California Air Resources Board

Public Hearing to Consider the Proposed Amendments to the Regulation for the Mandatory Reporting Of Greenhouse Gas Emissions Staff Report: Initial Statement of Reasons

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Executive Summary

California Air Resources Board (CARB or Board) staff is proposing to amend the Regulation for the Mandatory Reporting of Greenhouse Gas (GHG) Emissions (reporting regulation or MRR) to ensure the reported GHG data are accurate and fully support the California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms (title 17, California Code of Regulations, section 95800 et seq.) (Cap-and-Trade Regulation) (which is in process of changing its name to Cap-and-Invest Regulation). Staff is also proposing amendments to ensure the data that are collected for CARB's other climate change programs are complete and accurate, including the State's GHG inventory.

This staff report presents CARB staff's proposal to amend the reporting regulation. The staff report discusses the reasons for the proposed amendments and the potential impacts from the regulatory changes. The proposed amendments represent necessary amendments to the current reporting regulation. The proposed changes clarify the reporting requirements necessary for submittal of complete and accurate emissions data reports and add or clarify data elements for emissions and product data reporting necessary to support the Cap-and-Invest Regulation (formerly Cap-and-Trade Regulation). The proposed changes include amendments to ensure accurate accounting of, and to appropriately address and minimize the potential for emissions leakage resulting from, imported electricity transfers within the California Independent System Operator's (CAISO) Western Energy Imbalance Market (WEIM), including amendments anticipating CAISO's Extended Day Ahead Market (EDAM) tariff. In addition, proposed amendments add requirements to account for electricity imports from Energy Storage Systems (ESS), require reporting of emissions from geologic carbon dioxide sequestration facilities, require reporting of emissions from biorefineries consistent with petroleum refineries, require reporting of imported cement products and emissions, require reporting of emissions from imported hydrogen and in-state producers of hydrogen utilizing electricity, change the point of regulation and remove the reporting threshold for imported liquefied petroleum gas (LPG), expand the point of regulation for transportation fuel suppliers, streamline verification requirements related to site visits and verifier rotation, and include other minor amendments to ensure accurate GHG accounting and consistency with the Cap-and-Invest Program and to simplify reporting and verification requirements.

Background

The Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32, Nunez, Stats. 2006, ch. 488) requires California to cut GHG emissions to 1990 levels by 2020, to continue and maintain reductions beyond 2020, stimulate investment in clean and efficient technologies, and improve air quality and public health. AB 32 also requires CARB to adopt regulations for the mandatory reporting of GHG emissions in order to monitor and enforce compliance with CARB's GHG emissions reduction actions, including market-based compliance mechanisms. In 2016, the Legislature passed and Governor Brown signed Senate Bill (SB) 32 (California Global Warming Solutions Act of 2006: emissions limit, Pavley, Stats. 2016, ch. 249), which mandates a 40 percent reduction below 1990 levels by 2030. The 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan; CARB, December 2022) lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279 (The California Climate Crisis

Act, Muratsuchi, Stats. 2022, ch. 337). AB 1207 (Climate change: market-based compliance mechanism: extension, Irwin, Stats. 2025, ch. 117) extends the Cap-and-Invest Program to January 1, 2046, to support further climate action and achieve the 2045 targets. SB 905 (Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program, Caballero, Stats. 2022, ch. 359) works together with AB 1279 to support the safe scaling of carbon management technologies to help achieve the AB 1279 targets.

The reporting regulation was originally developed and adopted by CARB in December 2007. In December 2010, the Board adopted amendments to the reporting regulation in order to harmonize with the GHG reporting requirements of U.S. EPA, to support California's Cap-and-Invest Regulation, and to ensure consistency with the Western Climate Initiative reporting structure.

In September 2012, the Board adopted amendments to the reporting regulation in order to continue harmonization with U.S. EPA, as well as add conforming definitions to the Cap-and-Invest Regulation and the Cost of Implementation (COI) Fee Regulation (Cal. Code Regs., tit. 17, §§ 95200-95207). In September 2013, the Board adopted amendments to clarify the reporting requirements, support the Cap-and-Invest Regulation, and other updates. In September 2014, the Board adopted amendments to clarify the reporting requirements, integrate the COI reporting requirements, and collect additional information to support CARB's various climate change programs, such as the statewide GHG emissions inventory.

In July 2017, the Board adopted amendments to support the Cap-and-Invest Regulation and harmonize with the U.S. Environmental Protection Agency (EPA) Clean Power Plan reporting and U.S. EPA rule amendments. In December 2018, the Board adopted amendments to support the Cap-and-Invest Regulation and ensure consistency with the calculation of compliance obligations and to ensure that reported GHG emissions and product data are accurate and complete to support California's GHG reduction programs, including imported electricity emissions from the CAISO Energy Imbalance Market (EIM).

Since the Board's 2018 action, CARB staff has identified additional requirements and clarifications to the reporting regulation that are needed to support the Cap-and-Invest Regulation, ensure that reported GHG emissions and product data are accurate and complete to support California's GHG reduction programs, and further clarify the regulation and its requirements.

Objectives of the Proposed Amendments

CARB staff has proposed amendments to the regulations to:

- Align with and support California's Cap-and-Invest Regulation, including allocation and the calculation of compliance obligations.
- Ensure that reported GHG emissions and product data are accurate and complete to support California's GHG emissions reduction programs, including the statewide GHG emissions inventory.

The proposed amendments to MRR do not change the overall reporting structure. These proposed amendments improve upon, clarify, and add to the existing requirements.

Overview of the Proposed Amendments

Table ES-1 provides a summary of the key amendments proposed to the regulations. More complete descriptions of the proposed amendments are found in the succeeding chapters of this report.

Table ES-1
Summary of Proposed Regulatory Amendments to the
Regulation for Mandatory Reporting of Greenhouse Gas Emissions

Topic/Sector	Proposed Regulatory Updates

General	• Minor updates for typographical errors, clarifications, and removal of obsolete or redundant requirements that do not materially affect the reporting requirements
	• Update agency name from Air Resources Board (ARB) to California Air Resources Board (CARB) to conform with CARB's current branding and style practices
	• Update terminology from Cap-and-Trade to Cap-and-Invest per AB 1207
	• Definition updates and additions, including:
	  ○ Updating "operational control" and "supplier" to establish that a supplier consisting of multiple entities held under common ownership or operational control must report as a single reporting entity under MRR
	  ○ Amending "supplier" to include importers of cement and hydrogen and suppliers of imported LPG
	  ○ Amending "natural gas supplier" to require facilities to report natural gas purchase data for natural gas purchased from entities that sell or deliver fossil or biomass-derived LNG or CNG to end-users
	  ○ Amending "pipeline quality natural gas" to characterize "pipeline quality" based on an annual weighted average of each defining criterion
	  ○ Amending "fuel supplier" to include suppliers of biomass-derived natural gas and natural gas liquids, and suppliers of hydrogen
	  ○ Amending "biogenic portions of CO_2 emissions" to include emissions from the consumption of biomass-derived fuels and feedstocks
	• Establish cessation requirements for shutdown electric power entities (EPEs) and suppliers
	• Revise reporting cessation requirements to be based on an applicable reporting threshold rather than specifically a 10,000 MT CO_2e reporting threshold

Topic/Sector	Proposed Regulatory Updates
	• Require CARB to develop an assigned emissions level (AEL) when needed for non-submitted/non-verified reports submitted by any entity subject to verification, not just a covered entity • Establish applicability dates for proposed amendments • Apply requirement to report background information for forest-derived wood and wood waste to wood harvested from the Department of California Forestry and Fire Protection (CalFire) Tier 1 High Hazard Zones for Tree Mortality • Revise alternative method submission requirements • Require all reporters to designate an Alternate Designated Representative in CARB's online reporting tool • Require purchased biomethane to be identified as exempt or non-exempt • Require entities to separately identify, calculate and report direct emissions of CO_2 from the consumption of biomass-derived fuels rather than only from their combustion
Applicability	• Apply article to operators of biorefineries, regardless of emissions levels • Apply article to operators of linear generators • Expand the point of regulation for transportation fuel suppliers to include enterers of biomass-derived fuels and in-state biomass-derived fuel production facilities who supply fuel outside of the bulk transfer/ terminal system • Apply reporting requirements to suppliers of biomass-derived equivalents of natural gas liquids (NGL), including biomass-derived LPG • Change point of regulation for LPG imports to the operator of a liquefied petroleum gas (LPG) receiving facility that supplies imported biomass-derived or fossil LPG for distribution in California, and exclude suppliers of imported LPG from a reporting threshold • Include importers of cement as reporting entities • Include importers of hydrogen and producers of hydrogen utilizing electricity as reporting entities • Revise intrastate pipeline definition to apply to entities that jointly own or operate an interconnection pipeline to an interstate pipeline with other facilities if they do not report facility GHG emissions under MRR
Product Data Reporting	• Add "sweet whey powder" as a reportable covered product • Revise the definition of "aseptic tomato paste" to include tomato puree • Remove requirement to report calcium ammonium nitrate production data

Topic/Sector	Proposed Regulatory Updates
	• Revise product data reporting requirements for refineries, including phasing out reporting of Complexity Weighted Barrel (CWB) data, and phasing in reporting of product data for liquid hydrocarbon fuel (LHF) and asphalt production • Define asphalt production for the purposes of non-CWB reporting to exclude facilities that only engage in bitumen oxidation or blowing of asphalt produced from offsite petroleum refining • Revise the definitions for dehydrated onions, chili peppers, garlic, onion, parsley, and spinach to be based on weight-based moisture content rather than volume-based • Allow reporting and verification of prior product data for the purpose of one-time new product allocation • Add requirement for cement producers to report the annual quantity of supplementary cementitious materials (SCM) consumed for blending cement that is received from SCM manufacturers that are opt-in or covered entities under Cap-and-Invest, by SCM type and manufacturer • Add requirement for manufacturers of SCMs to report the annual quantity of SCMs produced and the annual quantity of SCMs delivered to cement or concrete plants to make finished cement, by SCM type and customer
Electric Power Entities	• Remove requirements for EPEs to report certain redundant information associated with registering specified sources • Require information related to CAISO sales to be reported on a Cap-and-Invest compliance period basis instead of annually • Updating “EIM” to “WEIM”, “EIM Outstanding Emissions” to “CAISO Markets Outstanding Emissions”, and “EIM Purchaser Emissions” to “CAISO Markets Purchaser Emissions” to reflect developments in CAISO electricity markets • Add definitions related to reporting specific types of electricity imports (pseudo-tie resources and dynamically tagged imports) • Add requirements for aggregated zero-emissions generation sources • Add and update definitions and requirements related to electricity imports and exports acquired through CAISO operated electricity markets • Update references to Cap-and-Invest Regulation for RPS Adjustment requirements • Update the Outstanding Emissions calculation to reflect improvements in CAISO operated electricity markets and reflect a new CAISO operated electricity market, the Extended Day Ahead Market (EDAM), expected in 2026

Topic/Sector	Proposed Regulatory Updates
	• Add definitions and requirements related to electricity imports from energy storage systems (ESS) • Remove requirement that renewable energy credit (REC) serial reporting issues for specified sources result in a qualified positive verification • Add option and qualifying criteria for EPEs to claim aggregated hydroelectric and/or zero-emissions generation sources as a single specified source
Electricity Generation Facilities	• Require operators of linear generators to report data in the same manner as fuel cell operators • Add option to separately report covered emissions from electricity generation during declared emergencies for exclusion from Cap-and-Invest applicability threshold
Refineries and Hydrogen Production Plants	• Apply petroleum refinery MRR requirements to biorefineries, including reporting of vented and fugitive emissions • Establish reporting requirements for biogenic emissions from processing or coprocessing of biomass-derived feedstocks • Require CO_2 from all startup, shutdown, and malfunction (SSM) flare events to be reported • Require emissions from process vents to be reported by standalone hydrogen plants that are not integrated with a refinery • Require refineries to report total, fossil crude, and biomass-derived refinery inputs • Require operators of hydrogen plants, including hydrogen plants integrated in refinery operations, to report product and delivery data for gaseous and liquid hydrogen sold or otherwise transferred to biorefineries

Topic/Sector	Proposed Regulatory Updates
Transportation Fuel Suppliers	• Add biomass-derived Reformulated Blendstock for Oxygenate Blending (RBOB) and biomass-derived LPG as reportable transportation fuels • Apply existing requirements for supplied RBOB and LPG to their biomass-derived equivalents, including requiring emissions from biomass-derived fuels to be calculated using the same emission factors as their fossil counterparts • Revise existing reporting requirements as needed to apply to in-state biomass-derived fuel production facilities and importers of biomass-derived fuels that supply fuel outside the bulk transfer/terminal system • Require denaturant volume in fuel ethanol to be reported as fossil or biomass-derived RBOB and quantified as a user-defined value or default value of 2 percent of total fuel ethanol volume • Require non-ethanol component of E85 to be reported as RBOB (fossil or biomass-derived) • Require fuel volumes eligible for exemption that are excluded from emissions reporting to be reported by exemption category • Require suppliers to report Low Carbon Fuel Standard (LCFS) pathway code and point of regulation data for biomass-derived fuels subject to emissions reporting
Suppliers of Natural Gas and Natural Gas Liquids	• Apply existing requirements for produced and supplied NGLs (including LPG) and imported LPG, CNG, and LNG to their biomass-derived equivalents, including requiring emissions from biomass-derived fuels to be calculated using the same emission factors as their fossil counterparts • Add emissions reporting exemption for imported fuels used exclusively in ocean-going vessels • Require CO_2 emissions from natural gas redelivered to public utility gas corporations to be estimated and included in CO_{2j} parameter only if emissions from redelivered gas exceed 25,000 MT CO_2e • Revise existing requirements for “importers of LPG” to apply instead to “suppliers of imported LPG,” which is inclusive of the proposed new point of regulation for imported LPG • Make optional the requirement for suppliers of imported LPG to report LPG volumes and associated emissions by component NGLs • Require intrastate pipeline operators to report information for all deliveries to end-users, regardless of the supplied amount
Geologic Sequestration	• Establish initial reporting requirements for geological sequestration of CO_2

Topic/Sector	Proposed Regulatory Updates
Cement	• Establish reporting requirements for importers of cement[1] • Require cement producers to report annual quantities of baghouse dust and grind aids consumed for blending cement instead of "cement substitutes" • Update the definition of "cement" to include non-conventional products that use low-carbon materials or processes if they satisfy performance standards for conventional cement types
Hydrogen Imports and Production Utilizing Electricity	• Establish GHG emissions and additional data reporting requirements for importers of hydrogen and in-state producers of hydrogen utilizing electricity that are not subject to MRR reporting under section 95101(a)(1)(B)3[2,3] • Establish methods for quantification of emissions from electricity consumed for hydrogen production using generation source emissions information, when known, or default factors, when not known • Allow for the use of alternative methods for GHG emissions reporting under certain circumstances to provide flexibility
Verification	• Require verification site visits once every three years instead of once every compliance period • Establish remote site visit eligibility criteria and requirements for certain low-risk reporters • Cap verification services with the same verification body by an entity to six consecutive verifications • Require ten days advance notice to the Executive Officer for a site visit instead of 14 days • Remove the requirement for a verification body to provide information on causes of emissions changes in the verification report when there was a >25% change in reported GHG emissions compared to the prior data year and full verification was not conducted • Require a verifier accredited as an oil and gas systems specialist when providing verification services to operators of biorefineries • Remove specialized verification requirements related to process emissions sources • Revise and clarify information a verifier must report in the Notice of Verification Services and Verification Plan

[1] Staff proposes that data reported by cement importers under section 95126 not be subject to verification.

[2] Existing provisions in MRR capture emissions from in-state hydrogen production facilities that have combustion and process emissions greater than 10,000 MT CO_2e, inclusive of traditional fossil-based technologies and biomass-based production technologies.

[3] Staff proposes that data reported by hydrogen importers and producers under section 95127 not be subject to verification.

Topic/Sector	Proposed Regulatory Updates
	• Require verifiers to conduct material misstatement calculations for thermal and non-thermal production by summing crude oil and associated gas covered product data in units of barrel of oil equivalent • Allow errors in the emissions data report to be corrected by the reporting entity and verified by the same verification body without a set aside when CARB determines that the errors do not impact covered emissions or covered product data • Simplify accreditation requirements for offset project specific verifiers • Allow verifier accreditations to be renewed for up to six years • Revise criteria under which a verification is deemed to have a high potential for a conflict of interest • Remove the requirement to obtain Executive Officer approval prior to the start of verification services in cases where the potential for a conflict of interest is low • Require verifiers to include in their conformance review emissions associated with an eligible state of emergency that are optionally reported by an electricity generation facility for exclusion from the Cap-and-Invest applicability threshold, if the facility was not a covered entity in the previous data year
Petroleum and Natural Gas	• Require operators of natural gas distribution pipelines to report data for transmission pipeline blowdowns

Staff Recommendation

Staff recommends the proposed amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions to continue to support the Cap-and-Invest Program through the reporting of complete and robust GHG emissions data, to harmonize the reporting requirements for MRR and the Cap-and-Invest Regulation, and to continue supporting the statewide GHG emissions inventory. Staff recommends that the Board approve the amendments to the regulation, as proposed.

I. Introduction and Background

The Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (reporting regulation or MRR) was developed pursuant to AB 32 and first adopted by the California Air Resources Board (CARB or Board) in December 2007. In December 2010, CARB adopted substantial amendments to the original regulation to harmonize with the U.S. EPA federal mandatory GHG reporting requirements contained in title 40, Code of Federal Regulations (CFR), Part 98; to support the California Cap-and-Invest Program; and to align with the Western Climate Initiative (WCI) reporting structure. These amendments became effective on January 1, 2012.

A. Overview of Prior Regulatory Actions

CARB adopted amendments in 2012 to continue alignment with U.S. EPA's Mandatory GHG Reporting Rule, further support the Cap-and-Invest Program, the COI Fee Regulation and the statewide GHG inventory. These amendments became effective January 1, 2013. Further amendments were made in 2013 to clarify the reporting requirements and support Cap-and-Invest Program needs which became effective on January 1, 2014. Additional amendments were made in 2014 to clarify the reporting requirements and support Cap-and-Invest Program needs which became effective on January 1, 2015. The sixth round of amendments were made in 2016 to support the Cap-and-Invest Regulation and harmonize with the U.S. EPA Clean Power Plan reporting and U.S. EPA rule amendments. In December 2018, further amendments were made to support the Cap-and-Invest Regulation and ensure consistency with the calculation of compliance obligations and to ensure that reported GHG emissions and product data are accurate and complete to support California's GHG reduction programs, including emissions from imported electricity through the California Independent System CAISO Western Energy Imbalance Market (WEIM) to serve California electric demand.

The full regulatory record and background for these seven previous GHG reporting regulation rulemakings is available here:

http://www.arb.ca.gov/regact/2007/ghg2007/ghg2007.htm (CARB MRR 2007)

http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm (CARB MRR 2010)

http://www.arb.ca.gov/regact/2012/ghg2012/ghg2012.htm (CARB MRR 2012)

http://www.arb.ca.gov/regact/2013/ghg2013/ghg2013.htm (CARB MRR 2013)

http://www.arb.ca.gov/regact/2014/ghg2014/ghg2014.htm (CARB MRR 2014)

http://www.arb.ca.gov/regact/2016/ghg2016/ghg2016.htm (CARB MRR 2016)

https://ww2.arb.ca.gov/rulemaking/2018/mandatory-reporting-greenhouse-gas-emissions-2018 (CARB MRR 2018)

B. Specific Purpose for the Adoption of the Proposed Regulatory Revisions

CARB staff has proposed amendments to the regulation to:

- Support California's Cap-and-Invest Regulation by revising data reporting requirements to continue to ensure consistency with allocation and the calculation of compliance obligations.
- Ensure that reported GHG emissions and product data are accurate and complete to support California's GHG emissions reduction programs, including the statewide GHG emissions inventory.

The proposed amendments to the reporting regulation are necessary to further ensure complete and accurate GHG reporting by clarifying reporting requirements and including additional or modified definitions reflecting the other modifications. The proposed amendments do not change the overall reporting structure or requirements of the reporting regulation. These proposed amendments improve upon, clarify, and add to the existing requirements.

II. The Problem that the Proposal is Intended to Address and Proposed Solutions to the Problem

To carry out the goals of AB 32, a robust and accurate GHG reporting program is necessary to track emissions from reporting entities over time and to demonstrate California's progress in reducing GHG emissions. Additionally, data reported under MRR is the foundation of California's Cap-and-Invest Program and must be complete and accurate to successfully implement the market program.

