of the Regulation.

**95893(e)(4)(B)2.a. [new 95893(e)(5)(B)2.a.]**

### Purpose

Text is added that allows for a substitute emission factor for natural gas that is comparably accurate to the emission factor used for the natural gas supplier’s MRR reporting for the purposes of reporting on use of allocated allowance value.

### Rationale

This change is needed to allow for flexibility in the natural gas emission factor used for calculating the GHG benefits from eligible uses of allowance value. The natural gas emission factor may vary depending on the nature of the project or the program administrator and limiting the emission factor to the one used in MRR is unnecessarily restrictive, provided the natural gas supplier can demonstrate the accuracy of any alternative emission factor.

**95893(e)(4)(B)2.c. [new 95893(e)(5)(B)2.c.]**

### Purpose

The date of publication of CARB's California Climate Investments Quantification Methodology Emission Factor Database Documentation is changed from August 2018 to January 2024 (CARB 2024g) and a reference to the accompanying Appendix A: Sustainable Communities and Clean Transportation is added (CARB 2024h).

### Rationale

The revised publication date is necessary to ensure the most recent emission factors are used for calculating GHG emissions benefits. Additionally, the emission factor database documentation now includes accompanying appendices. Therefore, reference to Appendix A: Sustainable Communities and Clean Transportation, is added for completeness.

**Table 9-6**

**Purpose**

The change from utilities to suppliers is necessary to keep consistent terminology.

**Rationale**

This change is needed because the term natural gas supplier is defined in the Regulation, and the use of consistent terminology is necessary to provide clarity to the regulated community.

**Table 9-6A**

**Purpose**

The purpose of new Table 9-6A is to provide the annual percentage of the investor-owned NGS allocation that shall be transferred to EDUs from 2029 and beyond.

**Rationale**

This table is necessary to describe and specify the amount of annual investor-owned NGS allocation that will be transferred to EDUs each year. Beginning the transition in 2029, after the sixth compliance period as proposed in section 95840, and phasing in the transition by 10% each year minimizes volatility in compliance costs and ratepayer impacts for NGS while simultaneously increasing support for EDU ratepayers as required by AB 1207.

## Section 95894. Allocation to Legacy Contract Generators for Transition Assistance.

**95894(a)**

**Purpose**

Section 95894(a) lists the annual application requirements for eligible legacy contract generators seeking allowance allocation for transition assistance. Section 95894(a) is revised to remove the phrase “in writing via certified mail.”

**Rationale**

Physical submittal of application materials is not necessary for CARB to verify eligibility for legacy contract generators seeking transition assistance. CARB accepts electronic submittal for numerous other materials submitted by entities for Cap-and-Invest Program purposes as specified in proposed section 95803(c). Removing this requirement also adds certainty that legacy contract applications will be received by CARB by the annual June 1 application deadline.

## Section 95911. Format for Auction of California GHG Allowances.

**95911(c)(2)**

### Purpose

This section is modified to move the annual date for announcing the Auction Reserve Price from the first business day in December to December 8 (or the next business day).

### Rationale

This change is necessary to accommodate the work necessary for CARB staff to conduct the new annual allowance transfers and retirements for compliance offset use in new section 95871(j), as these transfers affect the number of allowances offered at auction the following year. A one-week delay provides the necessary time while also ensuring that public notice for annual and quarterly auction information is provided in a timely manner.

## Section 95912. Auction Administration and Participant Application.

**95912(i)(3)**

### Purpose

This section is modified to specify the date for submitting payment to the financial services administrator in the auction notification.

### Rationale

The current language states that payment is required within seven days of notifying bidders of the auction results. The proposed changes allow CARB to publish a date in the auction notification that considers non-banking days or holidays to provide approximately equal days to arrange payment between notification of auction results and the payment due date for all auctions.

**95912(i)(4)**

### Purpose

The proposed modification specifies that CARB will assess the holding limits at least seven days prior to the transfer of allowances purchased into winning bidder’s accounts, once the announcement of the auction settlement price has been published, to accommodate the time needed for coordination with other External GHG ETS to which California has linked. The proposal allows seven days for CARB and linked jurisdictions to coordinate the amount to transfer to each account and acquire the necessary approvals across each jurisdiction to conduct the transfers.

### Rationale

The Proposed Amendments are necessary for clarity. The amendments capture existing implementation practice and current auction processes, where the current language may inadvertently imply that an entity's applicable holding limits are assessed immediately prior to the transfer of allowances purchased into winning bidder's accounts.

## Section 95913. Sale of Allowances from the Allowance Price Containment Reserve.

**95913(d)(1)(A)**

**Purpose**

A Reserve sale is offered if the settlement price of the auction in the previous quarter is above a threshold. The proposed amendment would change the threshold at which a Reserve sale is offered from 60% of the lowest Reserve tier price to 80% of the lowest Reserve tier price to decrease administrative burden.

**Rationale**

This amendment is necessary to decrease administrative burden. Requiring that CARB offer Reserve sales based on the 60% auction settlement price threshold has been inefficient and administratively burdensome and requires that the infrastructure and preparation be put in place to offer a Reserve Sale even if the event is not held because there are no qualified applicants. If no entities apply for a given Reserve sale, CARB does not hold it and posts a notice for the market. Offering a Reserve sale each year before the November 1 compliance obligation is due and offering a Reserve sale when the auction settlement price has reached 80% of the lowest Reserve tier continues to achieve the intent of the Reserve as a cost containment element while providing administrative efficiencies for staff. To date, no Reserve sales offered have been held because no qualified entities have applied to participate.

**95913(e)(2) [new]**

**Purpose**

The new subsection requires entities to keep registration information, such as the entity legal name, physical address, director and officer contact information, and corporate associations disclosures current pursuant to the timing in section 95830(e). If an entity fails to update material information by the deadline, then it will be denied participation in the Reserve sale.

**Rationale**

This proposed section is necessary to maintain market oversight and to align Reserve sale eligibility requirements with the auction eligibility requirements in section 95912(d)(4). This proposed section establishes consistency in staff's review and determination of approval and participation by regulated entities for jurisdiction-offered auction and reserve sale events.

**95913(f)(2)(A)-(E) [new]**

**Purpose**

New section 95913(f)(2) establishes consequences for Reserve sale participation. The Executive Officer will cancel or restrict a previously approved reserve sale application or may reject an application for an entity if it has committed any of the actions described in subsections 95913(f)(2)(A) through (2)(E).

New section 95913(f)(2)(A) states that the Executive Officer will take action against a Reserve sale application if the Executive Officer has determined that the Reserve sale participant has provided false or misleading facts to CARB.

New section 95913(f)(2)(B) states that the Executive Officer will take action against a Reserve sale application if the Executive Officer has determined that the Reserve sale participant has withheld material information from its application.

New section 95913(f)(2)(C) states that the Executive Officer will take action against a Reserve sale application if the Executive Officer has determined that the Reserve sale participant has violated the Reserve sale rules contained in subarticle 10.

New section 95913(f)(2)(D) states that the Executive Officer will take action against a Reserve sale application if the Executive Officer has determined that the Reserve sale participant has violated the registration requirements contained in subarticle 5.

New section 95913(f)(2)(E) states that the Executive Officer will take action against a Reserve sale application if the Executive Officer has determined that the Reserve sale participant has violated the rules governing trading contained in subarticle 11.

**Rationale**

The changes are necessary to clarify when the Executive Officer will withhold approval of a Reserve sale participation application or cancel or modify a previously approved application. The changes align the Reserve sale participation requirements with the auction participation requirements in section 95914(a) for consistency for covered entities. The Executive Officer must ensure complete and accurate disclosures, and has the authority to cancel, restrict, or reject a reserve sale application not meeting the reserve sale participation and eligibility requirements. This change will aid in proper oversight and market integrity ensuring that entities desiring to participate and purchase reserve allowances conform with the Program and meet all requirements for Reserve sale participation.

**95913(h)(1)(F)**

**Purpose**

Section 95913(h)(1)(F) describes the disposition of allowances from budget years 2031 through 2045 to the Allowance Price Containment Reserve. In 2026, the Executive Officer will transfer the allowances identified in Table 8-3 (i.e., 1% of the allowances from each budget year from 2031 through 2045) to the first tier of the Allowance Price Containment Reserve.

**Rationale**

This change is necessary to identify the price tier at which the allowances designated to the Allowance Price Containment Reserve by Table 8-3 will be made available. Placing the allowances in the first Reserve tier strengthens price-containment at the lower price tier and brings the number of Reserve allowances in the first tier (currently about 66.8 million) into closer alignment with the number of Reserve allowances in the second tier (currently about 89.5 million). Transferring these allowances to the Allowance Price Containment Reserve in 2026 ensures that the allowances are available to provide price-containment as soon as possible. The number of allowances moved to the Reserve for each budget year post-2030 balances the need for cost-containment in the context of a more stringent Program with the other important reasons for which allowances are intended to be used for, such as minimizing leakage, protecting utility ratepayers, and auctioning for equitable distribution and price transparency. To date, no allowances have been withdrawn from the Reserve, as no Reserve sales have been held.

**95913(j)(3)**

### Purpose

This section is modified to specify that the date for submitting payment to the financial services administrator will be included in the Reserve sale notification. Additionally, subsection 95913(j)(3)(C) is amended to describe that proceeds from the Reserve sale will be placed in the Greenhouse Gas Reduction Fund. Current subsections 95913(j)(3)(C)-(E) are renumbered to 95913(j)(3)(D)-(F).

### Rationale

The current Regulation text states that payment is required within seven days of notifying bidders of the Reserve sale results. The proposed changes allow CARB to publish a date in the Reserve sale notification that considers non-banking days or holidays to provide sufficient days to arrange payment between notification of Reserve sale results and the payment due date for all Reserve sales.

The current Regulation text also states that the financial services administrator will deposit proceeds upon receiving each cash payment or draw on a bid guarantee. The proposed modification is consistent with the auction deposit process, where a single deposit is made after all payments are received.

## Section 95915. Price Ceiling Sales.

**95915(h)(2)**

### Purpose

This section is amended to describe where moneys from the sale of Price Ceiling Units will be deposited and how those moneys will be used.

### Rationale

These changes are necessary to reflect changes prescribed in AB 1207 as to where the moneys from sale of price ceiling units are deposited and how they will be used. In AB 1207, the Legislature established a new fund for all money’s generated by Price Ceiling Sales. The

Legislature also specified it will determine future appropriation of those moneys for the purposes detailed in HSC section 38562(c)(2)(A)(ii)(II).

## Section 95920. Trading.

**95920(f)(3)(B)**

### Purpose

This section is modified to clarify that the holding limit allocation will remain in effect until the updated percentage share of the holding limit for each registered member of a corporate association group is submitted by all members of the group and approved by the Executive Officer.

### Rationale

The proposed change is intended to provide more clarity so that entities with a direct corporate association understand that updates to any holding limit shares must be approved by the Executive Officer before they are in effect within the tracking system. This is the same approval process as for all similar account updates. Changes are not effective until approved by the Executive Officer and implemented in the tracking system by the accounts administrator.

## Section 95921. Conduct of Trade.

**95921(b)(5)(D)**

### Purpose

This amendment clarifies that the price that must be provided in a transfer request for an Exchange Agreement is the “Exchange Delivery Settlement Price” and specifies that the close of trading day exchange delivery settlement price must be submitted in either U.S. dollars or Canadian dollars.

### Rationale

Clarifying that the price provided for an Exchange Agreement must be the exchange delivery settlement price as reported by an exchange clearinghouse organization allows staff and market participants to rely on consistent and accurate price data and streamlines reporting requirements for exchange trades. This price should not include commission fees.

Requiring identification of the currency supports market monitoring and accurate public reporting of exchange trade prices. Staff already must track the currency in which entities make payment for an exchange transfer because the carbon market is linked and operated by both CARB and the Ministère de l'Environnement et de la Lutte contre les Changements Climatiques (MELCC) in Québec. This change is needed for consistency with other transfer price reporting requirements that are currently specified in section 95921(b)(3) and section 95921(b)(4)(E), where a transfer must be reported in either U.S. dollars or Canadian dollars.

## 95921(b)(6)

### Purpose

Section 95921(b)(6) of the current Regulation allows entities to enter a price of zero, and the proposed changes clarifies and streamlines the conditions under when entities must enter a price of zero based on the transaction agreement type. Section 95921(b)(6) text is modified to replace the phrase "may enter a price of zero" with "must enter a price of zero."

The updated section now clearly identifies the six transaction agreement types where entities must report a zero-priced transaction. Two agreement types that must be reported as unpriced instead of zero-priced are moved to the new section 95921(b)(7). Section 95921(b)(6)(F) is moved to new section 95921(b)(7)(A), and section 95921(b)(6)(H) is moved to new section 95921(b)(7)(B). Current section 95921(b)(6)(G) is renumbered to 95921(b)(6)(F).

### Rationale

Since the start of the Program, there are two distinct transaction pricing categories for compliance instrument transfers that are allowed in limited circumstances: zero-priced and unpriced. These two pricing categories are disaggregated to clarify the applicable transaction agreement types and the associated reporting requirements.

The Proposed Amendments require that entities "must" enter a zero price in the tracking system when proposing a transfer that is tied to one of the six transaction agreement types listed in sections 95921(b)(6)(A)-(F). Entities will not have the option to leave the price field in the tracking system blank with this proposed change. The changes aid more effective market monitoring by clarifying requirements and reducing the administrative efforts needed by CARB to verify that the reporting is appropriate for the transaction agreement type. Streamlining the transfer price reporting requirements will also improve the accuracy of transfer price data reports that CARB publicly releases on a quarterly and annual basis.

Two transaction agreement types listed in section 95921(b)(6)(F) and section 95921(b)(6)(H) of the current Regulation are moved to the new list of transaction agreement types to instead be reported as unpriced transfers in new section 95921(b)(7). Staff have discussed with the third-party market monitor the importance of verifying that "arm's length" transfers result from these two agreement types, where arm's length means that parties negotiate a specific value or use some form of market valuation method for the compliance instruments and that parties are acting independently in their own self-interest.

## 95921(b)(7) [new]

### Purpose

New section 95921(b)(7) clarifies the specific transaction agreements for which transfers of compliance instruments may be reported as unpriced. Unpriced transfers are only allowed in the tracking system if the transfer results from one of the six transaction agreement types identified in sections 95921(b)(7)(A)-(F). For unpriced compliance instrument transfers, entities must provide either a description of the valuation method or a total market valuation of the compliance instruments that was agreed to for the transaction.

With the proposed changes, entities that report an unpriced transfer must provide supporting contract documentation to the Executive Officer.

**Rationale**

The current Regulation allows entities to leave the price field blank even when a transfer should be reported as having a price of zero. However, program implementation has shown that there are fundamental differences between transactions that have a recordable price of zero and those that do not contain an isolated price for compliance instruments alone.

The Proposed Amendments create a new section to support the reporting of unpriced transfers of compliance instruments under limited circumstances. Staff identified six transaction agreement types that may not include a specific price for the transferred compliance instruments. Staff must be able to verify that any unpriced transfer is associated with an arm's-length transaction, where the value of the traded compliance instruments reflect the value a buyer and seller have agreed upon while acting independently and in their own self-interest. The proposed reporting requirements for these types of transaction agreements support that verification process. Proposed Amendments require entities to submit to CARB supporting documents to allow verification of the details of unpriced transfers.

Accurate identification of unpriced transfer requests will aid staff in timely identification and review of unpriced transfers to ensure that market participants are in conformance with the trade rules specified in the Regulation, that there is no collusive interest in the transaction, and that the valuation of compliance instruments involved in the transfers reflects a competitive market value. Clarifications to transfer price reporting requirements will also help ensure the accuracy of reports on market transfers and pricing information that CARB publicly posts on a quarterly and annual basis.

**95921(b)(7)(A) and (B) [new]**

**Purpose**

New subsections 95921(b)(7)(A)-(B) lists two transaction agreement types that allow for unpriced transfers of compliance instruments. These transaction types were removed from the zero-price transaction reporting sections 95921(b)(6)(F) and 95921(b)(6)(H) and relocated here.

**Rationale**

Moving the regulatory text to new sections 95921(b)(7)(A) and (B) clarifies that these types of transfers must be reported as unpriced, and not as zero-priced. These transfers must instead include a description of either the valuation or formula or a total market value or total cost basis for the transaction. Clarifying the reporting of unpriced transfers of compliance instruments is necessary for supporting market integrity and improving the accuracy of public transaction data.

**95921(b)(7)(C) [new]**

**Purpose**

New subsection 95921(b)(7)(C) lists a transfer of compliance instruments due to a transaction agreement for a change of facility ownership or a business merger between covered entities that has been disclosed pursuant to section 95835(b) as a transfer that can be reported as unpriced.

**Rationale**

Transaction agreements associated with a change of facility ownership or business merger among covered entities that do not specify a price or cost basis for the sale of the compliance instruments alone are acceptable agreements since the compliance instruments can be one of many bundled assets transferred as a result of the change in ownership. However, while it is possible that a monetary value of compliance instruments cannot be isolated from the total monetary value of other assets involved in the transaction, staff expect the transaction can be verified to be arm's length with a reportable total market valuation for the facility sale.

**<u>95921(b)(7)(D) [new]</u>**

**Purpose**

New subsection 95921(b)(7)(D) allows for an unpriced transfer of compliance instruments due to an agreement for a registered entity to voluntarily retire a compliance instrument on behalf of an unregistered entity pursuant to section 95922(d)(2).

**Rationale**

This change is needed to support reporting of compliance instrument transfers that occur when an entity voluntarily retires compliance instruments on behalf of an unregistered entity, and there is not a specific price in the transaction agreement for the compliance instruments alone. Voluntary retirements can support businesses seeking green certifications and those working toward voluntary climate commitments. Transfers of compliance instruments may be proposed without price information as a result of an entity's voluntary participation in a marketing and branding program that includes accounting of renewable energy credit claims associated with voluntary greenhouse gas emissions reductions.

**<u>95921(b)(7)(E) [new]</u>**

**Purpose**

New subsection 95921(b)(7)(E) lists a transfer of compliance instruments used to satisfy a contractual requirement, wherein the seller has agreed to replace any invalidated offset credits, or an entity that must address an intentional forest offset project reversal.

**Rationale**

The change is needed to support and ensure timely monitoring of unpriced transfers of compliance instruments that could result in rare instances from a contractual requirement to (1) replace offset credits in the event of an offset credit invalidation determined by the Executive Officer, or (2) compensate an intentional forest offset project reversal. To support a fair and competitive market, the Proposed Amendments will enable staff to complete timely verification of the supporting contract documents that would be simultaneously provided by the entities to the Executive Officer when such transfers are proposed.

### 95921(b)(7)(F) [new]

#### Purpose

New section 95921(b)(7)(F) lists a transfer of compliance instruments that results from a transaction agreement that swaps or exchanges compliance instruments for commodities or assets without an isolated price or cost basis for compliance instruments alone.

#### Rationale

Staff have observed transaction agreements with complex pricing structures involving compliance instruments without isolated price information. Entities that are unable to report a specific price or cost basis for the instruments at the time of proposing the transfer in the tracking system would instead be required to report a total market valuation or provide a description of the valuation method used. Unpriced transfers are allowed so long as entities simultaneously provide a description of the valuation method used and supporting transaction documentation to the account administrator. Staff must be able to verify that a trade involving compliance instruments is arm's length in nature and that entities did not enter into agreements that violate the trade prohibitions identified in section 95921(f).

### 95921(d)(2)

#### Purpose

The proposed change would update the timeframe that compliance instruments may be held in an exchange clearing tracking system account from five calendar days to five business days.

#### Rationale

This change is necessary for clarifying the timing for this requirement. Based on workshop comments and questions received from interested parties, exchange trades may be proposed during the week, and not settle until the following week. So, staff believe that this clarification is reasonable to give more time for exchange activities to complete and these changes support exchange trading activities.

### 95921(f)(1)

#### Purpose

The amendments to section 95921(f)(1) clarify the existing trade prohibition by further detailing the types of activities resulting in "beneficial holding" conduct. A registered market participant is currently prohibited from giving a second entity ownership or control over allowances in their tracking system account with two exceptions. The first exception to beneficial holding conduct is when the two entities are direct corporate associates accurately disclosed pursuant to section 95833. The second exception applies to allowances temporarily held or to be held is with a registered clearinghouse organization that has an established active tracking system account pursuant to section 95814(a)(1)(C). The amendments are necessary to clarify that a registered entity is prohibited from acquiring and holding allowances on behalf of a second entity.

A registered entity must maintain its decision-making authority and trading ability over allowances in its holding account and is strictly prohibited from delegating and reassigning its control over trading activities and selling its ownership in allowances to a second entity, while the allowances still reside in the registrant's holding account. Conduct in which a second entity may authorize the purchasing, holding, selling, or trading and management of allowances on behalf of a registered entity or registered individual is prohibited and viewed as an immediate violation of this prohibition.

**Rationale**

This change is necessary to clarify what constitutes beneficial holding activity and the type of trade conduct that is explicitly prohibited. The amended text works to ensure that one entity does not own or control the allowances in multiple entity tracking system accounts while not part of a direct corporate association. Such activity would allow an entity to circumvent the allowance holding limits established in the Regulation. The 2013 ISOR explained that this prohibition is necessary because "ARB would be unable to detect market manipulations if ARB could not observe who actually had control over the disposition of compliance instruments" (CARB 2013c). This prohibition is essential to prevent any form of coordinated or collusive behavior in the market.

**<u>95921(f)(1)(B)</u>**

**Purpose**

Modified section 95921(f)(1)(B) clarifies that a registered entity is prohibiting from holding allowances as a result of an agreement or contract that gives any degree of control over allowance transaction decisions and trading activities to another entity, unless the two entities have an accurately disclosed direct corporate association or the activity is a result of trading with an exchange clearinghouse registered pursuant to section 95814(a)(1)(C). The amendments replace the phrase 'holding or planned disposition' with 'transaction decisions and the trading.' The sentence regarding provisions related to a date to deliver instruments is deleted and relocated to new section 95921(f)(1)(C).

**Rationale**

The change is necessary to clarify the beneficial holding prohibition and ensure that another entity does not exert any degree of control over the registrant's transaction decisions and trading of allowances held by the registrant. Such activity that would result from an agreement or contract granting control or delegated authority would go undetected and result in an entity potentially circumventing the allowance purchase and holding limits established in the Regulation.

The phrase 'planned disposition' was, in practice, unclear, so staff propose a change to the more straightforward phrase 'transaction decisions' because decision-making authority regarding the acquisition, holding, selling, and so on of compliance instruments should always remain with the registrant to conform with the existing conduct of trade rules.

**95921(f)(1)(B)1. [new]**

### Purpose

New subsection (f)(1)(B)1. is proposed to be added to provide an example of prohibited trade conduct that would arise from a financing agreement and enable beneficial holding. A loan or financing agreement involving allowance holdings where a second party has control over the allowances outside of an event of default as a term of the financing agreement would result in conduct that is considered a violation of the Beneficial Holding Prohibition.

### Rationale

This addition is necessary for clarity to describe how financing agreements, observed most often through investments and loans, may be structured in an acceptable manner that does not result in beneficial holding by an entity. Security agreements, investment prospectuses, or other financing documents that give or can give control of the allowances held in a registered entity's tracking system account to a second entity, regardless of registration status or eligibility, could undermine market rules and result in prohibited trade conduct under this provision.

CARB is not inhibiting the general creation of security interests—a registered entity may enter into a loan agreement with a security interest—but CARB is establishing boundaries limiting when a security interest in specific allowances cannot be upheld and enforced because such allowances (i.e., licenses to emit) were created to comply with obligations in an emissions market of which CARB regulates, and that core aspect must be preserved based on the legislative mandate of Assembly Bill 32 and Senate Bill 32.

**95921(f)(1)(B)2. [new]**

### Purpose

Proposed new subsection (f)(1)(B)2. is added to provide an example of a prohibited trade conduct that grants legally binding authority to a second entity by mutual agreement. The creation of an agreement that grants legally binding authority to a second entity outside of a direct corporate association to manage or control the tracking system account of a registered entity is considered a violation of the beneficial holding prohibition.

### Rationale

This subsection is necessary for clarifying that a registrant is prohibited from allowing a second entity to manage its tracking system account on its behalf. Participating in this type of trade conduct and transaction activity that uses an advisor or management company is prohibited, unless that advisor or management company is an accurately disclosed direct corporate association as covered by the proposed changes to section 95921(f)(1). Section 95921(f)(1)(B)2. includes prohibiting registrants from executing agreements that give a disclosed Cap-and-Trade Consultant or Advisor, as defined in sections 95923(a) and

95979(b)(2) of the Cap-and-Trade Regulation, the ability and authority to conduct each transaction of allowances and transfer recorded in the tracking system, without the express prior approval of a designee of the registered entity with authority to make legally binding decisions.

**95921(f)(1)(C) [new]**

### Purpose

Proposed new subsection (f)(1)(C) identifies the general types of secondary market activities that do not violate the beneficial holding prohibition and moves the existing requirements to a new subsection. The new subsection (f)(1)(C) contains the language regarding priced contracts with provisions specifying a date to deliver allowances that was previously in section 95921(f)(1)(B). The provisions are further clarified to specify future date, and a specified procedure that determines both a quantity of compliance instruments for delivery and a delivery date of compliance instruments, which are allowable transactions that comply with market rules. Furthermore, a priced or unpriced transaction of allowances resulting from a change in facility ownership or operational control by covered entities or opt-in covered entities that must be disclosed pursuant to section 95835(b) is allowed, and any resulting transfer of allowances as part of that change in ownership or control does not violate the beneficial holding prohibition.

### Rationale

Staff are clarifying that priced contracts for allowances may contain provisions specifying a future date to deliver allowances or other delivery procedures that are often found in secondary market contracts, such as options, futures, forward and swap trading facilitated by a clearinghouse organization. These transactions are found to comply with market rules because staff are able to track who owns and controls allowances at all times and apply holding and purchase limits appropriately for accounts since delivery of allowances is based on payment and contract settlement date. Staff support the use of secondary market contracts facilitated by a CFTC registered derivatives clearinghouse organization because they support speculative trading and price hedging to create a competitive and mature emissions trading market, and staff routinely work with several California state and federal agencies to ensure robust oversight of this market for compliance instruments and related financial and derivative markets.

The new subsection clarifies that transactions resulting from a facility change of ownership or operational control between covered entities are exempted from the beneficial holding prohibition. Staff recognize that allowance transfers may occur months after the actual sale has closed, particularly when CARB must help to administratively transfer compliance instruments to a new tracking system account which may extend the time in which the covered entity (seller) is holding allowances on behalf of a second covered entity (buyer). Thus, staff are making clear in the new subsection that this type of transaction is allowed between covered entities only and this activity is expected and not an attempt to manipulate the market.

## Section 95922. Banking, Expiration, and Voluntary Retirement.

**95922(d)(2)(B)**

### Purpose

The proposed amendment clarifies that there are no restrictions on entity requests to voluntary retire offset credits.

### Rationale

The proposed change is necessary to clarify the requirement for voluntary retirement by the entity for itself and on behalf of unregistered entities. Staff intend to clarify that there is no quantitative limit on the number of offset credits that may be voluntarily retired. CARB continues to support the voluntary retirement transfer process for both offset credits and allowances.

**95922(d)(2)(C)**

### Purpose

The proposed amendment clarifies that a registered entity entering into contract with an unregistered entity to voluntarily retire allowances on behalf of the unregistered entity does not violate the prohibitions in section 95921(f)(1) provided that the registered entity does not hold these allowances on behalf of the unregistered entity for more than 90 days.

### Rationale

The proposed text is necessary for clarity. The current regulatory language that "requires immediate delivery" is not clear, as these transfer requests require jurisdiction review and Registrar action. The 90-day exemption from the beneficial holding prohibition in section 95921(f)(1) is added to give enough time for the registered entity to complete the transfer in the tracking system. Until the transfer to the Retirement Account, the allowances subject to the transfer remain in the registered entity's account and count against the registered entity's holding limit.

## Section 95973. Requirements for Offset Projects Using CARB Compliance Offset Protocols.

**95973(a)(2)(D)**

### Purpose

The Proposed Amendments update the reference within section 95976 to refer to the correct Compliance Offset Protocol.

### Rationale

The change is necessary to maintain correct references to the Compliance Offset Protocol. Since sections 95976(d)(1) through (d)(6) are proposed to be deleted, section 95976(d)(10) is renumbered to section 95976(d)(4).

**95973(f) [new]**

### Purpose

The proposed amendment reiterates the existing prohibition on Livestock offset projects from receiving both ARB offset credits and Low Carbon Fuel Standard credits within the same reporting period. The amendment also clarifies that offset projects must maintain continuous reporting to retain eligibility to transition back to CARB's compliance offset program.

### Rationale

The first part of this amendment is necessary because section 95852.1.1(b) in the current Regulation, which has prohibited Livestock offset projects from receiving both ARB offset credits and Low Carbon Fuel Standard credits within the same reporting period, is proposed to be deleted. As the provision is relevant to CARB's compliance offset program, this amendment moves the existing provision into subarticle 13, which includes broad requirements for offset projects. The existing regulatory text is also modified for clarity.

The second part of this amendment is necessary to clarify requirements for Livestock offset projects that transition to a Low Carbon Fuel Standard pathway but may later wish to transition back to the compliance offset program. Specifically, an offset project must maintain continuous reporting by meeting its annual reporting obligations. Though that is an existing regulatory requirement, along with the termination if continuous reporting is not maintained, it is necessary to explicitly state these requirements so that projects transitioning to a Low Carbon Fuel Standard pathway are aware that they must maintain continuous reporting if they wish to preserve their eligibility to return to compliance offset program.

## Section 95974. Authorized Project Designee.

**95974(b)**

### Purpose

The proposed amendment provides a pathway for an Authorized Project Designee to remove itself from an offset project. Currently, only the Offset Project Operator can remove an Authorized Project Designee. The proposed amendment would allow an Authorized Project Designee to remove itself by submitting a written request to CARB and the registry listing the project (if the project is not listed with CARB directly) containing the project name, the CARB and offset project registry project identification numbers, current Offset Project Operator, the compliance offset protocol under which the project is listed, and the effective date of the requested removal. The letter must be signed by one of the Authorized Project Designee's account representatives.

### Rationale

This change is necessary to provide a pathway for an Authorized Project Designee to remove itself from an offset project. The current Regulation provides that only the Offset Project Operator can add or remove an Authorized Project Designee from a project, which can be inefficient. It is necessary for an Authorized Project Designee to submit a written request so that CARB and the registry are more formally notified in writing. Providing the listed information in the removal request letter is necessary so that CARB and the registry can properly identify the project with which the Authorized Project Designee is associated and the date by which they no longer want to be associated with that project.

## Section 95975. Listing of Offset Projects Using ARB Compliance Offset Protocols.

**95975(e)**

**Purpose**

The first proposed amendment in this section removes the reference to renewed crediting periods so that the remaining text is only relevant to an initial reporting period, not for the first reporting period in a renewed crediting period. Renewed crediting period requirements are proposed in section 95975(j).

To streamline regulatory text, the second proposed amendment replaces the list of specific protocols with a reference to single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

Removing the reference to renewed crediting periods is necessary for consistency with the Proposed Amendments in section 95975(j) which specify the information required for a renewed crediting period. The amendments in section 95975(j) seek to reduce and streamline the information which is required for a renewed crediting period.

The second amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C) and cross-references that location rather than repeating the list multiple times.

**95975(e)(1) [deleted]**

**Purpose**

To streamline regulatory text, the list of specific protocols, including the Ozone Depleting Substances offset protocol, is replaced with a reference to a single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

This amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C).

**95975(e)(2) [deleted]**

**Purpose**

To streamline regulatory text, the list of specific protocols, including the Livestock offset protocol, is replaced with a reference to single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

This amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C).

**95975(e)(3) [deleted]**

**Purpose**

To streamline regulatory text, the list of specific protocols, including the Urban Forest offset protocol, is replaced with a reference to single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

This amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C).

**95975(e)(4) [deleted]**

**Purpose**

To streamline regulatory text, the list of specific protocols, including the U.S. Forest offset protocol, is replaced with a reference to single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

This amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C).

**95975(e)(5) [deleted]**

**Purpose**

To streamline regulatory text, the list of specific protocols, including the Mine Methane Capture offset protocol, is replaced with a reference to single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

This amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C).

**95975(e)(6) [deleted]**

**Purpose**

To streamline regulatory text, the list of specific protocols, including the Rice Cultivation offset protocol, is replaced with a reference to single list of eligible protocols in section 95973(a)(2)(C).

**Rationale**

This amendment is necessary to streamline regulatory text. Currently, eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single list of eligible protocols in section 95973(a)(2)(C).

**95975(f)**

**Purpose**

The proposed amendment clarifies the extent to which CARB or the Offset Project Registry must review the submitted listing information for accuracy as part of its required review for completeness.