The proposed amendments clarify and revise existing requirements and add new requirements necessary to support the State's GHG emissions reduction goals, the Cap-and-Invest Program, and the statewide GHG inventory. Specifically, new data requirements are primarily needed to: collect emissions data from fuels and sectors not currently included in MRR reporting to give a more complete picture of GHG emissions in the State and more accurately assess California's progress towards achieving a reduction in GHG emissions of 40% below 1990 levels by 2030, as directed by SB 32, and net carbon neutrality and a reduction in GHG emissions by 85% below 1990 levels no later than 2045, as directed by AB 1279; calculate compliance obligations and allowance allocation for reporting entities in alignment with proposed amendments to the Cap-and-Invest Regulation; and include higher-resolution end-use information in MRR data for certain sectors so that the reported data can be used in the GHG emissions Inventory.

In addition to the summary information in this chapter, each update is discussed individually in Chapter III, The Specific Purpose and Rationale of Each Adoption, Amendment, or Repeal.

A. General

Staff proposes minor revisions throughout the regulation that do not materially affect the reporting requirements, including corrections for typos and references, clarifications, and removal of obsolete or redundant requirements; these are not summarized in this chapter, but are discussed in detail in Chapter III.

Staff proposes amendments to the definitions of “operational control” and “supplier” to require multiple entities that that are under common control or common ownership that supply fuels for which GHG emissions are reportable under MRR to report as a single reporting entity under MRR.

Staff proposes substantive amendments to other definitions that do not fall under the topics covered in later sections of this chapter. Staff proposes revising the definition of “supplier” to include importers of cement and hydrogen and suppliers of imported LPG and revising the definition of “fuel supplier” to include suppliers of biomass-derived natural gas and natural gas liquids, and suppliers of hydrogen. Staff proposes revising the “natural gas supplier” definition to include entities that sell or deliver fossil or biomass-derived LNG or CNG to end-users so that natural gas purchases from these suppliers are included in natural gas purchase data reported by facilities under section 95115(k). Staff proposes revising the definition for “pipeline quality natural gas” to be based on annual weighted averages of the defining criteria. Staff also proposes amending the definition of “biogenic portions of CO_2 emissions” to include emissions from the consumption of biomass-derived fuels and feedstocks.

Staff proposes a number of amendments to provisions for cessation of reporting and verification in sections 95101(h) and 95101(i), including clarifying cessation requirements for electric power entities (EPEs) with reduced emissions levels, establishing cessation provisions for EPEs and suppliers that cease operations, and revising existing reporting cessation requirements for facility operators and suppliers with reduced emissions levels to be based more generally on their applicable reporting threshold, rather than a 10,000 MT CO_2e reporting threshold, which will no longer apply to all suppliers under proposed amendments.

Staff proposes amendments to section 95103(g) that require CARB to assign an emissions level when needed to all entities subject to verification and not just those with a Cap-and-Invest compliance obligation. Staff also proposes revising section 95103(h) to specify an effective start date of 2027 data reported in 2028 for the amended regulation unless otherwise specified; in section 95103(h)(1), staff propose that revised cessation of reporting and entity shutdown requirements are applicable for 2026 data reported in 2027; in section 95103(h)(2), staff propose that certain definitions related to Electric Power Entities are applicable for 2026 data reported in 2027; in section 95103(h)(3), staff proposes that product data definitions in section 95102(b) of the MRR are applicable for 2026 product data reported in 2027; in section 95103(h)(4), staff propose that all revisions to requirements for electric power entities in section 95111 are applicable for 2026 data reported in 2027; and in section 95103(h)(5) staff propose that revised verification requirements are applicable for verifying 2026 data reported in 2027. Staff proposes revising section 95103(j)(2) to require that data on the use of forest-derived wood and wood waste be reported for wood harvested from CalFire’s Tier 1 High Hazard Zones of Tree Mortality as emissions from this wood may be eligible for exemption under section 95852.2(a)(4) of the Cap-and-Invest Regulation. To support this change, staff also proposes amending the definition for “forest-derived wood and wood waste” to incorporate wood harvested from areas of the State designated by CalFire as Tier 1 High Hazard Zones of Tree Mortality.

Staff proposes an amendment to section 95103(j)(3) to require operators or suppliers who report emissions from biomethane to report for each contracted delivery whether the biomethane is a biomass-derived fuel with exempt CO_2 emissions as described under sections

95852.1.1 and 95852.2.(a) of the Cap-and-Invest Regulation. This requirement helps reporters, CARB staff, and verifiers evaluate if biomethane emissions are accurately reported as exempt or non-exempt, which may impact an entity's covered emissions. Staff also proposes to require entities to separately identify, calculate and report direct emissions of CO_2 from the consumption of biomass-derived fuels rather than only from their combustion for consistency with proposed amendments to exemption provisions for CO_2 from biomass-derived fuels in the Cap-and-Invest Regulation.

Staff proposes revisions to section 95103(m)(2) to add and clarify information that must be included in an alternative method request to reduce the need for staff to collect additional information from the reporter before the request can be routed for Executive Officer approval.

Staff proposes an amendment to section 95104(b) to require all reporting entities to designate an Alternate Designated Representative (ADR) in the California electronic GHG Reporting Tool (Cal e-GGRT) in addition to a Designated Representative. This amendment helps to ensure continuity in reporting and prevent late reporting violations.

B. Applicability

Staff proposes amending section 95101(a)(1)(A) to apply this article to biorefineries regardless of emission levels, as is currently the case for petroleum refineries, so that all types of refineries are treated consistently under this article.

Staff proposes several amendments, described in more detail below, to include GHG emissions from sources and fuels not currently subject to MRR to support the statewide GHG emissions inventory and other programs that rely on data collected under this article. Staff proposes amendments to sections 95101(c)(2) and 95121 to expand the point of regulation for transportation fuel suppliers to include enterers of biomass-derived fuels and in-state biomass-derived fuel production facilities that supply fuel outside of the bulk transfer/ terminal system to better capture GHG emissions from biomass-derived transportation fuels supplied in California. Staff proposes applying this article to importers of cement in section 95101(a)(1)(H) so that data needed to track and analyze GHG emissions associated with imported cement can be collected to support implementation of SB 596. Staff proposes applying this article to importers of hydrogen and producers of hydrogen utilizing electricity in section 95101(a)(1)(I) to collect GHG emissions data to support tracking of hydrogen production and associated GHG emissions in response to expected expansion of lower carbon hydrogen production technologies as signaled by the 2022 Scoping Plan Update (CARB, December 2022).[4]

Staff proposes to revise the intrastate pipeline definition to include entities that jointly own or operate an interconnection pipeline to an interstate pipeline with other facilities if they do not report facility GHG emissions under MRR so that GHG emissions from supplied natural gas are reported by entities that fit this description. Staff also proposes amending sections 95101(c)(5), 95102(a), 95121, and 95122, to apply MRR requirements to suppliers of biomass-derived equivalents of natural gas liquids (NGL), including biomass-derived LPG, rather than

[4] Existing provisions in MRR capture emissions from in-state hydrogen production facilities that have combustion and process emissions greater than 10,000 MT CO_2e, inclusive of traditional fossil-based technologies and biomass-based production technologies.

just suppliers of fossil NGLs, to capture GHG emissions from novel, low carbon fuels not currently reported under MRR.

To ensure accurate and complete reporting of GHG emissions from imported LPG, staff proposes amending sections 95101(c)(5), 95102(a), and 95122 to change the point of regulation for LPG imports from the "importer of fuel" to the operator of an LPG receiving facility that supplies imported fossil or biomass-derived LPG at their facility for distribution in California; staff also proposes excluding suppliers of imported LPG from a minimum reporting threshold in section 95101(c)(5). The proposed changes to the point of regulation and reporting threshold for imported LPG have been discussed and refined with stakeholders and will be reflected in the proposed regulation going forward. However, to ensure that proposed amendments are as accurate and comprehensive as possible, staff may continue to develop proposals in this area throughout this regulatory process.

C. Product Data Reporting

The data used to calculate allocation under the Cap-and-Invest Regulation's product-based benchmarks for industrial allocation are reported pursuant to MRR. To align with proposed amendments to several product-based benchmarks and related definitions in the Cap-and-Invest Regulation, MRR staff proposes to add "sweet whey powder" as a reportable covered product and revise the definition of "aseptic tomato paste" to include tomato puree. Staff proposes new requirements to support updated allocation for cement in the Cap-and-Invest Program. These include requiring cement producers to report the annual quantity of supplementary cementitious materials (SCM) consumed for blending cement that is received from SCM manufacturers that are covered or opt-in entities in the Cap-and-Invest Program, by SCM type and manufacturer, and requiring manufacturers of SCMs to report annual quantities of SCMs produced and the annual quantity of SCMs delivered to cement or concrete plants to make finished cement, by SCM type and customer. Staff also proposes revising product data reporting requirements for refineries, including transitioning from reporting complexity-weighted barrel (CWB) data to reporting liquid hydrocarbon fuel and asphalt production data, and defining asphalt production for the purposes of non-CWB reporting to exclude facilities that only engage in bitumen oxidation or asphalt blowing of asphalt produced from offsite petroleum refining.

Staff proposes to remove the requirement to report calcium ammonium nitrate production data because the product-based benchmark for this covered product was eliminated from the Cap-and-Invest Regulation in a prior rulemaking. Staff also proposes to revise the definitions for dehydrated chili pepper, garlic, onion, parsley, and spinach to be based on a weight-based moisture content rather than volume-based to simplify calculating the quantity of reportable product. Staff also proposes to revise the definition for "plasterboard" to clarify that only saleable plasterboard, which excludes trimmings, should be reported in the quantity of plasterboard produced.

Staff also proposes revisions in section 95103(l)(1) to allow covered product data from up to five data years immediately prior to the current data year to be reported and verified for the purpose of one-time new product allocation pursuant to section 95891(b)(1) of the Cap-and-Invest Regulation. To ensure that proposed amendments are as accurate and comprehensive

as possible, staff may continue to develop proposals in this area throughout this regulatory process.

D. Electric Power Entities

Staff proposes to explicitly add the abbreviations for electric power entities (EPE), multi-jurisdictional retail provider (MJRP), asset-controlling supplier (ACS), and ARB identification number (ARB ID) to the Regulation text, in line with references in all other CARB and sector documentation.

Staff also proposes amendments in section 95111 to remove requirements for EPEs to report certain redundant information associated with registering specified sources, to clarify high GHG and Renewable Portfolio Standard (RPS) adjustment reporting requirements, to clarify references to the Cap-and-Invest Regulation for RPS Adjustment requirements, and to remove the requirement that REC serial reporting issues for specified sources result in a qualified positive verification. Staff also propose changes to require information related to CAISO sales to be reported on a Cap-and-Invest Program compliance period basis instead of annually to reduce repetitive reporting and better reflect regulatory provisions that determine reporting requirements at the end of each compliance period instead of year-to-year.

Staff proposes adding definitions to section 95102(a) related to reporting specific types of electricity imports, including pseudo-tie resources and dynamically tagged imports, and updating definitions and requirements related to electricity imports and exports acquired through CAISO operated electricity markets. Staff also proposes adding requirements for aggregated zero-emissions generation sources to accommodate long-standing contracts between multiple integrated generation sources, and future development of naturally interconnected sources.

Staff also proposes adding definitions and requirements to sections 95102(a) and 95111 related to electricity imports that pass through an Energy Storage System (ESS) on their transmission path before being imported. As part of future planning, increasing demand, and reliability concerns, entities in the Western Electricity Coordinating Council (WECC) have built out, and are continuing to build out, significant quantities of electricity storage, the nature of which is to delay electricity deliveries of generation from times of low demand to times of higher need, which requires additional reporting clarifications and requirements to ensure accurate accounting and reduce potential sources of leakage over the current assumptions of instantaneous deliveries.

Staff proposes amendments to section 95111 to ensure accurate accounting of, and to appropriately address and minimize the potential for emissions leakage resulting from, imported electricity transfers within the California Independent System Operator's (CAISO) Western Energy Imbalance Market (WEIM), including amendments anticipating CAISO's Extended Day Ahead Market (EDAM) tariff. More specifically, staff proposes updating the Outstanding Emissions calculation to reflect improvements in CAISO-operated electricity markets and the new CAISO operated extended day-ahead market (EDAM) expected in 2026. Additional background information and details for these amendments are provided below.

Renewable Portfolio Standard (RPS) Adjustment

The RPS adjustment was included in the initial MRR and Cap-and-Invest Regulations ("Regulations") 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 (Pub. Util. 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. PCC 0 (Pub. Util. 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. 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 Regulations since 2010, the RPS adjustment has continued to pose significant implementation challenges (CARB, October 2010). 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, April 2017, p. 24). 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 (Clean Energy, Jobs, and Affordability Act of 2022, Laird, Stats. 2022, ch. 361), AB 1279, and SB 100 (California Renewables Portfolio Standard Program: emissions of

greenhouse gases, De Leon, Stats. 2018, ch. 312) require deep decarbonization of the electricity sector, necessitating significant increases in renewable electricity that are not associated with GHG emissions as well as increased Program stringency to support these changes. Staff are proposing amendments to the Cap-and-Invest Regulation 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 Cap-and-Invest Regulation amendments limit the RPS adjustment to PCC 0 resources after the 2030 Cap-and-Invest Program budget year, limiting the implementation challenges posed by the RPS adjustment, while giving entities certainty and time to respond to this change. The words "and associated RECs" were added to MRR section 95111(b)(5), which reference the Cap-and-Invest Regulation's RPS Adjustment requirements, to fully integrate the requirements for RECs claimed as part of an RPS adjustment in both regulations.

Minimize Emissions Leakage for Imported Electricity

Staff are proposing changes to address requirements for imported electricity in light of California's decarbonization targets for the electricity sector and the CAISO planned launch of the EDAM. These updates are necessary to ensure that the Regulations reflect California's shifting regulatory environment and avoid gaps due to changes to CAISO markets.

Amendments to reflect changes to CAISO Markets

The CAISO manages the majority of California's electricity grid and operates wholesale electricity markets for California and portions of the West.

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).[5] The WEIM provides BAAs throughout the West access to CAISO's real-time market services and increases market efficiency by expanding the availability of electricity 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 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.

[5] This rulemaking updates references in MRR 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 to the current regulation text and WEIM when referring to proposed amendments.

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 WEIM. These changes limited the amount of electricity available to support WEIM imports to California by constraining attributions 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-Invest Regulation 2018 amendments, CARB made changes to the approach to addressing EIM Outstanding Emissions to continue maintaining the environmental integrity of the Cap-and-Invest Program (CARB, September 2018). 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. EDAM will allow for optimized commitment of electricity generation by CAISO in the day-ahead timeframe. Like the WEIM, the EDAM will enable electricity generators in the West to opt-in to serving areas that prices GHG emissions, including California, and to reflect those costs in their energy bids. EDAM will optimize transfers to GHG regulation areas 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:

1. Attributing electricity to GHG regulation areas based on state boundaries (instead of BAA boundaries);
2. A day-ahead counterfactual that establishes a baseline of what dispatch would have occurred in the non-GHG regulation area absent GHG policy;
3. Placing limits on resource attribution to time periods when a BAA in which the resource is located is exporting electricity; and
4. 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, December 2022), and in August 2023, CAISO submitted the tariff to implement EDAM to the Federal Energy Regulatory Commission (FERC) for approval (CAISO, August 2023). In December 2023, FERC approved the relevant provisions of the CAISO’s EDAM tariff (FERC, December 2023) setting the stage for an expected EDAM to launch in 2026. In this rulemaking, staff proposes to update the Regulations to reflect EDAM and the changes and improvements approved 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 MRR. This includes updating references in the Regulations from “EIM” to “WEIM” and replacing “EIM Outstanding Emissions” with the term “CAISO Markets Outstanding Emissions.” The proposed changes to the calculation of Outstanding Emissions are designed to address leakage for electricity imports that occur via WEIM-only and EDAM (once operational). The revised calculations limit the outstanding emissions, to the MWh attributed below a resource’s baseline, which are the MWh associated with the highest risk for emissions leakage and to exclude generation from resources contracted to California utilities for reliability purposes. 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. The proposed changes are aligned with proposed changes in the Cap-and-Invest Regulation.

E. Electricity Generation Facilities

Extreme heat events can strain the State’s power infrastructure and increase demand beyond what can be met by electricity generation facilities (EGF) under normal operating conditions. During an extreme heat event in 2022, the Governor proclaimed a State of Emergency and issued Executive Order N-14-22 that included provisions to facilitate an increase in electricity generation by suspending certain regulatory requirements. To prevent a non-covered EGF from becoming newly subject to the Cap-and-Invest Program requirements due to emissions from electricity generated to mitigate a grid-related state of emergency, CARB staff has proposed an amendment to section 95812(c)(2)(A)1 of the Cap-and-Invest Regulation that would allow a non-covered EGF to exclude covered emissions during an eligible declared emergency from their Cap-and-Invest Program applicability threshold calculation. MRR staff proposes requiring electricity generation facilities (EGF) seeking to exclude covered emissions from the Cap-and-Invest applicability threshold under proposed Cap-and-Invest Regulation section 95812(c)(2)(A)1 to separately report total annual covered emissions that occurred during eligible states of emergency to facilitate data checks and verification of the emissions excluded from the Cap-and-Invest Program applicability threshold calculation. Emergency electricity generation emissions would continue to be included in the total GHG emissions and covered emissions calculated for MRR GHG emissions reporting, which are used by other agency programs, such as the statewide GHG Inventory, as well as in the reporting and verification applicability threshold determinations.

F. Refineries and Hydrogen Plants

Staff proposes amendments to incorporate biorefining and coprocessing of biomass-derived feedstocks in the scope of MRR refinery reporting to ensure comprehensive GHG emissions reporting by the refinery sector, which now extends beyond petroleum refineries processing crude oil. Staff proposes adding and revising definitions to establish biorefineries and petroleum refineries as distinct entities within the broader category of “refineries,” and requiring operators of biorefineries to report the same data as petroleum refineries under section 95113

of MRR, including vented and fugitive emissions. Staff proposes adding a definition for "coprocessing," and adding requirements in section 95113 for reporting biogenic emissions from the processing of biomass-derived feedstocks in refinery units.

Staff proposes requiring emissions from all startup, shutdown, and malfunction (SSM) flare events to be reported to ensure comprehensive reporting of emissions from SSM flares during all operational scenarios, not just higher-flow situations. Staff also proposes requiring refinery operators to report refinery total, biomass-derived, and fossil crude input data to help CARB monitor facility changes for petroleum refineries and biorefineries and QA reported data, and assess the accuracy of reported biogenic emissions from the processing of biomass-derived feedstocks in refinery units.

Staff proposes several amendments to section 95114. Staff proposes requiring operators of hydrogen plants, including hydrogen plants integrated in refinery operations, to report product and delivery data for gaseous and liquid hydrogen sold or otherwise transferred to biorefineries in addition to hydrogen sold or otherwise transferred to petroleum refineries and hydrogen vehicle fueling stations, as is currently required. Staff also proposes requiring operators of standalone hydrogen plants to report GHG emissions from process vents in the same manner that hydrogen plants at integrated refineries already are required to under section 95113. This addition is necessary to capture emissions from process vents at hydrogen plants that are not part of an integrated refinery and ensure consistency in reporting requirements for hydrogen plants across the refining and hydrogen production sectors.

Staff proposes minor deletions in sections 95113 and 95114 to ensure GHG emissions from all fuel combustion, not just fossil fuel combustion, are reported by operators of refineries and hydrogen plants.

G. Transportation Fuel Suppliers

Staff proposes various amendments to require reporting of GHG emissions from novel, low carbon transportation fuels that are not currently reported by suppliers. These amendments include adding definitions for biomass-derived LPG and biomass-derived California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB or RBOB) and modifying existing reporting requirements in section 95121 to also apply to their biomass-derived equivalent fuel, including requiring GHG emissions to be calculated for biomass-derived fuels using the same emission factors as their fossil equivalents.

Staff proposes amendments to better capture GHG emissions from biomass-derived fuels that are supplied outside of the bulk transfer/terminal system. Staff proposes revisions that apply the existing transportation fuel supplier reporting requirements in section 95121 to in-state biomass-derived fuel production facilities and importers of biomass-derived fuels who supply fuels outside of the bulk transfer/terminal system, which are added to the point of regulation for transportation fuel suppliers in the regulation’s applicability provisions. To allow staff to assess completeness and double-reporting of biomass-derived transportation fuels reported to MRR under the existing and proposed points of regulation, staff proposes requiring suppliers to report, for all biomass-derived fuel volumes for which GHG emissions are reported: the LCFS pathway code, fuel type, point of regulation under which the volume is being reported, and the volume of biomass-derived fuel associated with each unique combination of LCFS pathway code, fuel type, and point of regulation.

To improve the quantification of GHG emissions from fossil denaturant in fuel ethanol and to include fossil denaturant emissions in an entity's covered emissions, staff proposes amendments requiring suppliers to report denaturant in fuel ethanol as RBOB or biomass-derived RBOB, rather than as pure ethanol. Staff proposes that denaturant emissions be quantified based on a default volume of 2 percent of the total fuel ethanol volume or based on a user-defined value that can be demonstrated. Staff also proposes an amendment requiring the hydrocarbon component of E85 to be reported as fossil or biomass-derived RBOB; this will ensure that GHG emissions from the E85 hydrocarbon component are captured under MRR.

Staff proposes additional changes that apply existing calculation requirements for sole position holders at terminals who do not have sealed or financial transaction meters to sole position holders of any fuel, rather than just biodiesel or diesel. To better align MRR reporting requirements in 95121(d)(8) with the underlying AB 32 COI Fee Regulation definitions for fuel producer and California diesel, staff proposes adding language to clarify that biodiesel and renewable diesel volumes blended into California diesel do not need to be reported if the resulting product is not marketed as California diesel. To support statewide GHG inventory calculations for transportation fuels, staff proposes requiring suppliers who exclude volumes from GHG emissions reporting under the exemptions provided in section 95121(a)(2) to report these volumes separately by the exemption category (e.g., final destination outside of California, exclusive use in marine applications), in addition to fuel type.

H. Suppliers of Natural Gas and Natural Gas Liquids

Staff proposes various amendments to require reporting of GHG emissions from novel, low carbon fuels that are not currently reported by suppliers of natural gas or natural gas liquids (NGL). These amendments include adding definitions for biomass-derived liquefied petroleum gas (LPG) and biomass-derived NGLs, and modifying existing reporting requirements in section 95122 to also apply to the biomass-derived equivalents of regulated fuels, including requiring GHG emissions to be calculated for biomass-derived fuels using the same emission factors as their fossil equivalents.

To ensure that all covered emissions from natural gas redelivered to another pipeline operator is accounted for in MRR reporting, staff proposes amending how gas utilities calculate the CO_{2j} parameter of the natural gas emissions equation, which accounts for redeliveries and receipts of gas from other natural gas transmission companies. Specifically, staff proposes that redeliveries to other public utility gas corporations must be included in the CO_{2j} parameter, and consequently subtracted out from the supplier's reported GHG emissions, only when emissions associated with the redelivered natural gas equals or exceeds the Cap-and-Invest Regulation threshold of 25,000 MT CO_2e; this threshold already applies to redeliveries to all other types of pipeline operators except for interstate pipeline operators, which aren't subject to GHG emissions reporting under MRR.

To support CARB staff's calculation of covered emissions for intrastate pipelines, staff proposes amendments to require intrastate pipeline operators to report customer delivery data for all deliveries to end-users, not just deliveries that exceed 188,500 MMBTU per year to a single entity. This allows CARB staff to subtract out emissions for all deliveries to covered facilities who have the compliance obligation for combusted natural gas emissions when calculating the intrastate pipeline operator's covered emissions.

Staff proposes minor revisions to section 95122 to align with proposed changes that revise the definitions for “local distribution company (LDC),” “natural gas suppliers,” and “intrastate pipeline operator.” Staff proposes revising the definition for LDC to exclude intrastate pipeline operators for greater consistency with how LDC is used in existing reporting requirements; this revision is not intended to change any reporting requirements. Revisions to the other two definitions are discussed under the “General” and “Applicability” sections of this chapter, respectively.

To simplify reporting, staff proposes an amendment to allow suppliers of imported LPG to report fuel volumes generically as “LPG” and use the default LPG emission factor to calculate emissions, rather than require LPG volumes and associated emissions to be reported and calculated from their LPG components (e.g., butane, propane) when component composition is known. Staff proposes an amendment to allow importers of LPG, compressed natural gas (CNG), or liquefied natural gas (LNG) to exclude fuel used exclusively in ocean-going vessels from GHG emissions reporting as these emissions would be emitted primarily outside of California. Staff also proposes revisions to align the requirements to report fuel volumes excluded from GHG emissions reporting with existing and proposed language in section 95122 that specifies the fuel supplier types eligible for the exemption (i.e., NGL fractionators and importers of LPG, CNG, or LNG), and the fuel types for which they are required to report GHG emissions (i.e., fossil and biomass-derived NGLs, CNG, or LNG). Staff also proposes requiring excluded volumes to be reported separately by their reason for exclusion, similar to the proposed amendment for transportation fuel suppliers in section 95121, so that the data may be used for GHG Inventory calculations and to support other analyses.

I. Geologic Sequestration

Operators of facilities with geologic sequestration of carbon dioxide are currently subject to this article, but no data reporting requirements have been established and the broader California framework under SB 905 is still under development. For now, staff proposes to have entities report emissions data from geologic sequestration of CO_2 as required under Subpart RR in the U.S. EPA Mandatory Greenhouse Gas Reporting Regulation (40 C.F.R. § 98, 2013). Staff may need to propose future amendments to align with the requirements of SB 905 (Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program, 2021-2022).

J. Cement

Staff proposes an amendment to require cement producers to report the annual quantities of baghouse dust and grind aids consumed for blending in cement instead of “cement substitute,” which is vague. Staff also propose to update the definition of “cement” to include non-conventional cement types that use low-carbon materials or processes if they satisfy performance standards for conventional cement types.

SB 596 (Greenhouse gases: cement sector: net-zero emissions strategy, 2021-2022) establishes a target of net-zero GHG emissions for the cement sector in California by 2045 and requires emissions reductions from all cement used in California, including imported cement. To support these mandates, staff proposes new requirements in MRR for cement importers to report GHG emissions from imported cement, along with additional data to support staff analysis of sector GHG emissions. Staff also proposes that cement importer data not be subject to verification because reported emissions are based on best available data and

not subject to a Cap-and-Invest Program compliance obligation. At this time, requirements are focused on assessing what data is available and providing a framework for reporting emissions. To ensure that proposed amendments to add cement importers to MRR are as accurate and comprehensive as possible, staff may continue to develop proposals throughout this regulatory process.

K. Imports of Hydrogen and Producers of Hydrogen Utilizing Electricity

The 2022 Scoping Plan Update signals the need for an aggressive reduction of fossil fuel use and a transition to lower carbon technologies. Meeting energy demand in California requires building out significant new low-carbon energy supply capacity, including an expected expansion of lower carbon hydrogen production (CARB, December 2022). The current MRR requires that in-state hydrogen producers exceeding 10,000 MT CO_2e of combustion and process emissions report emissions associated with hydrogen production. These existing provisions apply to traditional fossil hydrogen production technologies, as well as biomass-based production technologies that exceed the 10,000 MT CO_2e threshold. Imported hydrogen and hydrogen produced from electricity by facilities in California are currently not captured under MRR. To ensure the MRR has broader coverage of emissions resulting from the production of hydrogen utilized in California, staff proposes amendments to require operators of facilities that produce hydrogen utilizing electricity and importers of hydrogen to report GHG emissions resulting from the production of the hydrogen, along with additional data to support staff analysis of sector GHG emissions. These amendments include adding a reporting threshold consistent with the existing 10,000 MT CO_2e threshold for hydrogen production to ensure consistent treatment across production technologies and adding a definition of "importer of hydrogen." To provide flexibility to reporters in this sector, staff proposes language allowing for reporters to submit requests for the use of alternative methods for measuring and quantifying GHG emissions when specified methods are not viable or not applicable. Staff also proposes language to exempt data collected under this section from verification because hydrogen importers and producers of hydrogen utilizing electricity are not subject to the Cap-and-Invest Regulation.

L. Verification

Staff proposes changes to streamline verification requirements, including allowing verifier accreditation to be renewed for up to six years, establishing remote site visit eligibility criteria and requirements for certain low-risk reporters, removing unnecessary requirements from the information a verifier must report in the Notice of Verification Services and Verification Plan, allowing low-risk conflict of interest verifications to commence before the Executive Officer has granted approval for verification services, requiring verification site visits once every three years instead of once every compliance period, requiring ten days advance notice to be given the Executive Officer for a site visit instead of 14 days, removing specialized verification requirements related to process emissions sources, removing the requirement to provide information on causes of emissions changes in the verification report if a full verification was not conducted and there was a >25% change in GHG emissions compared to prior data year, and simplifying the accreditation requirements for offset project specific verifiers. Staff also proposes to allow errors in an emissions data report to be corrected by the reporting entity and re-verified by the same verification body if the errors do not impact covered emissions or

covered product data, rather than if the errors do not impact any emissions data or covered product data.

Staff proposes amendments to strengthen the integrity and rigor of verification services, including expanding the criteria under which a verification is deemed to have a high potential for a conflict of interest, capping a verification body's verification services for a single entity to six consecutive verifications in addition to six consecutive years, requiring a verifier accredited as an oil and gas systems specialist to provide verification services to operators of biorefineries, and clarifying that verifiers must conduct material misstatement calculations for thermal and non-thermal production by summing crude oil and associated gas covered product data in units of barrel of oil equivalent. Staff also proposes an amendment to require verifiers to include in their conformance review emissions associated with an eligible state of emergency that are optionally reported by an electricity generation facility for exclusion from the Cap-and-Invest Program applicability threshold, if the facility was not a covered entity in the previous data year.

M. Petroleum and Natural Gas Systems

Staff proposes changes to require natural gas distribution facilities to report transmission pipeline blowdowns and their GHG emissions. This change supports the State's GHG Inventory and aligns MRR reporting requirements with Subpart W requirements for transmission pipeline blowdowns in U.S. EPA's Mandatory GHG Reporting Rule (40 C.F.R. § 98).

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

The amendments are being made to ensure the most accurate GHG data are reported and verified to support the Cap-and-Invest Program, CARB's GHG emissions inventory, and other CARB climate change programs. Anticipated benefits of the proposed amendments include improved clarity for reporting entities as to their reporting requirements, more complete and accurate GHG emissions estimates, and continued robust methods for reporting emissions and product data to support CARB's Cap-and-Invest Program.

This section discusses the requirements and rationale for each provision of the proposed amendments to the reporting regulation.

A. Global changes throughout proposed amendments.

a) Purpose

The proposed amendment standardizes references to Energy Imbalance Market (EIM) as Western Energy Imbalance Market (WEIM).

b) Rationale

This amendment is necessary to standardize communications and is responsive to the reflect the full name of the real-time electricity market.

a) Purpose

The proposed amendments change all instances of “ARB” to “CARB” and “Air Resources Board” to “California Air Resources Board” to conform with CARB’s current branding and style practices.

b) Rationale

This change is needed to reflect that “CARB” and “California Air Resources Board” are now the preferred titles of the agency.

a) Purpose

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

b) Rationale

These changes are necessary because AB 1207 directs CARB to change the name of the Program from Cap-and-Trade to Cap-and-Invest in recognition of its 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)).

B. Section 95101. Applicability.

Subsection 95101(a)(1)(A)5.

a) Purpose

The proposed amendment incorporates biorefineries in the applicability provisions of this article.

b) Rationale

The existing regulation lists petroleum refineries as a distinct source category subject to MRR requirements regardless of emissions level. This change is needed to extend the applicability provisions that exist for petroleum refineries to biorefineries. This revision is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and create an overarching “refinery” emissions source category.

Subsection 95101(a)(1)(B)1.

a) Purpose

The proposed amendment adds electrochemical and thermochemical conversion processes to the existing applicability criteria for stationary fuel combustion units.

b) Rationale

This amendment is needed to ensure that units that produce emissions from electrochemical and/or thermochemical conversion processes, such as fuel cells and linear generators, are subject to the same applicability criteria as stationary combustion units.

Subsection 95101(a)(1)(H)

c) Purpose

This amendment applies this article's requirements to entities that import into California a quantity of cement with associated annual production emissions of 10,000 MT CO_2e or more.

d) Rationale

SB 596 (Greenhouse gases: cement sector: net-zero emissions strategy, 2021-2022) establishes a target of net-zero GHG emissions for the cement sector in California by 2045 and requires emissions reductions from all cement used in California, including imported cement. This amendment is necessary to collect the data needed to track and analyze GHG emissions associated with imported cement used in California to support implementation of SB 596.

The applicability threshold of 10,000 MT CO_2e of total annual production emissions is high enough to exclude very small importers from MRR reporting while still low enough to capture nearly all emissions from cement imported into California and aligns with the MRR reporting threshold for most source categories.

Subsection 95101(a)(1)(I)

a) Purpose

This amendment applies this article's requirements to entities that import into California a quantity of hydrogen exceeding 500 MT in a calendar year, and to operators of facilities that produce a quantity of hydrogen exceeding 500 MT in a calendar year utilizing electricity and that are not otherwise subject to reporting pursuant to section 95191(a)(1)(B)(3) of MRR.

b) Rationale

This amendment is needed to collect GHG emissions data to support the tracking of hydrogen production and associated GHG emissions from all hydrogen used in California, regardless of the end use, in response to expected expansion of lower carbon hydrogen production technologies as called for in the 2022 Scoping Plan Update (CARB, December 2022).

Basing the applicability threshold on mass of produced hydrogen rather than an emissions threshold is necessary to ensure complete coverage of the sector irrespective of the emissions intensity of the technology utilized for producing hydrogen. The proposed threshold of 500 MT represents the approximate quantity of hydrogen produced by in-state steam methane reformer (SMR) units per 10,000 MT CO_2e, based on the average statewide emissions intensity derived by staff from data reported to MRR by operators of SMR hydrogen production units in California.

Subsection 95101(b)(6)

a) Purpose

The proposed amendment removes the word hydrogen from the term “hydrogen fuel cell.” The proposed amendment also requires reporting for operators of linear generators.

b) Rationale

The proposed amendment clarifies that operators of all fuel cells are subject to reporting requirements in this subsection, not just operators of fuel cells that use hydrogen as a fuel. Similar to how fuel cells are addressed, the amendment specifies reporting is required for linear generators as the emissions are not classified as stationary combustion emissions and would otherwise not be reportable.

Subsection 95101(c)(1)

a) Purpose

This section establishes which fuel suppliers are subject to MRR reporting requirements. This revision revises the point of regulation for position holders and refiners to include those who deliver any transportation fuel regulated under section 95121 of MRR, rather than specifically petroleum and/or biomass-derived fuels.

b) Rationale

This change is needed to ensure transportation fuel suppliers report GHG emissions under MRR from all transportation fuels regulated under section 95121.

Subsection 95101(c)(2)

a) Purpose

This amendment replaces the term “biofuel production facilities” with “biomass-derived fuel production facilities.”

b) Rationale

This change is needed for consistency with the proposed replacement of the definition for “biofuel production facility” with a definition for “biomass-derived fuel production facility.” This change is needed for GHG emissions from all biomass-derived transportation fuels, not just those derived from biomass-derived fuels, that were produced in-state and supplied outside the terminal system to be reported under MRR.

Subsection 95101(c)(3)

a) Purpose

Section 95101(c)(3) is modified to subject refiners that produce biomass-derived LPG to MRR reporting.

b) Rationale

This change is necessary to require refiners that produce biomass-derived LPG to report under MRR. Under the current regulation, only refiners who produce petroleum-based LPG are required to report. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95101(c)(5)

a) Purpose

Subsection 95101(c)(5) currently establishes MRR applicability and the reporting threshold for suppliers of imported liquefied petroleum gas (LPG) and importers of compressed natural gas (CNG) or liquefied natural gas (LNG). This subsection is modified to:

1. Apply MRR requirements to all entities who meet the definition of “supplier of imported LPG” in section 95102(a), regardless of the quantities of imported LPG supplied.

2. Include entities who import the biomass-derived equivalents of CNG and LNG.

3. Reference the definitions for “supplier of imported LPG” and “importer of fuel.”

b) Rationale

1. This change is needed to revise the point of regulation for imported LPG from the “importer of fuel,” as defined in section 95102(a) of MRR, to the operator of an LPG receiving facility in California that supplies imported fossil or biomass-derived LPG at their facility for distribution in California.

This change is necessary to ensure complete and accurate reporting of imported LPG. For certain scenarios, such as when LPG is imported into California from a storage facility, the current point of regulation can be implemented in more than one way, which has resulted in some imports being reported by two different entities and some not being reported at all. Changing the POR to the operator of an in-state LPG receiving facility that supplies imported fossil or biomass-derived LPG for distribution in California would ensure consistent implementation because the point of regulation points to a single entity whose applicability is documented in legal contracts.

To ensure a fair market for LPG imports, this amendment requires <u>every</u> operator of an in-state LPG receiving facility, as defined in section 95102(a), that supplies imported LPG at their facility for distribution in California to report under MRR. To prevent sites with small amounts of storage, such as a single propane tank, from being pulled into MRR under this POR, the proposed definition for “LPG receiving facility” includes only facilities with at least 30,000 gallons of storage capacity.

2. This change is needed to expand MRR applicability to suppliers of biomass-derived CNG and LNG. Under the current regulation, only importers of fossil LPG, CNG, and LNG are subject to MRR; the proposed definition for “supplier of imported LPG” already includes both fossil and biomass-derived LPG. This change is one of multiple amendments proposed to

better capture GHG emissions from low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

3. These changes are needed to clearly establish where in the regulation the points of regulation for suppliers of imported LPG and importers of CNG or LNG are established, as they are not established in section 95122.

Subsection 95101(h)(1)(A)

a) Purpose

The proposed amendment removes the term “subsequent” from “subsequent compliance period” when defining the time period during which emissions must be below the specified threshold for facility operators or suppliers subject to a compliance obligation to be eligible to cease reporting and verification under MRR.

b) Rationale

The phrase "for a subsequent compliance period” can be interpreted in more than one way, depending on which year of the compliance period an entity is determining eligibility. The proposed amendment clarifies that entities must report emissions below the applicable threshold for a single full compliance period to qualify for cessation.

Subsection 95101(h)(1)(A)1.

a) Purpose

The proposed amendment revises requirements for cessation of reporting for facility operators and suppliers subject to a compliance obligation by replacing references to “10,000 MT CO_2e” to “the applicable reporting threshold.”

b) Rationale

This change is needed to apply the existing reporting cessation requirements to facility operators or suppliers whose reporting applicability threshold will be something other than 10,000 MT CO_2e under proposed amendments.

Subsection 95101(h)(1)(A)4.

a) Purpose

The proposed amendment removes the term “subsequent” from “subsequent compliance period” when defining the time period during which emissions must be below the specified threshold for facility operators or suppliers subject to a compliance obligation to be eligible to cease reporting and verification under MRR.

b) Rationale

The phrase "for a subsequent compliance period” can be interpreted in more than one way, depending on which year of the compliance period an entity is determining eligibility. The proposed amendment clarifies that entities must report emissions below the applicable threshold for a single full compliance period to qualify for cessation.

Subsection 95101(h)(1)(B)

a) Purpose

This section establishes eligibility requirements for cessation of reporting and verification for electric power entities (EPEs) subject to a compliance obligation. This section has been changed to:

1. Remove the term “subsequent” from “subsequent compliance period” when defining the time period during which emissions must be below the specified threshold for an EPE to be eligible to cease reporting and verification under MRR.

2. Update the EPE eligibility criteria for cessation of reporting and verification to apply to EPEs who report zero imports and zero exports, rather than only zero imports, and remove unnecessary language related to Cap-and-Invest Program entity type.

b) Rationale

1. The phrase "for a subsequent compliance period” can be interpreted in more than one way, depending on which year of the compliance period an entity is determining eligibility. The proposed amendment clarifies that a single full compliance period below the threshold is required for cessation.

2. This amendment is needed to ensure there is a consistent understanding of when an EPE qualifies for cessation of verification and/or reporting under MRR, and resolve conflicts between the Cap-and-Invest Regulation and MRR reporting and verification cessation requirements for EPEs.

Subsection 95101(h)(2)(A)

a) Purpose

The proposed amendment revises requirements for cessation of reporting for facility operators and suppliers not subject to a compliance obligation by replacing references to “10,000 MT CO_2e” with “the applicable reporting threshold.”

b) Rationale

This change is needed to apply the existing reporting cessation requirements to facility operators or suppliers whose reporting applicability threshold will be something other than 10,000 MT CO_2e under proposed amendments.