**Rationale**

This change is necessary to provide clear direction to CARB's approved offset project registries, as well as to its Offset Project Operators and Authorized Project Designees, about a registry's or CARB's role in reviewing submitted listing information for accuracy in addition to completeness. Section 95975(f) in the current Regulation requires a review for completeness, while section 95975(g) refers to a notification deadline associated with receiving listing information that is accurate and complete. This has led to some confusion as to whether the registry or CARB are to review for accuracy as well as completeness. However, registries or CARB shall request Offset Project Operators and Authorized Project Designees to correct any listing information that is discovered to be inaccurate as part of its completeness check and shall not approve a project listing until corrected information has been submitted.

**95975(g)**

**Purpose**

The proposed amendment removes the implicit requirement for registries or CARB to review offset project listing information for accuracy, aligning with the proposed revision in section 95975(f). It also adds a requirement that offset project listing information shall not be approved until the applicable offset project developer has completed its Cap-and-Invest Program registration.

**Rationale**

This change is necessary to provide clear direction to CARB's approved offset project registries, as well as to its Offset Project Operators and Authorized Project Designees, about a registry's or CARB's role in reviewing submitted listing information. There has been some confusion as to whether the registries or CARB are to review submitted listing information for accuracy in addition to completeness. The proposed amendment here changes the current requirement in section 95975(g) from providing listing information that is "accurate and complete" to "complete and, as appropriate, revised" to align with section 95975(f) and address any confusion. When CARB or offset project registries detect inaccurate information, they are required to request revisions to correct the inaccuracies. The 30-day timeline for approval now refers to when CARB or the offset project registry received "revised" instead of "accurate" information.

The change prescribing that offset project listing information shall not be approved until the applicable offset project developer has completed its Cap-and-Invest Program registration is necessary to clarify the consequence of not completing the required registration. The Regulation already requires registration pursuant to section 95830. The proposed change clarifies that CARB and Offset Project Registries will not approve any listing of an offset project until Program registration is complete.

**95975(j)**

**Purpose**

The proposed amendment updates the timing when listing information must be submitted to renew a project for an additional crediting period. The amendment also modifies the listing information that must be submitted for a renewed crediting period.

**Rationale**

The proposed amendment removes uncertainty and reduces complexity. The definition of "Reporting Period" in section 95802(a) allows the end date of the final reporting period of an initial crediting period to be changed, and therefore the end date is not set or known in advance. In many cases, the offset project operator retains the ability to change the initial crediting period end date until after verification is complete for the final reporting period of the crediting period. Under the current Regulation, this makes it difficult to know when renewal information must be submitted. Additionally, the offset project registry is not currently able to approve renewal information in many cases until one to two years after the end of the first crediting period since registry staff do not know if the applicant's start date for a renewed crediting period is accurate until the end date of the current reporting period has been verified.

The current Regulation requires the offset project operator to submit renewal information far in advance of the end of the initial crediting period. The deadline for submitting the information is before the offset project data report is due for the penultimate reporting period. The proposed amendment provides a later timeline for the offset project operator to submit the renewal information while still providing the offset project registry sufficient time to review the renewal information prior to the end of the current crediting period. This amendment allows for a submittal date for renewal information that is closer to the end of the current crediting period.

The proposed amendment also provides a path for a project that may have previously missed its deadline to submit renewal information an opportunity to renew its crediting period. This provides Offset Project Operators who were perhaps confused or uninformed about the renewal deadlines an opportunity to rejoin the program and not have their project considered terminated. However, an offset project that missed reporting deadlines for reporting periods remains unable to receive ARB offset credits for any reporting periods with a lapsed deadline. The provision to allow Offset Project Operators a chance to renew their crediting period applies only to projects whose initial reporting period ended by June 30, 2027. This date considers the timing for the Proposed Amendments in this regulation package to take effect and then allows another few months for Offset Project Operators to comply with the limited window. For projects with crediting periods ending after June 30, 2027, Offset Project Operators are expected to be able to comply with the updated credit renewal provisions as the deadline to apply for renewal shifts from nine months prior to the end of the reporting period to three months prior to the end of the reporting period.

The proposed amendment also reduces the amount of listing information that must be submitted for a renewed crediting period. Such information was already provided in the first crediting period and, as applicable, updated in subsequent Offset Project Data Reports, it is not necessary re-submit this listing information. Subsections 95975(j)(1)-(8) capture information that CARB staff deem critical to submit when re-listing a project across all project types.

**95975(j)(1) [new]**

### Purpose

The amendment requires that the offset project be clearly identified as part of information submitted to renew a crediting period. This amendment adds a requirement to include the CARB project identification number with the submitted information.

### Rationale

The amendment is necessary to clearly specify the project that is being renewed for an additional crediting period. The project must be identified by name, as well as by its project identification numbers as assigned by both CARB and an Offset Project Registry with which the project is listed. This amendment adds the requirement to include the CARB project identification number since it is clearly known and referenced for projects that have reached a renewed crediting period.

**95975(j)(2) [new]**

**Purpose**

The amendment requires that the Offset Project Operator and, if applicable, Authorized Project Designee be identified when submitting information needed to list a project for a renewed crediting period.

**Rationale**

Identification of the Offset Project Operator and, if applicable, Authorized Project Designee is necessary to make clear who has the legal authority to implement the offset project and, if applicable, who may be operating the project on behalf of the entity with the legal authority.

**95975(j)(3) [new]**

**Purpose**

The amendment requires that any Technical Consultants for a project be identified when submitting information needed to list the project for a renewed crediting period.

**Rationale**

The identification of any Technical Consultants is necessary to make clear a complete list of the offset project developers and those who are integrally involved in developing the offset project. Since a Technical Consultant, unlike an Offset Project Operator or an Authorized Project Designee, is not required to register in the Cap-and-Invest Program, their tracking system identification number is not required. All compliance offset protocols require any Technical Consultant to be included in offset project listing information, so that requirement is included here. This requirement is to include consultants for the project for which the crediting period is being renewed.

**95975(j)(4) [new]**

**Purpose**

The amendment requires that contact information for the Offset Project Operator, Authorized Project Designee, and Technical Consultants be provided as part of required information to renew a crediting period.

**Rationale**

The amendment is necessary for CARB and Offset Project Registries to have primary contact information for the offset project developers with this project. This information is necessary to aid public transparency. Contact information is required information in all compliance offset protocols, and that requirement is retained here.

**95975(j)(5) [new]**

**Purpose**

The amendment requires that the start date and end date for the current crediting period be clearly identified as part of required information to renew a crediting period.

**Rationale**

The amendment is necessary for public transparency and to clearly specify the term for which an offset project is currently being credited. The start and end dates of the renewed crediting period will be included among the attestations required in section 95975(j)(7).

**95975(j)(6) [new]**

**Purpose**

The proposed amendment requires that the relevant compliance offset protocol be clearly identified as part of required information to renew a crediting period.

**Rationale**

The amendment is necessary for public transparency to specify which compliance offset protocol the offset project most recently reported under.

**95975(j)(7) [new]**

**Purpose**

The proposed amendment requires that listing attestations must be provided as part of required information to renew a crediting period.

**Rationale**

The amendment is necessary to provide for enforceability within CARB's compliance offset program.

**95975(j)(8) [new]**

**Purpose**

The proposed amendment requires that information to renew an offset project crediting period include a signature of an authorized account representative.

**Rationale**

The amendment is needed to facilitate the enforceability of CARB's compliance offset program. Pursuant to section 95973(e), only one of the Offset Project Operator's Primary or Alternate Account Representatives may sign any documents and attestations on behalf of the Offset Project Operator for the offset project. The signature of an authorized account representative ensures the validity and enforceability of the submitted attestations supports CARB receiving renewal listing information that is true, accurate, and complete.

**95975(k)**

**Purpose**

The proposed amendment removes the “Proposed Renewal” status for an offset project listing.

**Rationale**

The amendment is necessary to clarify implementation of the project renewal status. Given the potential change in project status each time registry offset credits or ARB offset credits are issued (for the final reporting periods in an initial crediting period or previously renewed crediting period) between the time when renewed listing information is first approved and when ARB offset credits are eventually issued for a reporting period in the renewed crediting period, staff propose to eliminate each project renewal status, including the “Proposed Renewal” status, cited in this section. Instead, CARB will rely on the existing “Completed,” “Inactive,” “Monitored,” or “Terminated” project status to denote a project that did not renew its crediting period and to provide transparency about project status. Having fewer project status options simplifies Offset Project Registry operations.

**95975(m)**

**Purpose**

The amendment expands the requirement for listing information to be updated such that the requirement applies throughout the project life instead of only during one or more of its crediting periods.

**Rationale**

This amendment removes the phrase “during the crediting period” because the requirement to change listing information if the Offset Project Operator changes is necessary throughout the project life. This change is consistent with other Proposed Amendments that clarify the requirements for a project in its monitoring period.

**95975(m)(1)**

**Purpose**

The amendment clarifies that the obligation for a new Offset Project Operator or Authorized Project Designee to submit updated listing information exists not just during a project’s crediting period but throughout the project life. The amendment also replaces the undefined OPR acronym with the term “Offset Project Registry.” The amendment also clarifies what information must be submitted to CARB to update the listing information. The amendment is also modified to extend the submission deadline from 30 days to 45 days.

**Rationale**

The amendment is necessary to clarify that if the Offset Project Operator changes during a sequestration project’s monitoring period, the new Offset Project Operator or Authorized Project Designee must continue to submit updated listing information to the offset project registry with which a project is listed. This is necessary so the Offset Project Registry and CARB are aware of any changes of ownership and aware of which entities (or individuals) have the obligation and the legal authority to implement ongoing project activities.

To clarify the listing information that must be provided, the text, "… for the information that pertains to the Offset Project Operator and Authorized Project Designee, if applicable … " is deleted. New text specifies that the information that must be submitted for a change in Offset Project Operator is the same information that must be submitted for a project to renew its crediting period in section 95975(j). The submission deadline is extended from 30 to 45 days in recognition that registering an account with the tracking system may take longer than 30 days, and a registered account is required to update the listing information.

**95975(m)(2) [deleted]**

**Purpose**

This section is deleted as it is no longer necessary.

**Rationale**

The amendment is necessary as part of amendments to clarify what information must be submitted to an Offset Project Registry when the Offset Project Operator changes. Section 95975(m)(1) is amended such that it includes all information that must be submitted, and so existing subsection (m)(2) is no longer needed.

**95975(m)(2) [new]**

**Purpose**

This new subsection adds requirements related to the timing for submitting updated listing information when the Offset Project Operator changes due to the sale or transfer of real property containing an offset project.

**Rationale**

The change is necessary to facilitate the transition of a project to a new Offset Project Operator, to define who is responsible for project commitments, and to support CARB's ability to enforce regulatory requirements. This modification aligns with the new proposed section 95975.1 Notice and Disclosures for Offset Project Ownership Transfer. The new Offset Project Operator is required to submit updates to the listing information in section 95975(c) to CARB and the applicable offset project registry within 60 days of the transfer of title.

## Section 95975.1. Notice and Disclosures for Offset Project Ownership Transfer. [new]

**95975.1(a) [new]**

**Purpose**

This new section requires certain disclosures by the current Offset Project Operator to an entity intending to acquire any interest in the real property included in the offset project boundary new project owner (grantee(s)) prior to a sequestration project ownership transfer.

**Rationale**

The addition of this section ensures that any new sequestration offset project owner is informed of and prepared to take on the legal obligations, financial obligations, and liability associated with the sequestration offset project prior to the date of sale or transfer. This provision will help avoid project terminations and, in the event of project termination, ensure that the timing of the termination and the entity with liability for the termination are appropriate.

**95975.1(a)(1) [new]**

### Purpose

This new section identifies the information that is required to be disclosed by the current Offset Project Operator to the new forest owner prior to the date of sale or transfer.

### Rationale

This new section requires the current Offset Project Operator to disclose specific information to the new forest owner regarding the project and the associated legal obligations, financial obligations, and liability prior to the sale or transfer of the property or any portion of a registered offset project. Providing the disclosures and relevant information about the project prior to sale or transfer, as outlined in the following subsections, is critical for transparency, buyer protection, and ultimately proper enforcement of offset project requirements. The disclosures and information will help ensure that the party acquiring the property is informed and understands the commitments of the project and the limitations on the land.

**95975.1(a)(1)(A) [new]**

### Purpose

This new section requires the Offset Project Operator to provide the new forest owner the number of previously issued ARB offset credits, total associated carbon stocks, and the timeframe over which those carbon stocks must be maintained.

### Rationale

Disclosure of the previously issued ARB offset credits and the associated carbon stocks is necessary to ensure that the new owner is aware that they are taking on the responsibility for maintaining the carbon stocks associated with those credits for a specified period.

**95975.1(a)(1)(B) [new]**

### Purpose

This new section requires the Offset Project Operator to inform the new forest owner of the total number of credits that would need to be compensated should the project terminate immediately, including the compensation rate if applicable.

### Rationale

This new section is necessary to inform the new forest owner of the program requirements related to liability and project termination once the new owner assumes the project, including the number of credits that the new owner would be required to submit to CARB. The new section also serves to inform that a compensation factor may be applied that increases the total compensation amount.

**95975.1(a)(1)(C) [new]**

**Purpose**

This new section requires the Offset Project Operator to inform the new forest owner of the current market price of one ARB offset credit.

**Rationale**

Disclosure of the current market price of one ARB offset credit to the new project owner ensures that the new project owner, in conjunction with the disclosed total number of credits required for compensation, has information sufficient to calculate the current cost of project termination.

**95975.1(a)(1)(D) [new]**

**Purpose**

This new section requires the Offset Project Operator to provide to the new forest owner the current website URL to the Cap-and-Trade Regulation and the applicable compliance offset protocol.

**Rationale**

This new section is necessary to ensure the new forest owner is aware of the Cap-and-Invest Program and has access to all Program requirements, including requirements associated with the compliance offset protocol.

**95975.1(a)(1)(E) [new]**

**Purpose**

This new section requires the Offset Project Operator to provide to the new forest owner the timeline of regulatory project deadlines, including any reporting deadlines, verification deadlines, and crediting period renewal deadlines during the next 15 years.

**Rationale**

This new section is necessary to inform the new forest owner of the program requirements and to ensure regulatory deadlines, especially near-term deadlines, are known. The requirement of 15 years is aligned with the current record retention requirements applicable to Offset Project Registries, Offset Project Operators, and Verification Bodies.

**95975.1(a)(1)(F) [new]**

**Purpose**

This new section requires the Offset Project Operator to inform the new forest owner of the requirement and associated deadline to register for an account in the CARB tracking system within 45 days of the transfer of title.

**Rationale**

This new section is necessary to ensure the new forest owner is informed of Program requirements. All Offset Project Operators are required to register for an account with the CARB tracking system prior to listing a project. 45 days provides enough time for the new owner to submit the application and for CARB to process the application and issue the new identification number.

**95975.1(a)(1)(G) [new]**

**Purpose**

This new section requires the existing Offset Project Operator to inform the new owner, if they will become the new Offset Project Operator, of the time-sensitive requirement under section 95975.1(e), to update the offset project listing document within 60 days of the transfer of title or risk project termination.

**Rationale**

This new section is necessary to inform the new forest owner of time-sensitive Program requirements, If the new forest owner(s) fail to meet the listing requirements, the project terminates, and the new forest owners must surrender instruments equal to all previously issued ARB Offset Credits plus the compensation rate if applicable.

**95975.1(a)(2) [new]**

**Purpose**

This new section requires the Offset Project Operator to notify CARB of the intent to transfer ownership of the sequestration project.

**Rationale**

This new section is necessary to clearly identify the information that must be submitted to CARB in the event of a forthcoming or pending sale or transfer of any real property interests containing any portion of an offset project boundary underlying a registered sequestration offset project. CARB needs to be notified so that it is aware of a forthcoming ownership change or project termination in order to ensure requirements are met and/or proper enforcement.

**95975.1(a)(2)(A) [new]**

**Purpose**

This new section requires the Offset Project Operator to provide CARB with the name, phone number, mailing address, and email address of the forest owner(s) intending to sell or transfer their interest in real property comprising any portion of the offset project boundary.

**Rationale**

This new section is necessary to clearly identify the forest owners and to ensure that CARB has current contact information for communicating with the forest owners.

**95975.1(a)(2)(B) [new]**

**Purpose**

This new section requires the Offset Project Operator to provide CARB with the name, phone number, mailing address, and email address of the new forest owner(s).

**Rationale**

This new section is necessary to clearly identify the new forest owners and to ensure that CARB has current contact information to reach the new forest owners.

**95975.1(a)(2)(C) [new]**

**Purpose**

This new section requires the Offset Project Operator to provide CARB an attestation that required information is true, accurate, and complete.

**Rationale**

This new section is necessary for enforceability, to ensure the Offset Project Operator, under penalty of perjury, has met its obligation to provide information to the new owner and to CARB that is true, accurate, and complete.

**95975.1(a)(2)(D) [new]**

**Purpose**

This new section requires the new owner(s) to provide to CARB an attestation confirming the new owner's awareness and acceptance of the offset project responsibilities and commitments as a forest owner.

**Rationale**

This new subsection is necessary for enforceability and to confirm that the new forest owner has received all required information and disclosures from the previous owner.

**95975.1(a)(3) [new]**

**Purpose**

The proposed amendment adds a new section that discloses a project will terminate if the former offset project operator fails to submit the newly proposed notice to CARB or the disclosures to the new forest owner prior to the project lands transfer of title. The Offset Project Operator will be responsible for compensation.

**Rationale**

The new section is necessary to ensure the new owner has all the information necessary to continue the offset project and that CARB is aware of the forthcoming change in ownership. If the required information is not provided to the new owner and CARB is not notified of that information being provided to the new owner, CARB must assume that the new owner is not interested in continuing the project and, as provided in current requirements, the project must terminate.

**95975.1(b) [new]**

**Purpose**

The proposed amendment adds a requirement that the Offset Project Operator must notify CARB and the Offset Project Registry if the project will terminate prior to the transfer of title.

**Rationale**

The U.S Forest Compliance Offset Protocol states a project automatically terminates if project lands or timber rights are sold to an entity that does not elect to take over the forest project responsibilities and commitments. The notification is required to prevent a delay in terminating an offset project, if CARB or an Offset Project Registry is not aware if lands are sold to an entity that does not elect to continue the project.

**95975.1(c) [new]**

**Purpose**

This new section specifies the previous Offset Project Operator and, if applicable, Authorized Project Designee, must continue to meet the record retention requirements in section 95976(e).

**Rationale**

This new section is necessary to confirm that the record retention requirements still apply to previous forest owners.

**95975.1(d) [new]**

**Purpose**

This new section identifies requirements if there is a new Offset Project Operator due to ownership transfer.

**Rationale**

This new section is necessary to identify the requirements for a new Offset Project Operator.

**95975.1(d)(1) [new]**

**Purpose**

This new section states the new Offset Project Operator must register for a tracking system account and obtain a tracking system identification number.

**Rationale**

This new section is necessary to inform the new Offset Project Operator of the program requirements. Pursuant to existing requirements, an offset project operator is required to obtain a tracking system identification number to complete the listing form information.

**<u>95975.1(d)(1)(A) [new]</u>**

**Purpose**

This new section states that a tribal entity must have a limited waiver of sovereign immunity in place prior to registering a Tracking System account and prior to transfer of title.

**Rationale**

Tribes, because of their unique status as sovereign nations, must include a limited waiver of sovereign immunity that is legally binding under the Tribe's laws as part of the offset project listing requirements to participate in the Compliance Offset Program. The addition of the new requirement that the waiver is in place before the transfer of title is to ensure the requirements in 95975.1(e)(3) are enforceable if the listing is not updated.

**<u>95975.1(d)(2) [new]</u>**

**Purpose**

This new section requires the new Offset Project Operator to update the offset project listing within 60 days of the title transfer date.

**Rationale**

This new section is necessary to inform the new Offset Project Operator of the program requirements. The program requires listing information to be accurate, including the Offset Project Operator information and attestations. The requirement states the listing information must be updated within 60 days from title transfer date. Staff believe this is adequate time for an entity to register in the tracking system and submit the listing form.

**<u>95975.1(d)(3) [new]</u>**

**Purpose**

This new section informs the new owner(s) that if they do not submit the updated listing information within 60 days the project will terminate, and they will be responsible for the compensation.

**Rationale**

This new section is necessary to clarify who is responsible for compensating for early termination if the project ownership changes and the new Offset Project Operator does not update the listing information within the required timeframe.

**95975.1(e) [new]**

**Purpose**

This new section informs the current Offset Project Operator that if land associated with an offset project is planned to be transferred to an entity that is not eligible to participate in the Cap-and-Invest Program, the project will terminate, and the Offset Project Operator will be responsible for compensation.

**Rationale**

This new section is necessary to prevent confusion on who is liable to compensate for an early termination of an offset project if the new owner is not eligible to participate in the Compliance Offsets Program. Potential forest owners who may not be eligible include the U.S. federal government and Tribes that do not enter into a limited waiver of sovereign immunity pursuant to section 95975(l).

## Section 95976. Monitoring, Reporting, and Record Retention Requirements for Offset Projects.

**95976(a)**

**Purpose**

Amendments to this section clarify requirements for maintaining and calibrating monitoring equipment. The term "software" has been included to clarify if software products are used for an offset project, they must be maintained and calibrated correctly and conform to the requirements in the applicable offset protocol.

**Rationale**

This amendment clarifies that software applications used for monitoring and quantification requires maintenance and calibration in the same way the current regulation requires for other monitoring equipment. This amendment replaces the phrase "project performance" with "reporting and verification" since project performance is tracked through reporting and verification. The amendment also clarifies that the maintenance, use, and calibration of project monitoring equipment is required even if not explicitly called out in a Protocol. This is necessary to ensure that the modeling and quantification results are not skewed by equipment that has not been properly maintained.

The text, "The Offset Project Operator or Authorized Project Designee must employ the procedures …" was removed because maintenance and calibration can be done by others qualified for those tasks.

**95976(c)**

**Purpose**

The amendment adds a cross-reference to the section with all compliance offset protocols that have been incorporated by reference into the Regulation, which replaces the following subsections that once again list all adopted protocols.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(c)(1) [deleted]**

**Purpose**

The amendment removes the specific references to the two Ozone Depleting Substances offset protocols to clean up multiple and redundant lists of protocols.

**Rationale**

This amendment is necessary to provide a concise reading of regulatory requirements. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(c)(2) [deleted]**

**Purpose**

The amendment removes the specific references to the two Livestock offset protocols to clean up multiple and redundant lists of protocols.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(c)(3) [deleted]**

**Purpose**

The amendment removes the specific references to the Urban Forest offset protocol to clean up multiple and redundant lists of protocols.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(c)(4) [deleted]**

**Purpose**

The amendment removes the specific references to the three U.S. Forest offset protocols to clean up multiple and redundant lists of protocols.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(c)(5) [deleted]**

**Purpose**

The amendment removes the specific references to the Mine Methane Capture offset protocol to clean up multiple and redundant lists of protocols.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(c)(6) [deleted]**

**Purpose**

The amendment removes the specific references to the Rice Cultivation offset protocol to clean up multiple and redundant lists of protocols.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)**

**Purpose**

The amendment adds a cross-reference to the section with all compliance offset protocols that have been incorporated by reference into the Regulation, which replaces some of the following subsections that once again list all adopted protocols. It also updates specific references within this section.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C). And because those subsections relisting all adopted protocols are proposed to be removed, the other subsections are consequently being renumbered and cross-references to them must be amended.

**95976(d)(1) [deleted]**

**Purpose**

The amendment removes the specific references to the two Ozone Depleting Substances offset protocols for clarity.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)(2) [deleted]**

**Purpose**

The amendment removes the specific references to the two Livestock offset protocols for clarity.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)(3) [deleted]**

**Purpose**

The amendment removes the specific references to the Urban Forest offset protocol for clarity.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)(4) [deleted]**

**Purpose**

The amendment removes the specific references to the three U.S. Forest offset protocols for clarity.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)(5) [deleted]**

**Purpose**

The amendment removes the specific references to the Mine Methane Capture offset protocol for clarity.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)(6) [deleted]**

**Purpose**

The amendment removes the specific references to the Rice Cultivation offset protocol for clarity.

**Rationale**

This amendment is necessary to streamline regulatory text and remove an unnecessary relisting of adopted protocols. Eligible protocols are referenced in multiple subsections of the current Regulation. This amendment consolidates multiple references to eligible protocols into a single reference to the list of eligible protocols in section 95973(a)(2)(C).

**95976(d)(10) [new 95976(d)(4)]**

**Purpose**

The purpose of these amendments is to update cross-references to compliance offset protocols, in line with other such streamlining amendments.

**Rationale**

These amendments are necessary to accommodate the deletion of the previous subsections being cross-referenced and to update those cross-references to the now sole section listing the adopted compliance offset protocols. This is a part of broader amendments to streamline the regulatory text by addressing multiple and unnecessary relisting of those protocols.

**95976(f)(1)(A)**

### Purpose

The proposed amendment changes the word "year" to "period" to clarify requirements in this subsection.

### Rationale

This amendment is necessary since not all reporting periods covered by an Offset Project Data Report are one year in duration. The amendment clarifies that the requirement applies to the duration of the reporting period, regardless of its length.

**95976(g)**

### Purpose

The Proposed Amendment removes the reference to remote sensing for forestry and adds a reference to otherwise unapproved models.

### Rationale

This Proposed Amendment is necessary to remove the option to use alternate methods that apply remote sensing for forestry as CARB staff have determined such methods to currently be infeasible. When CARB identifies feasible methods to implement remote sensing for forestry, it will clarify the procedures for doing so. The amendment adds a reference to "otherwise unapproved models" to clarify that when project developers want to use a model or model variant that has not been explicitly approved in the compliance offset protocol, the alternate method process is the appropriate process to secure approval for using that model or model variant. The application of alternate modeling methods is most common for growth and yield modeling when implementing the U.S. Forest compliance offset protocols.

**95976(h) [new]**

### Purpose

The amendment clarifies and adds requirements for the monitoring, reporting, and verification responsibilities for an Offset Project Operator of a sequestration project during the monitored period of the project. Monitoring, reporting, and verification must occur for the duration of the project's life, which is defined to include the 100-year period after final credit issuance, to ensure permanence.

### Rationale

The amendment is necessary to clearly identify the monitoring, reporting, and verification responsibilities for an Offset Project Operator of a sequestration project during the monitored period of the project.

**95976(h)(1) [new]**

### Purpose

The amendment specifies when a sequestration project enters its monitored period. A project will enter its monitored period automatically when its crediting period ends and it has not renewed for an additional crediting period. A project may also choose to end its crediting period early and enter the monitored period by submitting a letter to CARB and the offset project registry with which the project is listed.

### Rationale

The existing Regulation does not clearly delineate when the monitored phase for sequestration projects begins. This amendment is needed to clearly identify the start of the monitored period. The amendment also provides a new option for an Offset Project Operator to begin a project's monitored period by ending a crediting period early. To initiate a project's monitored period early, the amendment requires the Offset Project Operator to submit a letter to CARB and the Offset Project Registry stating that it will no longer seek offset credits for the project and stating the start date. This is necessary so that CARB and the Offset Project Registry know the status of the project is changing along with the associated requirements and timelines. The letter must include specific information to ensure the correct project is identified and updated. The letter must be signed by a Primary Account Representative or alternate Account Representative on the Offset Project Operator's tracking system account because they are the only people authorized to make changes to the project status.

**95976(h)(2) [new]**

### Purpose

The amendment specifies that a sequestration offset project during its monitored period has the same continuous reporting obligations as before its monitored period. The amendment specifies the consequence of project termination if the Offset Project Operator does not satisfy the continuous reporting requirement.

### Rationale

The amendment is necessary to specify that the timeline for submitting annual Offset Project Data Reports does not change after a sequestration offset project enters its monitored period. These reports are just as necessary in the monitored period as they are when the project is actively seeking credits since the obligation to maintain sequestered carbon persists throughout the project life.

**95976(h)(3) [new]**

### Purpose

The Proposed Amendment specifies that a sequestration offset project during its monitored period must continue to be verified regularly, typically at least every six years. However, the verification requirements for the monitored period differ slightly from the crediting period. The project may defer verification if it meets certain requirements in 95977(d).

**Rationale**

This change is necessary to clarify the verification timelines for a sequestration offset project during its monitored period since the obligation to maintain credited carbon persists throughout the project life.

## Section 95977. Verification of GHG Emission Reductions and GHG Removal Enhancements from Offset Projects.

**95977(a)**

**Purpose**

The Proposed Amendment clarifies who is required to provide verification services. The phrase “for the purposes of” is replaced with the single word “when” for describing when offset verification services are performed.

**Rationale**

This change is necessary to clarify that the requirement in this section is (and remains) that verification of Offset Project Data Reports may be performed only by CARB-accredited offset verification bodies. To clarify that his section does not require offset project developers to verify all submitted Offset Project Data Reports, the Proposed Amendments provide a clearer description.

**95977(b)**

**Purpose**

The Proposed Amendments streamline and clarify the verification schedule for non-sequestration projects. Verification must occur on a reporting period basis if credits are being sought. One exception is for reporting periods where GHG emission reductions are less than 25,000 metric tons, in which case verification may be deferred. Verification of a reporting period can be forgone; however, verification is required for registry or ARB offset credit issuance.

**Rationale**

This change is necessary to clarify and modify existing requirements to better reflect the need and purpose of verification and previous CARB guidance. Current regulatory text states that verification of non-sequestration offset project that produce greater than or equal to 25,000 metric tons of GHG emissions reduction must be performed on a Reporting Period basis. Verification can be performed on reductions less than or greater than 25,000 metric tons and verification is only needed if credits are sought for that reporting period. Language is added to emphasize that verification must be done for a reporting period if credits will be sought. The ability for a project to defer verification to the next reporting period if reductions are under 25,000 metric tons to the next reporting period remains but additional text clarifies that the total reductions must be included in the Offset Project Data Report submission to meet the 4-month reporting deadline. This incorporates past CARB guidance to project developers that deferral is based on the initially reported GHG emission reductions and the ability to defer is not lost if revisions during the verification process result in 25,000 or more tons being verified.

The specific language regarding Offset Project Data Reports with zero GHG emission reductions is removed because there are multiple scenarios in which project developers of a non-sequestration project might opt to forego or defer verification of a reporting period. Verification is only required if credits are sought. Unlike sequestration projects, non-sequestration projects may forego verification because their previously credited GHG emission reductions are permanent, whereas sequestration project must continue to monitor, report, and verify their sequestered carbon for which they have previously been issued offset credits. The changes also state the consequence of not performing a verification (no credits issued for that reporting period).

**95977(c)**

### Purpose

Modifications to this section clarify existing regulatory text by replacing “years” with “reporting periods” in three instances and remove text from this section about verification timing requirements for a sequestration project during its monitoring period, as this is being moved to its own subsection. Amendments to this section also specify the consequences for not verifying according to the schedule or for not receiving a Positive Offset Verification Statement on any Reporting Period by the next required full verification.

### Rationale

Replacing “years” with “reporting periods” is necessary because not all reporting periods are one year in duration. These changes clarify that the requirement applies to the reporting period, regardless of its duration.

It is necessary to remove text regarding verification timing requirements for the monitoring period because that is being moved to a new separate subsection, described in subsection 95977(d) below. This split is necessary to clearly distinguish verification requirements during a project’s crediting period from those during its monitoring period, particularly since CARB is proposing to expand and clarify requirements around the monitoring period. This subsection now begins by inserting text “during crediting period” as part of its title to reflect the proposed separate subsections on verification schedule requirements between projects in a crediting period and a monitoring period.

**95977(c)(1) [new]**

**Purpose**

This new section specifies the consequence of termination for a sequestration offset project during its crediting period if an offset verification statement is not submitted in the required timeframes.

**Rationale**

This change is necessary to describe the consequences of not undertaking the required verification activities and submitting an offset verification statement within the verification timeline. If a project does not verify, i.e. demonstrate the credited carbon still exists, the project terminates to ensure the integrity of the program.

**95977(c)(2) [new]**

**Purpose**

This new section specifies when a sequestration offset project during its crediting credit may terminate after receiving an Adverse Offset Verification Statement. It does not terminate immediately but receives an additional three reporting periods in which to receive a Positive Offset Verification Statement for at least one reporting period. If the project does not receive a Positive Offset Verification Statement for a reporting period thereafter, the project terminates.

This new section provides flexibility for a sequestration offset project that is actively working though the verification process. If the project receives and submits an Adverse Offset Verification Statement within the verification timeframe, they will have an additional three reporting periods in which to receive a Positive Offset Verification Statement for at least one reporting period. The amendment also specifies termination as the consequence of failure to receive a Positive Offset Verification Statement for any of those reporting periods.

**Rationale**

This change is necessary to provide flexibility for sequestration projects in their crediting phase that are actively working though the verification process but have yet to get a positive Offset Verification Statement. The Proposed Amendments allow projects that receive and submit an Adverse Offset Verification Statement within the required timelines to have three additional reporting periods to pursue and submit a Positive Offset Verification Statement. The amendments also specify the consequence of project termination if a project does not receive and submit a Positive Offset Verification Statement for at least one reporting period undergoing verification within the extended timeframe.