Subsection 95101(h)(2)(C)

a) Purpose

This section establishes eligibility requirements for cessation of reporting and verification for EPEs not subject to a compliance obligation. The proposed amendment requires that an EPE not subject to a compliance obligation must report zero imports and zero exports before ceasing reporting under MRR.

b) Rationale

This amendment clarifies when an EPE may qualify for cessation of verification and/or reporting under MRR, consistent with the proposed clarification for the cessation of EPEs subject to a compliance obligation in 95101(h)(1)(B).

Subsection 95101(i)

a) Purpose

The proposed amendments update the subsection subtitle and subsection description to use the term “entities” rather than “facilities” or “facility operators.”

b) Rationale

The current text in 95101(i) refers to facilities, which have a specific definition in MRR that does not include EPEs or suppliers. The subsection subtitle and description need to be updated to use the more inclusive term “entities” to reflect the new requirements for EPEs and suppliers included under this subsection.

Subsection 95101(i)(1)

a) Purpose

The proposed amendments update the subsection to apply to entities rather than only facilities.

b) Rationale

These changes are necessary to provide cessation provisions for EPEs and suppliers that shut down in California.

Subsection 95101(i)(3)

a) Purpose

The proposed amendments establish the MRR cessation requirements for EPEs and suppliers that permanently shut down and defines “shut down” for these entity types for the purposes of MRR.

b) Rationale

The current text in 95101(i) provides cessation requirements for shutdown facilities, but does not provide requirements for shutdown EPEs or suppliers. Because an EPE or supplier engages primarily in commodity transactions and does not comprise a specific location with emissions-emitting infrastructure the way a facility does, they require a different definition of “shut down” and separate cessation requirements from facilities.

Subsection 95101(i)(6)

a) Purpose

The proposed amendments update the section text to use the term “entities” rather than “facilities” or “facility operators.”

The proposed amendments also add “or shut down” after “ceased to operate.”

b) Rationale

The current section provides cessation provisions for shutdown facilities, which have a specific definition in MRR that does not include EPEs or suppliers. The subsection text needs to be updated to use the more inclusive term “entities” to reflect the new shutdown provisions for EPEs and suppliers included under this subsection.

C. Section 95102. Definitions.

Subsection 95102(a). Asset Controlling Supplier.

a) Purpose

The proposed amendments add the “ACS” abbreviation to the definition of asset controlling supplier.

b) Rationale

The MRR regulation, CARB communications, and publicly posted documents all reference ACS by abbreviation. CARB staff is including it in the regulation for completeness and consistency.

Subsection 95102(a). Biofuel Production Facility.

a) Purpose

This amendment deletes the existing definition for “biofuel production facility” in order to replace the term with a new definition for “biomass-derived fuel production facility.”

b) Rationale

The definition for “biofuel production facilities” was historically used to identify one of the points of regulation for transportation fuel suppliers prior to the 2016 MRR. The amendments proposed in the 2026 MRR include the reinstatement of in-state biomass-derived transportation fuel production facilities who deliver outside the terminal system to the point of regulation for transportation fuel suppliers. The proposed changes to the definitions are needed for GHG emissions to be reported under MRR from biomass-derived transportation fuels delivered outside the terminal system that are produced in-state.

Subsection 95102(a). Biogenic Portions of CO_2 Emissions.

a) Purpose

This amendment revises the definition for “biogenic portions of CO_2 emissions” to include carbon dioxide emissions from both combustion and consumption of biomass-derived fuels and biomass-derived feedstocks, rather than only from biomass combustion in combustion units.

b) Rationale

This change is needed to ensure the term’s MRR definition is consistent with its proposed use in section 95113(n) of MRR.

Subsection 95102(a). Biomass-Derived California Reformulated Gasoline Blendstock for Oxygenate Blending.

a) Purpose

The proposed amendment adds a definition for “biomass-derived California reformulated gasoline blendstock for oxygenate blending” or “biomass-derived CARBOB” or biomass-derived “RBOB.”

b) Rationale

This change is necessary for GHG emissions from biomass-derived equivalents of CARBOB, or the portion of a CARBOB-equivalent product that is derived from biomass, to be reported under MRR by transportation fuel suppliers. Under the current regulation, only GHG emissions from fossil CARBOB are being reported by fuel suppliers. This change is one of multiple amendments proposed to better capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95102(a). Biomass-Derived Fuel Production Facility.

a) Purpose

This amendment replaces the existing definition for “biofuel production facility” with a definition for “biomass-derived fuel production facility” to provide an umbrella term for transportation fuel production facilities that produce transportation fuels solely from biomass-derived feedstocks but are not biorefineries.

b) Rationale

The definition for “biofuel production facilities” was historically used to identify one of the points of regulation for transportation fuel suppliers prior to the 2016 MRR. The amendments proposed in the 2025 MRR include the reinstatement of in-state biomass-derived transportation fuel production facilities who deliver outside the terminal system to the point of regulation for transportation fuel suppliers. The proposed changes to the definition are needed for GHG emissions to be reported under MRR from biomass-derived transportation fuels delivered outside the terminal system that are produced in-state. Biorefineries are excluded from the definition because they are being included in the definition for refiner, which is a different point of regulation for transportation fuel suppliers with its own set of reporting requirements.

Subsection 95102(a). Biomass-derived Liquefied Petroleum Gas.

a) Purpose

This amendment adds a definition for “biomass-derived liquefied petroleum gas” or “biomass-derived LPG.”

b) Rationale

This change is necessary for GHG emissions from biomass-derived equivalents of LPG, or the portion of an LPG-equivalent product that is derived from biomass, to be reported under MRR

by fuel suppliers. Under the current regulation, only GHG emissions from fossil LPG are being reported by fuel suppliers. This change is one of multiple amendments proposed to better capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95102(a). Biomass-derived Natural Gas Liquids.

a) Purpose

This amendment adds a definition for “biomass-derived natural gas liquids” or “biomass-derived NGLs.”

b) Rationale

This change is necessary for GHG emissions from biomass-derived equivalents of NGLs, or the portion of an NGL-equivalent product that is derived from biomass, to be reported under MRR by fuel suppliers. Under the current regulation, only GHG emissions from fossil NGLs are being reported by fuel suppliers. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95102(a). Biorefinery.

a) Purpose

The proposed amendment adds a definition for “biorefinery” to the regulation.

b) Rationale

The current regulation includes a definition and specific reporting and verification requirements for petroleum refineries but lacks a definition and specific reporting and verification requirements for biorefineries. This revision is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and create an overarching “refinery” source category. This change is needed to distinguish biorefineries from conventional petroleum-based refineries and to define the types of facilities to which refinery-specific reporting and verification requirements should apply.

Subsection 95102(a). CAISO Markets.

a) Purpose

The proposed amendment adds a definition for “CAISO markets” to the regulation.

b) Rationale

A definition 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 the CAISO Markets Outstanding Emissions Calculation in section 95111(h)(1). This includes the Western Energy Imbalance Market (WEIM) and the Extended Day-Ahead Market (EDAM).

Subsection 95102(a). CAISO Markets Purchaser or CAISO Purchaser.

a) Purpose

The proposed amendment adds a definition for “CAISO Markets Purchaser” to the regulation.

b) Rationale

A definition of “CAISO Markets Purchaser” is necessary due to the addition of EDAM purchasers as reporting entities in MRR pursuant to section 95111(h)(2) and (h)(3). The CAISO Markets Purchaser definition replaces the definition of “Energy Imbalance Market (EIM) Purchaser” and encompasses electrical distribution utilities that purchase electricity through the WEIM and EDAM. Beginning with operation of the EDAM, expected in 2026, CAISO Markets Purchasers include EDAM Purchasers, who incur a reporting obligation for their energy consumption resolved by day-ahead energy procured in the CAISO market used to serve California load.

Subsection 95102(a). CAISO Scheduling Coordinator.

a) Purpose

The proposed amendment adds a definition for “CAISO Scheduling Coordinator” to the regulation.

b) Rationale

A definition of “CAISO Scheduling Coordinator” is necessary to consolidate the term WEIM Participating Resource Scheduling Coordinator with a new term to include EDAM Participating Resource Scheduling Coordinators due to the addition of EDAM Participating Resource Scheduling Coordinators as reporting entities in MRR pursuant to section 95101(d)(1). The newly defined term encompasses scheduling coordinators participating in all CAISO markets and is already used in the definition for CAISO Market Purchasers.

Subsection 95102(a). California Independent System Operator or CAISO.

a) Purpose

The definition of “California Independent System Operator” or “CAISO” is revised.

b) Rationale

This change is necessary to include the new Extended Day-Ahead Market (EDAM) in the list of CAISO markets.

Subsection 95102(a). CBOB Summer. CBOB Winter. Conventional-Summer. Conventional-Winter.

a) Purpose

The proposed amendments remove the definitions for “CBOB summer,” “CBOB winter,” “Conventional-summer,” and “Conventional-winter.” Along with amendments to section 95121,

Table 2-5, these changes remove CBOB and finished gasoline products made with CBOB from the regulation.

b) Rationale

Conventional blendstock for oxygenate blending (CBOB) is not supplied in California by transportation fuel suppliers subject to MRR because it does not meet California specifications for gasoline blendstock. These changes are needed to remove terms that are obsolete and have caused confusion for new reporters.

Subsection 95102(a). Cement.

a) Purpose

The definition of “cement” is modified to include all types of cement that satisfy specifications or performance standards for conventional cement types.

b) Rationale

This change is necessary to recognize non-conventional cement types that use low-carbon materials or processes as cement if they satisfy performance standards for conventional cement types.

Subsection 95102(a). Committed Capacity.

a) Purpose

The proposed amendment adds a definition for “committed capacity.”

b) Rationale

This addition is necessary to define a term utilized in changes to the Outstanding Emissions Calculation in section 95111(h) to narrow the calculation of Outstanding Emissions to exclude committed capacity.

Subsection 95102(a). Covered Entity.

a) Purpose

The proposed amendment adds a definition for “covered entity.”

b) Rationale

The term “covered entity” is not currently defined in MRR but is used in section 95101(h) and in newly proposed language for section 95130(a)(4), and is defined in the Cap-and-Invest Regulation. This change is needed to define the term for the purpose of this article and for consistency with the Cap-and-Invest Regulation.

Subsection 95102(a). Dynamic Tag or Dynamically Tagged Power.

a) Purpose

A new definition of “dynamic tag” or “dynamically tagged power” is added.

b) Rationale

This addition is necessary to clarify instances of reporting exemptions in the regulation based on dynamic tagging and the use of dynamic tags, and to clarify to reporters exactly when their tags are considered dynamic under MRR.

Subsection 95102(a). Electricity Exporter.

a) Purpose

The definition of “electricity exporter” is revised.

b) Rationale

This change is necessary to utilize the new terms “CAISO Scheduling Coordinator” and “CAISO markets,” which include CAISO’s EDAM and any future markets, rather than only WEIM.

Subsection 95102(a). Electricity Importers.

a) Purpose

The definition of “electricity importers” is revised.

b) Rationale

These changes are necessary to remove EIM Purchasers from the list of types of electricity importers because EIM Purchasers are retail providers that can also be importers, but are not necessarily electricity importers. The definition is also updated to utilize the newly defined terms “CAISO markets” and “CAISO Scheduling Coordinator,” to be inclusive of all CAISO markets, rather than just the EIM.

Subsection 95102(a). Energy Imbalance Market Purchaser or EIM Purchaser.

a) Purpose

This amendment deletes the existing definition for “Energy Imbalance Market Purchaser” or “EIM Purchaser.”

b) Rationale

This deletion is needed because the definition for “EIM Purchaser” is being replaced with “CAISO Markets Purchaser” to provide a term inclusive of purchasers in all CAISO markets, rather than just the EIM.

Subsection 95102(a). Electricity Sold into the CAISO Markets.

a) Purpose

The definition of “electricity sold into the CAISO markets” is revised.

b) Rationale

This deletion is needed to be more inclusive of all CAISO markets, including the WEIM and EDAM.

Subsection 95102(a). Energy Imbalance Market. Energy Imbalance Market, Participating Resource Scheduling Coordinator.

a) Purpose

The definitions of “Energy Imbalance Market” and “Energy Imbalance Market, Participating Resource Scheduling Coordinator” are removed and combined into the newly defined term “CAISO Scheduling Coordinator.”

b) Rationale

This change is necessary to consolidate CAISO market participants and anticipate adding to the category any participants in future CAISO markets.

Subsection 95102(a). Energy Storage System or ESS.

a) Purpose

A new definition of “energy storage system” or “ESS” or “secondary generation source” is added.

b) Rationale

This addition is necessary to support proposed requirements for the new category of energy storage technology in the electricity markets.

Subsection 95102(a). Energy Storage System Registrant or ESS Registrant.

a) Purpose

A new definition of “energy storage system registrant” or “ESS registrant” is added.

b) Rationale

This addition is necessary to support proposed requirements for the new category of energy storage technology in the electricity markets, and the associated creation of a subset of reporters with optional reporting and verification requirements specific to energy storage systems.

Subsection 95102(a). Enterer.

a) Purpose

The definition for “enterer” is revised from an entity who imports into California motor vehicle fuel, diesel fuel, ethanol, biodiesel, non-exempt biomass-derived fuel or renewable fuel to an entity that imports into California a transportation fuel listed in Table 2-5 of MRR other than fossil or biomass-derived LPG.

b) Rationale

This amendment is needed to ensure that the enterer definition includes importers of new transportation fuels being added to section 95121, such as biomass-derived RBOB, which may be an exempt biomass-derived fuel. Importers of fossil and biomass-derived LPG are excluded from the “enterer” definition to ensure the term enterer continues to define a category of transportation fuel suppliers subject to section 95121 reporting requirements; importers of fossil or biomass-derived LPG are classified in MRR as suppliers of natural gas liquids (NGL) subject to reporting requirements in section 95122.

Subsection 95102(a). Exported Electricity

a) Purpose

This amendment replaces “is” with “can be” in the definition of “Exported electricity” to reflect that exported electricity delivered across balancing authority areas can be, but is not always, documented on NERC e-tags.

b) Rationale

This change is necessary to correct the definition, which previously stated that all exported electricity delivered across balancing authority areas is documented on NERC e-tags, which is not always the case.

Subsection 95102(a). Extended Day-Ahead Market or EDAM.

a) Purpose

A new definition of “Extended Day-Ahead Market” or “EDAM” is added.

b) Rationale

A definition of “Extended Day-Ahead Market” or “EDAM” is necessary due to the upcoming creation and operation of the Extended-Day-Ahead Market by CAISO that is expected to be operational in 2026.

Subsection 95102(a). First Deliverer of Electricity.

a) Purpose

The definition of “first deliverer of electricity” is revised.

b) Rationale

This change is necessary to make the definition of “first deliverer of electricity” consistent with the definition in the Cap-and-Invest Regulation. In the 2018 rulemaking for the MRR and Cap-and-Invest Regulation, this definition in each regulation was revised to add the language “or EIM purchaser” in the 45-day changes. Following subsequent revisions to the Cap-and-Invest Regulation in the 15-day changes, those changes were reverted in the Cap-and-Invest Regulation but inadvertently retained in MRR. This proposed change addresses that oversight.

Subsection 95102(a). Fleet Emission Factor.

a) Purpose

A new definition of “fleet emission factor” is added.

b) Rationale

A definition of “fleet emission factor” is necessary to designate terminology for the electricity generation emission factors calculated pursuant to section 95111(b)(2)(D) of MRR.

Subsection 95102(a). Forest-Derived Wood and Wood Waste.

a) Purpose

This definition is modified to incorporate wood harvested from areas of the State designated by CalFire as Tier 1 High Hazard Zones (HHZ) of Tree Mortality into the definition for “forest-derived wood and wood waste.”

b) Rationale

The current definition for “forest-derived wood and wood waste” includes only wood harvested pursuant to the California Forest Practice Rule, Title 14, California Code of Regulations, Chapters 4, 4.5, and 10, or pursuant to the National Environmental Policy Act. This change is needed to allow entities to report wood and wood waste sourced from HHZs as “forest-derived wood and wood waste”, rather than as a different type of waste, when reporting emissions from stationary combustion fuels. CO_2 emissions from wood and wood waste are eligible for exemption under section 95852.2(a)(4) of the Cap-and-Invest Regulation.

Subsection 95102(a). Fuel Ethanol.

a) Purpose

This amendment updates the definition of “fuel ethanol” to reference the latest protocol number and date for the ASTM protocol, “Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel” and to remove language specifying that fuel ethanol is for blending with gasolines for use as automotive spark-ignition engine fuel.

b) Rationale

This change is needed to reference the latest ASTM protocol for Denatured Fuel Ethanol for Blending with Gasolines, which sets the denaturant specifications for fuel ethanol, and to

remove language that may limit fuel ethanol blended with non-gasoline products from being reported under MRR.

Subsection 95102(a). Fuel Supplier

a) Purpose

This amendment updates the definition of “fuel supplier” to streamline language and incorporate suppliers of biomass-derived natural gas or NGLs and suppliers of hydrogen into the definition.

b) 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, 95122, or 95127 of MRR.

Subsection 95102(a). Imported Electricity.

a) Purpose

The definition of “imported electricity” is revised to include imported electricity purchased in the Extended Day-Ahead Market (EDAM) by CAISO Scheduling Coordinators, and updated for consistent use of the newly defined term CAISO Scheduling Coordinators.

b) Rationale

The change to include imported electricity purchased in EDAM and reported by CAISO Scheduling Coordinators is necessary to clarify that electricity imports to California can be purchased in this CAISO market, which is expected to launch in 2026.

Subsection 95102(a). Importer of Cement or Cement Importer.

a) Purpose

This amendment adds a definition for “importer of cement” or “cement importer.”

b) Rationale

This amendment is needed to identify the entities responsible for reporting data for imported cement and clinker and associated emissions under section 95126 of this article. This point of regulation intends to capture data for the vast majority of cement and clinker imported into California by placing the reporting responsibility on entities who typically transact cement or clinker in high enough quantities that associated emissions would be above the MRR reporting threshold.

Subsection 95102(a). Importer of Fuel.

a) Purpose

The definition for “importer of fuel” is revised to remove language applying the definition to importers of LPG, CNG, and LNG.

b) Rationale

This amendment, in conjunction to proposed amendments to section 95101(c)(5), simplifies how the point of regulation (POR) for imported LPG, CNG, and LNG is defined in MRR. Under proposed amendments, applicability provisions in section 95101(c)(5) identify the POR for imported LPG as being established in the proposed definition for "supplier of imported LPG," and the POR for importers of CNG and LNG as being established in the definition for "importer of fuel." This amendment is also needed for consistency with the proposed change to the POR for imported LPG because the "importer of fuel" will define the POR only in data years prior to 2027; for data year 2027 and beyond, the POR is defined in "supplier of imported LPG" to be the operator of an in-state LPG receiving facility that supplies fossil or biomass-derived LPG at their facility for distribution in California.

Subsection 95102(a). Importer of Hydrogen.

a) Purpose

This amendment adds a definition for "importer of hydrogen."

b) Rationale

This amendment is needed to identify the entities responsible for reporting data for imported hydrogen and associated emissions under section 95127 of this article. This point of regulation intends to capture data for the vast majority of hydrogen imported into California by placing the reporting responsibility on entities that have title to the hydrogen as it crosses the California border for imports via transport (e.g. truck, rail), and on the entity in California that enters into a contract for delivery of the hydrogen produced outside of California for hydrogen injected into a pipeline in North America.

Subsection 95102(a). Intrastate Pipeline.

a) 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, or jointly own or operate an interconnection pipeline to an interstate pipeline with other facilities.

b) Rationale

This change is necessary to ensure that GHG emissions from the natural gas distributed from intrastate pipelines 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.

Subsection 95102(a). Linear Generators.

a) Purpose

The proposed amendment adds a definition for "linear generators".

b) Rationale

This change is necessary to ensure operators of linear generators are subject to reporting. The definition matches proposed amendments to the Low Carbon Fuels Standard Regulation which aligns with both the definition of linear generators provided by the South Coast Air Quality Management District Rule 1110.3 (SCAQMD, 2023) and with the minimum efficiency required under IRS Instructions for Form 3468: Investment Credit. (IRS, 2024).