The Proposed Amendments recognize that verifications of sequestration projects often cover multiple reporting periods, and a Positive Offset Verification Statement, once approved by CARB, on any of the verified reporting periods is sufficient to meet the periodic verification requirement. If a Positive Offset Verification Statement is submitted and approved by CARB within the given timeline, the project continues. Otherwise, the project terminates, with forest owners responsible to compensate for all ARB offset credits issued for the project.

## 95977(d) [new]

### Purpose

This new subsection incorporates language moved from current section 95977(c) and modifies it. This new section clearly calls out and distinguishes the requirements for verification timing during a sequestration project's monitoring period.

### Rationale

These modifications are necessary to clearly prescribe the schedule for verification for a sequestration project during its monitoring period. These requirements are moved to a section that is separate from the crediting period requirements for clarity and to differentiate timing requirements between the crediting period and monitoring period. The updated regulatory language references the new section 95976(h), which describes how a sequestration project enters its monitoring period. Regulatory text that is moved from section 95977(c) is changed from "years" to "reporting periods" because not all reporting periods are one year in duration. Previous regulatory text in section 95977(c) described a situation in which a project could defer verification for twelve years instead of six years but also provided that the project must return to a six-year verification cycle if an Adverse Offset Verification Statement was received after deferring verification for twelve years. The proposed text modifies that circumstance to apply if the Offset Project Operator opts to defer verification only seven to eleven years, instead of the full twelve years to allow projects some flexibility in how long they would like to defer verification. The modification also removes the last sentence stating a project that receives two consecutive adverse Offset Verification Statements will receive an intentional reversal. New language regarding the disposition of projects not receiving and approved Positive Offset Verification Statement during the monitoring period is now included in 95977(d)(2).

## 95977(d)(1) [new]

### Purpose

The Proposed Amendment clarifies that a project must receive a Positive Offset Verification Statement within the verification timeframe specified in subsection 95977(e). It also clarifies the consequence of not meeting the requirement is project termination.

### Rationale

This change is necessary to specify a timeline by which a project must receive a Positive Offset Verification Statement. A project in its monitoring period has the same 11-month deadline, pursuant to section 95977(e), as a project in its crediting period. A project in its monitoring period retains the ability to petition CARB to determine the Offset Project Data Report's verifiability if it receives a notice for an Adverse verification opinion prior to the 11-month deadline.

## 95977(d)(2) [new]

### Purpose

The Proposed Amendment establishes that project termination will result when a sequestration project during its monitoring period has fifteen consecutive reporting periods without an approved positive verification.

### Rationale

The Proposed Amendment is necessary to specify the consequence of not completing verification with Positive Offset Verification Statements during a project's monitoring period. Because sequestration is reversible, verification is required on a periodic basis after offset credits have been issued. If a project does not verify, i.e. demonstrate the credited carbon still exists, the project terminates to ensure the integrity of the program. The new proposed regulatory text, which allows up to 14 reporting periods between approved Positive Offset Verification Statements, affords an Offset Project Operator more flexibility if it believes it may encounter issues to pass verification. This requirement may also incentivize projects to undergo full verification more frequently. The 15-year duration provides time for a project that deferred verification for 12 years and then received an Adverse verification opinion to secure a Positive Offset Verification Statement within its next few reporting periods before the project would terminate.

The current Regulation specifies that a project receiving Adverse Offset Verification Statements on two consecutive verifications will be considered to have an intentional reversal. The Proposed Amendments move away from that for several reasons informed by implementation experience. The current Regulation does not provide direction to specify the magnitude of the intentional reversal (i.e., the number of credits reversed and whether that would or could cause project termination). The Proposed Amendments thus move towards assigning the magnitude of the intentional reversal as to cause project termination while also providing project developers more attempts to pass verification to avoid termination. This offers more flexibility to project developers. It is possible that verification might result in a positive verification statement for some reporting periods but adverse for others within the same verification. The proposed regulatory amendments clarify how this situation would be handled.

## Section 95977.1. Requirements for Offset Verification Services.

### 95977.1(b)(1)

### Purpose

The Proposed Amendments remove the separate verification start time if a verification is being audited by CARB and change the minimum time required between when a verification body submits its Notice of Offset Verification Services (NOVS) and the start of the verification site visit from 15 to 40 calendar days. The Proposed Amendments also provide an option for CARB to approve in writing a site visit that is earlier than 40 calendar days after, but at least 15 calendar days after, the Notice of Offset Verification Services submittal.

### Rationale

This modification is necessary so that offset verification services that are being audited (whether by CARB or an Offset Project Registry) are treated the same as offset verification services that are not being audited. With the proposed amendment, all verification site visits, not only those being audited, must wait 40 calendar days between NOVS submittal and the site visit. For cases where a project and verification are selected for an audit, eliminating the disparate treatment removes potential perception of an adversarial role between CARB staff or Offset Project Registry staff conducting an audit on one side and the verification body and the offset project developer on the other side and also aligns with internal processes to approve out-of-state travel. The Proposed Amendments provide an option for CARB to approve an earlier site visit for circumstances where a 40-day wait may be infeasible or undesirable, such as when expected seasonal weather is likely to make the site inaccessible. The approval from CARB must be in writing so that the verification body can document why it conducted the site visit sooner than 40 calendar days after the NOVS submittal.

**95977.1(b)(3)(B)4.**

**Purpose**

The Proposed Amendment changes the information that must be included in the Offset Verification Plan to the expected date an offset verification body will submit its Offset Verification Statement rather than the expected date for completion of offset verification services.

**Rationale**

This modification is necessary to update and clarify the information that must be included in the Offset Verification Plan. The existing language requires the Offset Verification Plan to include the expected date for completing offset verification services. Offset verification services are considered complete upon CARB approval of the verification and issuance of ARB offset credits. The proposed amendment requires the verification body to disclose the expected date for submitting its Offset Verification Statement to CARB, which is a step where it has control over the timing, rather than the expected date when CARB might complete its verification review, which is less certain.

**95977.1(b)(3)(D)**

**Purpose**

The Proposed Amendment clarifies existing regulatory text by replacing “years” with “reporting periods” in three instances.

**Rationale**

Replacing “years” with “reporting periods” is necessary because not all reporting periods are one year in duration. These changes clarify that the requirement applies to the reporting period, regardless of its duration.

**95977.1 (b)(3)(D)2.i. [new]**

**Purpose**

Some projects outside of California may be designated as providing Direct Environmental Benefits to California based on planned activities. The proposed new subsection requires a verification body to review the extent to which previously planned activities that are crucial for Direct Environmental Benefits to the State (DEBS) designation have been implemented. The new section adds that a project's DEBS status will be revoked by CARB, if the verifier confirms that the project has not implemented the majority of planned actions in the approved plan or if the project is no longer providing Direct Environmental Benefits to California.

**Rationale**

This section is added to align with the new verification requirements in new subsection 95989(e), which require projects outside of California that have Direct Environmental Benefits to the state status based on planned activities to have to follow through on those planned activities by verifying the occurrence of those activities at each full verification. The proposed amendment specifies that the verifier must assess the extent to which planned activities have been implemented. This is necessary because projects that have DEBS status based on the planned activities only provide benefits if those activities are carried out. If a verifier determines that the activities have not been implemented, the project's status will be revoked since the project is no longer providing direct benefits to California.

**<u>95977.1(b)(3)(M)</u>**

**Purpose**

The Proposed Amendments clarify what constitutes a correctable error. Whether that be in the context of an Offset Project Data Report, a compliance offset protocol, or the regulation. The amendment clarifies that correctable errors less than a 3.00% overstatement of GHG emission reductions do not need to be corrected in the current reporting period. Such errors are still correctable errors and must be corrected in the next reporting period. Correctable errors that result from non-conformances must be corrected before the verification body submits an offset verification statement and cannot be included in the 3.00% exception.

**Rationale**

This modified language is necessary to ensure that correctable errors are understood and corrected in the current reporting period when they are identified. This amendment makes clear that the flexibility to not correct errors that result in less than 3.00% overstatement is only available for the current reporting period, and if such an error is a correctable error, it must be fixed in the subsequent reporting period. It also makes clear that non-conformances must be addressed within the reporting period being verified and are not included in the exception.

**<u>95977.1(b)(3)(N)1. [new]</u>**

**Purpose**

The Proposed Amendments specify that for a project seeking a crediting period renewal, a baseline revision may be required to conform to the most recent protocol at that time. Amendments also clarify that any changes to the baseline will not result in invalidation or additional crediting.

**Rationale**

This new subsection is necessary to confirm that for a project seeking to renew its crediting period, the project and associated baseline for the renewed crediting period must conform to the most recent protocol. No additional crediting or invalidation will occur due to differences in baseline calculations resulting from conforming to the latest protocol. The difference in project baselines can be attributed to differences in equations or methods in the latest protocol. No new credits will be issued to prevent double crediting from what was previously credited in the last crediting period.

**<u>95977.1(b)(3)(O)</u>**

**Purpose**

The Proposed Amendment specifies that correctable errors must be included in the Issues Log.

**Rationale**

An error must be included in the Issues Log regardless of whether the Offset Project Operator or, if applicable, Authorized Project Designee chooses to correct it in the reporting period currently being verified. It is important for CARB staff to see what issue arose during project verification to determine if the fix was appropriate. This information also helps staff know to look for similar issues in other projects and can inform potential future program updates if a particular error is common.

**<u>95977.1(b)(3)(R)</u>**

**Purpose**

The Proposed Amendment removes language about when offset verification services are complete.

**Rationale**

This regulatory language is proposed to be moved to section 95977.1(b)(3)(S), which is the appropriate section within the Regulation for describing the completion of offset verification services. Section 95977.1(b)(3)(R) is about the final processes leading up to submitting the Offset Verification Statement.

**<u>95977.1(b)(3)(R)4.d.</u>**

**Purpose**

The Proposed Amendment requires the offset verification team to hold the final discussion in a manner that ensures that Offset Project Registry staff who are auditing the verification can attend the discussion.

**Rationale**

This change is necessary to facilitate Offset Project Registries in meeting their audit requirements in section 95987(e). To count an audit toward its requirement to audit a minimum of 10% of verifications, an Offset Project Registry must complete several components, including attending the final discussion. An Offset Project Registry may not count the audit toward the minimum 10% requirement if any required component is not met.

**<u>95977.1(b)(3)(R)6.</u>**

### Purpose

The Proposed Amendments provide greater detail around the process for an offset project developer petitioning CARB concerning the verifiability of an Offset Project Data Report. This includes specifying the consequence of a petition not being submitted within the required timeline is that the applicable Reporting Period(s) are not eligible to received registry offset credits or ARB offset credits. The amendments clarify that offset project developers must submit a petition prior to both the Offset Verification Statement deadline and the submittal of an Adverse Offset Verification Statement. After the petition, the verification body may not submit an Offset Verification Statement to the Offset Project Registry until CARB determines the Offset Project Data Report is verifiable.

### Rationale

These changes are necessary to clarify the process for an offset project developer to petition CARB about the verifiability of its submitted Offset Project Data Report. The amendments clearly explain the deadline for when an Offset Project Operator or Authorized Project Designee must submit a verifiability petition to CARB. If the petition is not submitted on time, no offset credits may be issued. This is consistent with requirements for meeting the submittal deadline of both the Offset Project Data Report and Offset Verification Statement for offset credits to be issued. When a Positive Offset Verification Statement cannot be issued by the deadline, the petition for the Offset Project Data Report's verifiability must be submitted by the Offset Verification Statement deadline. The amendments also clarify the timeline within which a verification body may submit its Offset Verification Statement and detailed verification report following a petition. Specifically, once the petition is submitted, the verification body may not submit its verification report and Offset Verification Statement until after CARB has determined the Offset Project Data Report is verifiable. This is necessary to ensure the verifier has CARB's determination before it issues its report; it is possible CARB may determine the given report is verifiable, which would require the verifier to change course.

**<u>95977.1(b)(3)(R)7.</u>**

### Purpose

The Proposed Amendments clarify the process and requirements for an offset project developer to resolve outstanding issues in its Offset Project Data Report prior to CARB determining the Offset Project Data Report's verifiability. The Proposed Amendments require any outstanding verification issues be addressed and an updated Offset Project Data Report submitted to CARB within eight months from the date of petition. Within eight months, the petition must either be withdrawn or the Offset Project Data Report submitted to CARB for its determination. Amendments also clarify next steps once CARB determines the Offset Project Data Report is verifiable or not. If verifiable, the verification body submits an updated verification report and Offset Verification Statement. If not verifiable, offset credits will not be issued, and offset verification services are considered complete. The one exception to this is if unless there was a forest reversal during the reporting period, in which case CARB will assign the magnitude and type of reversal. The amendments also clarify that the 15-day timeline for a verification body to submit its Offset Verification Statement starts when CARB notifies the verification body and project developers that the Offset Project Data Report is verifiable.

**Rationale**

Based on implementation experience, the amendments are necessary to clarify the process for an offset project developer to resolve issues in an Offset Project Data Report for which a petition for verifiability has been submitted to CARB. The amendments also establish a new deadline for when the offset project developer and its verification body must resolve outstanding differences before CARB will determine the Offset Project Data Report's verifiability. This establishes a timeline that should be sufficiently long to resolve outstanding issues instead of leaving the process without deadline. The amendments provide eight months before CARB must assess the Offset Project Data Report's verifiability. A project that begins offset verification services three months after the reporting period ends has eight months before their 11-month Offset Verification Statement submission deadline. Providing another eight months from the petition deadline (i.e., the Offset Verification Statement submission deadline) to resolve outstanding issues thus allows such a project to effectively double its verification timeline in instances of disputes as to verifiability.

If CARB's final decision is that the Offset Project Data Report is not verifiable, then the Proposed Amendments clarify that no offset credits shall be issued for a reporting period with an unverifiable Offset Project Data Report. This is consistent with requirements for meeting the submittal deadline of both the Offset Project Data Report and Offset Verification Statement for offset credits to be issued. Proposed Amendments also provide that offset verification services will be considered complete if CARB's final decision is that the Offset Project Data Report is not verifiable, unless there was a forest reversal, because no further verification activity within the Regulation's prescribed timelines is possible. For reporting periods with a forest reversal, amendments clarify that CARB will assign the magnitude and type (either intentional or unintentional, or a combination thereof) of the reversal. The process for assigning the reversal is covered under new section 95983(g). Since a forest reversal results in a compliance obligation, it is necessary to determine the amount required to compensate for the reversal and whether that compensation occurs from the forest owner(s) or CARB's forest buffer pool.

Existing language requires the verification body to submit the Offset Verification Statement within 15 days. For clarity, the Proposed Amendments specify that the 15-day period begins when CARB notifies the Offset Project Operator and, if applicable, Authorized Project Designee and verification body that the Offset Project Data Report is verifiable.

**<u>95977.1(b)(3)(S)</u>**

**Purpose**

The Proposed Amendment moves existing regulatory text from the start of section 95977.1(b)(3)(R) to section 95977.1(b)(3)(S). New regulatory text is added to identify when offset verification services that do not result in ARB offset credit issuance are considered complete.

**Rationale**

This change is necessary to clearly identify the conclusion of all offset verification services. Current regulatory language notes that offset verification services are considered complete with the issuance of ARB offset credits, so the conclusion of offset verifications services is not clear for verifications that do not result in ARB offset credit issuance, including verification for a U.S. Forest reversal or a second verification of an Ozone Depleting Substance project for the purpose of reducing its invalidation period. This amendment makes clear that verification services for those verifications not resulting in credit issuance are complete when CARB approves the verification.

**<u>95977.1(b)(3)(W)</u>**

**Purpose**

The current Regulation authorizes CARB to notify a verification body that is must be available for an audit when it is providing offset verification services. Proposed Amendments also authorize Offset Project Registries to notify a verification body that is must be available for an audit. The Proposed Amendments also specify that Offset Project Operators are required to provide CARB staff and Offset Project Registry staff access to the project location for the purpose of witnessing a verification site visit.

**Rationale**

This change is necessary to ensure that offset verification bodies make themselves and their staff available for audit, not only to CARB but also to the CARB-approved Offset Project Registries that have listed a project undergoing verification. The change is necessary to ensure that Offset Project Operators do not take steps to hinder CARB or Offset Project Registry staff from being present at the offset project location to witness the site visit. These amendments clarify the authority of an Offset Project Registry, as well as CARB, to receive cooperation from verifications bodies for an audit.

## Section 95978. Offset Verifier and Verification Body Accreditation.

**<u>95978(d)(2)</u>**

**Purpose**

This subsection is amended to add “site visit” to clarify the requirements of this subsection.

**Rationale**

The added text is necessary to clarify that the requirement that technical experts must be under the direct supervision of an ARB-accredited offset verifier is specific to verification activities during site visits.

**<u>95978(e)</u>**

**Purpose**

This modification clarifies the requirements for CARB-accredited verification bodies during site visit verifications.

**Rationale**

The Proposed Amendments clarify that the current requirement for a CARB-accredited offset verifier to be within 4 hours of travel time from the technical experts applies only during a site visit, which includes being in proximity by telephone and being able to arrive at the project location within 4 hours.

## Section 95979. Conflict of Interest Requirements for Verification Bodies and Offset Verifiers for Verification of Offset Project Data Reports.

**<u>95979(b)(2)</u>**

**Purpose**

The Proposed Amendment provides a limited exception to the current requirement that no offset verification body member may provide any of the specified non-offset verification services to the project developer without that service resulting in a high conflict of interest. For verification of sequestration projects, a verification body would now be allowed up to five percent of its members, instead of no member, to have provided a specified non-offset verification service to the project developer.

**Rationale**

The Proposed Amendment is necessary to ensure that offset verification bodies that verify sequestration projects are able to hire the most qualified personnel. The number of entities currently involved in verifying sequestration projects is small. The requirement for an offset project developer to periodically rotate its verification body further restricts options for verification bodies. For sequestration projects, the requirement that no member of a verification body may have previously provided non-offset verification services to the project developer has proven to be restrictive. This Proposed Amendment allows a small minority of members (which includes both employees and subcontractors) to have previously provided non-offset verification services to the project developers without creating a high conflict of interest. This amendment does not allow those verification body members to provide offset verification services for a sequestration project developer with whom they would currently present a high conflict of interest. Rather, it allows the verification body to hire and retain personnel to assist them with verifications for other project developers while maintaining an acceptable conflict-of-interest level when providing verification services for sequestration projects.

**<u>95979(d)</u>**

**Purpose**

The Proposed Amendment specifies situations where a verification body is considered to have a medium conflict of interest given the new limited exception from a high conflict of interest for verifications of sequestration projects that is proposed in section 95979(b)(2).

**Rationale**

This Proposed Amendment is necessary to clarify the conflict-of-interest level (i.e., low or medium conflict of interest) for the limited situations that are no longer considered a high conflict of interest under the proposed changes to section 95979(b)(2). Specifying these limited situations as a medium conflict of interest is necessary to ensure that the verification body has a mitigation plan in place for those situations. Among other requirements, the mitigation plan must demonstrate that any member with a potential conflict of interest has been removed and insulated from providing verification services for the sequestration project.

**<u>95979(e)(2) [deleted]</u>**

**Purpose**

In the current Regulation, section 95979(e)(2) requires offset verification bodies to include as part of their Conflict-of-Interest self-evaluation a disclosure of all offset verification services that verification team members had previously provided to the offset project developers. Section 95979(e)(2) is proposed to be deleted.

**Rationale**

This requirement is removed because it is unnecessary. Verification bodies are currently required to disclose all offset verification services ever previously provided to the Offset Project Operator, Authorized Project Designee, and their technical consultant(s) and non-offset verification services provided to those entities within the previous five years. The disclosure period for verification services is longer than for non-offset verification services. The purpose of this section is to evaluate non-offset verification services and whether they constitute a conflict-of-interest. The proposed amendment removes the requirement to report offset verification services.

## Section 95980.1. Process for Issuance of Registry Offset Credits.

**<u>95980.1(b)</u>**

**Purpose**

The proposed amendment eliminates the “Active Registry Renewal” project status. It also clarifies that the change in status to “Active Registry Project” is applied only the first time a project is issued registry offset credits.

**Rationale**

This change is necessary to provide clear descriptions of project status. For clarity, CARB is proposing to eliminate the “Active Registry Renewal” status. For a project that does not renew its crediting period, its status will become either “Completed,” “Inactive,” “Monitored,” or “Terminated,” as appropriate, following the completion of offset verification services for reporting periods in the project's final crediting period. The proposed amendment also clarifies that the change to "Active Registry Project" status is applied only the first time a project receives registry offset credits. As a project has subsequent reporting periods, its status does not alternate between "Active Registry Project" and "Active CARB Project" depending on which type of credits were most recently issued.

**95980.1(d)**

**Purpose**

The Proposed Amendment removes the phrase "for offset projects seeking issuance of registry offset credits" to clarify that the ability of Offset Project Registries to request additional information is not limited to offset verification services that would result in registry offset credit issuance.

**Rationale**

This change is necessary to provide authority for Offset Project Registries to rigorously review all offset verification services. This change is proposed in conjunction with the amendment in section 95987(f). Since that amendment specifies that an Offset Project Registry may make requests for additional information as provided in section 95980.1(d), regardless of whether the verification would result in registry offset credit issuance, the language in section 95980.1(d) specifically referring to registry offset credit issuance is removed.

**95980.1(d)(4)**

**Purpose**

The Proposed Amendment specifies a timeline of ten business days within which an Offset Project Registry must provide its detailed report to CARB that describes why they came to a negative determination regarding issuing registry offset credits to a project. The proposed amendment also removed description of the required report as "detailed."

**Rationale**

The first proposed change is necessary to provide a clear timeline for the Offset Project Registry's requirement to provide a report to CARB. The 10-day deadline is reasonable as it matches the amount of time provided to Offset Project Operators and Authorized Project Designees to petition a denial of registry offset credit issuance.

The second proposed change is necessary to accurately reflect CARB expectations of Offset Project Registries. CARB does not need a lengthy, detailed report. The report only needs to be detailed enough to sufficiently explain why the Offset Project Registry reached a negative determination.

**95980.1(d)(5)**

**Purpose**

The Proposed Amendment specifies a timeline of ten business days for an Offset Project Operator or Authorized Project Designee to submit a petition to CARB regarding an Offset Project Registry denying issuance of registry offset credits to a project.

**Rationale**

The proposed change is necessary to provide a clear timeline for the Offset Project Operator or Authorized Project Designee to submit a petition to CARB. CARB staff believe 10-days is reasonable as it provides Offset Project Operators and Authorized Project Designees the same amount of time that they currently have to petition the Registry.

## Section 95981. Issuance of ARB Offset Credits.

**95981(b)(3) [new]**

**Purpose**

Proposed Amendments specify a one-year deadline from the date of registry offset credit issuance for requesting issuance of ARB offset credits. The amendments also specify that ARB offset credits shall not be issued if the request for issuance of ARB offset credits is not received within one year.

**Rationale**

The change is necessary to provide a deadline for offset project developers to request issuance of ARB offset credits. The Regulation currently specifies the earliest time when a request for issuance may be submitted but has no deadline. The proposed amendment provides a one-year timeline for a project developer to submit a request for issuance of ARB offset credits. This one-year timeline recognizes that project developers may re-evaluate their market options after the verification process has begun and provides an opportunity to pause between registry offset credit issuance and review by CARB staff for issuance of ARB offset credits. The one-year timeframe aligns with the timeframe project developers have to cancel registry offset credits after ARB offset credits are issued.

**95981(c)**

**Purpose**

The Proposed Amendment removes the specified timeline for CARB staff review a request for issuance of ARB offset credits within 45 calendar days of receiving complete and accurate information.

**Rationale**

The change is necessary to ensure the CARB staff have sufficient time to review project submissions prior to ARB offset credit issuance. CARB staff review time is important to ensure the environmental integrity of offset credits issued by CARB and to minimize the possibility of future invalidation. Under current implementation, the 45-day timeline is reset each time clarification to existing information or additional information is received by CARB staff to provide sufficient time to review the new information. Thus, the total days needed for review may exceed 45 days. The total time needed for project review varies across projects due to the need to ensure complete and accurate information through iterative requests.

**95981(e)**

### Purpose

The Proposed Amendment clarifies that the beginning of an initial crediting period is based on an Offset Verification Statement being approved by CARB and not simply being received by CARB.

### Rationale

The changes are necessary to conform with the definition of "Initial Crediting Period" in section 95802, which states that an Initial Crediting Period is based upon an Offset Verification Statement approved by CARB, not an Offset Verification Statement received by CARB. Replacing "received" with "approved" in the regulatory text is necessary for clarity and consistency across sections 95802 and 95981.

## Section 95981.1. Process for Issuance of ARB Offset Credits.

**95981.1(b)**

### Purpose

The Proposed Amendment eliminates both the "Active Registry Renewal" and "Active ARB Renewal" project status. It also clarifies that change in status to "Active CARB Project" is applied only the first time a project is issued ARB offset credits.

### Rationale

The proposed change is necessary to provide clear descriptions of project status. For clarity, CARB is proposing to eliminate both the "Active Registry Renewal" status and the "Active ARB Renewal" status. For a project that does not renew its crediting period, its status will become either "Completed," "Inactive," "Monitored," or "Terminated," as appropriate, following the completion of offset verification services for reporting periods in the project's final crediting period. The proposed amendment also clarifies that the change to "Active CARB Project" status is applied only the first time a project receives ARB offset credits. As a project has subsequent reporting periods, its status does not alternate between "Active Registry Project" and "Active CARB Project" depending on which type of credits were most recently issued.

**95981.1(e)**

### Purpose

The Proposed Amendment extends the deadline for cancelling registry offset credits to 90 days after CARB's final invalidation determination if there is an ongoing invalidation investigation at the time of the initial deadline for cancelling registry offset credits.

### Rationale

The proposed change is necessary to provide Offset Project Operators and Authorized Project Designees sufficient time to the make the appropriate decision for whether to complete the ARB offset credit issuance process by cancelling registry offset credits. The Regulation currently specifies a one-year timeline following ARB offset credit issuance, but it is appropriate to provide an extension when an invalidation investigation is ongoing.

## Section 95983. Forestry Offset Reversals.

**95983(a)(1)**

**Purpose**

The Proposed Amendment specifies that Alaska Native Corporations can use the risk associated with a public or tribal lands project to calculate the reversal risk rating contribution for their project.

**Rationale**

This change aligns with CARB's review of recently received information indicating that while not sovereign, Alaska Native Corporations are incorporated for the benefit of tribal and native village corporations, which share similarities with Tribes, and have certain restrictions and protections in place from land alienation (e.g., to prevent sales to private companies to harvest timber or mine the land).

**95983(a)(5) [new]**

**Purpose**

The Proposed Amendment adds a new subsection to clarify that the Forest Buffer Account can only be used to compensate for an unintentional reversal that occurs within a reporting period and for which there is sufficient verifiable evidence.

**Rationale**

This change is necessary to protect against "disturbance stacking," where small disturbances not properly accounted for in previous reporting periods cumulatively result in a reversal in a subsequent reporting period. The Forest Buffer Account is not intended to compensate for aggregation of carbon stock losses due to disturbances over multiple previous reporting periods that a project operator failed to account for. The U.S. Forest Compliance Offset Protocol requires the Offset Project Operator to update annual onsite carbon stocks for any disturbance that may have occurred during the reporting period.

**95983(b)**

**Purpose**

The current section states that the Offset Project Operator or Authorized Project Designee shall provide notice to CARB within 30 days of the discovery of the Unintentional Reversal.

The Proposed Amendment extends this timeframe and allows 2 months for notification from the discovery date.

**Rationale**

This change is necessary to provide sufficient time for the project operator to notify CARB of an Unintentional Reversal. If a large natural disturbance occurs, it is beneficial to provide a project operator enough time to gather enough information to be reasonably assured that a reversal has occurred.

### 95983(b)(1) [new]

**Purpose**

The Proposed Amendment adds a new section that clarifies what is considered a discovery date for an Unintentional Reversal and the parameters for selecting the date. The section also describes common scenarios that lead to unintentional reversals and what is considered a reasonable discovery date for those scenarios. The section also describes how prescribed fire by the forest owner and response to wildfire from an agency are treated.

**Rationale**

The Proposed Amendments are necessary to clarify what evidence is needed to support the discovery date of an Unintentional Reversal based on the type of disturbance. The timing of an unintentional reversal is key because reversals are quantified on a reporting period basis, which means multiple reporting periods of disturbances cannot be treated as a whole to amount to a reversal. Verifiable delineation of the discovery date is critical in determining whether losses from a disturbance can be defined as an unintentional reversal and which reporting, and verification deadlines apply, if any. Multiple approaches for verifying a discovery date must be clarified because the nature of different disturbances governs how the timing of forest carbon stock losses can be demonstrated with evidence.

The examples of prescribed fire and Response to Wildfire, were added based on numerous requests for guidance from program participants. CARB staff also find both these additions necessary as wildfire impacts are growing more prevalent as climate change impacts accelerate.

### 95983(b)(2) [new]

**Purpose**

This Proposed Amendment requires that a new stratum be added to the project's inventory to account for disturbance and its associated uncertainty.

**Rationale**

This new requirement is necessary to ensure all disturbances are measured and uncertainty accounted for in the project's annual accounting.

**95983(b)(3) [new]**

**Purpose**

The Proposed Amendment adds a requirement that any logs delivered to a mill because of salvage harvests must be included in the reversal estimate. The proposed amendment also requires the project operator to confirm pre-harvest carbon stocks within the disturbance area before the site visit by the verifier. The requirement stipulates that if the onsite carbon stock losses pre-salvage harvest cannot be verified, then the harvested area's onsite carbon stocks will be treated as an intentional reversal.

**Rationale**

This added requirement will provide stricter bounds regarding salvage harvests of project areas that will be compensated by the forest buffer account. The bounds include having a verifier confirm all trees harvested within the disturbed area meet the definition of "salvage harvest" and that all carbon accounting of the harvested logs is reflected in the reversal estimate. It's important that a project include all salvage harvests associated with the disturbance causing a reversal, because if they can deliver any of that wood to a mill they can recoup some of the carbon loss and reduce the reversal estimate the forest buffer has to compensate. Site visits by a verifier almost always occur after harvesting is complete, so it is necessary for the project to provide Information to the verifier that the activity meets the rule's definition of salvage instead of a normal harvest activity. If a verifier cannot determine with reasonable assurance that the conducted harvest was to salvage trees affected by the disturbance, then the areas harvested must be removed from the unintentional reversal estimate and considered intentional. The harvested areas will be considered intentional, because if it cannot be proven that the harvest took place in response to the disturbance, it could be proven that the purposeful harvest contributed to the reversal estimate.

**95983(b)(3)(A) [new]**

**Purpose**

The Proposed Amendments provide an extension of the submission deadline of the Offset Verification Statement if a project is terminated due to an unintentional reversal. The extension is only applicable to projects conducting salvage harvest and ends when all salvage treatments associated with the reversal are completed and verified.

**Rationale**

This addition provides that all salvage harvests and associated wood products are included in the final termination estimate. Harvested wood, whether salvage or a typical harvest, still represents carbon that can be sequestered over 100 years. It's important that a project include all salvage harvests associated with the disturbance causing a reversal, because if they can deliver any of that wood to a mill they can recoup some of the carbon loss and reduce the reversal estimate the forest buffer has to compensate.

**95983(b)(1) [new 95983(b)(4)]**

**Purpose**

Former section 95983(b)(1) is renumbered to section 95983(b)(4). The Proposed Amendments clarify what reports are needed when a reversal occurs. The amendments remove the verified estimate requirement, add a requirement to submit an OPDR within 19 months and an OVR within 30 months. It also adds that an OPDR for subsequent reporting periods does not need to be submitted until the verification of the reversal is complete.

**Rationale**

Currently the 23-month deadline gives almost one year to do the inventory and to provide a verified estimate (assuming 11 months were needed for the verification). The original intent of the current language was that an OPDR would be submitted once a verified estimate was complete. However, the current language has been misinterpreted as an OPDR is not required if an unintentional reversal occurs. This amendment is necessary to clarify the requirements by removing the verified estimate language and instead providing deadlines for when the OPDR must be submitted by the project operator and when the verification statement must be submitted by the verification body. The amendment adds six months, for a total of one and a half years, to submit the OPDR(s) in which the reversal occurred and another 11 months for the submittal of an OVS. This amendment clarifies that an OPDR must be submitted after an unintentional reversal and subsequent reporting period OPDR forms do not need to be submitted until after the reversal is confirmed.

**95983(b)(2) [new 95983(b)(5)]**

**Purpose**

This section is modified to correct the reference from 95983(b)(2) to 95983(b)(5).

**Rationale**

This modification is necessary to reflect the correct reference.

**95983(b)(2)(B) [new 95983(b)(5)(B)]**

**Purpose**

The Proposed Amendment modifies the terms in the equation for how CARB's Forest Buffer Account compensates for unintentional reversals when the offset project had early action offset credits which did not convert to ARB offset credits.

**Rationale**

This change is necessary to assure CARB retires enough credits from the Forest Buffer Account when a project has reversals over multiple reporting periods. The current equation works as intended for the first reversal but would not work well for subsequent reversals. The terms in the equation are modified to work for all reversals as intended. A determination of the proportion of credits to be retired from compliance versus early action phases of the project should look not at all credits from its early action and compliance phases but instead just at the “net” credits, where the “net” credits is the total issued minus credits which have been retired to compensate for prior reversals, including compensation for both intentional and unintentional reversals. If the total instead of the “net” credits are evaluated, then not enough ARB offset credits are retired. If the early action offset program is to compensate for the remainder of subsequent reversals, the early action offset program will eventually be asked to compensate for more credits than were issued and remained in its program. Changing the definition of the terms in the equation to looking at “net” instead of gross credits resolves this issue.

The Proposed Amendments conforms with the different retirement procedures in CARB’s compliance offset program and the early action offset program. In its compliance program, CARB retires all the compliance instruments, whether the instruments are offset credits from the forest buffer pool to compensate for an unintentional reversal or are compliance instruments (allowance and/or offset credits) submitted by forest owners to compensate for an intentional reversal. In the early action offset program, the procedure is somewhat different. The early action offset program retires early action offset credits from its buffer pool for what it describes as unavoidable reversals, and the project developers retire early action offset credits from their own accounts for avoidable reversals. The proposed amendment language reflects these different procedures in its description of how the retirements occur.

The change is also necessary to clarify that “reversal” is the total verified amount during the reporting period(s) verified and not for all the reporting periods in the project life.

**<u>95983(c)(1)</u>**

**Purpose**

The current section states that the Offset Project Operator or Authorized Project Designee shall provide notice to CARB within 30 days of the occurrence of the intentional reversal. The Proposed Amendment allows 2 months for notification from the end of the reporting period.

**Rationale**

This change is necessary to align with the proposed change to section 95983(c)(2) which outlines reporting and verification deadlines. The intentional reversal section deadlines previously were based on an “occurrence date.” The notification, reporting, and verification deadlines are now simply based on the reporting period end date.

**<u>95983(c)(2)</u>**

**Purpose**

The Proposed Amendments standardize submittal deadlines for reporting periods that have an intentional reversal. The proposed amendment removes the occurrence date for intentional reversals. The proposal includes requiring the OPDR to be submitted within 6 months of the end of the reporting period if an intentional reversal has occurred. The Proposed Amendments also remove the verified estimate requirement and instead requires a full verification within 11 months of the end of the reporting period.

**Rationale**

Currently the deadline gives the project operator one year to do the inventory and verification (assuming 11 months were needed for the verification) to provide a verified estimate. This amendment is necessary to clarify the requirements by removing the verified estimate language and instead providing deadlines for when the OPDR must be submitted by the project operator and when the verification statement must be submitted by the verification body. The amendment also removes the “occurrence date” language because it was interpreted as the date modeling or calculations for the reversal was complete. To standardize the notification timeline, the project operator has until six months after the end of the reporting period to submit an OPDR and 11 months for the verification body to submit the verification statement.

**95983(c)(3)(B)**

### Purpose

The Proposed Amendment modifies the terms in the equation for how forest owners compensate for intentional reversals when the offset project had early action offset credits which did not convert to ARB offset credits.

### Rationale

This change is necessary to ensure forest owners submit to CARB enough compliance instruments when a project has reversals over multiple reporting periods. The current equation works as intended for the first reversal but would not work well for subsequent reversals. The terms in the equation are modified to work for all reversals as intended. A determination of the proportion of credits to be retired from compliance versus early action phases of the project should look not at all credits from its early action and compliance phases but instead just at the “net” credits, where the “net” credits is the total issued minus credits which have been retired to compensate for prior reversals, including compensation for both intentional and unintentional reversals. If the total instead of the “net” credits are evaluated, then not enough ARB offset credits are retired. If the early action offset program is to compensate for the remainder of subsequent reversals, the early action offset program will eventually be asked to compensate for more credits than were issued and remained in its program. Changing the definition of the terms in the equation to looking at “net” instead of gross credits resolves this issue.

The Proposed Amendments conforms with the different retirement procedures in CARB’s compliance offset program and the early action offset program. In its compliance program, CARB retires all the compliance instruments, whether the instruments are offset credits from the forest buffer pool to compensate for an unintentional reversal or are compliance instruments (allowance and/or offset credits) submitted by forest owners to compensate for an intentional reversal. In the early action offset program, the procedure is somewhat different. The early action offset program retires early action offset credits from its buffer pool for what it describes as unavoidable reversals, and the project developers retire early action offset credits from their own accounts for avoidable reversals. The proposed amendment language reflects these different procedures in its description of how the retirements occur.

**95983(c)(3)(C)**

**Purpose**

The Proposed Amendment removes “occurrence” and “verified estimate” to align with changes in subsection 95983(c)(2). The proposed amendment intends to streamline and clarify language to state that CARB will notify the project operator of the final number of compliance instruments the forest owner must turn in to compensate for the intentional reversal. The current language states CARB will notify the project operator after the verified estimate has been reviewed or after one year has elapsed.

**Rationale**

This change is necessary to align with the proposed change to section 95983(c)(2) that establishes when reporting and verification must be completed after the end of a reporting period that has an intentional reversal. The current language regarding a verified estimate and the one-year timeframe if a verified estimate is not submitted is removed. CARB has proposed removing “verified estimate” from the reversal section as its meaning is not clear and instead has inserted deadlines for the reporting and verification of a reversal in 95983(c)(2).

**95983(c)(3)(D)**

**Purpose**

The proposed amendment adds “Forest buffer account” and “retired by the forest owner” to clarify that CARB retires offset credits from the forest buffer account for intentional reversals that miss the surrender deadline.

**Rationale**

The addition of these two terms is necessary to clarify that CARB retires offset credits from the forest buffer account for intentional reversals that miss the surrender deadline.

**95983(c)(4)(B)**

**Purpose**

The proposed amendment clarifies the trigger for the six-month interval for the forest owner to submit replacement compliance instruments.

**Rationale**

The change is necessary to correct terminology and establish when the forest owner’s six-month interval to submit replacement compliance instruments begins. Current regulatory language refers to CARB’s retirement, but no retirement associated with the early project termination described in section 95983(c)(4) has yet occurred. The proposed amendment corrects the language to refer to CARB’s notification to the forest owner.

**95983(c)(4)(C)**

**Purpose**

The proposed amendment clarifies the trigger for the six-month interval for the forest owner to submit replacement compliance instruments.

**Rationale**

The change is necessary to correct terminology and clearly establish when the forest owner's six-month interval to submit replacement compliance instruments begins. Current regulatory language refers to CARB's retirement, but no retirement associated with the early project termination described in section 95983(c)(4) has yet occurred. The proposed amendment corrects the language to refer to CARB's notification to the forest owner.

**<u>95983(d) [new]</u>**

**Purpose**

The current Regulation addresses intentional and unintentional reversals and how they are assessed. However, it does not address circumstances where a reversal can be attributed to both intentional and unintentional disturbances occurring in the same reporting period. The Proposed Amendments add a new subsection to provide direction to project operators for this scenario.

**Rationale**

The subsection requires projects to provide evidence to the verifier to distinguish the unintentional disturbances from the intentional. This is important when looking at potential reversals and determining how they will be classified and compensated. If both an unintentional (e.g. wildfire) and intentional (e.g. harvest) disturbance happens in the same reporting period and, when taken together, results in a reversal, the relative timing and extent of each disturbance need to be considered in determining how that reversal is compensated.

Additionally, unintentional reversals and intentional reversals have two different reporting and verification timelines. The proposed amendment provides clarity on which reporting and verification deadlines are appropriate for a project where both intentional and unintentional disturbances occur and result in a reversal. If the disturbance is greater than 50% unintentional, then the longer unintentional timelines apply.

**<u>95983(d)(1) [new]</u>**

**Purpose**

The proposed amendment provides direction on compensation when an unintentional reversal occurs after an intentional reversal during the same reporting period and in the same geographical boundary.

**Rationale**

The current Regulation addresses intentional and unintentional reversals and how they are compensated separately. It does not address circumstances where both types of reversals occur in the same reporting period and in the same area. This addition is necessary to define how a reversal is compensated if there is both an intentional and unintentional reversal.

Specifically, an unintentional reversal that occurs after the intentional reversal will be compensated by the forest buffer account if the estimate of the unintentional reversal is verified to be conservative. This is necessary to prevent more credits potentially being retired from the forest buffer account if a planned harvest is conducted after a natural disturbance that contributes to the unintentional reversal estimate.

**95983(d) [new 95983(e)]**

**Purpose**

The proposed amendment adds language regarding the disposition of a forest project after an intentional or unintentional reversal. This proposed amendment also adds a requirement to apply a confidence buffer when determining if a project will terminate.

**Rationale**

Currently, to determine if a forest project will terminate the current standing live carbon stocks are compared to the baseline standing live carbon stocks. When quantifying carbon stocks there is always some amount of error. For crediting, this error is recognized and accounted for by using a confidence deduction. The current regulation language does not include the use of a confidence deduction when comparing current standing live carbon stocks and baseline standing live carbon stocks. To ensure a conservative estimate is used to determine if the project will terminate the Proposed Amendments require the confidence deduction to be added to the current mean standing live carbon stocks.

**95983(g) [new]**

**Purpose**

This new section establishes the ability of CARB's Executive Officer to determine both the level and type of reversal when offset project developers fail to pass verification or otherwise not complete offset verification services within the prescribed timeframe.

**Rationale**

The amendment is necessary to establish how compliance obligations for forest owners would be determined if they do not receive a Positive Offset Verification Statement. CARB's Cap-and-Invest Program generally requires reporting entities and offset project developers to secure and pass independent, third-party verification. When verification is not passed, there must be some mechanism to ensure that the appropriate compliance obligation is proposed. In most cases, a failed offset verification means no offset credits will be issued. Reversals, though, require compensation, whether from forest owners for intentional reversals or from CARB's Forest Buffer Account for unintentional reversals. This section establishes CARB's authority to assign the reversal level and type (i.e., intentional, unintentional, or a combination thereof) and ensure compliance instruments are provided to compensate for the reversal.

This authority is invoked only when an Adverse Offset Verification is submitted or the verification timeline is missed. CARB's compliance offset program allows forest offset project developers to defer verification in many cases for up to six reporting periods. In some cases, a small reversal might be discovered during verification in one of the earlier reporting periods being jointly verified. To avoid invoking the Executive Officer's authority to assign emissions in these cases with deferred verification, the amendment provides up to eight years from the end of the last reporting period with an approved verification for a Positive Offset Verification Statement to be submitted for the reporting period with a reversal before the Executive Officer is empowered to assign the reversal level and type.

The requirements in this section 95983(h) are modelled upon the Executive Officer's authority in section 95131(c)(5) to assign emission levels in CARB's GHG Mandatory Reporting Program.

If an offset project is listed with an Offset Project Registry and if an Adverse Offset Verification Statement is submitted, the project and verification documentation would still be reviewed by the Offset Project Registry before CARB's review. If no Offset Verification Statement is submitted by the verification deadline, there would be no verification documentation for an Offset Project Registry to review, and CARB's Executive Officer would proceed towards CARB's determination of the reversal magnitude and type.

**95983(g)(1) [new]**

**Purpose**

The proposed amendment specifies the Executive Officer has authority to request information to inform their determination of the reversal magnitude and type.

**Rationale**

The proposed amendment is necessary to disclose to forest projects that the Executive Officer may request information from offset program participants to inform the assignment of reversal level and type. Information requests will be on a case-by-case basis depending on the specific facts of each instance.

**95983(g)(1)(A) [new]**

**Purpose**

The proposed amendment requires a verification body to provide information about the reversal which it has acquired while providing offset verification services.

**Rationale**

The amendment is necessary to allow the Executive Officer to gather information from an accredited, independent, third-party verification body which has evaluated data for the reversal. The amendment provides 15 days for the verification body to respond. Recognizing the additional complexity which may exist with a forest reversal, the offset amendment allows for the verification body to have at least two weeks to respond. This amendment specifies the verification body shall provide its most recent draft of a detailed verification report which it was preparing as part of the verification.

**95983(g)(1)(B) [new]**

**Purpose**

The proposed amendment requires an Offset Project Operator or Authorized Project Designee to provide information required to calculate the magnitude and determine the reversal type, as well as other documentation which the Executive Officer may request.

**Rationale**

The amendment is necessary to allow the Executive Officer to gather information from the offset project developers, specifically the Offset Project Operator and, if applicable, the Authorized Project Designee, both of whom are entities registered in the Cap-and-Invest Program. The amendment provides 15 days for the Offset Project Operator or, if applicable, Authorized Project Designee to respond with the requested information.

**95983(g)(1)(C) [new]**

**Purpose**

The proposed amendment requires offset project developers to make available personnel to assist the Executive Officer's reversal determination.

**Rationale**

This amendment is necessary to allow the Executive Officer access to personnel from the offset project developers to interpret and understand their data.

**95983(g)(2) [new]**

**Purpose**

The proposed amendment specifies the information which the Executive Officer is required to consider in assigning the reversal magnitude and type.

**Rationale**

The amendment is necessary to provide transparency for public stakeholders about the information which the Executive Officer will consider in determining the reversal magnitude and type. The amendment requires the Executive Officer to consider information from all prior reporting periods for a project, including the (final) Offset Project Data Report for each reporting period, as well as the Offset Verification Statement for each reporting period. In cases of deferred verification covering multiple reporting periods in which some reporting periods reach a positive verification opinion while others do not, the Executive Officer may also consider information from after the reversal.

**95983(g)(2)(A) [new]**

**Purpose**

The proposed amendment requires the Executive Officer to consider the actual carbon stocks at the end of the last verified reporting period.

**Rationale**

The amendment is necessary to ensure that the Executive Officer uses the appropriate start level of carbon stocks in assigning the reversal level. Typically, this will be the carbon stocks at the end of the last verified reporting period. Most verified reporting periods end in ARB offset credit issuance, but there are other scenarios. If the last verified reporting period ended in a reversal, then the Executive Officer would consider the carbon stocks at the end of the reporting period which experienced a reversal. It is also possible the reversal did not result in a positive verification, and so the reversal level was assigned. In that case, the Executive Officer shall use the actual carbon stocks implied by the assigned reversal level.

**95983(g)(2)(B) [new]**

**Purpose**

The amendment requires the Executive Officer to consider information from the offset project from an Offset Project Data Report or Offset Verification Statement from any other reporting periods for the offset project for which the reversal level and type are to be assigned.

**Rationale**

The amendment is necessary to ensure that the Executive Officer considers at a minimum all publicly available information about the offset project which is required to be included in Offset Project Data Reports and Offset Verification Statements.

**95983(g)(3) [new]**

**Purpose**

The proposed amendment prescribes methods which the Executive Officer may use to determine the reversal level and type.

**Rationale**

The amendment is necessary to provide public transparency for the methods the Executive Officer will use to determine the reversal level and type. The methods prescribed in this method assure that the assignment will not be arbitrary but rather based on the same methods that the offset project developers themselves would have used to conform with regulatory requirements.

**95983(g)(3)(A) [new]**

**Purpose**

The proposed amendment requires the Executive Officer to use the calculation methodologies in the applicable compliance offset protocol.

**Rationale**

The proposed amendment is necessary to ensure consistency across all reporting periods, whether GHG removal enhancements are being positively verified by CARB-accredited verification bodies or assigned by the Executive Officer. As future reporting periods for the offset project may again be verified, consistent calculation methodologies must be used across all reporting periods to assure the appropriate level of credit generation and compensation. The compliance offset protocols are referenced because that is where the calculation methodologies are found.

**95983(g)(3)(B) [new]**

**Purpose**

The proposed amendment requires the Executive Officer to use the regulatory definitions and descriptions of reversal.

**Rationale**

The proposed amendment is necessary to ensure the Executive Officer uses the regulatory definitions of “Reversal,” “Intentional Reversal,” and “Unintentional Reversal.” This is information required for assigning the reversal type. These definitions are not found in the current U.S. Forest protocols, so it is necessary to reference the regulation. The amendment assures that the Executive Officer will use methods to assign the reversal type consistent with how offset project developers would report reversals and verification bodies would verify reversals in any other reporting periods.

**95983(g)(3)(C) [new]**

**Purpose**

The proposed amendment requires the Executive Officer to consider any information about the offset project which has been reported to CARB as part of compliance offset program requirements.

**Rationale**

The proposed amendment is necessary to ensure the Executive Officer considers all information which has been reported for the offset project as part of Subarticle 13 of the Cap-and-Trade Regulation. Subarticle 13 provides the requirements of CARB’s compliance offset program.

**95983(g)(4) [new]**

**Purpose**

The proposed amendment requires the Executive Officer to use the best information available to assign the reversal level and type.

**Rationale**

The proposed amendment is necessary to describe how the Executive Officer pulls together all information to determine the assigned reversal level and type. The Executive Officer is required to use the best available information. Best available information includes but is not limited to the information for the last verified actual carbon stocks and other information reported in Offset Project Data Reports. Best available information includes also the calculation methods in the applicable compliance offset protocol, the regulation's reversal definitions, and all other information submitted as part of compliance offset program requirements for the project. The Executive Officer is allowed to consider other information, including the information it requested from the offset project developer, its verification body, and its offset project registry, but is not required to include all information received for its final determination if the information is not found to be among the best available information for the offset project and its reversed carbon stocks.

## Section 95984. Ownership and Transferability of ARB Offset Credits.

**95984(b)(2)**

### Purpose

The proposed amendment clarifies that all registered entities in the Program may voluntarily retire offset credits.

### Rationale

This change is necessary for clarity and to strengthen support for voluntary retirement of compliance instruments. The Program allows for a voluntarily associated entity (VAE) to voluntarily surrender compliance instruments to the retirement account. For example, a VAE may be interested in voluntarily contributing to achieving emissions reduction targets or in meeting its environmental, social, and governance goals by retiring compliance instruments. CARB supports these activities and encourages voluntary retirement of offset credits by any registered market participant.

Current section 95984(b) does not allow covered entities to voluntarily retire offset credits. This text has created a situation where covered entities that desire to voluntarily retire offset credits have needed to have VAE registrants retire offset credits on their behalf. CARB intends to keep the voluntary surrender process as simple as possible, and therefore proposes amendments to allow registered entities to retire offset credits directly.

## Section 95985. Invalidation of ARB Offset Credits.

**95985(b)(1)**

### Purpose

Throughout section 95985, there are references to the early action quantification methodology and to the section "Recognition of Early Action Offset Credits." Multiple references to the early action quantification methodology and to section 95990 on recognition of early action offset credits are deleted because they are no longer applicable.

### Rationale

The eight-year invalidation window for ARB offset credits issued for early action reporting periods has passed. The final ARB offset credits for early action reporting periods were issued on August 31, 2016, so the final eight-year invalidation periods for such credits ended on August 31, 2024. This amendment is necessary since the section 95990 on recognition of early action offset credits is deleted because it no longer applies.

**95985(b)(1)(A)2.**

**Purpose**

The proposed amendment clarifies the language about submittal of an Offset Verification Statement. The modification replaces the term “completed” with “approved.”

**Rationale**

The proposed amendment is necessary to clarify when offset verification services are considered complete. The existing regulatory language suggests that offset verification services can be completed by submitting an Offset Verification Statement. However, offset verification services are considered complete only upon CARB’s approval of the verification and, as appropriate, issuance of ARB offset credits.

**95985(b)(1)(A)3.**

**Purpose**

Proposed Amendments change the invalidation period start date from the end of the reporting period to the date ARB offset credits are issued.

**Rationale**

This section is amended to support the Program’s enforcement timeline for offset credit invalidation and to ensure that the invalidation period does not start before final CARB approval of project and verification documentation.

**95985(b)(1)(A)3.a. [deleted]**

**Purpose**

The proposed amendment removes the ARB offset credit invalidation time period start date from this subsection and moves it to section 95985(b)(1)(A)3. In the new section, the invalidation period start date changes from the reporting period end date to the date of ARB offset credit issuance.

**Rationale**

The proposed amendment is necessary for clarity. Since section 95985(b)(1)(A)3.b. is deleted due to referencing the early action program, section 95985(b)(1)(A)3.a. is moved to section 95985(b)(1)(A)3.

**95985(b)(1)(A)3.b. [deleted]**

**Purpose**

The proposed amendment removes the ARB offset credit invalidation time period start date for early action. Early action timelines are no longer applicable.

**Rationale**

The proposed amendment is necessary to remove regulatory text that is no longer applicable. The Regulation does not allow ARB offset credit issuance for early action reporting periods after August 31, 2016. All ARB offset credits issued on or before that date have now passed their 8-year (or 3-year) invalidation timeframe.

**95985(b)(1)(B)2.**

**Purpose**

The proposed amendment removes language about early action offset credits since those provisions are no longer applicable. The amendment also clarifies that CARB must approve an Offset Verification Statement to reduce the invalidation period to align with similar language in section 95977.1(b)(3)(S) and clarifies the language about what action completes offset verification services.

**Rationale**

The proposed amendment is necessary to remove language about ARB offset credits from early action projects. Removing this language is consistent with other changes throughout Subarticle 13 since early action is no longer applicable. The existing regulatory language states that offset verification services can be completed by submitting an Offset Verification Statement. However, as specified in section 95977.1(b)(3)(S), offset verification services are considered complete at CARB's approval of the verification and, as appropriate, issuance of ARB offset credits. The proposed amendment aligns with section 95977.2(b)(3)(S). The amendments also clarify that a reduced invalidation period requires not just the submission of a Positive or Qualified Positive Offset Verification Statement but that CARB has reviewed the verification documentation and finds the verification to be complete.

**95985(b)(1)(B)3.**

**Purpose**

Proposed Amendments change the invalidation period start date from the end of the reporting period to the date ARB offset credits are issued.

**Rationale**

The change is necessary to support the Program's enforcement timeline for offset credit invalidation and to ensure that the invalidation period does not start before final CARB approval of project and verification documentation.

**<u>95985(b)(1)(B)3.a. [deleted]</u>**

**Purpose**

The proposed amendment removes the start date for the invalidation time period for ARB offset credits from this subsection to 95985(b)(1)(B)3. In the new section the invalidation period start date changes from the reporting period end date to the ARB offset credit issuance date.

**Rationale**

The amendment is necessary for clarity. Section 95985(b)(1)(B)3.b. is deleted due to referencing the early action program which is no longer applicable. Section 95985(b)(1)(B)3.a., which contained text relevant for compliance projects, is moved to section 95985(b)(1)(B)3. and modified to state within three years of the date ARB offset credits are issued.

**<u>95985(b)(1)(B)3.b. [deleted]</u>**

**Purpose**

The proposed amendment removes the invalidation time period for ARB offset credits issued for early action.

**Rationale**

The amendment is necessary to remove regulatory text that is no longer applicable. The regulation did not allow ARB offset credits in recognition of early action to be issued after August 31, 2016, and the 8-year (or 3-year) invalidation periods for all ARB offset credits issued on or before that date has now passed.

**<u>95985(b)(1)(B)4.b.</u>**

**Purpose**

The proposed amendment clarifies the language about submittal of an Offset Verification Statement, replacing the term “completed” with “submitted.” This reflects the emphasis on the Offset Verification Statement submission and removes any suggestion that submitting an Offset Verification Statement completes offset verification services.

**Rationale**

The proposed amendment is necessary to clarify when offset verification services are considered complete. The existing regulatory language indicates that offset verification services might be completed by submitting an Offset Verification Statement. However, pursuant to section 95977.1(b)(3)(S), offset verification services are considered complete at CARB’s approval of the verification and, as appropriate, issuance of ARB offset credits.

**<u>95985(b)(1)(B)4.b.iv.</u>**

**Purpose**

This proposed amendment clarifies when the invalidation period of ARB offset credits is reduced. It clarifies that the invalidation period is reduced after CARB approval of the second verification.

**Rationale**

The change is necessary to clarify that CARB must decide if the invalidation timeframe will be reduced. A reduced invalidation period requires not only the submission of a Positive or Qualified Positive Offset Verification Statement but also a determination by CARB to approve the Offset Verification Statement. The amendment better aligns the regulatory text in this subsection with the text in section 95985(b)(1)(A)2.d.

**<u>95985(b)(2) [new]</u>**

**Purpose**

This proposed amendment defines "different verification body" or "new verification body" for the purposes of section 95985(b) to mean a verification team that is both affiliated with a different company and comprises completely different verification team members. This change clarifies whether a person may be a verification team member for both the first verification which resulted in ARB offset credit issuance and a subsequent verification which reduces the invalidation period for the same ARB offset credits.

**Rationale**

The change is necessary to clarify that all offset verification team members must differ between the two verifications. Current regulatory language requires only the verification body to differ. This change prevents an individual who, while working for a given verification body, performed an earlier verification for a project that resulted in offset credit issuance from performing the second verification, while working for a different verification body, that would reduce the invalidation period for the credits previously issued to that project. This change increases the independence between the first and second verifications.

**<u>95985(g)(2)</u>**

**Purpose**

This proposed amendment clarifies how CARB informs parties about invalidated offset credits by removing reference to the serial numbers of offset credits.

**Rationale**

The change is necessary to maintain CARB's security policy that serial number of compliance instruments, including invalidation ARB offset credits, are to be known only by Program administrators with tracking system access. The change removes any reference to providing serial number information to outside parties.

**<u>95985(h)(2)(C)</u>**

**Purpose**

This proposed amendment clarifies how CARB informs parties about invalidated offset credits by removing reference to the serial numbers of offset credits.

**Rationale**

The change is necessary to maintain CARB's security policy that serial number of compliance instruments, including invalidation ARB offset credits, are to be known only by Program administrators with tracking system access. The change removes any reference to providing serial number information to outside parties.

**95985(i)(1)(E)**

**Purpose**

This proposed amendment clarifies how CARB informs parties about invalidated offset credits by removing reference to the serial numbers of offset credits.

**Rationale**

The change is necessary to maintain CARB's security policy that serial number of compliance instruments, including invalidation ARB offset credits, are to be known only by Program administrators with tracking system access. The change removes any reference to providing serial number information to outside parties.

**95985(i)(2)(C)**

**Purpose**

This proposed amendment clarifies how CARB informs parties about invalidated offset credits by removing reference to the serial numbers of offset credits.

**Rationale**

The change is necessary to maintain CARB's security policy that serial number of compliance instruments, including invalidation ARB offset credits, are to be known only by Program administrators with tracking system access. The change removes any reference to providing serial number information to outside parties.

## Section 95986. Executive Officer Approval Requirements for Offset Project Registries.

**95986(k)(3)**

**Purpose**

The proposed amendment updates the reference from 95977(d) to 95977(e) to maintain accurate references in the Regulation.

**Rationale**

This modification is necessary to maintain accurate references within the regulation. With the insertion of new section 95977(d), the text which was previously referenced in section 95977(d) now appears in section 95977(e).

## Section 95987. Offset Project Registry Requirements.

**95987(b)(2)**

### Purpose

The amendment specifies that an Offset Project Registry now makes available the same offset project documentation anytime it approves a verification instead of just the times it issues offset credits.

### Rationale

This change is necessary to provide transparency and consistency in offset project implementation. The current Regulation does not specify the time when specified offset project documentation becomes publicly available for offset verification services which do not result in offset credit issuance. In past practice, sometimes project documentation became available when a registry completed its review and sometimes not until after CARB completed its review. The amended Regulation provides that Offset Project Registries will now make the specified offset project documentation available once it completes its review of offset verification services.

**95987(b)(3)(C)**

### Purpose

The proposed amendment updates the reference from 95977(d) to 95977(e) to maintain accurate references in the Regulation.

### Rationale

This modification is necessary to maintain accurate references within the Regulation. With the insertion of new section 95977(d), the text which was previously referenced in section 95977(d) now appears in section 95977(e).

**95987(b)(3)(E)1.**

### Purpose

This section is being modified to remove reference to “CITSS” and replace it with “tracking system,” because CITSS will eventually be replaced with a new compliance instrument registry.

### Rationale

This change is necessary to remove reference to “Compliance Instrument Tracking System Service” because CITSS will not be used in the long-term. In the future, the state may use a different system to administer the Program.

**<u>95987(b)(4)(A)</u>**

**Purpose**

This section is being modified to remove reference to “CITSS” and replace it with “tracking system,” because CITSS will eventually be replaced with a new compliance instrument registry.

**Rationale**

This change is necessary to remove reference to “Compliance Instrument Tracking System Service” because CITSS will not be used in the long-term. In the future, the state may use a different system to administer the Program.

**<u>95987(d)(3)</u>**

**Purpose**

The proposed amendment removes the requirement for experienced Offset Project Registries to provide monthly guidance reports.

**Rationale**

This change is necessary to reduce the administrative burden upon Offset Project Registry and CARB staff in preparing and receiving monthly reports. These reports may be necessary for new and less experienced Offset Project Registries to make sure they are appropriately distributing guidance. For experienced Offset Project Registries, the ongoing monthly requirement is an undue burden. The amendment removes the requirement to provide CARB a monthly guidance report but requires Offset Project Registries to provide a guidance report to CARB within 10 calendar days from CARB’s request.

**<u>95987(f)</u>**

**Purpose**

The proposed amendment clarifies that Offset Project Registries are required to review all verification reports which are submitted to them, including those which would not result in registry offset credit issuance. The amendment also clarifies that Offset Project Registries may request additional documentation from offset project developers and verification bodies prior to approving a verification.

**Rationale**

This change is necessary to ensure that Offset Project Registries follow the same process for reviewing verification reports which do not result in registry offset credit issuance as those that do. The change makes clear that Offset Project Registries have the authority to request additional documentation from Offset Project Operators and, if applicable, Authorized Project Designees and verification bodies. The amendments provide that the same process applies to Offset Project Registry review of offset verification services whether or not the verification would result in registry offset credit issuance.

**95987(f)(1)**

**Purpose**

The amendment updates specific references to maintain accurate references in the Regulation. With section 95976(d)(1) through (d)(6) being deleted, section 95976(d)(7) becomes section 95976(d)(1).

**Rationale**

These Proposed Amendments are necessary to maintain accurate references in the Regulation and conform with other Proposed Amendments.

**95987(f)(3) [new]**

**Purpose**

This new subsection specifies an additional item which Offset Project Registries are required to provide to CARB following their review of a verification.

**Rationale**

This change is necessary to ensure that CARB receives the detailed verification report and to inform its determination of whether to issue ARB offset credits.

**95987(l)**

**Purpose**

The proposed amendment expands the current requirement for when Offset Project Registries must provide copies of an Offset Project Data Report to CARB. The amendment also updates the reference to the reporting deadline.

**Rationale**

This change is necessary so that CARB receives all Offset Project Data Reports which are submitted by an applicable deadline. Current regulatory language refers only to Offset Project Data Reports which are submitted prior to the deadline for receiving offset credits. The proposed regulatory language extends the requirement to Offset Project Data Reports which missed the earlier four-month deadline for receiving offset credits but met the later twelve-month deadline necessary to maintain continuous reporting and avoid project termination. Requiring Offset Project Registries to provide all Offset Project Data Reports is necessary for CARB's oversight of the Compliance Offset Program and assuring that projects are meeting deadlines to remain in the program.

The reference to section 95976(d)(8) is changed to section 95976(d)(2) to retain accurate references as sections 95976(d)(1) through (d)(6) are being deleted.

## Section 95989. Direct Environmental Benefits in the State.

**95989(c)**

### Purpose

The proposed amendment changes when and how an application for direct environmental benefits in the State is submitted.

### Rationale

This new section is necessary to clarify when a project submits its direct environmental benefits application. Current regulatory language suggests the application is submitted to CARB with the first Offset Project Data Report. However, there was potential confusion since Offset Project Data Reports are submitted to an offset project registry, where the direct environmental benefits application is submitted to CARB.

The proposed change clarifies that the application is submitted to CARB prior to the Offset Project Operator or Authorized Project Designee submitting to CARB a request for issuance of ARB offset credits. The current language states that a DEBS application is to be submitted with the initial OPDR, which is generally only sent to the OPRs. CARB staff evaluate DEBS applications so submittal directly to CARB.

**95989(e) [new]**

### Purpose

The current Regulation establishes Direct Environmental Benefits to California for the project life. The proposed amendment will require verification of activity-based DEBS determination for projects outside of California.

### Rationale

This new section is necessary for projects with DEBS status based on planned activities. Projects must show those activities are being implemented as planned and are still providing benefits to the state of California. If the project can provide relevant documents to the verification body, then the DEBS status can continue. The DEBS status will be discontinued if the project is no longer providing benefits. The discontinuation of the status will apply to the vintage of the full verification and onward.

## Section 95990. Recognition of Early Action Offset Credits. [deleted]

### Purpose

Section 95990 is removed. This section describes invalidation procedures for Early Action projects and is deleted as it is no longer applicable.

### Rationale

This removal is necessary to align with changes to section 95985 that delete references to Early Action Offset Credits as the eight-year invalidation window for CARB offset credits issued for early action reporting periods has passed.

## Section 96021. Confidentiality.

**96021(b)**

### Purpose

Section 96021(b) is modified to clearly identify information submitted by an entity to the Executive Officer. Existing text “pursuant to this subarticle” is replaced by “pursuant to this article” to clearly specify that this provision applies to all the information submitted to the Executive Officer pursuant to Article 5.