Subsection 95102(a). Liquefied Petroleum Gas Receiving Facility or LPG Receiving Facility.

a) Purpose

The proposed amendment adds a definition for “liquefied petroleum gas receiving facility” or “LPG receiving facility.”

b) Rationale

This amendment, in concert with the proposed amendment to section 95101(c)(5) and proposed addition of a definition for “supplier of imported liquefied petroleum gas” is needed to change the point of regulation for fossil and biomass-derived LPG imports from the “importer of fuel,” as defined in section 95102(a), to the operator of an in-state LPG receiving facility that supplies imported fossil or biomass-derived LPG at their facility for distribution in California. Without this definition, it is unclear what is meant by “LPG receiving facility” for MRR reporting purposes. The definition constrains “LPG receiving facilities” to facilities with fossil or biomass-derived LPG storage capacity of at least 30,000 gallons to exclude retail consumers from being subject to MRR. The definition also specifically includes facilities not dedicated solely to LPG storage in case LPG storage is co-located on a facility with other uses.

This change is necessary to ensure complete and accurate reporting of imported LPG. For certain scenarios, such as when LPG is imported into California from a storage facility, the current point of regulation can be implemented in more than one way, which has resulted in some imports being reported by two different entities and some not being reported at all. Changing the POR to the operator of an in-state LPG receiving facility that supplies imported fossil or biomass-derived LPG for distribution in California would ensure consistent implementation because the point of regulation points to a single entity whose applicability is documented in legal contracts.

Subsection 95102(a). Local Distribution Company.

a) Purpose

The definition for “local distribution company” (LDC) is revised to remove intrastate pipelines.

b) Rationale

This change is necessary for consistency with the definition of LDC in 40 C.F.R. § 98.400, as well as the intended meaning of LDC used in section 95122 of MRR. Intrastate pipelines remain separately defined and subject to reporting. This change has no impact on reporting requirements.

Subsection 95102(a). Multi-Jurisdictional Retail Provider.

a) Purpose

The proposed amendment adds the “MJRP” abbreviation to the definition of “multi-jurisdictional retail provider.”

b) Rationale

The MRR regulation, CARB communications, and publicly posted documents all reference MJRP by abbreviation. CARB staff is including it in the regulation for completeness and consistency.

Subsection 95102(a). Natural Gas Liquid Fractionator.

a) Purpose

This amendment revises the definition of “natural gas liquid fractionator” to include installations that fractionate the biomass-derived equivalents of natural gas liquids (NGL).

b) Rationale

This change is needed for GHG emissions from biomass-derived equivalents of NGLs to be reported under MRR by NGL fractionators under section 95122 of MRR. Under the current regulation, only GHG emissions from fossil NGLs are being reported. This change is one of multiple amendments proposed to better capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95102(a). Natural Gas Supplier.

a) Purpose

The definition for “natural gas supplier” is revised to include intrastate pipelines, as well as suppliers of liquefied natural gas, compressed natural gas, and their biomass-derived equivalents.

b) Rationale

Under the current regulation, section 95115(k) requires facilities to report data on natural gas purchased from “natural gas suppliers,” which currently consists of LDCs and interstate pipelines. The proposed revisions are needed to ensure that facilities: 1) continue to report 95115(k) data for natural gas purchased from intrastate pipelines despite the proposed revision to exclude intrastate pipelines from the LDC definition, and 2) begin to report 95115(k) data for natural gas purchased from LNG and CNG suppliers. Changes to this definition do not have any impacts on suppliers of LNG and CNG who are subject to reporting pursuant to sections 95122(a)(3) and (4).

Subsection 95102(a). Oil and Gas Systems Specialist.

a) Purpose

This section contains two separate amendments:

1. A typo is fixed for the definition of oil and gas systems specialist by adding the word “of” to "operators of petroleum refineries, hydrogen production units or facilities, and petroleum and natural gas systems listed in section 95101(e)."

2. Biorefineries are added to the definition for “oil and gas systems specialist” as one of the emissions source categories included in this verifier accreditation.

b) Rationale

1. A word was added to the definition so that the sentence reads correctly.

2. The inclusion of "biorefineries" in the definition of oil and gas systems specialist is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries by creating an overarching “refinery” emissions source category. In conjunction with the proposed amendment to 95131(a)(2)(B), this addition will require that verifiers who are trained and accredited by CARB to undertake verifications of oil and gas facilities participate in the verification of facilities that meet the definition of “biorefinery.”

Subsection 95102(a). Operational Control.

a) Purpose

This amendment revises the definition for operational control 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 where there is shared authority.

b) Rationale

These changes are needed to revise the definition of operational control to apply to all entities, including suppliers, rather than just facilities. These revisions are needed to establish that a single supplier can be comprised of multiple entities with shared operational control, as well as continue to identify who has operational control in cases where authority is shared among multiple facility operators.

Subsection 95102(a). Petroleum Refinery.

a) Purpose

The proposed amendment revises the definition for “petroleum refinery” to remove the term “refinery” as a synonym for petroleum refinery.

b) Rationale

This change is needed for consistency with other proposed amendments that extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and create an overarching “refinery” emissions source category. Both petroleum refineries and biorefineries are considered “refineries” under the proposed regulation.

Subsection 95102(a). Pipeline Quality Natural Gas.

a) Purpose

The proposed amendment revises the definition of “pipeline quality natural gas” to use an annual weighted average for the defining criteria.

b) Rationale

Under the proposed amendment, if a natural gas stream has a high heat value, percent volume of methane, and/or percent volume of carbon dioxide outside the pipeline quality range for a subset of measurements taken during that year, but falls within the allowed specifications based on an annual weighted average, the stream is considered to meet the definition of pipeline quality natural gas for the full year. This amendment is needed to provide certainty to regulated entities regarding when MRR requires carbon content measurements to calculate emissions from natural gas (which is required for non-pipeline quality natural gas), versus when MRR requires measurements of high heating values and their associated energy quantities to calculate emissions.

Subsection 95102(a). Primary Generation Source.

a) Purpose

A new definition of “primary generation source” is added.

b) Rationale

This addition is necessary to support proposed requirements for the new category of electricity imports from energy storage technologies.

Subsection 95102(a). Process Emissions Specialist.

a) Purpose

The proposed amendments remove the definition for “process emissions specialist” to align with the removal of the requirement in section 95131(a)(2)(C) to include a process emissions sector specialist on the verification team for select facilities.

b) Rationale

During the initial years of verification, CARB wanted to ensure that sufficient industry expertise to verify facilities with process emissions existed on each verification team. Requiring verifiers to obtain a process emissions sector accreditation was a reasonable approach for this sector. Now that the risks associated with misreporting for this sector are well understood by facility operators, verifiers, and CARB staff, and therefore the risk of mis-reporting has dropped dramatically, the proposed amendments allow any verifier to provide verification services to facilities with process emissions. In addition, the number of facilities that report process emissions has dropped considerably. Currently 186 entities require a transactions sector specialist, 65 facilities require an oil and gas sector specialist, and only 18 facilities require a process emissions specialist. Maintaining the process emission sector specialty requirement creates an unnecessary burden for verifiers who want to perform those verifications, for

facilities who are limited in which verifiers they can hire, and for CARB to train and maintain that sector specialist accreditation.

Subsection 95102(a). Pseudo-Tie.

a) Purpose

A new definition for “pseudo-tie” is added.

b) Rationale

Pseudo-tie refers to the connection of a generation source in one balancing authority area modelled as within another controlling or operating balancing authority area. Pseudo-ties are common in EIM and EDAM markets and can occur in bilateral transfers as well. This addition is necessary to clarify and address occasional issues with the applicability of regulatory requirements including identifying which and how reporters are subject.

Subsection 95102(a). Refiner.

a) Purpose

The proposed amendment expands the definition of “refiner” to include biorefineries that produce and supply transportation fuels.

b) Rationale

This revision is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries. This change is needed to apply transportation fuel supplier reporting requirements for refiners in section 95121 of MRR to refineries that produce and supply biofuels, in addition to refineries that produce and supply fossil fuels.

Subsection 95102(a). Refinery Fuel Gas.

a) Purpose

This amendment revises the definition of “refinery fuel gas” to apply to gas generated at a “refinery” rather than a “petroleum refinery.”

b) Rationale

This change is needed to expand the definition of RFG to include gas produced at biorefineries, in addition to petroleum refineries.

Subsection 95102(a). Renewable Energy Credit.

a) Purpose

The definition of “Renewable Energy Credit or REC” is updated to reference the 9th revised edition (April 2017) of the California’s Energy Commission Renewables Portfolio Standard (RPS) Eligibility Guidebook.

b) Rationale

The change is necessary to align with proposed changes to Cap-and-Invest to reference the 9th revised edition of the RPS Guidebook and ensure consistent definition of terms across programs.

Subsection 95102(a). Renewable Liquid Fuels.

a) Purpose

This amendment removes the definition for “renewable liquid fuels.”

b) Rationale

This change is needed to remove an obsolete term and to align with proposed amendments to the Cap-and-Invest Regulation to remove this definition.

Subsection 95102(a). Retail Sales.

a) Purpose

The definition of “retail sales” is revised.

b) Rationale

This addition is necessary to clarify and eliminate ambiguity in the requirements to report retail sales, and to describe the use of reported retail sales in the Outstanding Emissions Calculation.

Subsection 95102(a). Sector Specific Verifier.

a) Purpose

The proposed amendments remove the reference to “process emissions specialist” from the definition for “sector specific verifier.”

b) Rationale

This change is aligned with the proposed removal of the definition for “process emissions specialist” from section 95102(a) and the proposed removal of the requirement to include a process emissions specialist on the verification team from section 95131(a)(2). During the initial years of verification, CARB wanted to ensure that sufficient industry expertise to verify facilities with process emissions existed on each verification team. Now that the risks associated with misreporting for this sector are well understood by facility operators, verifiers, and CARB staff, the proposed amendments allow any verifier to provide verification services to facilities with process emissions.

Subsection 95102(a). Specified Source of Electricity or Specified Source.

a) Purpose

The definition of “specified source of electricity” or “specified source” is revised to add details regarding energy storage systems.

b) Rationale

This change is necessary to update the definition to address new energy storage technologies entering the electricity market and support proposed regulatory amendments in section 95111(b) and 95111(i) related to the addition of requirements for energy storage systems.

Subsection 95102(a). Supplier.

a) Purpose

This amendment revises the definition of “supplier” to be inclusive of suppliers of biomass-derived fuels, LPG receiving facilities that distribute imported fuel for use in California, and importers of cement and hydrogen, and to also apply to multiple entities held under common ownership or common control.

b) Rationale

Numerous reporting requirements in this article apply to “suppliers,” including reporting deadline and cessation provisions. These changes are needed to apply supplier reporting requirements to suppliers of imported LPG, cement and hydrogen importers, and suppliers of biomass-derived fuels that will be subject to MRR under proposed changes. These changes are also needed to clarify that if supplier operations are conducted by multiple entities under common control or common ownership, the entities must report as a single supplier under a single ARB ID for MRR. This ensures that most emissions from fuels supplied and combusted in California are reported under MRR by preventing entities from breaking up fuel volumes across one or more reporting entities under the same ownership structure to avoid exceeding the MRR threshold.

Subsection 95102(a). Supplier of Imported Liquefied Petroleum Gas or Supplier of imported LPG.

a) Purpose

This amendment adds a definition for “supplier of imported liquefied petroleum gas.”

b) Rationale

This amendment is needed to change the point of regulation (POR) for imported LPG from the “importer of fuel” to the in-state LPG receiving facility that supplies imported fossil or biomass-derived LPG at its facility for distribution in California, beginning with 2027 data. This change is necessary to ensure complete and accurate reporting of imported LPG. For certain scenarios, such as when LPG is imported into California from a storage facility, the current point of regulation can be implemented in more than one way, which has resulted in some imports being reported by two different entities and some not being reported at all. Changing the POR to the operator of an in-state LPG receiving facility that supplies imported fossil or biomass-

derived LPG for distribution in California would ensure consistent implementation because the point of regulation points to a single entity whose applicability is documented in legal contracts.

To ensure a fair market for LPG imports, this amendment requires every operator of an in-state LPG receiving facility, as defined in section 95102(a), that supplies imported LPG at their facility for distribution in California to report under MRR. To prevent sites with small amounts of storage, such as a single propane tank, from being pulled into MRR under this POR, the proposed definition for "LPG receiving facility" includes only facilities with at least 30,000 gallons of storage capacity.

Subsection 95102(a). Western Energy Imbalance Market.

a) Purpose

The definition of "Energy Imbalance Market" is updated to "Western Energy Imbalance Market" and reordered alphabetically.

b) Rationale

This change is necessary to reflect the current full name of this electricity market.

Subsection 95102(b). Aseptic Tomato Paste.

a) Purpose

This amendment revises the definition of "aseptic tomato paste" to include tomato puree.

b) Rationale

This amendment is needed to allow operators of tomato processing facilities to report product data for aseptic paste products that are below 24 percent tomato soluble solids but above 8 percent. This amendment is also needed to align the definition for "aseptic tomato paste" in MRR with the definition in the Cap-and-Invest Regulation.

Subsection 95102(b). Asphalt Production.

a) Purpose

This amendment adds a new definition for "asphalt production" to be used for the purposes of non-CWB product data reporting.

b) Rationale

This definition is needed to allow entities that do not report CWB data to report product data for asphalt production and to align MRR with proposed amendments that add "asphalt and road oils" to Table 9-1 of the Cap-and-Invest Regulation for purposes of product-based allowance allocation.

Subsection 95102(b). Calcium Ammonium Nitrate.

a) Purpose

The proposed amendment removes the definition for "calcium ammonium nitrate."

b) Rationale

The Cap-and-Invest benchmark for calcium ammonium nitrate was set to zero in the 2016 Cap-and-Invest Regulation. Therefore, there is no longer a reason for reporting entities to report this covered product under MRR to receive Cap-and-Invest Program allowance allocation. The definition is being removed, in line with the removal of the reporting requirement for this product under section 95118.

Subsection 95102(b). Dehydrated Chili Pepper. Dehydrated Garlic. Dehydrated Onion. Dehydrated Parsley. Dehydrated Spinach.

a) Purpose

The proposed amendments update the definitions for dehydrated chili pepper, garlic, onion, parsley, and spinach to rely on weight-based moisture content measurements instead of volume-based moisture content measurements.

b) Rationale

This change is needed to allow the dehydrated products industry to calculate the produced tons of covered product without requiring a density calculation to convert volume to mass.

Section 95102(b). Liquid Hydrocarbon Fuel.

a) Purpose

This amendment adds a definition for “liquid hydrocarbon fuel.”

b) Rationale

This definition is needed to transition refinery operators from CWB-based product data reporting to liquid hydrocarbon fuel product data reporting, and to align MRR with Cap-and-Invest Regulation amendments that add “liquid hydrocarbon fuel” to Table 9-1 for purposes of product-based allowance allocation.

Subsection 95102(b). Plasterboard.

a) Purpose

The proposed amendment clarifies that trimmings are not included in reportable “plasterboard."

b) 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-Invest Program benchmark was developed based on saleable plasterboard; trimmings that are removed during the final step are not considered saleable.

Subsection 95102(b). Supplementary Cementitious Materials or SCMs.

a) Purpose

A new definition for ‘“supplementary cementitious materials” or “SCMs”’ is added.

b) Rationale

This change is necessary to allow in-state SCM manufacturers and cement manufacturers to report product data for allowance allocation. This change is also needed to define a product for which cement importers must report data under the proposed section 95126 of this article and to clarify the types of mineral additives added to clinker to make cement and improve its properties through hydraulic or pozzolanic activity.

Subsection 95102(b). Sweet Whey Powder.

a) Purpose

This change adds a definition for “sweet whey powder.”

b) Rationale

This change is needed to allow entities to report sweet whey powder product data for allowance allocation under a new dairy sector product benchmark in the Cap-and-Invest Regulation.

Subsection 95102(c). Asphalt Production.

a) Purpose

The proposed amendment revises the existing “asphalt production” definition in section 95102(c) to apply only to complexity weighted barrel (CWB) data reporting.

b) Rationale

By the 2031 data year, operators of refineries will be required to transition from reporting CWB product data to reporting liquid hydrocarbon fuels (LHF) and/or asphalt production data to receive refinery product data allocation under the Cap-and-Invest Program. This amendment is needed to support this transition by retaining the existing “asphalt production” definition for the purposes of CWB data reporting until CWB reporting is phased out. The new definition for non-CWB “asphalt production” product data reporting that will replace this definition is proposed in section 95102(b).

Subsection 95102(c). Coprocessing.

a) Purpose

The proposed amendment adds a definition for “coprocessing” to section 95102(c).

b) Rationale

Co-processing biomass-derived feedstocks is a distinct activity that generates emissions from both fossil and biomass-derived sources. The addition of this term is needed to incorporate reporting of emissions from co-processing in MRR and assist industries in identifying and accurately reporting emissions arising from this specific process.

D. Section 95103. Greenhouse Gas Reporting Requirements.

Subsection 95103(a)(6)

a) Purpose

The proposed amendment removes the word “hydrogen” from the term “hydrogen fuel cell.” The amendment also requires the operator of a linear generator to report the information in section 95112(f).

b) Rationale

The proposed amendment clarifies that operators of all fuel cells are subject to reporting requirements in this subsection, not just operators of fuel cells that use hydrogen as a fuel. The proposed amendment also requires the same information to be reported by linear generators that is also reported by fuel cell operators.

Subsection 95103(f)

a) Purpose

The amendment to section 95103(f) establishes that data reported by cement importers under section 95126 and data reported by importers of hydrogen and producers of hydrogen utilizing electricity under section 95127 are not subject to verification.

b) Rationale

This amendment, in addition to language proposed in sections 95126 and 95127, is needed to establish that data reported under sections 95126 and 95127 do not need to be verified even if sector emissions equal or exceed 25,000 MT CO_2e, which is the MRR verification threshold for most other source categories. Staff propose that section 95126 and 95127 data not be subject to verification because reported emissions are based on best available data and not subject to a Cap-and-Invest Program compliance obligation. At this time, requirements are focused on assessing what data is available and providing a framework for reporting emissions.

Subsection 95103(g)

a) Purpose

The proposed amendment requires CARB to develop an assigned emissions level (AEL) for all entities subject to verification that do not submit a report or fail to obtain a positive verification statement, not just covered entities.

b) Rationale

MRR emissions data is published annually and used by numerous CARB programs that rely on high-quality data, including the GHG Inventory and Cap-and-Invest Programs. The regulation provides a mechanism, AELs, for CARB to calculate GHG emissions for entities covered under the Cap-and-Invest Program that fail to submit or successfully verify their report. However, the regulation does not currently provide a mechanism to calculate GHG emissions for entities that are subject to verification, but are not covered entities, and that fail to submit or successfully verify their report. This change is needed to ensure high-quality

emissions data for all entities subject to verification. CARB staff does not believe AELs are needed for entities not subject to verification at this time.

Subsection 95103(h)

a) Purpose

These amendments delete the existing effective dates for the regulation and establish that all provisions of the regulation apply to 2027 data reported in 2028, unless otherwise noted in MRR and for the following cases where provisions are applicable for 2026 data reported in 2027: 95101(h) and (i) provisions related to cessation of reporting and shutdown requirements, select 95102(a) definitions applicable to EPE reporting, all 95102(b) definitions applicable to product data reporting, all section 95111 provisions applicable to EPE data reporting, and provisions of sections 95130 through 95133 related to verification of 2026 data reported in 2027.

b) Rationale

These changes are needed to indicate when the proposed amendments go into effect, which provisions apply to 2026 data reported in 2027, and remove obsolete effective dates. An effective date of 2027is established based on the expected rulemaking schedule and the fact that data reporting for MRR is on a calendar year basis.

Subsection 95103(h)(1)

a) Purpose

This amendment deletes the existing effective date for Subarticle 6 and establishes that cessation of reporting and entity shutdown requirements in section 95101(h) and (i) are applicable in 2027 for reporting 2026 data.

b) Rationale

This addition is necessary to remove obsolete effective dates and to clarify that amendments to cessation of reporting and entity shutdown are applicable immediately in 2027 for purposes of reporting 2026 data.

Subsection 95103(h)(2)

a) Purpose

This provision establishes that certain definitions in section 95102(a) related to EPE reporting are applicable for reporting 2026 data in 2027.

b) Rationale

This addition is necessary for the MRR program to accurately account for emissions due to imports from the Extended Day-Ahead Market (EDAM), which will become active in 2026, as well as to accurately account for emissions due to imports from energy storage systems (ESS). An effective date of 2026 data for these provisions of the regulation is established based on

the expected rulemaking schedule and to provide methods that account for the specific reporting complexities related to imports from EDAM and ESS in the MRR program.

Subsection 95103(h)(3)

a) Purpose

This provision establishes that definitions in section 95102(b) related to product data reporting are applicable for reporting 2026 data in 2027.

b) Rationale

This addition is necessary to allow reporting entities to report new products and make use of revised product definitions for allocation purposes pursuant to section 95891(b) of the Cap-and-Invest Regulation.