### Rationale

The proposed change is needed to clarify the confidential requirements for all reports and information provided by an entity to CARB. Existing text “pursuant to this subarticle” may be interpreted as this provision only applying to the information submitted pursuant to subarticle 16. To avoid confusion, the existing text “pursuant to this subarticle” is replaced by “pursuant to this article” to ensure that entities understand that this provision applies to all the information submitted to the Executive Officer pursuant to Article 5.

## Appendix B. CITSS User Terms and Conditions.

### Purpose

This section is modified to give the Executive Officer the ability to re-verify Know-Your-Customer documents when a violation of the Registry User Terms and Conditions is suspected by CARB. These modifications also include asking Registry Users to always keep their contact information active. Registry Users will need to login to the Registry and update this information whenever it changes.

### Rationale

The proposed modification is necessary to give the Executive Officer the ability to re-verify Know-Your-Customer documents is necessary to enable the agency to contact Registry Users at any time and to take enforcement actions against Registry Users who violate or are suspected of violating the Cap-and-Trade Regulation.

## Appendix C. Quarterly Auction and Reserve Sale Dates.

### Purpose

Appendix C is amended to identify the date of quarterly auctions and Reserve sales from 2032 through 2045.

### Rationale

The changes are necessary to include the dates of the auctions and Reserve sales beyond 2031 through 2045, consistent with the extension of the Program through 2045 in AB 1207.

## Appendix D. CPP Glidepath Targets and Backstop Triggers from 2021 to 2031. [deleted]

### Purpose

Existing Appendix D is removed. The existing Appendix D provides the glidepath target and backstop triggers for the Federal Clean Power Plan Requirements, which is no longer applicable.

### Rationale

This removal is necessary to align with the removal of section 95859, which is deleted because it is not applicable given the 2019 repeal of the Federal Clean Power Plan (U.S. EPA 2024).

## Appendix D. Tracking and Auction Systems User Terms and Conditions. [new]

### Purpose

New Appendix D is added to incorporate user terms and conditions for the tracking and auction systems into the Regulation. The new Appendix D is an agreement between CARB and each registered user of the tracking or auction systems who has registered under the California Cap-and-Invest Program or who represents a California entity in the tracking system. The agreement sets the terms that users agree to follow in order to access and use the tracking and auction systems.

### Rationale

The addition of the new text to Appendix D is necessary to codify terms and conditions for the tracking and auction systems. Existing Appendix B includes user terms and conditions specific to the existing tracking system (CITSS) but does not include terms and conditions for the auction system. A new tracking system is being developed. Data in CITSS will be transferred to the new tracking system. Appendix D codifies user terms and conditions for the new tracking system and auction system during and after the transition.

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

CARB anticipates that the Proposed Amendments will produce the following benefits to California businesses and individuals:

- Reduced GHG emissions. The Cap-and-Invest Program is designed to help the State meet its statutory GHG emissions reduction targets in SB 32 and AB 1279 (40% below 1990 levels by 2030 and 85% below 1990 levels by 2045, respectively) by imparting an economy-wide carbon price signal that discourages the use of fossil fuels and incentivizes the use of low-carbon energy sources and production methods. GHG emissions reduction achieved through the Program contributes to California's efforts to combat climate change.
- Improved local air quality. By penalizing the use of fossil fuels, the Program is anticipated to reduce fuel combustion emissions from covered facilities,[31] which reduces emissions of criteria air pollutants in surrounding areas. Improved local air quality will lead to improved public health outcomes, especially in priority communities and communities of color that are disproportionately exposed to air pollution from large industrial facilities.
- A marginal increase in total GHG allowance auction revenues, with increases to GGRF funding available for legislative appropriation through 2035 and to utility revenues for ratepayer benefit programs, such as the California Climate Credit, through 2046.

In the following sections, staff describe the estimated benefits of the Proposed Amendments to businesses and individuals. Additional detail on the methods used to derive the estimated benefits is included in the SRIA (see Appendix C).

## A. Summary of Emissions Benefits

### 1. GHG Emissions

Staff expect the Proposed Amendments to reduce California's GHG emissions relative to the baseline by approximately 963 million metric tons in carbon dioxide equivalent ($MMTCO_2e$) from 2027 through 2046. Most of these GHG emission reductions are achieved through reduced fossil fuel combustion at covered facilities and are derived from sector-level emissions trajectories modeled under CARB's 2022 Scoping Plan Update (CARB 2022d). A small amount of the expected GHG benefits is expected to be achieved through additional auction

[31] Although the Cap-and-Invest Program imparts an economy-wide carbon price that extends to transportation fuels and residential/commercial energy use, staff analysis for the Proposed Amendments assigns GHG emissions benefits, criteria pollutant emissions benefits, and associated health benefits from decarbonization measures in those sectors to complementary measures such as the Low Carbon Fuel Standard. In reality, the Cap-and-Invest Program is expected to drive down emissions in all covered sectors. The GHG and health benefits in this analysis should be seen as conservative estimates.

proceeds for GGRF programs that reduce GHG emissions in sectors that are not covered by the Program or other CARB regulations.

### 2. Criteria Pollutant (NOx and $PM_{2.5}$) Emissions

Staff expect the Proposed Amendments to achieve approximately 305 thousand tons of reduced NOx emissions and 50 thousand tons of reduced $PM_{2.5}$ emissions relative to the baseline during 2027 through 2046. These criteria pollutant emissions reductions are expected to be achieved through reduced fossil fuel combustion at covered facilities. Criteria pollutant emissions reductions are estimated by using the 2022 Scoping Plan fuel forecasts and applicable emission factors to convert the expected decrease in fossil fuel use associated with GHG emissions reduction at covered facilities to equivalent tons of NOx and $PM_{2.5}$.

## B. GHG Reduction Benefit – Avoided Climate Damages (Social Cost of Carbon)

The benefit of GHG emissions reduction achieved by the Proposed Amendments can be estimated using the social cost of carbon (SC-CO2), which provides a dollar valuation of the damages caused by one metric ton of carbon pollution and represents the monetary benefit today of reducing carbon emissions in the future. The social cost of carbon is not the same as the cost of abatement. Rather, SC-CO2 is a comprehensive damages metric that includes the value of future climate change impacts, including changes in net agricultural productivity, energy use, human health, property damage from increased flood risk, as well as nonmarket damages, such as the services from natural ecosystems to society. However, modeling limitations restrain the ability of the SC-CO2 to capture all impacts of climate change. Despite recent improvements, it is likely that the SC-CO2 still underestimates the full benefits of emissions reductions.

In the analysis of the SC-CO2, CARB considered whether to utilize the 2021 Interagency Working Group (IWG) study (U.S. IA Working Group 2021) or the U.S. Environmental Protection Agency's (U.S. EPA) new estimates of the social cost of greenhouse gases (U.S. EPA 2023a). For the Proposed Amendments, CARB uses the U.S. EPA's 2023 estimates since its data includes scientific advancements not considered in the IWG study. These peer-reviewed estimates reflect recent advances in our understanding of climate change and its economic impacts and incorporate recommendations made by the National Academies of Science, Engineering, and Medicine. This approach is consistent with the approach presented in the U.S. EPA's final Regulatory Impact Analysis of the Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review published in December 2023 and reflects the best available science in the estimation of the socioeconomic impacts of greenhouse gas emissions (U.S. EPA 2023b).

This analysis also presents the estimates of the IWG SC-CO2 and the range of avoided SC-CO2 using the current IWG recommended values. Table 7 shows the range of SC-CO2 values used in the assessment.

**Table 7: Values for Avoided Climate Damages (SC-CO2 in 2024$ per metric ton of CO2)**

| Emissions Year | EPA Values | | | IWG Values | | |
|---|---|---|---|---|---|---|
| | 2.5% discount rate | 2% discount rate | 1.5% discount rate | 5% discount rate | 3% discount rate | 2.5% discount rate |
| 2025 | $156 | $254 | $431 | $22 | $72 | $107 |
| 2030 | $173 | $276 | $460 | $25 | $79 | $115 |
| 2035 | $189 | $297 | $489 | $28 | $87 | $123 |
| 2040 | $207 | $320 | $517 | $33 | $94 | $132 |
| 2045 | $227 | $344 | $547 | $36 | $101 | $140 |
| 2050 | $246 | $369 | $578 | $41 | $109 | $149 |

The range of avoided SC-CO2 during 2027-2046 is based on the sum of the annual GHG emissions reduction from the increased Cap-and-Invest Program stringency and the GHG emissions reduction from increased GGRF expenditures in non-regulated sectors. In Table 8, staff analysis calculated the avoided SC-CO2 values by applying the values in Table 7 to the emission reductions from the Proposed Amendments. Using the U.S. EPA values, these benefits range from $192 billion to $486 billion, depending on the chosen discount rate.

**Table 8: Avoided Climate Damages for the Proposed Amendments (SC-CO2 in billion 2024$)**

| Year | GHG Emissions Reduction (MMT) | EPA Values | | | IWG Values | | |
|---|---|---|---|---|---|---|---|
| | | 2.5% discount rate | 2% discount rate | 1.5% discount rate | 5% average | 3% average | 2.5% average |
| 2027 | 16 | $2.5 | $4.0 | $6.7 | $0.4 | $1.1 | $1.7 |
| 2030 | 34 | $5.9 | $9.4 | $15.7 | $0.9 | $2.7 | $3.9 |
| 2034 | 51 | $9.7 | $15.4 | $25.3 | $1.5 | $4.4 | $6.3 |
| 2038 | 59 | $11.9 | $18.4 | $30.0 | $1.9 | $5.4 | $7.6 |
| 2042 | 58 | $12.4 | $19.1 | $30.6 | $2.0 | $5.6 | $7.8 |
| 2046 | 51 | $11.7 | $17.8 | $28.2 | $1.9 | $5.2 | $7.2 |
| **Total** | **963** | **$192** | **$300** | **$486** | **$30** | **$87** | **$123** |

## C. Health Benefits

The Proposed Amendments would reduce NOx and $PM_{2.5}$ emissions, resulting in health benefits in California. CARB staff analyzed the value of health benefits associated with 12 health outcomes, most of which were added or updated through CARB's recent expansion to the scope of the health outcomes it assesses when evaluating regulatory programs (CARB 2022e): cardiopulmonary mortality, acute myocardial infarction, lung cancer incidence, asthma onset, asthma symptoms, hospitalizations for cardiovascular illness, hospitalizations for respiratory illness, hospitalizations for Alzheimer's disease, hospitalizations for Parkinson's disease, cardiovascular emergency department (ED) visits, respiratory ED visits, and work loss days.

These health outcomes have been identified by U.S. EPA as having a causal or likely causal relationship with exposure to $PM_{2.5}$ based on a substantial body of scientific evidence (U.S. EPA 2019, U.S. EPA 2021). U.S. EPA has determined that both long-term and short-term exposure to $PM_{2.5}$ plays a causal role in premature mortality, meaning that a substantial body of scientific evidence shows a relationship between $PM_{2.5}$ exposure and increased risk of death. This relationship persists when other risk factors, such as smoking rates, poverty, and other factors are taken into account. U.S. EPA has also determined a causal relationship between non-mortality cardiovascular effects (e.g., acute myocardial infarction) and short- and long-term exposure to $PM_{2.5}$, a likely causal relationship between non-mortality respiratory effects (including worsening asthma) and short- and long-term $PM_{2.5}$ exposure, and a likely causal relationship between non-mortality neurological effects and long-term $PM_{2.5}$ exposure.

CARB staff analysis evaluated health impacts associated with reduced exposure to $PM_{2.5}$ and NOx emissions from the Proposed Amendments. NOx includes nitrogen dioxide, a potent lung irritant, which can aggravate lung diseases, such as asthma, when inhaled (U.S. EPA 2016).

However, the most serious quantifiable impacts of NOx emissions occur through the conversion of NOx to fine ammonium nitrate aerosols through chemical processes in the atmosphere. $PM_{2.5}$ formed through such atmospheric transformations is termed secondary $PM_{2.5}$. Both directly emitted $PM_{2.5}$ and secondary $PM_{2.5}$ are associated with adverse health outcomes. As a result, reductions in $PM_{2.5}$ and NOx emissions are associated with reductions in these adverse health outcomes.

A range of health benefits are shown based on estimates with and without a relative statewide incidence factor that accounts for potential differences in population exposure.[32]

### 1. Incidence-Per-Ton Methodology

CARB uses the incidence-per-ton (IPT) methodology to quantify the health benefits of emissions reductions in cases where dispersion modeling results are not available.[33] CARB's IPT methodology is based on a methodology developed by U.S. EPA (Fann et al. 2009, Fann et al. 2012, Fann et al. 2018, CARB 2022e.

Under the IPT methodology, it is assumed that changes in emissions are approximately proportional to changes in health outcomes. IPT factors are derived by calculating the number of health outcomes associated with exposure to $PM_{2.5}$ for a baseline scenario using measured ambient concentrations and dividing by the emissions of $PM_{2.5}$ or a precursor. The calculation is performed separately for each air basin using the following equation:

$$IPT = \frac{number\ of\ health\ outcomes\ in\ air\ basin}{annual\ emissions\ in\ air\ basin}$$

Multiplying the emissions reductions from the Proposed Amendments in an air basin by the IPT factor yields an estimate of the reduction in health outcomes achieved by the Proposed Amendments. For future years, the number of outcomes is adjusted to account for population growth. CARB's current IPT factors are based on a 2014-2016 baseline scenario, which represents the most recent data available at the time the current IPT factors were computed. IPT factors are computed for primary $PM_{2.5}$ and secondary ammonium nitrate $PM_{2.5}$ formed in the atmosphere from precursors.

### 2. Updated Information on Health Impact Analysis

CARB has initiated an expanded health analysis to include additional health endpoints in order to provide a more comprehensive analysis of the benefits of the agency's plans and

[32] Relative health impacts of emissions vary by source as some sources may be closer to residential areas than others. Past CARB analyses have applied general potency or scaling factors by source category to estimate impacts of a source relative to on-road vehicle emissions from roadways that run through residential neighborhoods. These factors for Agricultural, Refineries, Industrial, and Electric Generation sectors are 0.38, 0.63, 0.43, and 0.23, respectively (Apte et al., 2019). Where applicable, the results presented in this document show a range in health impacts: the lower bound reflects the use of scaling factors, while the upper bound is calculated without scaling factors.

[33] A description of this method is included on *CARB's Methodology for Estimating the Health Effects of Air Pollution* webpage.

regulations. A description of the updated and new health outcomes was provided in CARB's Updated Health Endpoints Bulletin, released November 2022 (CARB 2022e). This expansion in scope was based on U.S. EPA's Technical Support Document (TSD) for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone Season NAAQS and is associated with U.S. EPA's Environmental Benefit Mapping and Analysis Program – Community Edition (BenMAP-CE) version 1.5.8 (U.S. EPA 2021).

To derive the IPT factor for each health endpoint, the number of health outcomes for each endpoint associated with exposure to $PM_{2.5}$ were calculated by inputting $PM_{2.5}$ concentrations from air monitoring data into U.S. EPA's BenMAP-CE version 1.5.8.4 (released April 16, 2021). The baseline incidence datasets embedded in the BenMAP-CE software were used; the incidence data for mortality, hospital admissions (including myocardial infarctions), and emergency department visits were provided at the county level, while the incidence data for work loss days was provided at the national rate in the software (U.S. EPA 2023c).

For most of the health endpoints, the U.S. EPA had identified one effect estimate derived from one study to be used in the respective health impact function. However, for myocardial infarction and respiratory ED visits, the U.S. EPA had identified multiple effect estimates; thus, U.S. EPA's health impact functions for these two endpoints were estimated using pooling methods. Pooling combines multiple risk estimates to determine a summary mean value estimate and associated confidence intervals (U.S. EPA 2021). For the myocardial infarction endpoint, the results were pooled from four different epidemiological studies using the random or fixed effects pooling and sum dependent pooling methods, as specified in the configuration file that U.S. EPA uses for PM quantification. For respiratory ED visits, the results were pooled using effect estimates derived from an analysis of four different U.S. locations in one study; this pooling also used the random or fixed effects method, as specified in U.S. EPA's configuration file.

### 3. Reduction in Adverse Health Impacts

CARB staff analysis estimates of the total number of health endpoint cases statewide that would be reduced from 2027 to 2046 from implementation of the Proposed Amendments are presented in Table 9, with bounds indicating the application of sector-level scaling factors.

**Table 9: Projected statewide health benefits for the Proposed Amendments***

| Health endpoint | Number of avoided cases from increased Program stringency |
|---|---|
| Cardiopulmonary mortality | 4,800 – 7,800 |
| Cardiovascular disease | 1,000 – 1,600 |
| Cardiovascular ED visits | 1,300 – 2,100 |
| Myocardial infarction | 550 - 875 |
| Respiratory disease | 150 - 250 |
| Respiratory ED visits | 2,900 – 4,700 |
| Lung cancer incidence | 370 - 600 |
| Asthma onset | 11,400 – 18,300 |
| Asthma symptoms | 947,200 – 1,503,000 |
| Work loss days | 697,800 – 1,122,400 |
| Alzheimer’s disease | 2,300 – 3,800 |
| Parkinson’s disease | 330 - 550 |

*The range represents health incidents based on implementation of the statewide scaling factors. Health incidents are rounded to reflect inherent uncertainty in the health impact analysis.

These reductions in adverse health cases are expected to be seen across all ages in the state. Children in particular are expected to benefit from the reduced cases of asthma onset and symptoms due to the Proposed Amendments. This may lead to better health outcomes when these children become adults since studies have shown that childhood asthma puts individuals at greater risk for respiratory disease and lower respiratory function in adulthood (Sears et al. 2003, McGeachie et al. 2016). Adults are also expected to benefit from the Proposed Amendments due to fewer lost work days and fewer incidences of nonfatal acute myocardial infarctions (heart attacks), lung cancer, and cardiopulmonary mortality. Seniors may benefit from reduced cases of hospitalizations not only for cardiovascular and respiratory diseases, but also for neurological conditions (Alzheimer’s and Parkinson’s diseases). And fewer ED visits for both cardiovascular and respiratory diseases across all ages in the population are expected.

Table 10 shows the air basin distribution of avoided health endpoints due to reduced emissions at covered facilities under the Proposed Amendments, relative to the Baseline Scenario during 2027-2046.

**Table 10: Avoided Mortality and Morbidity Incidents[34] during 2027-2046 under the Proposed Amendments due to reduced emissions at covered facilities[35] by Air Basin[36]**

| Air basin | Cardio-pulmonary Mortality | Hosp. for Cardio-vascular Disease | Cardio-vascular ED Visits | Acute Myocardial Infarction | Hosp. for Resp. Disease | Resp. ED Visits | Lung Cancer Incidence | Asthma Onset | Asthma Symptoms | Work Loss Days | Hosp. for Alz. Disease | Hosp. for Park. Disease |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBV | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 9 - 16 | 7 - 12 | 0 - 0 | 0 - 0 |
| LC | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 1 - 1 | 82 - 92 | 46 - 52 | 0 - 0 | 0 - 0 |
| LT | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 21 - 30 | 15 - 21 | 0 - 0 | 0 - 0 |
| MD | 150 - 260 | 24 - 42 | 42 - 74 | 18 - 31 | 3 - 6 | 85 - 150 | 9 - 17 | 315 - 555 | 26,485 - 46,265 | 17,510 – 30,615 | 50 - 85 | 7 - 13 |
| MC | 1 - 1 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 1 - 1 | 0 - 0 | 2 - 3 | 205 - 250 | 165 - 195 | 0 - 1 | 0 - 0 |
| NCC | 47 - 72 | 10 - 15 | 12 - 19 | 4 - 6 | 2 - 3 | 39 - 61 | 4 - 7 | 155 - 235 | 13,415 – 20,640 | 8,945 – 13,820 | 16 - 24 | 5 - 7 |
| NC | 6 - 11 | 1 - 2 | 1 - 2 | 0 - 1 | 0 - 0 | 5 - 8 | 0 - 1 | 13 - 22 | 1,085 – 1,775 | 885 – 1,495 | 2 - 3 | 1 - 1 |
| NP | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 1 - 1 | 42 - 67 | 33 - 53 | 0 - 0 | 0 - 0 |
| SV | 135 - 210 | 26 - 41 | 33 - 51 | 16 - 25 | 3 - 5 | 80 - 130 | 10 - 15 | 335 - 525 | 27,760 – 43,550 | 19,935 – 31,190 | 35 - 55 | 9 - 15 |
| SS | 20 - 28 | 4 - 5 | 6 - 9 | 2 - 3 | 1 - 1 | 18 - 26 | 2 - 2 | 56 - 81 | 4,785 – 6,825 | 3,255 – 4,630 | 6 - 9 | 1 - 2 |
| SD | 100 - 160 | 24 - 38 | 27 - 43 | 11 - 17 | 3 - 5 | 51 - 80 | 9 - 14 | 265 - 420 | 22,040 – 35,055 | 16,795 – 26,680 | 75 - 120 | 8 - 13 |
| SFB | 660 – 1,160 | 175 - 310 | 175 - 315 | 80 - 140 | 22 - 39 | 445 - 785 | 65 - 115 | 1,760 – 3,110 | 146,950 – 259,430 | 116,225 – 205,135 | 380 - 680 | 70 - 130 |
| SJV | 905 – 1,090 | 141 - 170 | 235 - 285 | 95 - 115 | 23 - 27 | 635 - 765 | 56 - 68 | 2,340 – 2,840 | 207,430 – 248,950 | 126,175 – 151,930 | 300 - 385 | 40 - 50 |
| SCC | 60 - 70 | 13 - 15 | 14 - 17 | 6 - 7 | 2 - 2 | 31 - 37 | 5 - 6 | 145 - 175 | 12,780 – 15,200 | 8,880 – 10,660 | 21 - 26 | 5 - 6 |
| SC | 2,770 – 4,730 | 570 - 975 | 730 – 1,245 | 310 - 525 | 88 - 150 | 1,535 – 2,615 | 203 - 347 | 5,983 – 10,284 | 484,085 – 824,840 | 378,945 – 645,905 | 1,380 – 2,415 | 185 - 320 |
| State-wide | 4,850 – 7,790 | 990 – 1,610 | 1,280 – 2,055 | 540 - 875 | 150 - 240 | 2,930 – 4,655 | 365 - 590 | 11,365 – 18,260 | 947,175 – 1,502,985 | 697,810 – 1,122,390 | 2,270 – 3,800 | 335 - 555 |

[34] Abbreviations used for mortality and morbidity incident categories are as follows: “Hosp.” is “Hospitalizations”; “ED” is “Emergency Department”; “Resp.” is “Respiratory”; “Alz.” is “Alzheimer’s”; “Park.” is “Parkinson’s.”

[35] The range represents the incidents with and without the statewide sector-level potency factors.

[36] List of air basin names in full: Great Basin Valleys, Lake County, Lake Tahoe, Mojave Desert, Mountain Counties, North Central Coast, North Coast, Northeast Plateau, Sacramento Valley, Salton Sea, San Diego County, San Francisco Bay, San Joaquin Valley, South Central Coast, South Coast.

## 4. Uncertainties Associated with the Mortality and Illness Analysis

Although the estimated health outcomes presented in this report are based on a well-established methodology, they are subject to uncertainties in translating air quality changes into health outcomes.

Other sources of uncertainty include the following:

- The relationship between changes in pollutant concentrations and changes in pollutant or precursor emissions is assumed to be proportional, although this is an approximation.
- Future population estimates are subject to increasing uncertainty as they are projected further into the future.
- Baseline incidence rates can experience year-to-year variation.

## 5. Potential Future Evaluation of Additional Health Benefits

CARB has initiated an expanded health analysis to include additional health outcomes in order to provide a more comprehensive review of the health impacts of $PM_{2.5}$ exposure for this regulation and upcoming regulations.[37] However, note that the current $PM_{2.5}$ mortality and morbidity evaluation conducted by CARB staff still focuses on select air pollutants and only captures a portion of the health benefits of the Proposed Amendments. Further updates to the methodology may be made in the future to quantify additional benefits of reducing air pollution, such as by including additional pollutants and health outcomes. For instance, the current analysis considers the impact of NOx on the formation of secondary $PM_{2.5}$, but only includes a portion of the secondary $PM_{2.5}$. In addition, NOx can also react with other compounds to form ozone, which can cause respiratory problems. Ozone impacts are not included in this analysis. Also, CARB will continue to evaluate approaches to provide both quantitative and qualitative information on health outcomes based on the best available science, such as through current literature reviews and CARB funded research contracts. More information on CARB's research contracts can be found on CARB's *online research page*.

## 6. Monetization of Health Benefits

The reductions in adverse health impacts described above can be assigned monetary values so the health benefits can be directly compared to other costs and savings associated with the Proposed Amendments. These values are derived from economic studies and are based on the expenses that an individual must bear for air pollution related health impacts, such as medical bills and lost work, or on willingness to pay metrics, which in addition to capturing the direct expenses of the health outcomes also capture the value that individuals place on pain and suffering, loss of satisfaction, and leisure time.

[37] *CARB's Methodology for Estimating the Health Effects of Air Pollution | California Air Resources Board*

The resulting valuation per incident of avoided public health outcomes is listed in Table 11. Additional detail on the methodology used to derive these valuations is included in the SRIA (see Appendix C).

**Table 11: Estimated Valuation per Incident for Avoided Health Outcomes (2024$)**

| Endpoint | Value Per Incident (2022$) | Valuation Methodology | Notes |
|---|---|---|---|
| Premature Mortality | $14,500,000 | WTP | Shown at 2024 income levels. The estimate will grow annually proportional to income growth using U.S. EPA's central estimate for income elasticity of 0.40, and income growth forecast from BenMAP-CE. |
| **Hospitalizations and ER Visits** | | | |
| Hospitalizations for Parkinson's Disease | $18,000 | COI | Direct cost of hospitalization incident. |
| Hospitalizations for Respiratory Disease | $14,000 | COI | Direct cost of hospitalization incident. |
| Hospitalizations for Alzheimer's Disease | $17,000 | COI | Direct cost of hospitalization incident. |
| Hospitalizations for Cardio-, Cerebro-, and Peripheral Vascular Disease | $21,500 | COI | Direct cost of hospitalization incident. |
| ED visits, All Cardiac Outcomes | $1,600 | COI | Direct cost of ED visit. |
| ED visits, respiratory | $1,200 | COI | Direct cost of ED visit. |
| **Health Endpoint Onset/Occurrence** | | | |
| Incidence, Asthma | $ 62,000 | COI | Present value of lifetime healthcare cost and productivity losses using a 3% discount rate. |
| Asthma Symptoms, Albuterol use | $300 | WTP for symptoms + COI for Albuterol use | Willingness to pay plus cost of albuterol. |
| Incidence, Lung Cancer | $35,000 | COI | Direct medical cost of lung cancer. Cost discounted to present value at 3%. |
| Acute Myocardial Infarction, Nonfatal | $108,500 | COI | Present value of 3 years medical cost and earnings lost over a 5-year period. Using a 3% discount rate. |
| Work Loss Days | $250 | COI | Based on county-level median daily wages. |

The resulting statewide valuation of health benefits during 2027-2046 is displayed in Table 12, which differentiates the valuation depending on the application of sector-level scaling factors. The statewide valuation of health benefits during 2027-2046 is estimated to range from $76.6 billion to $122.9 billion. Table 13 and Table 14 present the scaled and non-scaled estimates of avoided health incidences and the associated valuation. The monetized benefits from all COI-based endpoint valuations are included in the macroeconomic modeling.

**Table 12: Valuation of Statewide Health Benefits of the Proposed Amendments (million 2024$)**

| Year | Scaled Health Valuation | Non-Scaled Health Valuation |
|---|---|---|
| 2027 | $1,126 | $1,803 |
| 2030 | $2,881 | $4,584 |
| 2034 | $4,255 | $6,958 |
| 2038 | $4,577 | $7,562 |
| 2042 | $4,589 | $7,224 |
| 2046 | $3,602 | $5,632 |
| **Total** | **$76,570** | **$122,950** |

**Table 13: Total Estimated Avoided Incidences and Valuation of Health Outcomes by Year (scaled)**

| Year | Cardiopulmonary Mortality | Hospitalizations for Parkinsons Disease | Respiratory Hospitalization | Hospitalizations for Alzheimer's Disease | Hospitalizations for Cardiovascular Disease | Cardiovascular ED Visits | ED visits, respiratory | Asthma Onset | Asthma Symptoms | Lung Cancer Incidence | Acute Myocardial Infarction | Work Loss Days | Valuation (Million 2024$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 75 | 5 | 2 | 31 | 14 | 21 | 48 | 200 | 18,985 | 5 | 9 | 11,380 | $1,125 |
| 2030 | 190 | 12 | 5 | 84 | 37 | 52 | 120 | 475 | 41,990 | 14 | 21 | 28,190 | $2,880 |
| 2034 | 275 | 19 | 8 | 125 | 55 | 73 | 170 | 655 | 52,955 | 21 | 31 | 40,155 | $4,255 |
| 2038 | 290 | 20 | 9 | 140 | 60 | 76 | 175 | 670 | 54,605 | 22 | 32 | 41,530 | $4,575 |
| 2042 | 285 | 20 | 9 | 135 | 59 | 73 | 170 | 645 | 53,535 | 21 | 31 | 39,945 | $4,590 |
| 2046 | 220 | 16 | 7 | 110 | 48 | 56 | 125 | 470 | 38,715 | 17 | 24 | 30,050 | $3,600 |
| Total | **4,800** | **330** | **150** | **2,300** | **1,000** | **1,300** | **2,900** | **11,400** | **947,200** | **370** | **550** | **697,800** | **$76,570** |

**Table 14: Total Estimated Avoided Incidences and Valuation of Health Outcomes by Year (non-scaled)**

| Year | Cardiopulmonary Mortality | Hospitalizations for Parkinsons Disease | Respiratory Hospitalizations | Hospitalizations for Alzheimer's Disease | Hospitalizations for Cardiovascular Disease | Cardiovascular ED Visits | ED visits, respiratory | Asthma Onset | Asthma Symptoms | Lung Cancer Incidence | Acute Myocardial Infarction | Work Loss Days | Valuation (Million 2024$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 120 | 8 | 3 | 52 | 23 | 33 | 76 | 325 | 30,100 | 9 | 14 | 18,280 | $1,805 |
| 2030 | 300 | 20 | 9 | 140 | 59 | 82 | 185 | 760 | 66,015 | 23 | 34 | 44,945 | $4,585 |
| 2034 | 450 | 32 | 14 | 215 | 91 | 120 | 270 | 1,070 | 85,345 | 34 | 51 | 65,745 | $6,960 |
| 2038 | 480 | 35 | 15 | 240 | 100 | 125 | 285 | 1,110 | 89,045 | 36 | 54 | 68,675 | $7,560 |
| 2042 | 450 | 32 | 14 | 220 | 94 | 115 | 260 | 1,010 | 83,180 | 34 | 50 | 62,905 | $7,225 |
| 2046 | 340 | 26 | 11 | 175 | 75 | 87 | 195 | 740 | 60,385 | 26 | 38 | 47,015 | $5,630 |
| **Total** | **7,800** | **550** | **250** | **3,800** | **1,600** | **2,100** | **4,700** | **18,300** | **1,503,000** | **600** | **875** | **1,122,400** | **$122,950** |

## D. Benefits to Typical Businesses

The Cap-and-Invest Program covers a wide variety of California businesses that face different compliance obligations depending on the emissions intensity of their operations, the availability of abatement options, and eligibility for free allowance allocation. Most covered entities will see a net increase in Program costs associated with higher allowance prices under the Proposed Amendments, and some sectors may see a decrease in total allowance allocation resulting from the reduced overall annual allowance budgets through 2046. However, depending on the cost and feasibility of decarbonizing their operations, some individual facilities could see a net financial benefit from the Proposed Amendments through selling excess allowances on the secondary market. Some industrial sectors will also benefit from increased allowance allocation to incentivize low-carbon production methods, as described in Section VIII.A.9.

## E. Benefits to Small Businesses

Because of the annual emissions threshold for Program coverage, small businesses generally do not incur a direct compliance obligation under the Program. However, small businesses may see an increase in energy costs from the pass through of some Program costs in utility rates, but measures such as energy efficiency and fuel switching may partially offset those increased costs. Under the Proposed Amendments, this cost increase will also be partially offset by a projected increase in IOU electric utility allowance allocation auction revenues distributed through the Small Business California Climate Credit.[38] Some small businesses

[38] See the *California Public Utilities Commission webpage* for more information on the Small Business Climate Credit.

may also benefit from GGRF revenues that are invested in Programs aimed to deploy low-carbon technologies and reduce GHG emissions at a community level.

## F. Benefits to Individuals

### 1. GGRF and California Climate Credit

The Cap-and-Invest Program is designed to benefit all Californians through reducing GHG emissions that cause catastrophic climate change. While individuals do not participate directly in the Program, the financial costs of covered entities either paying Program compliance costs or decarbonizing their operations may be passed through to consumers through an increase in the costs of goods and energy. The Program is also designed to provide benefits to individuals as part of implementation of the Program:

- GGRF revenues accrued from the sale of state-owned allowances are appropriated by the Legislature in a variety of programs that directly benefit individuals and communities. In 2025, SB 840 set future appropriation rules for GGRF programs, including affordable housing and sustainable communities, community air monitoring, and high-speed rail. Staff analysis reflects these updated appropriations and shows that GGRF proceeds for these programs are expected to increase in the near-term before declining through 2045 in line with falling emissions and demand for allowances (Table 15). Staff estimate that the Proposed Amendments will increase GGRF revenues by \$3.5 billion through 2035,[39] with a cumulative net decrease of \$900M compared to the Baseline from 2027-2046.
- Revenues from allowances allocated to utilities are used to benefit ratepayers, and future utility revenues are expected to increase under the Proposed Amendments (Table 16). The majority of these revenues are used to fund the residential California Climate Credit, which is disbursed directly to households on investor-owned utility bills. Some utility allowance proceeds are also used to fund clean energy projects, such as electric vehicle chargers or community solar installations. Under AB 1207, allowances allocated to natural gas IOUs will be transitioned to electrical utilities (both investor-owned and publicly owned utilities, or POUs), and POUs will be required to use these additional allowances for residential ratepayer bill credits. AB 1207 also directs 5% of electric IOU proceeds during July 1, 2026 through July 1, 2031 for electric utility transmission projects to further enable renewable electricity development. Staff estimate that the Proposed Amendments will increase utility revenues by \$9.7 billion cumulatively from 2027-2046.

[39] Equivalent to approximately \$10 per person per year through 2035, assuming an average California population of around 40 million (DOF 2025a).

**Table 15: Expected Change in Total GGRF Revenues under the Proposed Amendments ($ billion)**

| Year | Baseline Revenue | Proposed Amendments Revenue | Change in Revenue |
|---|---|---|---|
| 2027 | $2.8 | $4.0 | $1.1 |
| 2028 | $2.7 | $3.5 | $0.8 |
| 2029 | $2.5 | $3.1 | $0.6 |
| 2030 | $2.4 | $2.8 | $0.4 |
| 2031 | $2.3 | $2.6 | $0.3 |
| 2032 | $2.2 | $2.4 | $0.2 |
| 2033 | $2.1 | $2.2 | $0.1 |
| 2034 | $2.1 | $2.1 | $0.0 |
| 2035 | $2.0 | $1.9 | -$0.1 |
| 2036 | $1.9 | $1.8 | -$0.1 |
| 2037 | $1.8 | $1.6 | -$0.2 |
| 2038 | $1.7 | $1.5 | -$0.2 |
| 2039 | $1.7 | $1.4 | -$0.3 |
| 2040 | $1.6 | $1.2 | -$0.3 |
| 2041 | $1.5 | $1.1 | -$0.4 |
| 2042 | $1.4 | $1.0 | -$0.5 |
| 2043 | $1.3 | $0.8 | -$0.5 |
| 2044 | $1.3 | $0.7 | -$0.6 |
| 2045 | $1.2 | $0.5 | -$0.7 |
| 2046 | $1.2 | $0.5 | -$0.7 |
| **Total** | **$37.7** | **$36.8** | **-$0.9** |

**Table 16: Expected Change in Utility Allowance Revenues for Ratepayer Benefit under the Proposed Amendments ($ billion)**

| Year | Baseline Revenue | Proposed Amendments Revenue | Change in Revenue |
|---|---|---|---|
| 2027 | $3.6 | $4.0 | $0.4 |
| 2028 | $3.5 | $4.1 | $0.6 |
| 2029 | $3.5 | $4.2 | $0.7 |
| 2030 | $3.4 | $4.4 | $1.0 |
| 2031 | $2.7 | $4.8 | $2.0 |
| 2032 | $2.6 | $4.3 | $1.7 |
| 2033 | $2.5 | $4.2 | $1.7 |
| 2034 | $2.5 | $3.9 | $1.4 |
| 2035 | $2.4 | $3.5 | $1.2 |
| 2036 | $2.3 | $3.5 | $1.2 |
| 2037 | $2.2 | $2.5 | $0.3 |
| 2038 | $2.1 | $2.2 | $0.2 |
| 2039 | $2.0 | $2.0 | $0.1 |
| 2040 | $1.9 | $1.8 | -$0.1 |
| 2041 | $1.8 | $1.6 | -$0.2 |
| 2042 | $1.7 | $1.4 | -$0.3 |
| 2043 | $1.6 | $1.2 | -$0.4 |
| 2044 | $1.5 | $1.0 | -$0.5 |
| 2045 | $1.4 | $0.8 | -$0.6 |
| 2046 | $1.4 | $0.8 | -$0.6 |
| **Total** | **$46.5** | **$56.3** | **$9.7** |

From an emissions perspective, the economic benefit to individuals from reduced GHG and criteria pollutants emissions in sectors attributed to the Program is estimated per the methodologies below.

## 2. Other Benefits

Additional benefits to individuals from the Proposed Amendments may include the following:

- California's path to reduce GHG emissions will provide new jobs and economic opportunities in clean-energy industries. As outlined in the 2022 Scoping Plan Update, the economy will still grow to $5.1 trillion, with 4 million additional jobs, and health savings in 2045 would be approximately $200 billion (CARB 2022a). The Cap-and-Invest Program is the most far-reaching policy in the portfolio of policies to achieve the statutory GHG emissions reduction targets.
- A well-designed Cap-and-Invest Program that continues to reduce GHG emissions with a growing the economy signals the viability of the Program and supports other jurisdictions in pursuing similar policies. CARB's policy leadership may have profound effects on the global effort to combat climate change, which in turn benefits California by

further reducing the risk of prolonged drought, heat waves, wildfires, and other extreme weather-related events.

# V. Air Quality

This section summarizes staff analysis of the expected GHG and criteria air pollutant benefits of the Proposed Amendments.

## A. Baseline Assumptions and Accounting Methodology

The Baseline for this analysis assumes status-quo Cap-and-Invest Program implementation, which reflects the existing Program allowance budgets through 2045 corresponding to a 40% reduction in State GHG emissions relative to 1990 levels by 2030, without allowance budget adjustments to reflect technical updates to the GHG Emission Inventory. The Baseline also accounts for complementary policies[40] assumed to contribute to the State's GHG emissions reduction targets for 2030 and 2045, as reflected in emissions modeling conducted for the 2022 Scoping Plan Update. Although the Program imparts an economy-wide carbon price that extends to transportation fuels and residential/commercial energy use, staff analysis assumes the GHG emissions benefits, the criteria pollutant emissions benefits, and the associated health benefits from those sectors are achieved by complementary policies. Staff analysis used Appendix C of the 2022 Scoping Plan Update to determine which decarbonization measures and sectors are attributed to the Proposed Amendments to the Cap-and-Invest Program.[41] Staff analysis assumes the amended Program allowance budgets will drive GHG emissions reduction from the industrial sector, from electricity generation, and from lowering the carbon intensity of fuel use in buildings (building electrification is attributed to complementary policies). As such, the analysis included in this report represents conservative air quality estimates.

The 2030 GHG emissions reduction scenario used in this analysis aligns with CARB's 2022 Scoping Plan Update and reflects updates to the GHG inventory. Staff analysis incorporates this GHG emissions modeling to calculate the corresponding emissions covered by the Program and the GHG emissions benefits of the Proposed Amendments (CARB 2022a, CARB 2022f, CARB 2022g). The Scoping Plan Scenario presents modeling results for GHG emissions and energy demand by sector and by fuel type. To calculate projected future emissions for the Baseline and the alternatives, staff analysis either added or subtracted emissions relative to the Proposed Amendments to correspond to the scenario allowance

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[40] Examples of these complementary policies are the Low Carbon Fuel Standard (LCFS), incentives for increased deployment of light-, medium-, and heavy-duty ZEVs, and the State Implementation Plan for federal Clean Air Act compliance.

[41] Decarbonization measures are identified in Appendix C of the 2022 Scoping Plan Update (CARB 2022f), and specific actions to achieve those measures are described in Table 2-1 of the 2022 Scoping Plan Update (CARB 2022a). The resulting GHG emissions associated with these actions for the Scoping Plan Scenario form the basis for the GHG emissions associated with the Proposed Amendments. The measure "compensate for remaining emissions (carbon dioxide removal)" is necessary to achieve carbon neutrality but does not contribute to achieving the SB 32 or AB 1279 GHG emissions reduction targets and is not reflected in the Proposed Amendments.

budgets and then derived sector-level emissions trajectories that demonstrate the expected total GHG emissions reduction under the scenario needed to reach the scenario 2030 and 2045 targets. Emissions results associated with sectors and fuels attributed to other programs or regulations remain the same in the Baseline Scenario, the alternatives, and the Proposed Amendments.

## B. Total Emissions Benefits

The Proposed Amendments set more stringent future Program allowance budgets, as needed to support achieving both the statewide GHG emissions reduction target of 40% by 2030 and an 85% GHG emissions reduction target by 2045. The GHG emissions reductions from facilities covered by the Cap-and-Invest Program correspond with reduced combustion of fossil fuels, which produces local air quality improvements in communities near covered facilities.

The Proposed Amendments are also anticipated to increase the near-term proceeds from the auction of State-owned allowances that are placed in the GGRF. The resulting near-term increase in GGRF program expenditures will result in additional GHG emissions reduction from activities not otherwise covered by the Cap-and-Invest Program.

Table 17 presents the total GHG and criteria pollutant emissions benefits from increased Program stringency and additional GGRF investments expected under the Proposed Amendments, relative to the baseline during 2027-2046. Additional detail on methodological assumptions used to produce the estimated GHG and criteria pollutant benefits is included in the SRIA.

### 1. Greenhouse Gas Emissions Benefits of the Proposed Amendments

Table 18 presents the annual expected GHG emissions reduction under the Proposed Amendments during 2027-2046. The projected GHG emissions benefits of the Proposed Amendments are calculated as the difference in expected cumulative GHG emissions between the Baseline Scenario and Proposed Amendments. The Proposed Amendments are expected to reduce GHG emissions by approximately 953 $MMTCO_2e$ from 2027-2046 due to increased Program stringency, with an additional 10 $MMTCO_2e$ of GHG emissions reduction from increased GGRF program expenditures over project lifetimes. GHG benefits associated with GGRF programs are narrowly limited only to those GHG emissions reductions achieved in sectors that are not covered by the Program or other CARB regulations, to address any potential double-claiming of GHG emissions benefits in this analysis. This analysis assumes that future GGRF revenues will be appropriated in line with the requirements of SB 840.

### 2. Criteria Pollutant Emissions Benefits of Proposed Amendments

California’s Cap-and-Invest Program is designed to reduce statewide GHG emissions through a market mechanism that does not directly limit emissions for any specific facility or geography. However, by imparting an increased price on covered GHG emissions, staff analysis forecasts that the Proposed Amendments will result in local air quality improvements as facilities and operations in sectors covered by the Program invest in efficiency improvements or switch to cleaner technologies. For sectors assumed to be affected by the

Cap-and-Invest Program carbon price and not covered by other CARB programs (e.g., industrial manufacturing facilities, petroleum refineries, and agricultural operations), staff analysis assumes that any incremental decrease in facility-level GHG emissions between regulatory scenarios is attributable to a proportional decrease in on-site fuel combustion.

The staff analysis of criteria pollutant emission benefits draws from 2022 Scoping Plan Update modeling data to convert facility-level GHG emissions reduction to corresponding decreases in fuel combustion (CARB 2022d). It then applies applicable Scoping Plan emissions factors to convert the reduced fuel use to expected reductions in two key criteria pollutants, $PM_{2.5}$ and NOx (CARB 2022f). Criteria pollutant benefits are not included for GGRF program expenditures because SB 840 did not appropriate future proceeds to the limited subset of historic programs that have reported criteria pollutant benefits in sectors not covered by the Program or other CARB regulations.

The resulting annual criteria pollutant emissions benefits are presented in Table 18 and the geographic distribution of these benefits is presented in Table 19. Statewide criteria pollutant reductions are disaggregated by California air basin by associating fuel reductions with the known geographic distribution of Program covered facilities and agricultural production within the State.

**Table 17: Total GHG and Criteria Pollutant Emissions Benefits Under the Proposed Amendments, Relative to the Baseline During 2027-2046**

| Emissions Benefits Category | GHG Reduction (million MTCO2e) | NOx Reduction (thousand short tons) | $PM_{2.5}$ Reduction (thousand short tons) |
|---|---|---|---|
| Increased Program Stringency | 953 | 305 | 50 |
| Increased GGRF Expenditures in Select Non-Regulated Sectors | 10 | - | - |
| Total | 963 | 306 | 50 |

**Table 18: Annual GHG and Criteria Pollutant Emissions Benefits Under the Proposed Amendments, Relative to the Baseline During 2027-2046**

| Year | GHG Reduction (million MTCO2e) | NOx Reduction (short tons) | $PM_{2.5}$ Reduction (short tons) |
|---|---|---|---|
| 2027 | 16 | 6,770 | 765 |
| 2028 | 21 | 9,010 | 1,065 |
| 2029 | 28 | 11,345 | 1,475 |
| 2030 | 34 | 13,330 | 2,025 |
| 2031 | 44 | 16,695 | 2,680 |
| 2032 | 47 | 16,600 | 2,800 |
| 2033 | 49 | 16,460 | 2,910 |
| 2034 | 51 | 16,490 | 3,030 |
| 2035 | 54 | 16,565 | 3,165 |
| 2036 | 56 | 16,180 | 3,195 |
| 2037 | 58 | 16,070 | 3,200 |
| 2038 | 59 | 16,080 | 3,180 |
| 2039 | 59 | 16,535 | 3,155 |
| 2040 | 60 | 17,675 | 3,100 |
| 2041 | 59 | 18,040 | 2,915 |
| 2042 | 58 | 18,550 | 2,715 |
| 2043 | 55 | 19,145 | 2,490 |
| 2044 | 53 | 19,680 | 2,245 |
| 2045 | 51 | 11,985 | 1,945 |
| 2046 | 51 | 11,985 | 1,945 |
| **Total** | **963** | **305,195** | **50,005** |

**Table 19: Total Criteria Pollutant Benefits by Air Basin for the Proposed Scenarios, Relative to the Baseline Scenario for 2027-2046**

| Air Basin | Benefits from Increased Cap-and-Invest Program Stringency (reduction in short tons) | |
|---|---|---|
| | **NOx** | **$PM_{2.5}$** |
| Great Basin Valleys | 145 | 3 |
| Lake County | 215 | 4 |
| Lake Tahoe | 260 | 5 |
| Mojave Desert | 41,260 | 7,300 |
| Mountain Counties | 613 | 10 |
| North Central Coast | 15,585 | 1,570 |
| North Coast | 2,730 | 190 |
| Northeast Plateau | 1,570 | 30 |
| Sacramento Valley | 18,535 | 3,190 |
| Salton Sea | 9,425 | 533 |
| San Diego County | 7,525 | 1,335 |
| San Francisco Bay | 43,615 | 12,305 |
| San Joaquin Valley | 97,925 | 6,830 |
| South Central Coast | 12,000 | 750 |
| South Coast | 53,805 | 15,950 |
| **Total** | **305,195** | **50,005** |

# VI. Environmental Impact Analysis

CARB is the lead agency for the Proposed Amendments and has prepared an environmental impact analysis (EIA) pursuant to its certified regulatory program (title 17, CCR, sections 60000 through 60008) to comply with the requirements of the California Environmental Quality Act (CEQA). CARB's regulatory program, which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State's ambient air quality has been certified by the California Secretary for Natural Resources under Public Resources Code section 21080.5 of CEQA (title 14, CCR, section 15251(d)). Public Resources Code section 21080.5 allows public agencies with certified regulatory programs to prepare a "functionally equivalent" or substitute document in lieu of an environmental impact report or negative declaration, once the program has been certified by the Secretary for the Resources Agency as meeting the requirements of CEQA. CARB, as a lead agency, prepares a substitute environmental document (referred to as an "Environmental Impact Analysis" or "EIA") as part of the Staff Report to comply with CEQA (title 17, CCR, section 60005).

The Draft EIA for the Proposed Amendments is included in Appendix B. The Draft EIA provides a programmatic environmental analysis of an illustrative, reasonably foreseeable compliance scenario that could result from implementation of the Proposed Amendments.

For the purpose of determining whether the Proposed Amendments would have a potential adverse effect on the environment, CARB evaluated the potential physical changes to the environment resulting from reasonably foreseeable compliance responses.

Reasonably foreseeable compliance responses associated with the Proposed Amendments include the following responses, which could result in changes to the existing physical environment: reduced GHG emissions, reduced fuel use, increased use of low-carbon fuels and feedstocks, including biofuels and development of associated infrastructure; increased deployment of thermal energy storage and battery storage and manufacturing of storage systems and associated increases in mining and exports; increased recycling or refurbishment of batteries; reduced extraction, refinement, and distribution of oil and gas products; increased use of low-carbon products and expansion and potential new development of associated facility operations; upgrading and electrifying equipment and other efficiency improvements, the construction and operation of new manufacturing facilities to support zero-emission technologies; the construction and operation of new power plants, solar fields, wind turbines, and other electricity generation facilities to accommodate increased electrical demand associated with the deployment of zero-emission technologies; and changes to the extraction, transport, and treating of mine gas or ventilation air methane.

While many impacts associated with the compliance responses identified for the Proposed Amendments could be reduced to less-than-significant levels through conditions of approval applied and mitigation measures to project-specific development, the authority to apply that mitigation lies with land use agencies or other agencies approving the development projects, not with CARB. Consequently, if a potentially significant environmental effect cannot be feasibly mitigated with certainty, the EIA takes a conservative approach and identifies the impact as significant and unavoidable while disclosing the impact for CEQA compliance purposes. As such, reasonably foreseeable compliance responses associated with the Proposed Amendments could result in potentially significant and unavoidable environmental impacts. Table 20 summarizes the potential environmental impacts of the Proposed Amendments.

**Table 20: Summary of Potential Environmental Impacts**

| Impact Number | Resource Area Impact | Significance |
|---|---|---|
| 1-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts on Aesthetics | Potentially Significant and Unavoidable |
| 2-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts on Agriculture and Forestry Resources | Potentially Significant and Unavoidable |
| 3-1, 3-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts on Air Quality | Potentially Significant and Unavoidable |
| 4-1, 4-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Biological Resources | Potentially Significant and Unavoidable |
| 5-1 | Short-Term Construction-Related and Long-Term Operational-Related Effects to Cultural Resources | Potentially Significant and Unavoidable |
| 6-1, 6-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Energy Resources | Less than Significant |
| 7-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Geology and Soils | Potentially Significant and Unavoidable |
| 8-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Greenhouse Gas Emissions | Beneficial |
| 9-1, 9-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts Related to Hazards and Hazardous Materials | Potentially Significant and Unavoidable |
| 10-1, 10-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Hydrology and Water Quality | Potentially Significant and Unavoidable |

| Impact Number | Resource Area Impact | Significance |
|---|---|---|
| 11-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts on Land Use and Planning | Potentially Significant and Unavoidable |
| 12-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Mineral Resources | Less than Significant |
| 13-1, 13-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Noise | Potentially Significant and Unavoidable |
| 14-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Population and Housing | Less than Significant |
| 15-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Public Services | Less than Significant |
| 16-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Recreation | Less than Significant |
| 17-1, 17-2 | Short-Term Construction-Related and Long-Term Operational-Related Impacts to Transportation | Potentially Significant and Unavoidable |
| 18-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts on Tribal Cultural Resources | Potentially Significant and Unavoidable |
| 19-1 | Long-Term Operational-Related Impacts to Utilities and Service Systems | Potentially Significant and Unavoidable |
| 20-1 | Short-Term Construction-Related and Long-Term Operational-Related Impacts on Wildfire | Potentially Significant and Unavoidable |

Staff prepared a Notice of Preparation and made it available for review and comment for 30 days, per the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15082(b)). The comment period for the Notice of Preparation began on September 19, 2023, and ended on October 19, 2023. Written comments on the Draft EIA will be accepted during the 45-day comment period. The

Board will consider the Final EIA, including responses to comments received on the Draft EIA, before taking action to adopt the Proposed Amendments. If the Proposed Amendments are adopted, a Notice of Decision will be posted on CARB's website and filed with the Secretary of the Natural Resources Agency for public inspection (Cal. Code Regs., tit. 17, § 60004.2(d)).

# VII. Environmental Justice

State law defines environmental justice as the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Gov. Code, § 65040.12, subd. (e)(1)). Environmental justice includes, but is not limited to, all of the following:

- The availability of a healthy environment for all people;
- The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities.
- Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision making process.
- At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions (Gov. Code, § 65040.12, subd. (e)(2)).

The Board approved its Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into CARB's programs consistent with the directives of State law. These policies apply to all communities in California, but are intended to address the disproportionate environmental exposure burden borne by low-income communities and communities of color. Environmental justice is one of CARB's core values and fundamental to achieving its mission.

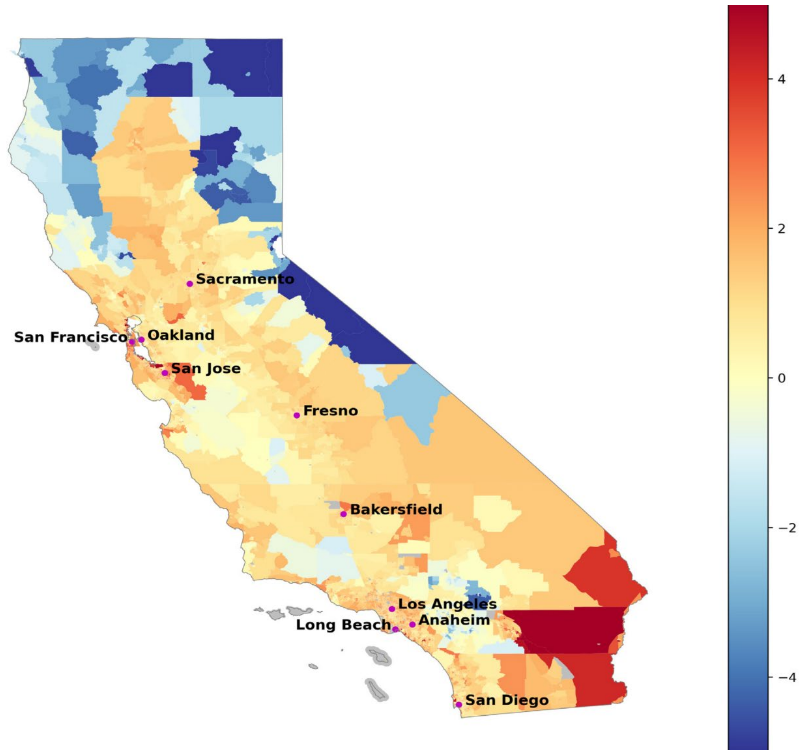
With the passage of AB 32, CARB was charged with developing a Scoping Plan that outlines how California will achieve its climate goals and to update it every five years. The Board was also required to convene an Environmental Justice Advisory Committee (EJAC) to advise the Board during the development and subsequent updates of the Scoping Plan, and any other pertinent matter in implementing AB 32. The EJAC consists of representatives of communities in the State with significant exposure to air pollution, including disadvantaged communities with minority or low-income populations. Four iterations of the Committee have been convened. The first EJAC advised on the initial 2008 Scoping Plan, the second was convened in March 2013 to advise the Board on the 2013 Scoping Plan Update, the third in 2015 to advise on the 2030 Target Scoping Plan Update, and the fourth in 2021 to advise on the 2022 Scoping Plan Update. More than five dozen of the EJAC's recommendations were incorporated into the 2022 Scoping Plan Update.

In September 2022, Governor Newsom issued Executive Order N-16-22, which directs California agencies and departments developing or updating strategic plans from 2023 to 2026 to reflect the use of data analysis and inclusive practices to more effectively advance equity and respond to identified disparities with changes to the organization's mission, vision, goals, data tools, policies, programs, operations, community engagement, tribal consultation policies and practices, and other actions as necessary to serve all Californians. The Order also directs departments to gather input from disadvantaged and underserved communities as part of this process.

## A. Cap-and-Invest and Equity

As an economy-wide program, the Cap-and-Invest Program may impart cost impacts on individuals and businesses by incorporating a carbon price into the price of energy and goods upstream. The Proposed Amendments aim to meet the urgency of the climate crisis and accelerate California's transition to a carbon-neutral economy, but in doing so must ensure that the costs of this transition do not fall disproportionately on vulnerable and overburdened populations. Staff recognize that the financial impact of increasing energy prices is felt more acutely by low-income households that spend a greater percentage of their income on energy costs. In addition, due to persisting health and opportunity gaps, not all communities are equally resilient in the face of climate impacts. Staff further recognize that the harms of climate change will likely fall disproportionately on vulnerable populations that already live in areas of the State more prone to extreme weather and lack the financial means to adapt. Figure 8 shows the Climate Vulnerability Metric (CVM), which is a tool focused on the community-level impacts of a warming climate on human welfare, at the census tract level under a moderate emissions scenario (CARB 2022h). The CVM shows that climate change will have highly unequal impacts across California.

**Figure 8: Combined impacts of climate change per the Climate Vulnerability Metric (CVM) in 2050 under a moderate emissions scenario; damages as share of 2019 tract income (%)**




*The map shows combined impacts of climate change in 2050 under a moderate emissions scenario, reported as a share of 2019 census tract income. For example, a CVM value of 3 implies that by 2050, a census tract is projected to experience human welfare impacts of climate change that amount to 3% of annual income. The higher the CVM for a given census tract, the more damaging the projected impacts of climate change on human welfare. Census tracts with high CVMs are represented by positive percentages in orange and red. A lower CVM is associated with lower projected impacts of climate change, shown in yellow, while a negative CVM value represents a projected beneficial impact of climate change (e.g., through reductions in deaths caused by extremely cold winter weather). Negative CMVs are represented by negative percentages in blue.*

As discussed in Chapter I of this staff report, the Program includes mechanisms to help alleviate cost impacts, including:

- Directing proceeds from the sale of state-owned allowances to the Greenhouse Gas Reduction Fund (GGRF), which are then spent on a variety of programs and projects, including weatherization of low-income housing, expanding clean public transit options, providing community air protection incentives, providing rebates for electric vehicles, and preserving and restoring public lands, with an emphasis on benefiting priority populations; and[42]
- The California Climate Credit, a flat annual or biennial credit that minimizes the impact to Californians from energy rate increases related to the implementation of the Cap-and-Invest Program. [43]

In addition to these benefits, the suite of Proposed Amendments, led by the more stringent allowance budgets, will further incent reductions in the combustion of fossil fuels at covered stationary sources, many of which are located in low-income communities that also face the highest levels of air pollution in the State from both mobile and stationary sources (see the SRIA in Appendix C). Thus, while the Program is designed to reduce statewide greenhouse

[42] As of November 2023, over 76% of funding implemented has benefited priority populations. See *California Climate Investments* for more information.

[43] See *California Climate Credit | California Public Utilities Commission*

gas emissions, the greatest co-benefits of decreased air pollution emissions owing to facility-level abatement measures are expected to accrue to the communities currently most impacted by air pollution (OEHHA 2022).

Historic disparities in air pollution burden in certain disadvantaged communities existed for decades before the implementation of Cap-and-Invest and are not the result of implementation of Cap-and-Invest or other CARB programs. Most GHG-emitting stationary facilities covered by the Program have been located in or adjacent to environmental justice communities (OEHHA 2022) since well before the Program was implemented in 2012. Despite ongoing concern, there is no evidence that the Cap-and-Invest Program has exacerbated local air pollution in environmental justice communities. A breadth of recent independent studies indicate that since 2013, disadvantaged communities have experienced cumulative reductions in local air pollution emissions from covered stationary sources (Pastor et al. 2022, Sheriff 2024), with many studies finding that cumulative reductions in pollution emissions have been greater in disadvantaged communities than in other communities (Burtraw and Roy 2023, Hernandez-Cortes and Meng 2022, OEHHA 2022).[44] For example, a 2022 report by the Office of Environmental Health and Hazard Assessment found that through 2017 the greatest beneficiaries of reduced local air pollution emissions from facilities subject to the Cap-and-Invest Program have been disadvantaged communities and communities of color in California (OEHHA 2022). Despite reductions in local air pollution, a wide gap in air quality still exists between disadvantaged communities and other communities. As described below, CARB is committed to addressing local air pollutants harming California's overburdened communities through targeted regulations.

## B. CARB and Improving Air Quality

Reductions in harmful local air pollutants are primarily achieved by CARB and local air districts through targeted regulations. Generally, regulatory authority over local air pollution from specific sectors and sources is split among CARB and the local air districts. Local air districts oversee local air pollutant regulations and permitting for stationary facilities within their borders, and CARB regulates local air pollution from statewide mobile sources, such as cars and trucks.

The passage of AB 617 in 2017 recognized the need for the State to continue to identify and effectively address concerns related to local air quality impacts, especially in the State's most vulnerable communities, and to provide more direct tools to assist the State and air districts in improving air quality. Specifically, AB 617 provides direction to strengthen air quality monitoring and reduce air pollution in communities affected by a high cumulative burden of exposure to pollution. CARB has established the Community Air Protection Program and is taking comprehensive action with air districts, communities, and other interested parties to achieve AB 617 requirements.[45] In addition, AB 617 requires CARB to develop a statewide strategy to reduce criteria pollutants and toxic air contaminants (TACs) in communities affected by high cumulative exposure burdens through approved community emissions reduction

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[44] See *FAQ Cap-and-Trade Program | California Air Resources Board*

[45] See the *Community Air Protection Program webpage* for more information on AB 617 implementation.

programs developed by local air districts, in partnership with residents in the affected communities. AB 617 did not alter the longstanding local air district permitting authority for stationary sources. However, the bill required CARB to establish a uniform system of annual reporting of criteria pollutants and TACs for the existing statewide air monitoring network, and to expedite implementation of best available retrofit control technology in nonattainment areas. The Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants (CTR) to implement statewide annual reporting of criteria air pollutant and toxic air contaminant emissions data from facilities became effective January 1, 2020, with amendments effective January 1, 2022.[46]

However, CARB has recognized for decades that often the greatest health risks in disadvantaged and overburdened communities are from toxic diesel exhaust generated by truck traffic and goods transport, especially at ports. CARB has taken decisive action to address this dominant source of local air pollution with regulations that target the major sources of diesel exhaust, namely, truck traffic and cargo-related activities, and will continue to ensure its programs address these needs and support adoption of zero emissions vehicles.

CARB's targeting of heavy-duty transport and goods movement sector has dramatically reduced toxic diesel exhaust in disadvantaged communities since 2000, although persistent disparities remain (OEHHA 2022). CARB has initiated development of the 2025 Mobile Source Strategy to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's air quality and climate targets.[47] Mobile sources and the fossil fuels that power them contribute the majority of both emissions of diesel particulate matter and emissions of smog- and particulate forming- pollutants, such as oxides of nitrogen, and they are also the largest source of GHG emissions in California.

The Cap-and-Invest Program is one of California's primary tools for driving statewide GHG emissions reduction, and the Proposed Amendments are designed to help achieve the reductions needed to meet the targets in SB 32 and AB 1279 in a manner that is technologically feasible and cost-effective. If elements of California's suite of climate programs are no longer available, Cap-and-Invest is well positioned fill those gaps. Complementary CARB efforts, such as the AB 617 Community Air Protection Program and continued targeting of diesel exhaust from goods movement, help ensure that community-level air quality concerns are also addressed as the State progresses toward its ambitious climate targets.

# VIII. Standardized Regulatory Impact Assessment

This section summarizes the economic impact of the Proposed Amendments as presented in the Standardized Regulatory Impact Assessment (SRIA), which can be found in Appendix C, as well as on the Department of Finance website. CARB responses to comments received from the Department of Finance can also be found in Appendix C. By law, CARB staff are required to release the SRIA prior to the release and completion of a regulatory proposal. The SRIA represents a preliminary analysis that is based on a draft and incomplete regulatory proposal and is required to provide a conservative estimate of the costs that could potentially

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[46] See *Criteria Pollutant and Toxics Emissions Reporting (CTR) | California Air Resources Board*

[47] See *2025 Mobile Source Strategy | California Air Resources Board*

be incurred by a regulatory proposal. It is inherently uncertain because it involves conducting estimates and speculative projections around what *may* happen in the future. It also does not purport to forecast the cost of compliance for a regulated entity. It does allow for a comparison of different policy choices that describes relative outcomes for understanding trade-offs under those different scenarios. It is unlikely to capture absolute outcomes in the real world. The Program is designed to provide compliance flexibility where each regulated entity can make internal decisions for how to most cost-effectively comply with the Regulation. Through budget year 2025, CARB has provided over 12 billion dollars in allowance value to covered industrial sectors to support compliance. CARB submitted its SRIA to DOF on April 9, 2024. CARB subsequently held four additional public workshops and continued to refine its regulatory proposal, including changes directed by AB 1207. As such, the analysis in the SRIA does not fully reflect the proposal being released for public comment.