Subsection 95103(h)(4)

a) Purpose

This section establishes that the amendments to Section 95111 provisions for EPE reporting are applicable for reporting 2026 data in 2027.

b) Rationale

This addition is necessary for the MRR program to accurately account for emissions due to imports from the Extended Day-Ahead Market (EDAM), which will become active in 2026, as well as to accurately account for emissions due to imports from energy storage systems (ESS). An effective date of 2026 data for these provisions of the regulation is established based on the expected rulemaking schedule and to provide methods that account for the specific reporting complexities related to imports from EDAM and ESS in the MRR program.

Subsection 95103(h)(5)

a) Purpose

This provision establishes that amended verification requirements in sections 95130 through 95133 are applicable for verifying 2026 data reported in 2027.

b) Rationale

This addition is necessary to clarify that verifiers must apply updated requirements for verifying 2026 emission data reports in 2027.

Subsection 95103(j)

a) Purpose

This section is modified to:

1. Require operators or suppliers to identify, calculate, and report all direct emissions of CO_2 resulting from the combustion or consumption of biomass-derived fuels, rather than only from the combustion of biomass-derived fuels.

2. Replace references to sections 95852.1.1 and 95852.2 of the Cap-and-Invest Regulation with a reference to section 95852.1 to align MRR with proposed updates to section 95852.1 of the Cap-and-Invest Regulation.

b) Rationale

1. This change is needed to align with proposed amendments to the Cap-and-Invest Regulation that allow CO_2 emissions resulting from consumption of eligible biomass-derived fuels to be exempt from a compliance obligation.

2. Section 95852.1 of the Cap-and-Invest Regulation establishes compliance obligations and requirements for exemption from a compliance obligation for biomass-derived fuels. Given the proposed amendments to 95852.1, these proposed amendments are needed to ensure that MRR continues to reference all potentially applicable Cap-and-Invest Regulation requirements for biomass-derived fuels, including the clarified requirement that an entity claiming use of an exempt biomass-derived fuel have sole ownership or contract rights to the fuel and associated emissions exemptions or emissions reductions attributed to the fuel.

Subsection 95103(j)(2)

a) Purpose

This section is modified to:

1. Clarify that the California Forest Practice Rules and the National Environmental Policy Act (NEPA) as two separate regulations.

2. Apply 95103(j)(2) data reporting requirements to wood harvested from areas of the State that have been identified by CalFire as Tier 1 High Hazard Zones (HHZ) of Tree Mortality.

b) Rationale

1. This change is needed to establish that the data reporting requirements in this section apply to forest-derived wood and wood waste harvested pursuant to the California Forest Practice Rules or NEPA.

2. These changes are needed to require entities to report data used to verify whether CO_2 emissions from wood and wood waste sourced from HHZs are eligible for exemption under section 95852.2(a)(4) of the Cap-and-Invest Regulation. These amendments, along with amendments proposed to the definition for “forest-derived wood and wood waste,” allow wood or waste that is not harvested pursuant to the California Forestry Practice Act and Rules or NEPA, but that is harvested from an HHZ or other areas in the U.S. with an equivalent designation, to be potentially eligible for exemption from a compliance obligation under section 95852.2(a)(4) of the Cap-and-Invest Regulation.

Subsection 95103(j)(3)(C)

a) Purpose

Section 95103(j)(3) requires operators or suppliers who report biomass emissions from biomethane fuel to report biomethane vendor data, including delivered amount, for each contracted biomethane delivery. The proposed amendment revises section 95103(j)(3) to add

a requirement for reporters to specify whether each contracted delivery of biomethane reported under 95103(j)(3) is exempt or non-exempt pursuant to section 95852.1.1 of the Cap-and-Invest Regulation.

b) Rationale

Entities may exempt combusted or consumed biomethane CO_2 emissions from a Cap-and-Invest Program compliance obligation if the biomethane being combusted or consumed meets exemption eligibility criteria set forth in section 95852.1.1 of the Cap-and-Invest Regulation. Because the reporting of biomethane as exempt versus non-exempt may impact an entity's compliance obligation, this determination warrants a high level of scrutiny by verifiers and CARB staff. Currently, there is no way for verifiers and CARB staff to connect the contracted biomethane delivery data reported under section 95103(j)(3), which is useful for assessing exemption eligibility, to the quantities of exempt and/or non-exempt biomethane reported for emissions calculations. This change is needed for such a connection to be made, which will support CARB staff and verifiers in assessing whether reporters have accurately calculated emissions from biomethane as exempt or non-exempt and minimize the risk of entities misreporting biomethane covered emissions.

Subsection 95103(k)(7)

a) Purpose

The proposed amendment revises this section to exempt financial transaction meters from calibration requirements of section 95103(k) when the meter is also used by other companies that do not share common ownership with the "supplier," rather than "fuel supplier."

b) Rationale

This change is needed to apply this provision to importers of cement and importers of hydrogen, which are included in the MRR definition for "supplier," but not "fuel supplier."

Subsection 95103(l)(1)

a) Purpose

The proposed amendment adds a new subsection that allows covered product data from prior data years to be reported and verified for the purpose of one-time new product allocation pursuant to section 95891(b)(1) of the Cap-and-Invest Regulation. Reporting would be optional but, if reported, the prior covered product data would be due by the MRR reporting deadline of April 10th and would be evaluated by CARB by April 30th. If accepted by CARB, the prior covered product data would be subject to verification. Verification of covered product data for prior data years would be due at the verification deadline, with separate verification statements submitted for each data year.

b) Rationale

Covered products can only be reported and receive Cap-and-Invest Program allowance allocation once they are defined, have a benchmark in the Cap-and-Invest Regulation, and are required to be reported under MRR. However, this typically occurs one or more years after the newly covered product was first manufactured. This amendment provides a mechanism to

provide product-based allocation for newly manufactured products retroactively, potentially back to when they were first manufactured.

Subsection 95103(m)(2)

a) Purpose

The proposed amendment modifies section 95103(m)(2) to provide greater specificity regarding the minimum information required to be included in an alternative method request.

b) Rationale

Section 95103(m)(2) of MRR grants operators and suppliers the opportunity to request the use of alternative measurement/monitoring methods in cases where traditional metering or methods are impractical. However, this section currently lacks specificity on the submission requirements for alternative method requests. This amendment is needed to provide clearer and more detailed guidance for operators or suppliers seeking approval for alternative methods, and to ensure that submissions provide the information necessary for CARB to evaluate the viability and ±5 percent accuracy of the proposed alternative method.

Subsection 95103(m)(4)

a) Purpose

The proposed amendment clarifies the maximum permissible duration for employing a temporary method for GHG emissions reporting to be 365 consecutive days, starting from the initial date of implementation.

b) Rationale

Explicitly stating a 365 consecutive day limitation from the commencement of the method's implementation provides a definitive timeframe and prevents the extended or improper use of temporary methods.

Subsection 95103(n)(2)(D)

a) Purpose

This section prescribes which entity has the reporting responsibility when a fuel supplier undergoes an ownership change. This amendment revises this section to apply more broadly to “suppliers,” which includes importers of cement and hydrogen, rather than “fuel suppliers,” which does not.

b) Rationale

This change is needed to specify who has the reporting responsibility when an importer of cement or importer of hydrogen undergoes a change in ownership.

E. Section 95104. Emissions Data Report Contents and Mechanism.

Subsection 95104(b)

a) Purpose

The proposed amendments require every reporting entity subject to the regulation to have at least two representatives associated with their Cal e-GGRT account.

b) Rationale

Currently, only one representative is required to be associated with each entity account in Cal e-GGRT, which can result in a lack of any viable contacts when the representative ceases to be employed by the reporting entity or their contact info changes. Requiring a second individual to be associated with each reporting entity account in Cal e-GGRT increases the likelihood that CARB will be able to contact at least one individual when needed, such as immediately before a deadline.

F. Section 95105. Recordkeeping Requirements.

Subsection 95105(d)(6)

a) Purpose

Section is updated to remove a reference to a section of the Cap-and-Invest Regulation that does not exist.

b) Rationale

This update is necessary to remove a reference to a section of the Cap-and-Invest Regulation that no longer exists, 95852(b)(5). The Cap-and-Invest Regulation section 95852(b) with requirements for First Deliverers of Electricity ends at 95852(b)(4).

G. Section 95110. Cement Production.

Subsection 95110(d)(4)

a) Purpose

This amendment replaces the requirement to report the annual quantity of cement substitutes with requirements to report the annual quantity of baghouse dust and grind aids consumed for blending.

b) Rationale

This amendment, along with sections 95110(d)(3) and (5), is necessary to specify the non-clinker components of cement that are required to be reported by cement producers and clarify the requirements of this section. Currently, cement producers are required to report “cement substitutes,” which is vague and undefined. Data reported under this section is used to calculate allowance allocation for adjusted clinker and mineral additives under the Cap-and-Invest Regulation.

Subsection 95110(d)(5)

a) Purpose

This amendment requires cement producers to report SCMs produced in California by opt-in or covered entities that are blended with clinker and mineral additives by SCM type and SCM manufacturer.

b) Rationale

This amendment is needed to collect data on the amount of SCMs that were produced in-state and used to make cement by cement producers that are subject to the Cap-and-Invest Program to calculate allowance allocation for finished cement pursuant to new requirements in the Cap-and-Invest Regulation. This amendment is also needed to collect data on the location of production for all SCMs being reported and the SCM types being used to support staff analysis of this sector.

H. Section 95111. Data Requirements and Calculation Methods for Electric Power Entities.

Subsection 95111(a)(4)(A)2.

a) Purpose

The proposed amendment removes the requirement for EPEs to provide the reason why measurement of power at the busbar is unknown.

b) Rationale

There are numerous points beside the busbar where an electricity importer may measure power to be imported and numerous reasons an importer may utilize different measurement points. The transmission loss factor is included to account for additional emissions resulting from transmission losses in situations where the electricity is not measured at the busbar. Thus, CARB does not need additional justification for selecting this option and does not use this information as currently reported.

Subsection 95111(a)(5)(A)

a) Purpose

The proposed amendments add “ARB ID” as an abbreviation for “ARB identification number.”

b) Rationale

This abbreviation is needed for consistency with CARB communications.

Subsection 95111(a)(12)

a) Purpose

This section contains two separate amendments:

1. The proposed amendments change CAISO sales data from being reported annually to being reported in the final data year of a compliance period. Data for all data years in the compliance

period is required to be reported in the final year. The amendments include an additional provision to report CAISO sales in the final emissions data report for entities that shut down or cease operating prior to the end of a compliance period.

2. The proposed amendment corrects an error in a reference to a Cap-and-Invest Regulation section.

b) Rationale

1. The Cap-and-Invest Program assesses CAISO sales data at the end of each compliance period. Requiring retrospective reporting for a compliance period provides for more complete and accurate data reporting than reporting on an annual basis and reduces the reporting burden for entities and administrative burden for CARB staff.

2. This change is needed to reference section 95892(b)(2), which includes all subsections within that section, and not just section 95892(b)(2)(A).

Subsections 95111(a)(12)(A) 1.-4.

a) Purpose

The proposed amendments remove the requirement for electrical distribution utilities (EDU) to themselves calculate emission factors for in-state resources when calculating emissions associated with CAISO sales from a specified source, effectively requiring EDUs to use CARB-calculated emission factors.

The proposed amendments also consolidate the existing requirement under 95111(a)(12)(A)2.b. into 95111(a)(12)(A)1.

Taken together, the proposed amendments remove section 95111(a)(12)(A)2. from the regulation and renumber the subsequent subsection to maintain numerical order.

b) Rationale

CARB has been able to calculate in-state generation source emission factors for some years now. These amendments are needed to remove an unnecessary reporting requirement, reduce inconsistencies in emission factors calculated for the same source, and remove unnecessary regulatory text.

Subsection 95111(a)(12)(B)

a) Purpose

The proposed amendment updates 95111(a)(12)(B) to exclude from reporting CAISO sales EDUs that have had all of their directly allocated allowances in a limited use holding account for the entire compliance period.

b) Rationale

The Cap-and-Invest Program has always required that directly allocated allowances be placed in a limited use holding account for an entire compliance period for an entity to not be required to report CAISO sales. This amendment aligns MRR with Cap-and-Invest Program

requirements and with the amendment proposed for section 95111(a)(12)(A) to require CAISO sales reporting to occur in the final data year of a compliance period.

Subsection 95111(a)(13)

a) Purpose

Section 95111(a)(13) is added to allow EPEs to claim aggregated hydroelectric and/or zero-emissions generation sources as a single specified source if qualifying criteria are met, and to establish the qualifying criteria for this option.

b) Rationale

This addition is necessary to support and accurately regulate grandfathered and physically limited generation source aggregations not explicitly addressed under the current regulatory provisions.

Subsection 95111(b)(1)

a) Purpose

These amendments modify the existing equation for calculating emissions from unspecified sources to include loss factors (ELF) for new energy storage system technologies entering the electricity market and required to be reported under MRR.

b) Rationale

Energy storage technologies operate differently from traditional generation sources for which the current regulation was designed, and therefore require different methodologies for assessing emissions. These proposed amendments adapt existing equations to enable reporting of imported electricity from energy storage technologies for accurate and complete reporting of emissions from unspecified power associated with these sources.

An energy storage system loss factor (ELF) of 1.18 was chosen based on the round-trip efficiencies for utility-scale batteries used by the National Renewable Energy Laboratory (NREL) of 85% (1/0.85 = 1.18) and ~33% for hydrogen-based storage (1/0.33 = 3.00) (Augustine & Blair, Appex. A, May 2021).

Subsection 95111(b)(2)

a) Purpose

This section is modified to:

1. Remove the definition of the E_{sp} term applicable only in the first compliance period.2. Remove the requirement for the reporting entity to provide unit level GHG emissions data and net generation data for the calculation of GHG emissions from specified units.

b) Rationale

1. These changes are needed to remove obsolete regulatory text.

2. These changes are needed to enable accurate and complete reporting of emissions from specified power associated with energy storage technologies.

Subsection 95111(b)(2)(B)

c) Purpose

This section contains three separate amendments:

1. The proposed amendment updates 95111(b)(2)(B) to clarify situations where EPA and/or EIA data may not be available for a reporting year by using historical data or other public datasets.
2. The proposed amendments revise language that states CARB “may” use EIA data if electricity production emissions cannot be isolated from EPA data, to state that CARB “will” use EIA data in this situation.
3. The proposed amendments remove language that specifies that emissions from biomass-derived fuels will be based on EIA data until U.S. EPA data is available for the purpose of calculating emissions from a specified facility or unit.

d) Rationale

1. The proposed changes are needed to address the possibility that EPA and/or EIA public data currently used to calculate annual emissions factors may no longer be available annually in future years

2. The proposed changes are needed to specify and clarify CARB’s action in the potential situation of being unable to isolate electricity production emissions from EPA data.

3. The proposed changes are needed to remove redundant language. The methodology in MRR for calculating E_{sp} for all sources already requires using U.S. EPA data first, if available and able to be directly related to emissions from electricity generation, and then EIA data.

Subsection 95111(b)(2)(C)

a) Purpose

This proposed amendment clarifies this requirement by removing language specifying owners and operators and restricting voluntary reporters to EIA data only.

b) Rationale

The use of U.S. EPA data for calculating the emissions factor of a unit or facility is dependent on if the source is being reported by any EPE at all and not just if the owner or operator is a registering or reporting entity, and there should be consistency in the use of datasets for required and voluntary reporters if possible. In addition, this requirement can be more straightforward in simply stating that when U.S. EPA data is not available, EIA data should be used.

Subsection 95111(b)(2)(E)

a) Purpose

Section 95111(b)(2)(E) is changed to include imported electricity purchased through the Extended Day-Ahead Market and power used to charge an energy storage system as subject

to the lesser of analysis requirement, and to exclude imported electricity from energy storage systems from the lesser of analysis requirement.

b) Rationale

These changes are needed to implement updates in reporting for electricity from the Extended Day-Ahead Market and from energy storage systems. Extended Day-Ahead Market imports may be deemed from sources that are subject to the lesser of analysis, so its inclusion in the requirement is necessary. Energy storage system imports are not delivered in the same interval as their metered generation, so this provision is not applicable, and this update is needed to clarify this exemption; however, the power used to charge an energy storage system is delivered in the same interval as its generation and is clarified here to still be subject to the lesser of analysis requirements.

Subsection 95111(b)(5)

a) Purpose

1. The proposed amendment clarifies the requirement to subtract out covered emissions resulting from renewable energy credits (REC) withdrawn in the current data year that were claimed in a prior reporting year as a Renewable Portfolio Standard (RPS) adjustment.

2. The proposed amendment moves the definition for the $CO_2e_{RPS\_adjustment}$ term below the equation in which it is used to be placed with the other equation term definitions.

3. This section is updated to add the words “and associated RECs” to the requirement that electricity included in an RPS adjustment must meet the requirements of Cap-and-Invest Regulation, section 95852(b)(4).

b) Rationale

1. The MRR implies, but does not directly state, that RECs previously claimed in a prior reporting year as an RPS adjustment that are subsequently withdrawn in the current data year should be accounted for by increasing covered emissions in the current year. This amendment is needed to achieve this adjustment to an EPE’s covered emissions resulting from withdrawn RECs.

2. This change is needed for greater clarity, as well as consistency with surrounding regulatory text.

3. This change is necessary to reflect that RECs associated with electricity reported as part of an RPS adjustment also have requirements under the Cap-and-Invest Regulation, section 95852(b)(4).

Subsection 95111(c)(3)(C)

a) Purpose

The proposed amendment changes the applicability of high GHG reporting requirements from facilities/units owned or operated by a retail provider to all facilities/units reported by EPEs that meet the definition of generation providing entities (GPE).

b) Rationale

The existing reporting requirement only applies to retail providers who operate, or who fully or partially own, a resource, which comprise only a subset of entities who meet the definition of GPE. This amendment is needed to apply the requirement to all GPEs.

Subsection 95111(d)(7)

a) Purpose

This proposed amendment removes section 95111(d)(7), which permits MJRPs that serve California to exclude information currently listed in sections 95111(g)(1)(E)-(J) when registering claims to specified power.

b) Rationale

This change is needed to align with other proposed amendments that delete the requirements currently contained in 95111(g)(1)(E)-(J) and render this section obsolete.

Subsection 95111(f)(5)

a) Purpose

The proposed amendment requires ACS entities to submit application information only in their first reporting year of ACS registration rather than on an annual basis.

b) Rationale

This change is needed to remove unnecessary reporting requirements. CARB does not need ACS application information listed in subsections (A) through (F) annually. This information is only necessary in the first year of ACS reporting to register the reporter.

Subsection 95111(g)

a) Purpose

1. The proposed amendment clarifies the deadlines for registering specified sources.

2. The proposed amendment reduces the REC retirement and RPS adjustment reporting deadlines from 45 days after the reporting deadline to 30 days after the reporting deadline.

b) Rationale

1. Current regulation text references a February 1 and a June 1 deadline for registering specified sources. This amendment removes the conflicting and incorrect June 1 deadline requirement.

2. During the 2016 amendments, CARB moved the verification deadline from September 1 to August 10, reducing the verification time by three weeks. However, CARB did not adjust the REC retirement and reporting deadlines for the RPS adjustment thereby limiting the time for verifiers to ensure these reporting requirements are met. By moving the deadline for REC and RPS adjustment reporting from approximately July 15 to approximately July 1, this change returns two additional weeks of RPS adjustment verification time to the verifiers and aligns the MRR deadline with the CEC deadline for RPS program reporting. Reporters will still have

seven months from the start of the year to correct their RPS data. Entities claiming the RPS adjustment can generally defer their claim to the following year if they are unable to meet the applicable deadline.

Subsection 95111(g)(1)(B)

a) Purpose

The proposed amendments add the 'ARB ID' abbreviation to "ARB identification number" in line with other established CARB documentation and establishes the ARB ID as a universal identifier for source registration with CARB.

b) Rationale

This change is needed for consistency with all CARB communications, and to explicitly identify the identifying number used by CARB for source registration.

Subsection 95111(g)(1)(C)

a) Purpose

The proposed amendment removes legacy and other unnecessary data requirements no longer used by CARB.

b) Rationale

Due to changes in specified source calculation methodologies developed over the years, CARB no longer requires as much information for processing specified source registrations as originally envisioned. This amendment removes all unnecessary reporting requirements that have annually resulted in additional administrative oversight and confusion among reporters with limited benefit.