## A. Changes since the release of the Standardized Regulatory Impact Assessment

Several changes to the regulatory proposal have been made since the release of the SRIA. These changes are listed below and are reflected in the analysis and results presented in the following sections (Table 21 and Table 22). Though much of the difference in costs and benefits since the SRIA is attributable to updated data inputs and methodological assumptions, changes to the regulatory proposal such as easing near-term allowance budget reductions from 264 to 118 million allowances through 2030 support reduction in the market impacts of the Proposed Amendments and promote consumer affordability, as described below. The estimated cost of compliance with this regulation over its 20-year lifetime is $124 billion or averaging $6.2 billion annually. This cost is negligible relative to California's current annual $4 trillion economy, which is projected to grow to over $5 trillion by 2046 (CARB 2024f).

### 1. Timeframe of Analysis

The SRIA examined potential changes to the Cap-and-Invest Program during 2025-2046. After the release of the SRIA, given ongoing stakeholder engagement, legislative action, and the feasibility of rulemaking timelines, CARB staff determined that proposed allowance budget removals should begin with vintage 2027 allowances instead of vintage 2025 allowances. The Proposed Amendments include removal of the same cumulative total number of allowances as analyzed in the SRIA through 2046, but now the proposed allowance removals are spread across two fewer years. Other proposed regulatory changes now also begin for the 2027 allowance budget year.

### 2. Source of Allowance Removals

In the SRIA, staff examined Proposed Scenarios A, B, and C. Each of these scenarios removed 264 million allowances from Cap-and-Invest Program budgets, but differed by whether these allowances were removed from allowances otherwise available for auction and allocation (Proposed Scenario A), from the Allowance Price Containment Reserve (APCR) and Price Ceiling accounts (Proposed Scenario C), or from a combination of both (Proposed Scenario B). For the Proposed Amendments, staff propose to remove allowances solely from the auction and allocation accounts (akin to SRIA Proposed Scenario A), which preserves the allowances reserved for cost-containment and protects against price volatility and economic uncertainty.

### 3. Allowance Budget Trajectory

As detailed in the SRIA and in CARB's public pre-rulemaking workshops, staff considered removing 264 million allowances from Program budgets to reflect updates to the GHG Emissions Inventory and increased ambition beyond the 40% statewide GHG emissions reduction target for 2030 to be on track to achieve carbon neutrality by 2045. There are multiple potential paths to implementing this allowance budget reduction, and in determining the future allowance budgets reflected in the Proposed Amendments, staff had to consider a range of other Program considerations such as cost-effectiveness, consumer affordability, and mitigating impacts on low-income communities. In the SRIA, all 264 million allowances were removed from the 2025-2030 budget years, which resulted in a budget *increase* in 2031 before budgets declined linearly to meet the 2045 GHG emissions reduction target. CARB staff's presentation from the July 2024 public workshop (CARB 2024b) notes the potential negative impacts of this discontinuity on regulated entities and discussed other potential options that do not lead to an increase in the allowance budget from 2030 to 2031. The Proposed Amendments include an updated allowance budget that reflects the 2027 start year and in which 118 million allowances are removed through 2030, and annual budgets show a smooth year-over-year decline through 2045. This change eases near-term impacts and provides for a smooth transition to the post-2030 Program. Cumulatively through 2045, the Proposed Amendments contain the same number of total allowances as analyzed in the SRIA Proposed Scenarios.

### 4. Allowance Removals for Offset Use

AB 1207 directs CARB to remove allowances from annual budgets corresponding with compliance offset use. The Proposed Amendments and updated economic analysis reflect this new requirement. The resulting economic impact is minimal due to decreasing demand for allowances relative to supply as covered facilities reduce GHG emissions through 2045.

### 5. Emissions Reductions and Health Benefits

The SRIA estimated annual GHG and criteria pollutant emissions benefits for each regulatory scenario during 2025-2046. Criteria air pollutant reductions were then used to estimate the corresponding monetary value of improved public health outcomes. However, given the need to adjust allowance budgets such that allowance removals begin with the 2027 vintage year, staff now expect the GHG and criteria pollutant benefits of the Proposed Amendments to begin accruing in 2027, and this updated economic analysis excludes any emissions benefits previously assumed to occur in 2025 or 2026. This updated analysis also removes some criteria pollutant benefits associated with GGRF program expenditures in sectors not otherwise covered by the Program, as the relevant GGRF appropriations were not extended in SB 840. This analysis also reflects an updated approach for relating reductions in criteria pollutant emissions to reduced incidents of public health indicators such as cardiopulmonary mortalities (see section IV.C.). The overall effect of all regulatory changes described in this document produces a minor decrease in GHG and criteria pollutant benefits relative to the SRIA Proposed Scenarios (Table 22).

### 6. Contribution of Allowances to the Allowance Price Containment Reserve (APCR)

The Proposed Amendments add 1% of allowances in post-2030 annual budgets to the first tier of the APCR. Continuing to populate the APCR after 2030 further supports cost containment and protects against price spikes and impacts to consumer affordability as the Program increases in stringency. Any APCR allowances sold still generate proceeds for the GGRF, however these allowances are sold at a pre-determined price threshold that increases 5% per year in inflation-adjusted terms.

It is also important to note that to date no APCR sale or use of the price ceiling mechanism has been needed to support compliance. Ensuring cost-effective access to compliance options such as carbon dioxide removal and clean hydrogen, and timely access to other technologies for reducing GHG emissions will be important as regulated companies develop strategies and investment plans to reduce their GHG emissions.

### 7. Utility Allocation and Consignment

Allowances are allocated to Electrical Distribution Utilities (EDUs) and Natural Gas Suppliers (NGS) to protect ratepayers from Cap-and-Invest Program costs, and most of these allowances are consigned to auction, which generates proceeds that fund ratepayer benefit programs such as the California Climate Credit. The Proposed Amendments include updates to allowance allocation to EDUs compared to the EDU allocation assumed for the SRIA. EDU allocation is intended to reflect the anticipated cost of compliance with the Cap-and-Invest Program and incorporates the best available data on variables such as projected load growth and renewable electricity procurement. Note that the Proposed Amendments include EDU allocation through 2035. However, this analysis assumes EDU allocation will continue for all scenarios through 2046 and extrapolates values after 2035 based on current data.

Separately, AB 1207 directs CARB to transition free allowances from NGS to EDUs and requires EDUs to use the new allowances from this transition for residential ratepayer bill credits. AB 1207 also sunsets an existing 15% set-aside for clean energy and energy efficiency projects from EDU IOU allowance proceeds by July 1, 2026, and provides 5% of these proceeds during July 1, 2026 through July 1, 2031, for electric utility transmission projects to further enable renewable electricity development.

Currently, EDUs that are publicly owned utilities (POUs) have discretion over the percentage of their allocated allowances that are consigned to auction each year. The SRIA Proposed Scenarios evaluated the effects of changing this requirement to require POUs to consign 100% of their allocated allowances beginning in 2025. Reflecting the AB 1207 requirement to transition NGS allowances to provide residential bill credits for EDU customers, including POU customers, and considering public input, the Proposed Amendments require POUs to consign only the additional allowances provided from NGS pursuant to AB 1207 to auction.

## 8. GGRF Appropriations

SB 840 sets future appropriation rules for State-owned proceeds in the GGRF, switching to annual dollar amounts and priority thresholds for various GGRF programs instead of fixed proportions. The suite of GGRF programs directly funded by SB 840 are different than the programs included in the SRIA, which assumed that historic apportioning of GGRF proceeds would continue. SB 840 does not extend appropriations for a limited subset of GGRF programs that have reported criteria pollutant benefits in sectors not otherwise covered by the Program or other CARB regulations and that were included for the health benefits analysis in the SRIA. Thus, the updated economic analysis no longer includes criteria pollutant benefits from GGRF programs. The updated analysis still does include some GHG emissions reduction benefits from the use of GGRF proceeds. SB 840 extended appropriations for GHG emissions reduction programs under the Department of Forestry and Fire Protection (CalFIRE), which were included in the SRIA and continue to be included in this analysis.

## 9. Industrial Allowance Allocation

Industrial facilities covered by the Cap-and-Invest Program receive allowance allocation to protect against emissions leakage. The number of allowances given to an eligible facility is in part determined by the Cap Adjustment Factor, which in the current Regulation declines each year in proportion to the overall allowance budgets. Since releasing the SRIA, staff updated the regulatory proposal to maintain Cap Adjustment Factors at the current Regulation levels through 2031, before switching to the proportional approach relative to the updated allowance budgets in 2032.[48] This change increases the estimated level of industrial allocation relative to the SRIA to help mitigate emissions leakage risk.

The SRIA also evaluated a regulatory concept for manufacturing incentive allocation, which would provide additional allowances each year to specific manufacturing covered entities that invest in technologies to reduce their covered emissions and decarbonize their production methods. Since publishing the SRIA, staff have finalized this regulatory proposal for inclusion in the Proposed Amendments and project that manufacturing incentive allocation could potentially utilize approximately 40 million total allowances, spread across 12 allowance budget years. Provision of these allowances supports facility-specific GHG emissions reduction that will decrease the Program compliance obligation and protect against emissions leakage risk for eligible facilities.

## 10. Other Analytical Assumptions and Input Data

Staff also made the following miscellaneous updates to input assumptions for producing this updated economic analysis:

- Voluntary Renewable Electricity (VRE) Program allowances. The SRIA described a concept to reserve of total of 5.5 million allowances from 2025-2030 annual budgets to

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[48] Similar to the utility allocation updates described above, the Proposed Amendments include Cap Adjustment Factors for industrial allocation through 2035. For this analysis, Cap Adjustment Factors after 2035 are extrapolated forward proportional to the overall Program allowance budgets.

replenish the VRE Reserve account, which would have continued implementation of the VRE Program and recognized voluntary investments in renewable electricity beyond State mandated requirements. The Proposed Amendments do not provide additional allowances to the VRE Reserve account.

- Net flow of allowances to Québec. As a linked jurisdiction with the California Cap-and-Invest Program, allowances purchased in the California market can be used to fulfill a compliance obligation in Québec and vice versa. Based on historic trends, staff analysis assumes a total net flow of approximately 14 million allowances from California to Québec in future years (CARB 2024i).
- The quantity of banked allowances held in private entity accounts for this analysis was updated to reflect allowances remaining from vintages 2013-2023 after the November 2024 triennial compliance event (CARB 2025k).
- The Proposed Amendments include updates to various reporting and disclosure requirements in the current Regulation, such as the Corporate Association Group (CAG) disclosure requirements discussed in section II.D of the ISOR. The updated economic analysis includes an estimate of annual reporting costs that a typical covered entity may incur due to the Proposed Amendments, which staff expect to be small ($500-$1,000 per year). These reporting cost assumptions are derived from average hourly engineer, scientist, and managerial wage data compiled from the U.S. Bureau of Labor Statistics (U.S. Bureau of Labor Statistics 2024). These costs are described in further detail in Section B.3.
- The updated economic analysis reflects the announced closure of two covered petroleum refineries (California State Assembly 2025), the new implementation of 15% ethanol blending in the gasoline supply (CARB 2025l), and accelerated phase-out for federal clean hydrogen tax credits.[49]
- Availability of more recent input data. Since releasing the SRIA, staff updated baseline values in the economic analysis to reflect actual 2025 allowance allocation (CARB 2024j), 2023 covered emissions reported and verified through the Mandatory Reporting Regulation (MRR) (CARB 2024k), California Climate Investments appropriation and expenditure data through 2024 (CARB 2025m; CARB 2025n), updated EIA data for energy cost assumptions (EIA 2025a; EIA 2025b), and an assumed compliance offset credit price of $21 based on average offset transfer prices in 2024 (CARB 2025o). Various technical assumptions for industrial decarbonization costs were also updated to reflect recent analysis, including an electricity price of 21 cents/kWh based on CEC electricity rate forecasts (CEC 2024b), a renewable natural gas price range of $13-$31 per MMBtu (CEC 2023c), between $3.80 and $5.52 per kg of electrolytic hydrogen from renewable electricity (U.S. DOE 2024), and updated sector-level industrial decarbonization analysis from a CARB contracted report (Karki et al. 2024). As described in Section VIII.B., macroeconomic modeling of the Proposed Amendments was also updated using more recent economic and demographic data from DOF. Staff also updated the program cost analysis, health benefits monetization, and social cost of carbon analyses such that all results are presented in 2024 dollars.

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[49] Eligible clean hydrogen projects must break ground by January 1, 2028, and can be claimed for 10 years, pursuant to 26 U.S.C 45V.

**Table 21: Estimated Scenario Allowance Demand and Weighted Average Allowance Price, 2027-2046**

| Scenario | Projected Net Allowance Demand[50] (billion) | Projected Weighted Average[51] Allowance Price | Price Assumption |
|---|---|---|---|
| Baseline Scenario | 1.9 | $44 | Floor Price |
| Alternative 1 | 1.6 | $59 | Historic (2022-2024) ratio between Floor Price and Auction Settlement Price |
| Proposed Amendments | 1.4 | $68 | Midpoint between Floor Price and APCR 1 Price |
| Alternative 2 | 1.1 | $98 | APCR 1 Price |

## 11. Changes Reflecting DOF Comments

Staff made the following changes to the analysis based on DOF's comments to CARB published on May 9, 2024 (DOF 2024):

1) Update the assumed price of natural gas for calculating GHG abatement costs using the 2025 U.S. Energy Information Administration (EIA) Energy Outlook (EIA 2025a). As explained in the SRIA, staff scaled EIA Energy Outlook data to average California natural gas rates to derive an assumed rate of $12/MMBtu (in 2023 dollars) for calculating abatement costs under a more stringent Cap-and-Invest Program. After updating this scaling calculation to reflect 2025 EIA industrial rate data for California (EIA 2025b), the revised natural gas price assumption is $11/MMBtu.

2) Include projected changes to State personal income tax revenue in the analysis of fiscal impacts. Based on macroeconomic modeling of impacts to personal income, State personal income tax revenue is estimated to decrease by about $3.2 billion through 2046.

Table 22 reflects all changes discussed above and compares the results of the revised economic assessment of the Proposed Amendments to the results presented in the SRIA.

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[50] Net allowance demand represents the total projected number of allowances that covered entities will need to procure (at auction or via secondary markets) to address their projected covered emissions, after subtracting current allowance holdings, free allowance allocation, and the limited use of compliance offsets. This calculation excludes any California allowances purchased for compliance obligations in the linked Québec Cap-and-Trade System.

[51] Average allowance prices from 2027-2046 are weighted by the total Program allowance budget in each year.

**Table 22: Comparison of Economic Analysis Results for Cap-and-Invest Program SRIA and Form 399**

| Category of Cost or Benefit | SRIA Results | Form 399 Results |
|---|---|---|
| Net Direct Cost Change (Compliance + Abatement – Cost Savings) ($ billion) | $87.3 | $66.1 |
| Program Revenue Change (GGRF + Ratepayer) ($ billion) | $31.9 | $8.9 |
| NOx Reduction (thousand short tons) | 310 | 305 |
| $PM_{2.5}$ Reduction (thousand short tons) | 52 | 50 |
| GHG Reduction (million $MTCO_2e$) | 980 | 963 |
| Avoided Cardiopulmonary Mortalities[52] | 4,960 (2,740 – 7,080) | 7,800 (4,300 – 11,125) |
| Monetized Health Benefits ($ billion) | $73.0 | $122.9 |
| Social Cost of Carbon Benefit[53] ($ billion) | $28 - $460 | $192 - $486 |

## B. The creation or elimination of jobs within the State of California

The Proposed Amendments do not directly create or eliminate any jobs. However, as an economy-wide GHG emissions reduction program that puts a price on carbon emissions, Cap-and-Invest does produce indirect employment impacts by affecting production costs in California.

As described in the SRIA, the Regional Economic Model Inc. (REMI) model is used to model the estimated macroeconomic impacts of the Proposed Amendments, including projected employment effects by major sector. REMI is a structural economic forecasting and policy analysis model that integrates input-output, computable general equilibrium, econometric and economic geography methodologies. Since the release of the SRIA, the REMI model's National and Regional Control was updated to conform to the most recent California Department of Finance economic forecasts which include U.S. Real Gross Domestic Product, income, and employment, as well as California civilian employment by industry, released with the 2025-2026 May Revision to the Governor's Budget on May 14, 2025 (DOF 2025b; DOF 2025c; DOF 2025d). After the Department of Finance economic forecasts end in 2028, CARB staff made assumptions that post-2028, economic variables would continue to grow at the same rate projected in the REMI baseline forecasts.

[52] Range included for avoided cardiopulmonary mortalities represents a 95% confidence interval. The increase in cardiopulmonary mortalities between the SRIA and this Form 399 analysis is largely attributable to a methodological change in how local air quality improvements relate to avoided incidents of public health events (see Section IV.C.).

[53] Range included for Social Cost of Carbon Benefit represents the application of different discount rates.

Baseline employment is estimated to grow by over 1.8 million jobs across the regulatory horizon, to over 27.5 million jobs in 2046.The Proposed Amendments are estimated to result in a decrease in employment growth that becomes larger over time, resulting in an average decrease of less than 0.1%, or near zero percent, of baseline employment through 2046. Table 23 shows the impacts of the Proposed Amendments on employment in major sectors in California. The job impacts represent the net change in employment across the economy, which is composed of positive impacts for some industries and negative impacts for others. The Proposed Amendments are estimated to result in approximately 27 thousand jobs foregone, primarily in manufacturing, services, and government sectors, and four hundred job gains on average.

**Table 23: Job Impacts by Major Sector**

| Year | 2027 | 2030 | 2034 | 2038 | 2042 | 2046 | Annual Average |
|---|---|---|---|---|---|---|---|
| Baseline Employment | 25,729,064 | 26,178,244 | 26,804,606 | 27,202,977 | 27,453,828 | 27,572,238 | 26,901,623 |
| % of California baseline change | -0.01% (near 0%) | -0.04% (near 0%) | -0.09% (near 0%) | -0.14% (near 0%) | -0.15% (near 0%) | -0.12% (near 0%) | -0.10% (near 0%) |
| Change in total jobs | -3,200 | -11,200 | -24,600 | -38,600 | -41,400 | -32,606 | -26,272 |
| Jobs gained | 5,249 | 508 | 42 | 0 | 0 | 0 | 389 |
| Jobs foregone | -8,440 | -11,702 | -24,650 | -38,572 | -41,397 | -32,606 | -26,661 |
| Natural resources | 1,140 | 508 | 42 | -100 | -102 | -4 | 138 |
| Construction | 1,894 | -647 | -2,848 | -4,335 | -3,605 | -529 | -2,079 |
| Manufacturing | 123 | -178 | -1,172 | -2,156 | -2,699 | -2,126 | -1,453 |
| Retail and wholesale | -1,526 | -1,843 | -3,039 | -4,123 | -4,072 | -3,226 | -2,964 |
| Transportation and public utilities | 2,092 | -589 | -2,531 | -3,888 | -4,413 | -3,807 | -2,561 |
| Finance, insurance, and real estate | -1,063 | -1,431 | -2,565 | -3,704 | -3,841 | -3,166 | -2,652 |
| Services | -5,620 | -6,306 | -10,490 | -15,479 | -16,204 | -13,924 | -11,194 |
| Government | -231 | -707 | -2,006 | -4,787 | -6,462 | -5,825 | -3,506 |

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

The Proposed Amendments are not expected to directly create or eliminate any businesses. However, the economy-wide carbon price imparted by the Program may incentivize some sectors to expand or contract. For example, increasing demand for clean electricity in the electric power sector facilitates a large increase in sales, but services are expected to be provided primarily by existing utilities. Additionally, producers of low-carbon fuels or equipment may see increased business in California as facilities undergo abatement measures to mitigate their GHG emissions.

As described in the SRIA, the REMI model was used to estimate the effect of the Proposed Amendments on future output from California businesses by major sector. The REMI model cannot directly estimate the creation or elimination of businesses. However, changes in jobs and output for the California economy described below can be used to understand some potential impacts. The overall jobs and output impacts of the Proposed Amendments are small relative to the total California economy, representing changes of less than 0.2 percent, or near zero percent (Table 24). However, impacts across specific industries differ.

**Table 24: Change in Output by Major Sector**[54]

| Year | 2027 | 2030 | 2034 | 2038 | 2042 | 2046 |
|---|---|---|---|---|---|---|
| Baseline Output (2024M$) | 6,515,500 | 6,880,600 | 7,454,300 | 7,999,700 | 8,552,100 | 9,109,500 |
| % Change | -0.02% (near 0%) | -0.04% (near 0%) | -0.08% (near 0%) | -0.12% (near 0%) | -0.13% (near 0%) | -0.10% (near 0%) |
| **Change in Output (2024M$)** | **-1,000** | **-2,500** | **-5,800** | **-9,800** | **-11,400** | **-9,200** |
| Natural Resources | 64 | 27 | -29 | -75 | -91 | -44 |
| Construction | 406 | -140 | -648 | -1,037 | -922 | -182 |
| Manufacturing | 96 | 8 | -486 | -1,093 | -1,523 | -1,178 |
| Retail and Wholesale | -339 | -477 | -925 | -1,448 | -1,656 | -1,491 |
| Transportation and Public Utilities | -24 | -262 | -358 | -325 | -228 | -9 |
| Finance, Insurance & Real Estate | -368 | -521 | -1,021 | -1,585 | -1,781 | -1,569 |
| Services | -795 | -1,004 | -1,872 | -3,036 | -3,501 | -3,207 |
| Government | -54 | -167 | -488 | -1,202 | -1,678 | -1,565 |

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

By imparting a price on GHG emissions, the Proposed Amendments incentivize the expansion of businesses that supply low-carbon technologies and alternative fuels to consumers and businesses in California.

## E. Significant statewide adverse economic impact directly affecting business, including ability to compete

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

[54] Throughout this document, total projected changes in economic indicators due to the Proposed Amendments are rounded to reflect the inherent uncertainty in macroeconomic modeling inputs and results.

## F. The competitive advantages or disadvantages for businesses currently doing business within the State

The Proposed Amendments increase the stringency of the Cap-and-Invest Program, which strengthens the incentive to use low-carbon energy sources and production methods within the State. This incentive may provide a competitive advantage to in-state businesses that decarbonize their operations.

Separately, the Program includes allowance allocation for industrial facilities in emissions-intensive, trade-exposed sectors that is designed to minimize the competitive disadvantage for in-state firms relative to out-of-state competitors that are not covered by a similar regulation (CARB 2010a). Industrial allowance allocation is critical to minimize emissions leakage risk and maintain an incentive for clean, efficient production within the State of California.

## G. The increase or decrease of investment in the State

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

The changes to growth in private investment for the Proposed Amendments relative to the baseline are shown in Table 25, which shows a decrease of private investment of about $672 million in 2030, and decreases over time to be $393 million below baseline in 2046. Overall, there is a cumulative decrease of $21.4 billion or 0.14%, which is near zero percent of the $15 trillion in baseline private investment for 2027-2046.

**Table 25: Projected Change in Gross Domestic Private Investment Growth**

| Year | Private Investment (2024M$) | % Change | Change (2024M$) |
|---|---|---|---|
| 2027 | 610,515 | -0.03% (near 0%) | -199 |
| 2030 | 654,975 | -0.10% (near 0%) | -672 |
| 2034 | 722,635 | -0.17% (near 0%) | -1,225 |
| 2038 | 783,260 | -0.22% (near 0%) | -1,758 |
| 2042 | 840,700 | -0.19% (near 0%) | -1,598 |
| 2046 | 893,845 | -0.04% (near 0%) | -393 |
| **Annual Average** | **757,135** | **-0.14% (near 0%)** | **-1,070** |
| **Cumulative** | **15,142,700** | **-0.14% (near 0%)** | **-21,420** |

## H. The incentives for innovation in products, materials, or processes

By imparting a long-term price signal on the combustion of fossil energy, the Program provides a direct incentive for innovation toward more efficient, low-carbon processes and energy. These investments are included in this analysis as abatement costs attributed to a more stringent Cap-and-Invest Program. While these abatement costs are assumed to be constant and reflect contemporaneous installation and operation cost data, facilities covered by the Program have a continued incentive for additional technological innovation that may drive abatement costs lower in future years.

## I. The benefits of the Regulation to the health and welfare of California residents, worker safety, and the state's environment

The Proposed Amendments are designed to reduce statewide emissions in support of California's statutory GHG targets. Reduced fossil fuel combustion also improves local air quality and public health. Increased proceeds from allowance sales produces additional economic benefits.

The Proposed Amendments to the Cap-and-Trade Regulation are designed to support achieving the statutory GHG targets of a 40% reduction relative to 1990 levels by 2030, and an 85% GHG emissions reduction by 2045. The Proposed Amendments support these targets with more stringent GHG allowance budgets relative to the current Regulation. Avoided GHG emissions from increased Program stringency correspond with avoided fossil fuel consumption at facilities covered by the Program,[55] which results in cost savings and criteria pollutant emission reductions that improve local air quality and public health outcomes.

Staff's approach to estimating the costs and benefits of the Proposed Amendments aligns with the approach used for the SRIA and reflects the final regulatory proposal described in the ISOR. As described in the SRIA, the anticipated GHG emissions benefits from increased Program stringency are derived from CARB's 2022 Scoping Plan Update modeling (CARB 2022d). Staff calculated equivalent GHG trajectories for the Baseline Scenario and Alternatives 1 and 2 by adding or subtracting emissions corresponding to the different scenario Cap-and-Invest allowance budgets. Scoping Plan modeling also included estimated fuel demand by sector, which staff used along with applicable Scoping Plan emissions factors to translate GHG trajectories to changes in criteria pollutant emissions from Cap-and-Invest covered facilities (CARB 2022f).

The Proposed Amendments are also anticipated to increase the total proceeds received from allowance auctions, with an increase in proceeds placed in the GGRF for appropriation by the Legislature and Governor through 2035 and an increase in proceeds used to directly benefit utility ratepayers through programs such as the California Climate Credit through 2046. Anticipated auction revenues are calculated by multiplying the estimated demand for allowances, which is derived from projected GHG emissions, by the assumed price per allowance for each scenario in Table 21. GGRF auction revenues produce a direct economic and fiscal benefit for the State, are used to benefit priority populations, and result in some

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[55] Although the Cap-and-Invest Program imparts an economy-wide carbon price that extends to transportation fuels and residential/commercial energy use, staff analysis for the Proposed Amendments assigns GHG emissions benefits, criteria pollutant emissions benefits, and associated health benefits from decarbonization measures in those sectors to complementary measures such as the Low Carbon Fuel Standard. In reality, the Cap-and-Invest Program is expected to drive down emissions in all covered sectors. The GHG and health benefits in this analysis should be seen as conservative estimates.

additional GHG emissions reduction from activities not otherwise covered by the Cap-and-Invest Program or other CARB regulations. Staff calculated the expected GHG benefits from future GGRF expenditures in applicable programs by extrapolating from the emissions benefits reported for previous GGRF expenditures to-date (CARB 2025m; CARB 2025n) and applying new appropriations rules adopted in SB 840.[56] The anticipated reductions in GHG and criteria pollutant emissions resulting from the Proposed Amendments, including from the marginal near-term increase in GGRF revenues, are presented in Section V.

The monetized benefits of the Proposed Amendments are presented in Table 26. The methodology for estimating the monetary value of global climate benefits and improved local air quality in California communities is discussed in section IV.

[56] In 2025, SB 840 set future appropriation rules for GGRF proceeds that differ from the historic proportions assumed in the SRIA. SB 840 provides ongoing support for CalFire to implement healthy forest and fire prevention programs and prescribed fire and other fuel reduction projects, which produce GHG emissions benefits that CalFire reports to CARB through California Climate Investments (CARB 2025n).

**Table 26: Summary of Cumulative Statewide Impacts of the Proposed Amendments During 2027 to 2046[57]**

| Category of Cost or Benefit | Proposed Amendments |
|---|---|
| Total Direct Costs (Compliance + Abatement Costs) ($ billion) | $123.8 |
| Cost Savings ($ billion) | $57.8 |
| Increased Program Revenues (GGRF + Ratepayer) ($ billion) | $8.9 |
| NOx Reduction (thousand short tons) | 305 |
| $PM_{2.5}$ Reduction (thousand short tons) | 50 |
| GHG Reduction (million $MTCO_2e$) | 963 |
| Avoided Cardiopulmonary Mortalities[58] | 7,800 (4,300 – 11,125) |
| Monetized Health Benefits ($ billion) | $76.6 - $122.9 |
| Avoided Climate Damages (Social Cost of Carbon Benefit[59] ($ billion)) | $192 - $486 |

Additionally, a well-designed Cap-and-Invest Program that continues to reduce GHG emissions while growing the economy signals the viability of the Program and supports other jurisdictions in pursuing similar policies. CARB's policy leadership may have profound effects on the global effort to combat climate change, which in turn benefits California by further reducing the risk of prolonged drought, heat waves, wildfires, and other extreme weather-related events.

# IX. Evaluation of Regulatory Alternatives

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

The primary element of the Proposed Amendments to the Cap-and-Trade Regulation is removing allowances from future Program allowance budgets to reflect the GHG emissions reduction needed to meet State targets for 2030 and 2045 and align with CARB's 2022

[57] All figures are cumulative values during 2027-2046, expressed relative to the Baseline Scenario. Monetary values are expressed in 2024 U.S. dollars.
[58] Range included for avoided cardiopulmonary mortalities represents a 95% confidence interval. Health benefits presented in this table do not apply statewide potency factors as described in Section IV.C.
[59] Range included for Social Cost of Carbon Benefit represents the application of different discount rates.

Scoping Plan Update and the latest AB 32 GHG Emissions Inventory.[60] The statutory targets for 2030 and 2045 are to reduce State GHG emissions by 40% and 85% relative to 1990 levels, and a range of future Cap-and-Invest Program allowance budgets may be viable for meeting these targets. For this analysis, staff specifically considered two possible alternatives for revised allowance budgets, which were informed by stakeholder input and prior analysis from the 2022 Scoping Plan Update: a scenario support the minimum 40% GHG emissions reduction target for 2030 which reflects the updated AB 32 GHG Inventory, and a scenario supporting an upper-bound of a 55% GHG emissions reduction target for 2030. Both alternatives (as well as the Proposed Amendments) include post-2030 allowance budgets that support achieving an 85% GHG emissions reduction target by 2045.

Staff applied a similar approach for quantifying the costs and benefits of the Proposed Amendments and the chosen alternatives, which is described in more detail in the SRIA. The main variables that differentiate each of the evaluated scenarios are the compliance costs associated with GHG emissions from entities covered by the Program and the abatement costs incurred from measures taken to reduce facility GHG emissions relative to the Baseline scenario. Differences in estimated Program compliance costs are largely a function of scenario allowance budget removals, allowance prices, free allowance allocation, and total GHG emissions from covered entities, since covered emissions determine demand for allowances.[61] GHG abatement costs reflect staff assumptions for the costs of applicable abatement technologies and ongoing changes in energy costs after installation (see section III.A. of the SRIA).

In accordance with the approach described above, the following sections compare the costs and benefits of each evaluated regulatory scenario and describe why Alternatives 1 and 2 are rejected in favor of the Proposed Amendments.

[60] Concurrent to the development of the 2022 Scoping Plan Update, the annually updated AB 32 GHG Emission Inventory was adjusted to more fully incorporate third-party verified GHG emissions and correct for some errors. See *Frequently Asked Questions: Greenhouse Gas Emissions Inventory* for more information.

[61] Program compliance costs also include the use of compliance offset credits, which reflect GHG emissions reduction in sectors not covered by the Cap-and-Invest Program and are limited to 6% of covered entities' compliance obligations from 2027-2046.

**Table 27: Scenario Comparison of Cumulative Allowance Budgets, Allowance Prices, and Covered Emissions, 2027-2046**

| Scenario | Cumulative Allowance Budget Removal (million allowances) | Assumed Allowance Auction Settlement Price (from Table 21) | Cumulative Covered Emissions ($MMTCO_2e$) |
|---|---|---|---|
| Proposed Amendments | 264 | $68 | 2,305 |
| Alternative 1 | 118 | $59 | 2,535 |
| Alternative 2 | 392 | $98 | 2,045 |

## A. Alternative 1

Alternative 1 removes 118 million allowances from the pool of pre-2030 Program allowances reserved for cost-containment to support meeting the statutory target to reduce GHG emissions by 40% by 2030 relative to 1990 levels. This removal is the minimum needed to align the supply of allowances for this decade with the updated AB 32 GHG Inventory. After 2030, Alternative 1 includes new allowance budgets that decline linearly to support achieving the statutory target to reduce GHG emissions by 85% by 2045 relative to 1990 levels. From 2027-2046, Alternative 1 reduces GHG emissions by 640 million $MTCO_2e$ relative to the Baseline.

### 1. Costs and Benefits of Alternative 1

Staff analysis shows that Alternative 1 would incur $62.0 billion in total costs and $24.3 billion in cost savings for Cap-and-Invest covered entities. The estimated impacts of Alternative 1 on macroeconomic indicators such as employment and California business output were evaluated using the REMI model and are presented in the SRIA.

From 2027-2046, Alternative 1 reduces GHG emissions by 640 million $MTCO_2e$ relative to the Baseline. The monetized benefits of this GHG emissions reduction range from $132 billion to $329 billion under the U.S. EPA SC-CO2 valuation, depending on the chosen discount rate (Table 28). Alternative 1 produces $44.1 – $73.3 billion in health benefits (Table 29), depending on the application of scaling factors described in Section IV.C.

Table 30 compares the total costs and benefits of Alternative 1 and the Proposed Amendments.

**Table 28: Alternative 1 Avoided SC-CO2 Benefits (Billion 2024$)**

| Year | GHG emission reductions (MMT) | EPA Values | | | IWG Values | | |
|---|---|---|---|---|---|---|---|
| | | 2.5% discount rate | 2% discount rate | 1.5% discount rate | 5% average | 3% average | 2.5% average |
| **Total** | 640 | $132 | $204 | $329 | $21 | $60 | $84 |

**Table 29: Alternative 1 Total Estimated Incidences of Health Outcomes**

| Health Outcomes | Scaled Benefit | Non-Scaled Benefit |
|---|---|---|
| Cardiopulmonary Mortality | 2,800 | 4,600 |
| Hospitalizations for Parkinson’s Disease | 200 | 300 |
| Hospitalizations for Respiratory Disease | 100 | 100 |
| Hospitalizations for Alzheimer’s Disease | 1,400 | 2,300 |
| Hospitalizations for Cardiovascular Disease | 600 | 1,000 |
| Cardiovascular ED visits | 700 | 1,200 |
| Respiratory ED visits | 1,600 | 2,700 |
| Asthma Onset | 6,300 | 10,500 |
| Asthma Symptoms | 513,100 | 847,600 |
| Lung Cancer Incidence | 200 | 350 |
| Acute Myocardial Infarction | 300 | 500 |
| Work Loss Days | 393,300 | 654,800 |
| Valuation (Million 2024$) | $44,100 | $73,300 |

**Table 30: Summary of Cost, Benefits, and Cost-Effectiveness of Alternative 1**

| Benefit and Cost Measures | Proposed Amendments (Billion 2024$) | Alternative 1 (Billion 2024$) |
|---|---|---|
| **Total Costs less Transfers** | **110.8** | **47.3** |
| Total Costs | 123.8 | 62.0 |
| Transfers | 13.1 | 14.8 |
| **Total Benefits** | **180.7** | **92.2** |
| Total Costs-Savings | 57.8 | 24.3 |
| Health Benefits[62] | 122.9 | 67.9 |
| **Summary with Social Cost of Carbon** | | |
| Social Cost of Carbon | 192 – 486 | 132 – 329 |
| Net-Benefit | 262 – 556 | 177 – 375 |
| **Cost-Effectiveness** | | |
| GHG Emission Reductions (MMTCO2e) | 963 | 640 |
| GHG Cost-Effectiveness ($/MTCO2e) | 55 | 36 |

## 2. Reason for Rejecting Alternative 1

Staff rejected Alternative 1 because, while it meets the 40% GHG emissions reduction target for 2030, it is not aligned with the 2022 Scoping Plan Update modeling that suggests additional reductions are needed to be on a course with a high likelihood of meeting 2045 statutory targets. Though the Proposed Amendments remove the same number of allowances as Alternative 1 through 2030, the Proposed Amendments remove additional allowances post-2030 and have the same cumulative number of allowances as the SRIA Proposed Scenarios. These more ambitious cumulative allowance budgets accelerate near-term GHG emissions

[62] Health benefits presented in Table 27 and Table 30 do not apply scaling factors when relating criteria pollutant reductions to reduced incidents of public health events, as described in Section IV.C.

reduction and provide critical climate benefits, with an ultimately smoother transition to the GHG emissions reduction needed to meet statutory targets and carbon neutrality in 2045.

## B. Alternative 2

Alternative 2 removes 392 million allowances from current 2027-2030 Program budgets to support meeting a 55% reduction in GHG emissions relative to 1990 levels by 2030. This scenario represents an upper bound on ambition for GHG emissions reduction by 2030. After 2030, Alternative 2 includes new allowance budgets that decline linearly to reach the 85% GHG emissions reduction target in 2045.

### 1. Costs and Benefits of Alternative 2

Staff analysis shows that Alternative 2 would incur $173.7 billion in total costs and $109.8 billion in cost savings for Cap-and-Invest covered entities. The estimated impacts of Alternative 2 on macroeconomic indicators such as employment and California business output were evaluated using the REMI model and are presented in the SRIA.

From 2027-2046, Alternative 2 reduces GHG emissions by 1,244 million $MTCO_2e$ relative to the Baseline. These benefits range from $243 billion to $619 billion under the U.S. EPA SC-CO2 valuation, depending on the chosen discount rate (Table 31). Alternative 2 produces $91.6 – $152.3 billion of monetized public health benefits from improved local air quality (Table 32), depending on the application of scaling factors described in Section IV.C.

Table 33 compares the total costs and benefits of Alternative 2 and the Proposed Amendments.

**Table 31: Alternative 2 Avoided SC-CO2 Benefits (Billion 2024$)**

| GHG emission reductions (MMT) | EPA Values | | | IWG Values | | |
|---|---|---|---|---|---|---|
| | 2.5% discount rate | 2% discount rate | 1.5% discount rate | 5% average | 3% average | 2.5% average |
| 1,244 | $243 | $379 | $619 | $37 | $110 | $157 |

**Table 32: Alternative 2 Total Estimated Incidences of Health Outcomes**

| Health Outcomes | Scaled Benefit | Non-Scaled Benefit |
|---|---|---|
| Cardiopulmonary Mortality | 5,800 | 9,700 |
| Hospitalizations for Parkinson's Disease | 400 | 700 |
| Hospitalizations for Respiratory Disease | 200 | 300 |
| Hospitalizations for Alzheimer's Disease | 2,700 | 4,700 |
| Hospitalizations for Cardiovascular Disease | 1,200 | 2,000 |
| Cardiovascular ED visits | 1,500 | 2,600 |
| Respiratory ED visits | 3,500 | 5,800 |
| Asthma Onset | 13,700 | 22,900 |
| Asthma Symptoms | 1,149,700 | 1,894,500 |
| Lung Cancer Incidence | 450 | 750 |
| Acute Myocardial Infarction | 650 | 1,100 |
| Work Loss Days | 841,100 | 1,403,300 |
| Valuation (Million 2024$) | $91,600 | $152,300 |

**Table 33: Summary of Cost, Benefits, and Cost-Effectiveness of Alternative 2**

| Benefit and Cost Measures | Proposed Amendments (Billion 2024$) | Alternative 2 (Billion 2024$) |
|---|---|---|
| **Total Costs less Transfers** | **110.8** | **146.8** |
| Total Costs | 123.8 | 173.7 |
| Transfers | 13.1 | 26.9 |
| **Total Benefits** | **180.7** | **253.1** |
| Total Costs-Savings | 57.8 | 109.8 |
| Health Benefits | 122.9 | 143.3 |
| **Summary with Social Cost of Carbon** | | |
| Social Cost of Carbon | 192 – 486 | 243 – 619 |
| Net-Benefit | 262 – 556 | 350 – 727 |
| **Cost-Effectiveness** | | |
| GHG emission reductions (MMTCO2e) | 963 | 1,244 |
| GHG Cost-Effectiveness ($/MTCO2e) | 55 | 30 |

### 2. Reason for Rejecting Alternative 2

Staff rejected Alternative 2 because the pace of pre-2030 GHG emissions reduction may produce negative economic consequences that may be avoided while still meeting the State's climate targets. In adopting climate regulations, AB 32 and AB 1207 require CARB to both minimize emissions leakage and support affordability, among other requirements. While Alternative 2 appears more cost-effective, costs are significantly higher than the Proposed Amendments in the near-term due to front-loaded GHG emissions reduction necessary to align with a 55% by 2030 GHG emissions reduction scenario. Macroeconomic modeling conducted for the SRIA shows that Alternative 2 results in significantly higher job losses and reduced economic output, which may correspond to emissions leakage if in-State production declines and could negatively impact affordability.

Under Alternative 2, there is a pronounced inflection point for GHG emissions in sectors covered by the Cap-and-Invest Program in 2030 (at 55%), after which the pace of GHG emissions reduction in these sectors considerably slows as the State approaches the 2045 targets. In contrast, the Proposed Amendments provide some additional near-term GHG emissions benefits while also ensuring a smoother transition to meeting the GHG emissions reduction target and carbon neutrality in 2045, as shown in the 2022 Scoping Plan Update. This smoother transition helps prevent emissions leakage and protect the environmental integrity of the Program and support overall affordability.

## C. Small Business Alternative

The Board has not identified any reasonable alternatives that would lessen any adverse impact on small business. Due to the 25,000 $MTCO_2e$/year covered emissions threshold for incurring a Cap-and-Invest Program compliance obligation, small businesses typically do not face any direct costs associated with the Regulation. However, small businesses may be indirectly affected by any increased carbon costs from the Program that covered entities may pass through to consumers. Costs will vary based on the businesses' use of fossil fuels and ability to reduce the use of fossil fuels in their operations.

## D. Performance Standards in Place of Prescriptive Standards

With respect to Government Code sections 11346.2(b)(4)(A) and 11346.2(b)(1), the Proposed Amendments do not mandate the use of specific technologies or equipment or prescribe specific actions or procedures on regulated entities. The Regulation is a market-based mechanism to reduce GHG emissions, which establishes a declining cap on approximately 80% of total statewide GHG emissions. There are no individual or facility-specific emissions reduction requirements.

## E. Health and Safety Code section 57005 Major Regulation Alternatives

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

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

Government Code section 11346.2(b)(6) requires CARB to describe its efforts to avoid unnecessary duplication or conflicts with federal regulations that address the same issues. The proposed amended Regulation continues to place a compliance obligation on large industrial sources, fuel suppliers, and electricity generators and importers for the GHG emissions associated with their activities. The GHG emissions from these entities, except for the GHG emissions from certain electricity generating units (EGUs) covered by the federal new source performance standards and emissions guidelines set under section 111 of the Clean Air Act,[63] are not currently covered by any federal regulations. Covering these GHG emissions does not conflict with federal regulations. Affected EGUs under those federal standards are covered under the proposed amended Regulation; indeed, compliance by affected EGUs with the proposed amended Regulation is the likely means by which the State will propose to demonstrate compliance with the federal standards. The federal standards generally allow for state measures, such as California's Cap-and-Invest Program, that place requirements on affected EGUs in order to meet aggregate emissions limits for the entire sector during each compliance period. The proposed amended Regulation is not different from federal regulations but rather a state measure that can be used as a means of complying with federal regulations.

[63] The U.S. Environmental Protection Agency has proposed to rescind these new source performance standards and emissions guidelines. (90 Fed. Reg. 25,752 (June 17, 2025).) At the time of this Staff Report publication, that proposal has not been finalized. If it were finalized, then no sources would be covered by any federal GHG regulations.

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

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

In this chapter, staff provide a brief overview of the regulatory process and actions taken to develop the Proposed Amendments to the Cap-and-Trade Regulation.

Staff have been engaging with the public on potential future changes to the Cap-and-Invest Program. From June 2023 through October 2025, CARB staff conducted eight public workshops in addition to numerous meetings with various groups and individual members of the public to discuss concepts for potential Cap-and-Trade Regulation amendments to address various concerns. One of these workshops included a presentation from the AB 32 Environmental Justice Advisory Committee (EJAC). Two of the workshops were held jointly with the Québec Ministry of Environment, Fight Against Climate Change, Wildlife and Parks, the operator of the Québec Cap-and-Trade System that is linked with California's Cap-and-Invest Program. During the second joint workshop, two separate modeling teams, one contracted by CARB and the other an internal team from the government of Québec, presented initial results from independent modeling efforts for allowance prices under different allowance budget scenarios. Staff also held two community listening sessions with the EJAC to give interested parties additional opportunities to hear an overview of the Program and to provide input to staff about potential changes to the Program. Presentation materials for the community meetings were made available in both English and Spanish, the meetings were interpreted from English to Spanish, and video recordings of the meetings are publicly posted in both English and Spanish. Staff also presented at and participated in an EJAC Meeting and Joint EJAC/CARB Board Meetings. Table 34 provides an overview of the public workshops and community meetings held in support of potential revisions to the Cap-and-Trade Regulation.

All workshops and community meetings were held virtually to enable access and wide participation through remote attendance. About two weeks prior to each event, a notice for the workshop was emailed to subscribers of CARB's "Cap-and-Trade Program," "Climate Change," and "GHG Mandatory Emissions Reporting" listservs. About 30,500 individuals or companies were notified for each workshop/meeting through the existing subscription lists. Materials for public workshops and community meetings, including staff presentations, were posted to CARB's Cap-and-Trade Meetings and Workshops webpage prior to the workshops.[64] During each workshop, staff presented concepts for public consideration and provided opportunities for the public to provide verbal feedback during the workshop and written public feedback for at least two weeks following the workshop. All workshop recordings and written public feedback are accessible through CARB's Cap-and-Trade Program Meetings and Workshops webpage.

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[64] See *Cap-and-Trade Meetings & Workshops | California Air Resources Board* for more information.

Meetings were attended by covered entities, including representatives from natural gas and electrical utilities, industrial facilities, and transportation fuel suppliers; community members; environmental organizations; environmental justice groups; carbon market observers; voluntary carbon market participants; academics; consultants; and members of the public. These individuals and groups engaged by participating in workshops and meetings, providing data, and submitting written feedback on potential allowance budget scenarios and other initial concepts. Public input through the pre-rulemaking public process was used to develop, inform, and refine staff proposals.

The modeling and direction in the 2022 Scoping Plan Update, evolving State policy, implementation experience, and updates to the AB 32 GHG Emission Inventory have all informed the development of potential Program updates and initial concepts presented during public workshops and community meetings.

**Table 34: Cap-and-Invest Public Workshops**

| Workshop | Date | Location | Time | Comment Letters Received |
|---|---|---|---|---|
| Presented the status of the Cap-and-Trade Regulation, scope of potential amendments, and evaluations to inform potential regulatory amendments to align with the 2022 Scoping Plan Update. (Joint California-Québec workshop) | June 14, 2023 | Virtual via Zoom | 8:30 am - 11 am | 30 |
| Introduced framework to explore more stringent cumulative 2021-2030 allowance budgets and solicited alternatives. Also discussed industrial allowance allocation and the use of allowance value by natural gas suppliers and electrical distribution utilities. | July 27, 2023 | Virtual via Zoom | 9 am – 12 pm | 53 |
| Reviewed 2030 allowance budget scenarios and discussed potential post-2030 budgets. Also discussed updates to EDU allocation and cap adjustment factors and topics relevant to the treatment and reporting of electricity imports and biogenic emissions exemptions. | Oct. 5, 2023 | Virtual via Zoom | 9:30 am - 4 pm | 56 |
| Community meeting for community members to hear a Program overview and to provide input about potential changes to the Program. An invited speaker also shared an environmental justice perspective on the Program. | Oct. 30 and Nov. 7, 2023 | Virtual via Zoom | 6 pm – 8 pm | 1 |

| Workshop | Date | Location | Time | Comment Letters Received |
|---|---|---|---|---|
| Presentation of third-party modeling of allowance prices under different allowance budget scenarios. Also discussed concepts related to joint-market rules and cost-containment. (Joint California-Québec workshop) | Nov. 16, 2023 | Virtual via Zoom | 9:30 am – 12:30 pm | 27 |
| Reviewed potential allowance budget scenarios and discussed potential post-2030 allowance budgets, market rules and potential concepts for updates to compliance offsets requirements. EJAC member shared environmental justice perspective on the Program. | April. 23, 2024 | Virtual via Zoom | 9:30 am - 12:30 pm | 48 |
| Reviewed topics relevant to allowance allocation and emissions coverage. | May. 31, 2024 | Virtual via Zoom | 9:00 am - 12:00 pm | 40 |
| Reviewed topics relevant to allowance allocation. | July 10, 2024 | Virtual via Zoom | 1:00 pm – 3:00 pm | 35 |
| Overview of recently signed legislation, Assembly Bill 1207 and Senate Bill 840, providing direction on the Cap-and-Invest Program and discussions of related potential updates to the Cap-and-Trade Regulation. | October 29, 2025 | Virtual via Zoom | 9:00 am – 1:00 pm | 65 |

In addition, staff participated in numerous meetings requested by various groups and interested parties, presenting information on the implementation of the existing Regulation and exploring potential amendments.

The Cap-and-Invest Program website has been continually updated since the beginning of the Program to facilitate public participation, enhance transparency, and ensure equal access to Program market information for all interested parties. Staff have consistently made materials related to this rulemaking available online, including workshop notices, meeting presentations, meeting recordings, and comment letters submitted by the public in response to meetings and workshops. The website also provides background information on the Cap-and-Invest Program, previous workshop notices and materials, public Program data, guidance documents for covered entities and market participants, and all formal documents associated with previous rulemakings.

Staff also conducted a Standardized Regulatory Impact Assessment as required by SB 617 (Calderon and Pavley, Chapter 496, Statutes of 2011) and received feedback and comments from the Department of Finance.

## A. Discussion of EJAC Recommendations

As detailed in Table 31, CARB held two Cap-and-Invest Program virtual Community Meetings in fall 2023, which included an EJAC presentation. Additionally, CARB attended an EJAC meeting in September 2023 to provide an early-stage overview of potential Program updates and answer questions.[65] In April 2024, the EJAC was invited to provide further detail on their perspective during a Cap-and-Invest Program Workshop on potential Program updates.[66] CARB provided a more detailed presentation at the May 2024 EJAC meeting that discussed (1) the role of the Program in achieving the State's climate goals, (2) key Program design elements and the changes under consideration, and (3) the administrative process for updating the Cap-and-Trade Regulation and the results of the SRIA (CARB 2024l). In September 2025, recommendations for the Cap-and-Invest Program were presented by EJAC at the Joint Meeting of the California Air Resources Board and the Assembly Bill 32 Environmental Justice Advisory Committee (EJAC 2025).

During CARB meetings and workshops the EJAC has presented several key recommendations (EJAC 2023, EJAC 2024, EJAC 2025):

- Eliminate free allowances for the industrial sector;
- Eliminate offsets;
- Restrict trading in priority environmental justice communities; and
- Prohibit crediting for Carbon Capture or Direct Air Capture projects;

These suggested changes represent elimination of fundamental components of the Cap-and-Invest Program that are responsive to legislative direction in AB 32, AB 398, and most recently in AB 1207. AB 1207, provides long-term direction on both free allowances to minimize industrial emissions leakage, free allowances to utilities and offsets use and does not include any restrictions on trading. AB 398, reaffirmed by AB 1207, also mandates that CARB "designate the market-based compliance mechanism…as the rule for petroleum refineries and oil and gas production facilities to achieve their greenhouse gas emissions reductions."

Removal or changes to core Program design features, such as:

- offsets for cost-containment,
- free allocation for utility ratepayer benefit and minimizing leakage, and
- use of an aggregate market-based system, as authorized by AB 32, to minimize economy-wide Program costs

must consider consistency with relevant statutes, the role of these features in the Program, and the context of a more stringent Program moving forward with reduced allowance supply as proposed. In this staff report and supporting analyses (Appendix C) staff considered the

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[65] See *EJAC Committee Meetings and Events | California Air Resources Board* for more information.
[66] See the *Cap-and-Trade Meetings and Workshops webpage*.

collective impact of the Proposed Amendments on Program implementation, State achievement of GHG emission reduction targets, market dynamics, and covered entity and economy-wide costs. Any additional Program changes must also be considered holistically with the proposed package of amendments. As one example, discontinuing the use of any offsets would further limit compliance instruments, beyond the reductions in annual budgets in the Proposed Amendments, and put further upward pressure on allowance costs. The following paragraphs provide more detailed considerations for each of these EJAC recommendations.

Free allowances are currently provided to electric and gas utilities for ratepayer benefit and to industry to minimize emissions leakage. The amount of allowances allocated for free declines each year. The allowances provided to investor-owned electric and gas utilities are consigned each year at the quarterly auctions with revenue returned to ratepayers as a climate credit on their utility bills.[67] These California Climate Credits are meant to minimize the impacts to Californians from energy rate increases related to the implementation of the Cap-and-Invest Program. The state's ambitious goals to have a more resilient, clean, and affordable electricity grid warrants a careful approach to potential changes in the climate credit for ratepayers, and especially for low-income households.

The free allowances provided to industry are designed to minimize emissions leakage per AB 32 and AB 398. More recently through AB 1207, the Legislature has directed CARB to provide free industrial allowance allocation to minimize leakage risk at set assistance factors of 100% through January 1, 2031 and after January 1, 2031, to distribute industrial allocation allowances in a manner that minimizes emissions leakage risk. Providing some number of free allowances for minimizing leakage is a common feature of most carbon pricing programs that cover industrial sources throughout the world.[68] AB 398 recognized that the 2021 through 2030 decade would see an ongoing and steepening reduction in allowance supply, which could increase prices for allowances (ICAP 2018). The upward pressure industry to not provide free allowances would be inconsistent with AB 1207's direction on ensuring affordability and AB 32 and AB 1207 direction on minimizing leakage and establishing cost-effective programs.

AB 398 also requires CARB to report to the Legislature in 2025 on the progress toward meeting GHG emissions reduction targets and on the leakage risk posed by the Regulation. This includes assessing the potential for a border carbon adjustment, where imported products would face some type of carbon liability similar to the carbon pricing faced by in-state production. Key considerations under a potential carbon border adjustment feature include the ability to understand the carbon embedded in products received from global markets and interaction with those markets. CARB staff previewed the AB 398 analysis in October 2025 and highlighted that other comparable jurisdictions have historically provided relatively more free industrial allocation than California (CARB 2025j). Any future approach to minimizing industrial leakage must be supported by data and carefully consider broader implications. Moreover, elimination of free allocation before replacement with some other mechanism to minimize leakage could have greater impacts on some industries, state and local economies, and jobs under a more stringent Program as proposed in this staff report. Eliminating free allowances for these entities, as recommended by the EJAC (EJAC 2025) will also increase

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[67] *California Climate Credit | California Public Utilities Commission*

[68] See the free allocation approach to emissions-intensive trade-exposed industries under *Washington State's Cap-and-Invest Program*, *Québec's Cap-and-Trade System*, and the *EU ETS*.

the cost pass through of carbon prices and is likely to increase costs for all entities as there will be a higher demand for allowances, which drives up the prices of allowances.

The offsets[69] feature of the Program also has legislative direction on usage limits and direct environmental benefits to the state per AB 398, AB 1207, and SB 840. Importantly, the Compliance Offset Program has served as an important cost-containment feature of the Program where costs for compliance offsets are historically slightly lower than the costs for allowances (CARB 2024m). The compliance offset program also financially supports action to reduce GHG emissions outside of the sectors directly covered by the Cap-and-Invest Program. This includes projects to sustainably manage natural and working lands to increase carbon sequestration, to capture and destroy fugitive emissions from high global warming gases, and to reduce fugitive methane emissions from mines and livestock operations. These actions are supported by the regulated entities that buy offsets and require no public monies. As part of the State's compliance offset program, tribal forestry projects have emerged as a meaningful way for tribes to participate in the Cap-and-Invest Program and generate revenue that is used to benefit their members.[70] Any restriction on offset use must consider impacts to compliance costs, stranded investments for existing projects, and reduced funding opportunities for reducing GHG emissions from non-covered sectors and for sequestering carbon in natural and working lands. The April 2024 EJAC presentation noted that if the suggested change to eliminate offsets is not incorporated, then:

- offsets must be located in areas where GHG emissions occur and within the State;
- offsets should not recognize international forestry projects; and
- CARB should consider activities that reduce pollution from across the Mexican border.

The existing Compliance Offset Program and CARB activities are aligned with these recommendations. Offset credits may only be generated by projects within the United States. International projects, including international forestry projects, are not part of the current program. Pursuant to AB 398, no more than one half of the quantitative usage limit may be sourced from projects that do not provide Direct Environmental Benefits (DEBs) to the State of California. DEBs designated offset credits provide benefits to California's air quality or water quality. Further recommendations in the September 2025 Joint CARB-EJAC meeting suggested the following if CARB does not eliminate offsets:

- CARB should correct the values of projects proven to be overestimated and prioritize projects within the state; and
- CARB should prohibit the use of offsets that increase air or water pollution.

AB 1207 provides direction on the use of offset credits within the Program, including the following: CARB shall establish a 6% offset usage limit through 2046, CARB shall develop approaches to increase offset projects in the state, and CARB must consider developing additional compliance offset protocols. SB 840 requires CARB to evaluate the contribution of offset projects to progress toward California's Climate Goals and benefits to the State. SB 840

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[69] The compliance offset program has faced litigation, and CARB prevailed. Our Children's Earth Foundation v. California Air Resources Board (1st Dist. 2015) 234 Cal.App.4th 870 (upholding Citizens Climate Lobby and Our Children's Earth Foundation v. California Air Resources Board (2012) Case No. CGC-12-519554; 2013 WL 861396) (petition for review by California Supreme Court denied June 10, 2015).

[70] See the Offset Credit Issuance Table on the *Cap-and-Trade Program Data page* for information about issued CARB offset credits including offset project operators. Under the Cap-and-Invest Program, over *90 million verified offset credits*, worth approximately $1.5 billion, have been issued to Tribal projects.

also requires CARB to update all existing compliance offset protocols by 2029 to ensure they reflect the best available science.

In regard to carbon capture and direct air capture projects, AB 1207 directs CARB to consider developing additional compliance offset protocols to address sectors that are not covered by the Cap-and-Invest Program but are identified in the Scoping Plan, specifically including carbon dioxide removal. The Scoping Plan identifies Carbon Capture, Use, and Sequestration (CCUS) and Direct Air Capture (DAC) as essential tools for achieving climate neutrality. In recognition of the critical need to remove historical and ongoing emissions and to address sectors where emissions are unavoidable and have no cost-effective or technologically feasible mitigation alternatives of carbon into the atmosphere, SB 905 (2022) requires CARB to create a CCUS Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal projects and technology.

The EJAC's recommendation is to establish trading restrictions for stationary source emitters in disproportionately impacted communities, specifically "Facilities in or directly adjacent to disadvantaged communities as defined by Health & Safety Code Section 39711 should be restricted from using allowances to demonstrate compliance. Instead, they should be subject to regulations requiring direct emissions reductions equivalent to the declining caps applicable to the overall program (e.g., 3% per year)" (EJAC 2024). This recommendation is more prescriptive than a general "restricted trading approach." It implies removing a significant number of facilities and emissions from the Program, as compliance obligations for stationary facilities in disadvantaged communities (DACs) would no longer be established by a facility's GHG emissions and allowances could not be used to demonstrate compliance, core provisions of the Cap-and-Invest Program. Instead, the EJAC recommendation is to subject such facilities to facility-specific caps established by a distinct regulation but related to cap declines within the Program. For impacted facilities, the EJAC recommendation is contrary to AB 398 and AB 1207, which mandate that CARB designate the Cap-and-Invest Program as the rule to achieve GHG emission reductions at petroleum refineries and oil and gas production facilities through 2045.

Such provisions would effectively reduce the size of the market and could erode the benefits of a well-functioning market program, such as cost-effectiveness, liquidity, and price transparency, thus increasing the potential both for market manipulation and for higher costs for the electricity importers, natural gas suppliers, and transportation fuel suppliers who market or import energy for California consumption but may not own physical facilities anywhere in the state, including in any DACs in the state. Within the Program, there are about 250 are stationary source facilities,[71] of which approximately 60% are located in disadvantaged communities (DAC).[72] The remainder of covered entities are fuel suppliers and electricity providers., By restricting stationary source facilities within DACs from surrendering allowances

[71] The Mandatory Greenhouse Gas Reporting Program annually publishes GHG emissions data for individual reporting facilities, electric power entities, and fuel suppliers on the *Reported Data webpage*. Stationary sources facilities are facilities with Emitter Covered Emissions greater than zero (CARB 2023e)

[72] Senate Bill (SB) 535 (De León, Chapter 830, Statutes of 2012) is the legislation that gives CalEPA the responsibility for identifying those communities, stating that CalEPA's designation of disadvantaged communities must be based on "geographic, socioeconomic, public health, and environmental hazard criteria". CalEPA released its updated designation of disadvantages communities for the purpose of SB 535 (CalEPA 2022). Staff used this geographic information and industrial facility location data (CARB 2024n) to determine facilities located in DAC. Maps of this information are published on *CARB Pollution Mapping Tool* and *OEHHA's CalEnviroScreen webpage*.

for compliance, the number of entities that must acquire allowances for Program compliance would be reduced by over one-third and GHG emissions covered by the Program would be reduced by approximately 51.6 MMT$CO_2$e representing a 57% reduction in covered emissions from these stationary source facilities. Any changes in the size of the compliance market must be evaluated for potential adverse impacts, including to price transparency and price volatility.

Replacing an emissions trading program with a different policy, either eliminating trading or requiring facility-specific caps distinct from the Cap-and-Invest Program, for approximately 60% of the currently covered 250 stationary source facilities will require consideration of several factors. Different industrial sectors differ in the fraction of stationary source facilities located in DACs and are subject to varying complementary policies for GHG emissions reduction. About 50% of the approximately 70 power generating facilities covered by the Program are in DACs. Currently, SB 100 calls for 100% clean electricity by 2045, and there are new federal greenhouse gas standards and guidelines for fossil fuel-fired power plants to reduce greenhouse gas emissions from power plants. Furthermore, power plants fall under the authority of Federal Energy Regulatory Commission, which ensures reliable, safe, secure, and economically efficient energy for consumers at a reasonable cost.[73] In the petroleum refining, hydrogen production, and oil and gas extraction sectors, about 65% of the approximately 60 covered facilities are located in DACs, representing 75% of covered emissions in these sectors.[7272] Only one of the seven covered cement plants is located in a DAC. SB 596 (Becker, Chapter 246, Statutes of 2021) requires CARB to develop a comprehensive strategy for the cement sector in California to achieve a GHG emissions intensity 40% below baseline levels by 2035 and net-zero GHG emissions by 2045. Similar information would need to be reviewed for California's wide variety of other industrial sectors, including food production, glass and metals manufacturing, and pulp and paper production.

Implementing the EJAC recommendation increases the potential for emissions leakage relative to the Proposed Amendments for most industrial sectors. Under the Proposed Amendments, the average annual budget decline is 11% from 2027 to 2030. Facilities required to comply with proportionally declining facility-level caps annually, or over short time frames, will need readily available options to increase efficiency or reduce onsite emissions to comply. This approach could add new considerations for near- and long-term investment planning for facilities. For some sectors, large investments may require permits or other approvals from various authorities that may not align with compliance timing for reducing emissions. The recommendation from the EJAC may also disadvantage facilities that have already significantly invested in GHG emissions reduction and new facilities with innovative low-GHG processes, where there may be fewer opportunities to further reduce emissions from a starting benchmark. In the absence of options to increase emissions efficiency in a timely manner while maintaining the same level of production, entities may need to reduce their production output to reduce their emissions. If demand for a product remains from consumers, some supply may be met by out-of-state facilities, potentially resulting in emissions leakage and added costs for materials and products within California.

Facility-specific limits could also bring the potential for shifts or increases in total in-state emissions across facilities within a sector. An increase in overall GHG emissions could result from decreasing production in order to meet prescriptive emission limits at facilities located in DACs, with that needed production replaced by less efficient facilities in the same sector that are not located in DACs, thus increasing emissions at the non-DAC facilities. Facilities not

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[73] *Federal Energy Regulatory Commission (ferc.gov)*

located in DACs may, or may not, be as efficient as the facilities in DACs which would determine total state-level emissions impacts.

Product-based industrial allocation within the Regulation is designed to minimize the risk of emissions leakage, per AB 32 and AB 398. For each eligible product, annual allowance allocation to a facility is dependent on verified facility output of the product, scaled by the applicable product benchmark, cap adjustment factor, and assistance factor. This consistent treatment of all facilities within a sector works to reduce state-wide emissions while providing an incentive for GHG emissions efficient production of materials and goods within California. Any policy restricting trading or implementing facility-specific caps would need to incorporate mechanisms to mitigate both any increased risk of emissions and production moving out-of-state and risk of production shifts to more GHG emissions intensive facilities within California.

A new policy to reduce GHG emissions from stationary sources within DACs must consider consistency with relevant statutes and must be evaluated based on its specific design to better understand the potential abatement outcomes, costs, compliance, and emissions leakage impacts for impacted facilities, sectors, and the Program as a whole. Regardless, all facilities would remain subject to limits on harmful air pollution imposed through permits administered by local air districts, as is the case under the Proposed Amendments and long-standing permitting process in the state.

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# XIV. Appendices

Appendix A-1: Proposed Regulation Order

Appendix A-2: Alternative Format to Proposed Regulation Order

Appendix B-1: Draft Environmental Impact Analysis

Appendix B-2: Draft Environmental Impact Analysis Attachment A

Appendix B-3: Draft Environmental Impact Analysis Attachment B

Appendix C: Standardized Regulatory Impact Assessment, Department of Finance Comment Letter, and CARB Responses

Appendix D-1: Updated 2027-2030 and Post-2030 Allowance Allocation to Electrical Distribution Utilities

Appendix D-2: 2027-2035 EDU Allocation Calculations Spreadsheet

Appendix E: Additions and Amendments to Product-Based Benchmarks in the Cap-and-Invest Regulation