Subsection 95111(g)(1)(E)

a) Purpose

The proposed amendment removes legacy and other unnecessary data requirements no longer used by CARB and replaces it with a new requirement requiring reporters at the time of source registrations to indicate if energy storage system (ESS) units are being registered in addition to generation sources, and how those ESS units are charged.

b) Rationale

Due to changes in specified source calculation methodologies developed over the years, CARB no longer requires as much information for processing specified source registrations as originally envisioned. This amendment removes all unnecessary reporting requirements that have annually resulted in additional administrative oversight and confusion among reporters with limited benefit. The new information required to be reported is needed for CARB to determine the correct methodologies that should be used by the reporter to calculate an emission factor and energy losses associated with ESS units.

Subsection 95111(g)(1)(F)-(M)

a) Purpose

The proposed amendments remove legacy and other unnecessary data requirements no longer used by CARB that are contained in sections 95111(g)(F)-(L) and renumbers section 95111(g)(M) to 95111(g)(F) to maintain numerical order.

b) Rationale

Due to changes in specified source calculation methodologies developed over the years, CARB no longer requires as much information for processing specified source registrations as originally envisioned. This amendment removes all unnecessary reporting requirements that have annually resulted in additional administrative oversight and confusion among reporters with limited benefit.

Subsection 95111(g)(1)(F)1.

a) Purpose

The proposed amendment establishes that reporters must report whether RECs reported under 95111(g)(1)(F)1. have been designated as retired, specifically within 30 days following the emissions data report due date; the current text does not specify the retirement time frame. This subsection was originally 95111(g)(M)1. and is renumbered to 95111(g)(F)1 to maintain numerical order.

b) Rationale

This change is needed to collect data on whether RECs reported as an RPS adjustment have been placed in a retirement subaccount and designated as retired under the California RPS program by the MRR RPS adjustment reporting deadline, which is being revised in section 95111(g)(1) from 45 days to 30 days after the emissions report due date.

Subsection 95111(g)(1)(F)3.

a) Purpose

This change removes the requirement that REC serial reporting issues for specified imports result in a qualified positive verification statement. This subsection was originally 95111(g)(M)3. and is renumbered to 95111(g)(F)3.

b) Rationale

Specified source REC serial reporting issues have no impact on covered emissions and are prone to errors and omissions outside the responsibility of the reporters that are increasingly becoming administratively burdensome to correct. The disincentive of receiving a qualified positive statement and requiring a site visit the following year does not help to address these issues.

Subsection 95111(g)(4)

a) Purpose

These changes: 1) remove reporting of information that is no longer needed, and 2) require EPEs to state whether any electric power deliveries originated from, were stored in, or passed through an ESS along the transmission path so the appropriate ESS Loss Factor (ELF) can be applied.

b) Rationale

1. For registration and data verification purposes, the proposed changes will enable CARB staff to more efficiently process all sources together, without requiring additional information for new generation sources and generation sources with additional capacity.

2. The new category of energy storage system technologies affects how emissions should be properly accounted for, requiring that additional information about electricity sources, stored or passing through an energy storage system, be reported to CARB if not already reported pursuant to other parts of this article.

Subsection 95111(g)(4)(A) - (E)

a) Purpose

The proposed amendment removes sections 95111(g)(4)(A)-(E).

b) Rationale

The regulation text is no longer relevant to current reporters.

Subsection 95111(h)

a) Purpose

Section 95111(h) is updated to include the Extended Day-Ahead Market and consolidate the Western Energy Imbalance Market and the Extended Day-Ahead Market into the term CAISO Markets.

b) Rationale

These changes are necessary to include potential emissions leakage from the Extended Day-Ahead Market in the Outstanding Emissions calculation, and to be consistent with and anticipate future markets by referring to these electricity markets together as CAISO markets instead of by their individual names.

Subsection 95111(h)(1)

a) Purpose

Section 95111(h)(1) is updated to include the Extended Day-Ahead Market and change the term “EIM Outstanding Emissions” to “CAISO Markets Outstanding Emissions.” The section is also updated to correct a grammatical error, add language stating that Extended Day-Ahead Market transactions will be settled in the Western Energy Imbalance Market, and to remove requirements that are only applicable for the 2019 reporting year.

b) Rationale

These changes are necessary to include potential emissions leakage from the Extended Day-Ahead Market in the Outstanding Emissions calculation, and to include both current and any future CAISO markets in the title of the outstanding emissions value. The added language that states EDAM transactions are settled in the WEIM is necessary to show that WEIM 5-minute interval data will be used to calculate outstanding emissions from both markets. The 2019 reporting year requirements are no longer relevant to current reporters.

Subsection 95111(h)(1)(A)

a) Purpose

The original section 95111(h)(1)(A) is deleted, and the following subsections renumbered to maintain numerical order. The new section 95111(h)(1)(A) (formerly 95111(h)(1)(B)) describes how CARB calculates emissions associated with WEIM-only participant deliveries.

b) Rationale

Section 95111(h)(1)(A) is deleted and replaced with new sections 95111(h)(1)(A)-(C) to provide separate equations to reflect the different CAISO Markets. The revised WEIM section 95111(h)(1)(A) and new sections 95111(h)(1)(B) and (C) are necessary to reflect that some entities are expected to only participate in the WEIM and other entities will participate in both the WEIM and EDAM. The revisions in the new section 95111(h)(1)(A) are also necessary to include only MWh that have the most risk for emissions leakage to occur, which are the MWh below participating resources' base schedules adjusted for committed capacity and net export constraints. This calculation is performed specifically for WEIM only transactions, where the baseline for considering where emissions leakage risk occurs is the WEIM participating resources' base schedules.

Subsection 95111(h)(1)(B)

a) Purpose

This amendment adds a new section, 95111(h)(1)(B), before former section 95111(h)(1)(C), now section 95111(h)(1)(D). The new section describes how CARB calculates EDAM outstanding emissions and provides the Total California EDAM Emissions equation.

b) Rationale

These changes are necessary to reflect that some entities are expected to only participate in the WEIM and other entities will participate in both the WEIM and EDAM and to appropriately address emissions leakage risk for each market. This section is necessary to reflect that while EDAM transactions are settled in the WEIM and WEIM data is used to calculate EDAM outstanding emissions, the baseline portion of the calculation is specific to the EDAM in the form of the GHG counterfactual adjusted for committed capacity MWh. Committed capacity is a newly defined term in MRR for out-of-state electricity generation capacity that is committed to serve the California load via contract for resource adequacy purposes. Committed capacity MWh that meets the requirements of the CPUC's Resource Adequacy program are unlikely to result in emissions leakage, so these MWh are adjusted for in the data used for the calculation. Committed capacity data will be submitted by CAISO annually to CARB. The WEIM data that

captures EDAM transactions uses the GHG counterfactual as the baseline for assessing emissions leakage instead of participating resources' base schedules.

Subsection 95111(h)(1)(C)

a) Purpose

This amendment adds a new section, 95111(h)(1)(C), before former section 95111(h)(1)(C), now section 95111(h)(1)(D). The new section describes how CARB calculates the total emissions from CAISO Markets.

b) Rationale

These changes are necessary to reflect that the CAISO Markets include both WEIM and EDAM and thus, the total CAISO Markets Outstanding Emissions is the sum of the total WEIM and EDAM outstanding emissions as calculated separately in the preceding two subsections.

Subsection 95111(h)(1)(D)

a) Purpose

The proposed amendment updates former section 95111(h)(1)(C), now 95111(h)(1)(D), to incorporate EDAM, replace "EIM Participating Resource Scheduling Coordinators" with "CAISO Scheduling Coordinators," and remove an outdated requirement for 2019 data year.

b) Rationale

These changes are needed to include all CAISO markets in data reported by CAISO Scheduling Coordinators and remove regulation text no longer relevant to current reporters.

Subsection 95111(h)(2)

a) Purpose

Section 95111(h)(2) is updated to:

1. Include EDAM and utilize the new terms "CAISO Markets Purchaser" and "CAISO Scheduling Coordinator."

2. Remove an outdated reference and requirement for 2019 data year.

b) Rationale

1. These changes are necessary to include EDAM purchasers in this section's provisions and reflect the new "CAISO Markets Purchaser" definition. The definition of "EIM Purchaser" has been removed and combined with EDAM purchasers in the new "CAISO Markets Purchaser" definition. The changes also reflect the new "CAISO Scheduling Coordinator" definition.

2. The regulation text is no longer relevant to current reporters.

Subsection 95111(h)(2)(A)

a) Purpose

Section 95111(h)(2)(A) is updated to replace references to EIM with “CAISO Markets.”

b) Rationale

This change is needed to include EDAM transactions in the calculation of CAISO Markets Purchaser Emissions.

Subsection 95111(h)(2)(B)

a) Purpose

This amendment replaces “EIM Purchaser” with “CAISO Markets Purchaser.”

b) Rationale

This change is necessary to reflect the new “CAISO Markets Purchaser” definition. The definition of “EIM Purchaser” has been removed and is combined with EDAM purchasers in the new “CAISO Markets Purchaser” definition.

Subsection 95111(h)(2)(B)1.

a) Purpose

1. This amendment replaces “EIM Purchaser” with “CAISO Markets Purchaser.”

2. This amendment clarifies that only CAISO Markets Purchasers that are also EPEs subject to verification must conduct third-party verification of reported California retail sales.

b) Rationale

1. This change is necessary to reflect the new “CAISO Markets Purchaser” definition. The definition of “EIM Purchaser” has been removed and is combined with EDAM purchasers in the new “CAISO Markets Purchaser” definition.

2. The current regulation text erroneously requires all CAISO Markets Purchasers to conduct third-party verification of California retail sales. This amendment corrects that error to require only those Purchasers who are already subject to MRR verification to have their retail sales reviewed as part of third-party verification, and all other EIM purchases to continue to have retail sales documentation reviewed by CARB.

Subsection 95111(h)(2)(B)2.

a) Purpose

1. This amendment inserts a new section requiring CAISO Markets Purchasers that are not subject to verification to annually submit documentation that supports the reported total volume of retail sales to CARB for review and verification.

2. This amendment replaces “EIM Purchaser” with “CAISO Markets Purchaser.”

b) Rationale

1. The current regulation requires all CAISO Markets Purchasers to conduct third-party verification of California retail sales. This amendment corrects that requirement to require only those Purchasers who are already subject to MRR verification to have their retail sales reviewed as part of third-party verification, and all other CAISO Markets Purchasers to have retail sales documentation reviewed by CARB.

2. This change is necessary to reflect the new “CAISO Markets Purchaser” definition. The definition of “EIM Purchaser” has been removed and is combined with EDAM purchasers in the new “CAISO Markets Purchaser” definition.

Subsection 95111(h)(2)(B)3.

a) Purpose

This section is amended to replace “EIM Purchaser” with “CAISO Markets Purchaser” and to renumber this subsection from 95111(h)(2)(B)2. to 95111(h)(2)(B)3.

b) Rationale

This change is necessary to reflect the new “CAISO Markets Purchaser” definition and to accommodate a new subsection, respectively. The definition of “EIM Purchaser” has been removed and is combined with EDAM purchasers in the new “CAISO Markets Purchaser” definition.

Subsection 95111(i)

a) Purpose

A new section, 95111(i), is added for generation providing entities (GPEs) and reporting entities to voluntarily report and verify additional information on the charging and discharging of their ESS sources for an accurate calculation of emissions factors and/or loss factors for use in the following reporting year.

b) Rationale

Annual data needed to assess an exact emissions factor or ESS loss factor for ESS sources is not available to CARB in either an administratively efficient or timely manner under the current reporting timeline nor do existing public datasets for ESS indicate all sources of charging for CARB to accurately conduct an emissions factor calculation. As such, an optional pathway is necessary for those entities who would like to provide this additional information for a more accurate calculation of their ESS factors or losses in lieu of CARB’s proposed default methodology. This amendment adds additional requirements for ESS registrants to be able to report and have verified ESS specific information to calculate an emissions and/or loss factor.

I. Section 95112. Electricity Generation and Cogeneration Units.

Subsection 95112(b) and (f)

a) Purpose

The proposed amendment removes the word hydrogen from the term “hydrogen fuel cell” and adds the term “linear generator”

b) Rationale

The proposed amendment clarifies that operators of all fuel cells and linear generators are subject to reporting requirements referenced in this subsection, not just operators of fuel cells that use hydrogen as a fuel.

Subsection 95112(j)

a) Purpose

This section allows electricity generating facilities to report covered emissions that result from electricity generation during a state of emergency declared by the governor to address high energy demand or electric grid reliability so that the covered emissions may be excluded from the Cap-and-Invest Program applicability threshold calculation under proposed changes to section 95812(c)(2)(A)1 of the Cap-and-Invest Regulation.

b) Rationale

This amendment is needed to prevent a non-covered facility from becoming newly subject to the Cap-and-Invest Regulation solely due to an increase in energy production and associated emissions that occur during a state of emergency declared by the governor to mitigate high energy demand or electric grid reliability concerns. This addresses the concern that an operator of an electricity generation facility would choose not to operate during a declared emergency to avoid becoming subject to the Cap-and-Invest Regulation. A facility with non-emergency covered emissions that newly exceeds the 25,000 MT CO2e Cap-and-Invest Regulation threshold in any year would still become a covered entity – only emissions during an emergency would be excluded from the Cap-and-Invest Regulation threshold calculation under the proposed amendment. Emissions reported pursuant to this amendment would still be included in an entity’s total emissions and in the verification applicability threshold calculation, ensuring that an entity’s Cap-and-Invest Program exemption eligibility under section 95812(c)(2)(A)1 of the Cap-and-Invest Regulation would be verified by an independent third-party.

J. Section 95113. Refineries.

Section 95113

a) Purpose

The proposed amendment modifies the title of the section to remove the word “Petroleum.” The new title of section 95113 is “Refineries.”

b) Rationale

This change is needed to expand the applicability of section 95113 to include biorefineries and thus ensure GHG emissions are reported by the expanding biofuel production sector under MRR. This revision is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and create an overarching "refinery" emissions source category.

Section 95113

a) Purpose

The proposed amendment to the introductory text of section 95113 requires biorefineries to report emissions and other data consistent with petroleum refineries pursuant to section 95113 of MRR and the requirements of Subpart Y of the U.S. EPA Mandatory Greenhouse Gas Reporting Regulation (40 C.F.R. § 98.250 to 98.258) as incorporated in MRR.

b) Rationale

This amendment is needed to ensure that biorefineries report emissions from vented and fugitive sources pursuant to section 95113 in a manner consistent with the reporting requirements for petroleum refineries. The current regulation requires these emissions to be reported only if the refinery processes crude oil.

Subsection 95113(a)

a) Purpose

The proposed amendment removes the word "fossil" from the title of the subsection "CO_2 from Fossil Fuel Combustion" to read "CO_2 from Fuel Combustion."

b) Rationale

This amendment is necessary to ensure that combustion emissions are captured from refinery combustion sources regardless of whether the fuel is fossil or biomass-derived in origin. This revision is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and create an overarching "refinery" emissions source category.

Subsection 95113(c)

a) Purpose

The proposed revision to section 95113(c) clarifies the daily sampling requirement for carbon content and molecular weight for Refinery Fuel Gas (RFG) and removes unnecessary references and obsolete starting dates.

b) Rationale

The modified section is necessary to clarify and streamline the requirements for RFG sampling. No new sampling requirements are imposed by this amendment.

Subsection 95113(d)

a) Purpose

1. The proposed amendments in section 95113(d) correct references to 40 C.F.R. § 98 requirements.

2. The proposed amendments broaden the scope of reporting requirements for startup, shutdown, malfunction (SSM) flares beyond the stipulated threshold specified in 40 C.F.R. § 98.256. For SSM flares, the proposed amendment will require reporting of all instances of SSM flares, irrespective of their gas flow rates (i.e., not just limited to those exceeding 500,000 standard cubic feet per day, as mandated by the existing regulation).

b) Rationale

1. The existing regulation contains incorrect references to subsections in 40 C.F.R. § 98. These corrections are needed to avoid confusing regulated entities.

2. The proposed amendments to SSM flare requirements are necessary to ensure comprehensive reporting of emissions from SSM flares during all operational scenarios, not just higher-flow situations. This will provide a more thorough and accurate measurement of CO_2 emissions generated during SSM scenarios at refineries.

Subsection 95113(l)(3)

a) Purpose

The proposed amendments to section 95113(l)(3) set an end date of 2030 data reported in 2031 for reporting CWB data (i.e., CWB data cannot be reported beginning with 2031 data), but provide refineries the option to permanently switch to LHF product data reporting as early as the 2026 data year. Once a refiner elects to report liquid hydrocarbon fuels, they may not report CWB data and must continue to report LHFs. This amendment also establishes that facilities with reportable CWB throughput only for an “asphalt production” unit cannot report CWB product data.

b) Rationale

These amendments are needed to support the transition from allocation based on reported CWB data to allocation based on reported LHF and asphalt production data for refineries in the Cap-and-Invest Program by phasing out CWB data reporting, and to align MRR reporting with new Cap-and-Invest Program allocation provisions in section 95891(b)(3) of the Cap-and-Invest Regulation that dictate when refinery operators can receive allocation for CWB or LHF products.

Entities that only modify asphalt that was produced offsite at their facility should not report CWB data for “asphalt production.” This change is needed for consistency with the proposed new definition for “asphalt production” in 95102(b), which excludes modification of asphalt from offsite refining for the purposes of non-CWB product data reporting.

Subsection 95113(l)(4)

a) Purpose

This amendment adds a new section, 95113(l)(4), to require refinery operators to report liquid hydrocarbon fuel (LHF) product data instead of CWB product data beginning with 2031 data, set the standard specifications for reporting LHF quantities, provide refineries the option to permanently switch to LHF product data reporting as early as 2026 data, and clarify that LHF data is covered product data subject to verification and accuracy requirements.

b) Rationale

This section is needed to support the transition from allocation based on reported CWB data to allocation based on reported LHF and asphalt production data for refineries in the Cap-and-Invest Program by requiring refinery operators to report LHF product data in place of CWB data by the 2031 data year and ensuring that LHF product data meets accuracy and verification standards needed for use in the Cap-and-Invest Program market. These amendments are also needed to provide refineries with some flexibility as to when to switch to LHF product data reporting and to align with new Cap-and-Invest Program allocation provisions in section 95891(b)(3) that dictate when refinery operators can receive allocation for CWB or LHF products.

Subsection 95113(l)(4)(A)

a) Purpose

Section 95113(l)(4)(A) establishes that LHF production data must include only fuels produced onsite and details what qualifies as on-site production. The section explicitly excludes fuel blending from onsite fuel production. It also excludes LHFs brought onsite from being included in LHF product data, and excludes LHFs produced from intermediate feedstocks produced elsewhere and brought onsite from being included in LHF product data, with the exception of LHF produced from intermediate feedstocks that have been produced by another covered entity.

b) Rationale

This section is needed to establish the criteria under which LHF volumes can be included in reported LHF product data and consequently receive allowance allocation under the Cap-and-Invest Program. LHFs derived solely from fuel blending onsite and finished LHFs brought onsite are excluded to ensure only one entity may report production and receive allocation for any LHF volume and that allocation is only provided for production processes occurring in California. LHFs produced from intermediate feedstocks that have been produced by another covered entity are reportable as LHF product data. In this instance, energy use and emissions resulting from production of the intermediate feedstock are covered under the Cap-and-Invest Program, minimizing the risk of emissions leakage. Additionally, the covered entity who produces the intermediate feedstocks would not be able to report the intermediate feedstocks as LHF, removing the potential for double reporting of a single LHF volume.

Subsection 95113(l)(5)

a) Purpose

Section 95103(l)(5) requires operators of asphalt production units who do not report CWB product data to report annual production data for asphalt and road oils.

b) Rationale

This section is needed to support the transition from allocation based on reported CWB data to allocation based on reported LHF and asphalt production data for refineries in the Cap-and-Invest Program. Because asphalt and road oils are not LHFs and have their own benchmark under the Cap-and-Invest Regulation, they must be reported as a separate product from LHF. This requirement is also applicable to stand-alone asphalt plants who engage in “asphalt production” as defined in section 95102(b).

Subsection 95113(l)(6)

a) Purpose

This amendment requires refineries to report quantities of total refinery inputs, fossil crude inputs, and biomass-derived feedstock inputs.

b) Rationale

This amendment is needed for CARB staff to understand how non-crude inputs are being used at refineries as more biofuels are being produced, and to QA reported refinery data.

Subsection 95113(n)

a) Purpose

The proposed addition of subsection 95113(n) establishes reporting requirements for biogenic emissions from the processing or coprocessing of biomass-derived feedstocks in hydrotreaters, Fluid Catalytic Cracking Units (FCCUs), or other refinery units. The proposed amendments require operators to propose biogenic emissions quantification methods and seek approval pursuant to the alternative method submittal process in section 95103(m)(2), and to report as non-exempt any biogenic emissions that are quantified outside of an approved methodology, or that are otherwise determined by CARB or the verifier to not meet the +/-5 percent accuracy criteria.

b) Rationale

The proposed addition is necessary to provide refinery operators a pathway for accurately quantifying and reporting biomass-derived emissions from processing and coprocessing of biomass-derived feedstocks under MRR. The reliance on alternative method requests provides reporters flexibility in the methods used to quantify biomass-derived emissions, while allowing CARB to ensure that the measurement and quantification techniques used to quantify biomass-derived emissions are accurate, verifiable, and consistent with methods operators use to calculate Carbon Intensity scores pursuant to the Low Carbon Fuel Standard program, when applicable.

Subsection 95113. Table 2-1. Refinery Products.

a) Purpose

This amendment adds a new data column to Table 2-1 to identify which refinery products are potentially eligible to be reported as liquid hydrocarbon fuel. The footnotes clarify that a fuel listed in Table 2-1 that is potentially eligible for reporting as an LHF must additionally meet the definition of LHF and requirements in 95113(l)(4) to be included in the reported LHF production quantity. The footnotes also clarify that the volume of reported LHF should exclude ethanol and other blendstocks produced offsite.

b) Rationale

This amendment is needed to clarify to refinery operators which products can potentially be included as LHFs when reporting LHF product data. The footnotes are needed to avoid confusion regarding what is considered eligible for reporting as LHF product data given that the fuel quantity reported under a particular product name to EIA may be quite different from the quantity that must be reported to CARB for LHF product data reporting. Ethanol and other blendstocks that do not meet LHF criteria and that are reported as part of a finished motor gasoline product must be excluded to ensure consistency in how LHF volumes are reported, regardless of whether an operator chooses to separately report blendstocks that are blended together under multiple product names or under a single finished product name.

K. Section 95114. Hydrogen Production.

Section 95114

a) Purpose

This amendment revises section 95114 to apply to biorefineries the existing clarification that GHG emissions and outputs associated with hydrogen production must be reported separately from other emissions and output associated with refineries.

b) Rationale

The incorporation of "biorefineries" into section 95114, "Hydrogen Production," is part of a suite of amendments to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and create an overarching “refinery” emissions source category. This change is needed for alignment with the existing regulation, which categorizes hydrogen production as a separate emissions source category from refineries under MRR, with separate reporting requirements.

Subsection 95114(b)

a) Purpose

The proposed amendment removes the word “Fossil” from the subsection title, “CO_2 from Fossil Fuel Combustion.”

b) Rationale

This amendment is necessary to ensure that combustion emissions from hydrogen production are reported pursuant to this subsection regardless of whether the combusted fuel is fossil or biomass-derived in origin.

Subsection 95114(j)

a) Purpose

The proposed amendment requires operators to report all gaseous and liquid hydrogen sold or otherwise transferred to biorefineries, in addition to petroleum refineries and hydrogen vehicle fueling stations.

b) Rationale

The integration of biorefineries into the "Additional Product Data" section 95114 (j) is needed to extend applicable existing reporting and verification requirements for petroleum refineries to biorefineries and to collect data on hydrogen sold or otherwise transferred to biorefineries for staff analysis.

Subsection 95114(m)

a) Purpose

The proposed amendment adds subsection 95114(m) to require hydrogen producers to calculate and report emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) from process vents within their facilities using the methodology outlined in section 40 C.F.R. § 98.256(l), which is already incorporated into the regulation pursuant to section 95100(c).

b) Rationale

This addition is necessary to capture emissions from process vents at hydrogen plants that are not part of an integrated refinery and therefore, are not subject to U.S. EPA Subpart Y reporting; currently these emissions are only required to be reported by hydrogen production plants that are part of a refinery. Requiring these facilities to report process vent emissions ensures consistency across the refining and hydrogen production sectors.

L. Section 95115. Stationary Fuel Combustion Sources.

Subsection 95115(n)(3)

a) Purpose

A typo was fixed for subsection 95115(n)(3) by adding a period at the end of the sentence.

b) Rationale

The period was added to the subsection so that the sentence reads correctly.

Subsection 95115(n)(16)

a) Purpose

This amendment adds “sweet whey powder” as a reportable product.

b) Rationale

This change is needed to allow entities to report sweet whey powder product data for allowance allocation under a new dairy sector product benchmark in the Cap-and-Invest Regulation.

Subsection 95115(n)(22)

a) Purpose

This amendment adds new requirements for facility operators who produce SCMs to report the quantity of SCMs produced and the quantity of SCMs delivered to cement or concrete plants to make finished cement along with associated delivery data. SCM production is covered product data and subject to verification.

b) Rationale

This amendment is needed for in-state SCM producers to report SCM product data and receive allowance allocation in the Cap-and-Invest Regulation for SCMs produced and blended to make finished cement. To determine the quantity of SCMs produced in-state that are blended to make cement, staff need to collect both in-state SCM production and delivery data reported under 95115(n)(22) by in-state SCM producers and the quantity of SCMs blended to make cement reported in section 95110(d)(5) by cement manufacturers. For section 95115(n)(22), the total quantity of SCMs produced in-state is reported, regardless of final use and destination. For section 95110, only the quantity that is blended to make cement in California is reported.

Requiring reporting of delivery data will allow for a cross-check of deliveries reported by SCM producers with SCM receipts reported by cement manufacturers to confirm the quantities of SCMs produced in-state for which in-state cement producers may receive allocation.

Subsection 95115. Table 2-3.

a) Purpose

The proposed amendment corrects the default high heating value (HHV) for ethane in Table 2-3 from 0.096 MMBtu/gallon to 0.069 MMBtu/gallon.

b) Rationale

This change is needed for consistency with the HHV included in EPA’s 40 C.F.R. § 98 Subpart C, Table C-1, as referenced in MRR.

M. Section 95118. Nitric Acid Production.

Subsection 95118(d)

a) Purpose

The proposed amendments remove the requirement for operators of a nitric acid manufacturing facility to report annual production data for calcium ammonium nitrate solution and removes the text, "Reporting the annual production of calcium ammonium nitrate solution is no longer required beginning in 2019 for reporting of 2018 data" from the regulation.

b) Rationale

The Cap-and-Invest Program benchmark for calcium ammonium nitrate was set to zero in the 2016 Cap-and-Invest Regulation. Therefore, there is no longer a reason for reporting entities to report this covered product data under MRR to receive Cap-and-Invest Program allowance allocations. This change is needed to remove an unnecessary reporting requirement and associated obsolete language from MRR.

N. Section 95121. Suppliers of Transportation Fuels.

Section 95121

a) Purpose

This amendment revises the introductory text for section 95121 to replace “biofuel production facility” with “biomass-derived fuel production facility.”

b) Rationale

This change is needed for consistency with the proposed replacement of the definition of “biofuel production facility” with a definition for “biomass-derived fuel production facility” in section 95102(a).

Subsection 95121(a)(1)

a) Purpose

Section 95121(a)(1) is modified to incorporate reporting of GHG emissions from biomass-derived LPG by refiners.

b) Rationale

This change is necessary for GHG emissions from biomass-derived LPG to be reported under MRR by refiners. Under the current regulation, only GHG emissions from fossil LPG are required to be reported by refiners. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95121(a)(2)

a) Purpose

Section 95121(a)(2) is modified to:

1. Apply to enterers that import any regulated transportation fuel for distribution outside the bulk transfer/terminal system, rather than only fossil transportation fuels.

2. Apply to biomass-derived fuel production facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system.

3. Correct the grammar of the sentence specifying the cases under which fuel may be excluded from emissions reporting by transportation fuel suppliers.

4. Apply the existing emissions reporting exemption for fuels that can be demonstrated to have been previously delivered by a position holder or refiner out of an upstream rack, to all regulated transportation fuels rather than only fossil fuels.

5. Correct the text to reference Table 2-5 instead of Table 2-4.

b) Rationale

1. This change is needed to require enterers to report GHG emissions from all regulated transportation fuels imported into California and delivered outside the bulk transfer system, rather than only imported fossil fuels. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

2. This change is needed to require facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system to report GHG emissions. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

3. This grammatical revision is necessary to ensure that transportation fuel suppliers can accurately interpret when they may exclude fuel volumes from GHG emissions reporting. It does not change the cases under which fuel volumes may be excluded.

4. This change is needed to prevent double reporting of biomass-derived fuels that are delivered across a rack more than once.

5. This revision is necessary to correct a typographical error. Table 2-5 is the correct reference as it provides the list of fuels that are subject to reporting to MRR.

Subsection 95121(b)(1)

a) Purpose

This section is modified to:

1. Apply to enterers that import all regulated transportation fuels for distribution outside the bulk transport system, rather than only fossil transportation fuels.

2. Apply to biomass-derived fuel production facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system in California.

3. Require fuel ethanol emissions to be reported based on component pure ethanol and denaturant volumes, with the denaturant volume reported as RBOB or biomass-derived RBOB and quantified based on a known volume or as 2 percent of the total fuel ethanol volume, and the remaining fuel ethanol volume reported as pure ethanol.

4. Require the hydrocarbon component of E85 to be reported as fossil or biomass-derived RBOB and the remaining E85 volume to be reported as pure ethanol.

5. Establish the emission factors for biomass-derived Blendstock and biomass-derived LPG components to be the same as their fossil equivalents.

6. Apply the requirement to calculate emissions based on the delivering entity's invoiced volume of fuel or based on a meter that meets the requirements of section 95103(k) to a position holder of *any* regulated transportation fuel who does not have sealed or financial transaction meters at the rack and is the sole position holder at the terminal, rather than to a position holder of only diesel or biodiesel who does not have sealed or financial transaction meters at the rack and is the sole position holder at the terminal.

b) Rationale

1. This change is needed to require enterers to report GHG emissions from all regulated transportation fuels imported into California and delivered outside the bulk transfer system, rather than only fossil fuels. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

2. This change is needed to require facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system to report GHG emissions. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

3. Under the existing regulation, fuel ethanol is required to be reported as 100% pure ethanol even though it contains denaturant that is typically fossil gasoline or other similar fossil liquid hydrocarbon fuel. As a result, denaturant emissions are currently calculated using the emission factor for ethanol and denaturant CO_2 emissions are exempt from a compliance obligation under the Cap-and-Invest Regulation. This change is needed to capture GHG emissions from denaturant more accurately in an entity's total emissions and to include all fossil denaturant emissions in an entity's covered emissions. The default value for denaturant of 2 percent is based on the maximum amount of denaturant reportable as alcohol to the Internal Revenue Service for fuel alcohol tax credit purposes (I.R.C. § 40(d)(4)).

4. This change is needed to capture GHG emissions from the hydrocarbon component of supplied E85 even in cases where the hydrocarbon component does not fit the definition for one of the regulated transportation fuels listed in Table 2-5 of MRR, such as when E85 is made using renewable naphtha.

5. This change is needed to establish the emission factors reporters must use when calculating GHG emissions from biomass-derived Blendstock and biomass-derived LPG, which are being added to MRR as regulated transportation fuels under other proposed amendments. This change is one of multiple amendments proposed to capture GHG emissions from novel, low

carbon fuels under MRR. These changes are necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

6. This revision is necessary to ensure all position holders regulated under section 95121 comply with meter accuracy requirements specified in section 95103(k).

Subsection 95121(b)(2)

a) Purpose

This amendment applies the emission calculation requirements detailed in this subsection to refiners that produce biomass-derived LPG, in addition to refiners that produce fossil LPG.

b) Rationale

This change is necessary for GHG emissions from biomass-derived LPG to be reported under MRR by refiners. Under the current regulation, only GHG emissions from fossil LPG are required to be reported by refiners. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95121(b)(3)

a) Purpose

This amendment applies this section's emission calculation requirements to biomass-derived fuel production facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system in California.

b) Rationale

This change is needed to require facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system to report GHG emissions and thus ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95121. Table 2-4: Transportation Fuel CH_4 and N_2O emission factors.

a) Purpose

Section 95121, Table 2-4 is modified to apply Blendstock CH_4 and N_2O emission factors to biomass-derived Blendstock, in addition to fossil Blendstock.

b) Rationale

Table 2-4 in Section 95121 provides the emission factors to be used by transportation fuel suppliers to calculate CH_4 and N_2O emissions from Blendstock, Distillate, Ethanol, and Biodiesel and Renewable Diesel. This change is necessary to clearly establish that the CH_4 and N_2O emissions factors for Blendstock must be used for biomass-derived Blendstock, in addition to fossil Blendstock. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for

MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95121(d)(1)

a) Purpose

This section is modified to:

1. Correct the grammar of the sentence specifying the cases under which fuel volumes do not need to be reported by California position holders.

2. Apply the emissions reporting exemption to all transportation fuels that can be demonstrated to have been previously delivered by a position holder or refiner out of an upstream rack, rather than only fossil fuels.

3. Require fuel ethanol emissions to be reported based on component pure ethanol and denaturant volumes, with the denaturant volume reported as fossil or biomass-derived RBOB and quantified based on a known volume or as 2 percent of the total fuel ethanol volume, and the remaining fuel ethanol volume reported as pure ethanol (100%).

4. Require the hydrocarbon component of E85 to be reported as fossil or biomass-derived RBOB and the remaining E85 volume to be reported as pure ethanol.

b) Rationale

1. This grammatical revision is necessary to ensure that California position holders can accurately interpret when they may exclude fuel volumes from GHG emissions reporting. It does not change the cases under which fuel volumes may be excluded.

2. This change is needed to prevent double reporting of biomass-derived fuels that are delivered across a rack more than once.

3. Under the existing regulation, fuel ethanol is required to be reported as 100% pure ethanol even though it contains denaturant that is typically fossil gasoline or other similar fossil liquid hydrocarbon fuel. As a result, denaturant emissions are currently calculated using the emission factor for ethanol and denaturant CO_2 emissions are exempt from a compliance obligation under the Cap-and-Invest Regulation. This change is needed to capture GHG emissions from fossil denaturant more accurately in an entity's total emissions and include all fossil denaturant emissions in an entity's covered emissions. The default value for denaturant of 2 percent is based on the maximum amount of denaturant reportable as alcohol to the Internal Revenue Service for fuel alcohol tax credit purposes (I.R.C. § 40(d)(4)).

4. This change is needed to capture GHG emissions from the hydrocarbon component of supplied E85 even in cases where the hydrocarbon component does not perfectly fit the definition for one of the regulated transportation fuels listed in Table 2-5 of MRR, such as when E85 is made using renewable naphtha.

Subsection 95121(d)(2)

a) Purpose

Section 95121(d)(2) is modified to:

1. Correct the reference from Table 2-4 to Table 2-5.

2. Correct the grammar of the sentence specifying the cases under which fuel volumes do not need to be reported by California position holders that are also terminal operators and refiners.

3. Exempt emissions reporting for all transportation fuels that can be demonstrated to have been previously delivered by a position holder or refiner out of an upstream rack, rather than only fossil fuels.

4. Require fuel ethanol emissions to be reported based on component pure ethanol and denaturant volumes, with the denaturant volume reported as fossil or biomass-derived RBOB and quantified based on a known volume or as 2 percent of the total fuel ethanol volume, and the remaining fuel ethanol volume reported as pure ethanol (100%).

5. Require the hydrocarbon component of E85 to be reported as fossil or biomass-derived RBOB and the remaining E85 volume to be reported as pure ethanol.

6. Remove the requirement for position holders who hold only a single position at the terminal and dispense only diesel or biodiesel at the rack to report the annual quantity of fuel using a meter that meets the requirements of section 95103(k) or billing invoices. This text is redundant with other sections of MRR.

b) Rationale

1. This revision is necessary to correct a typographical error. Table 2-5 presents the transportation fuels that are subject to reporting under section 95121 of MRR.

2. This grammatical revision is necessary to ensure that California position holders that are also terminal operators and refiners can accurately interpret when they may exclude fuel volumes from GHG emissions reporting. It does not change the cases under which fuel volumes may be excluded.

3. Apply the emissions reporting exemption to all transportation fuels that can be demonstrated to have been previously delivered by a position holder or refiner out of an upstream rack, rather than only fossil fuels.

4. Under the existing regulation, fuel ethanol is required to be reported as 100% pure ethanol even though it contains denaturant that is typically fossil gasoline or other similar fossil liquid hydrocarbon fuel. Consequently, denaturant emissions are currently calculated using the emission factor for ethanol and denaturant CO_2 emissions are exempt from a compliance obligation under the Cap-and-Invest Regulation. This change is needed to capture GHG emissions from fossil denaturant more accurately in an entity's total emissions and include all fossil denaturant emissions in an entity's covered emissions. The default value for denaturant of 2 percent is based on the maximum amount of denaturant reportable as alcohol to the Internal Revenue Service for fuel alcohol tax credit purposes (I.R.C. § 40(d)(4)).

5. This change is needed to capture GHG emissions from the hydrocarbon component of supplied E85 even in cases where the hydrocarbon component does not perfectly fit the definition for one of the regulated transportation fuels listed in Table 2-5 of MRR, such as when E85 is made using renewable naphtha.

6. This revision needed to remove a redundant requirement that is addressed elsewhere in sections 95121(b)(1) and 95121(d)(2). This amendment has no impact on reporting requirements.

Subsection 95121(d)(3)

a) Purpose

This section is modified to:

1. Update a reference for the California Board of Equalization to the California Department of Tax and Fee Administration.

2. Require fuel ethanol emissions to be reported based on component pure ethanol and denaturant volumes, with the denaturant volume reported as fossil or biomass-derived RBOB and quantified based on a known volume or as 2 percent of the total fuel ethanol volume, and the remaining fuel ethanol volume reported as pure ethanol (100%).

3. Require the hydrocarbon component of E85 to be reported as fossil or biomass-derived RBOB and the remaining E85 volume to be reported as pure ethanol.

b) Rationale

1. This revision is necessary to ensure that this section reflects the current name of the agency that oversees fuel taxation.

2. Under the existing regulation, fuel ethanol is required to be reported as 100% pure ethanol even though it contains denaturant that is typically fossil gasoline or other similar fossil liquid hydrocarbon fuel. Consequently, denaturant emissions are currently calculated using the emission factor for ethanol and denaturant CO_2 emissions are exempt from a compliance obligation under the Cap-and-Invest Regulation. This change is needed to capture GHG emissions from fossil denaturant more accurately in an entity's total emissions and include all fossil denaturant emissions in an entity's covered emissions. The default value for denaturant of 2 percent is based on the maximum amount of denaturant reportable as alcohol to the Internal Revenue Service for fuel alcohol tax credit purposes (I.R.C. § 40(d)(4)).

3. This change is needed to capture GHG emissions from the hydrocarbon component of supplied E85 even in cases where the hydrocarbon component does not perfectly fit the definition for one of the regulated transportation fuels listed in Table 2-5 of MRR, such as when E85 is made using renewable naphtha.

Subsection 95121(d)(4)

a) Purpose

This section is modified to:

1. Apply to biomass-derived fuel production facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system.

2. Apply to enterers and biomass-derived fuel production facilities that supply any regulated transportation fuel outside the bulk transfer/terminal system, rather than only fossil transportation fuels.

3. Require fuel ethanol emissions to be reported based on component pure ethanol and denaturant volumes, with the denaturant volume reported as fossil or biomass-derived RBOB and quantified based on a known volume or as 2 percent of the total fuel ethanol volume, and the remaining fuel ethanol volume reported as pure ethanol.

4. Require the hydrocarbon component of E85 to be reported as fossil or biomass-derived RBOB and the remaining E85 volume to be reported as pure ethanol.

5. Remove the restriction for enterers to report only volumes imported as a blended component of a finished transportation fuel.

b) Rationale

1. This change is needed to require facilities that produce and deliver biomass-derived fuels outside the bulk transfer/terminal system to report GHG emissions. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

2. This change is needed to require enterers and biomass-derived fuel production facilities to report GHG emissions from all regulated transportation fuels imported into California and delivered outside the bulk transfer system, rather than only fossil fuels. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

3. Under the existing regulation, fuel ethanol is required to be reported as 100% pure ethanol even though it contains denaturant that is typically fossil gasoline or other similar fossil liquid hydrocarbon fuel. As a result, denaturant emissions are currently calculated using the emission factor for ethanol and denaturant CO_2 emissions are exempt from a compliance obligation under the Cap-and-Invest Regulation. This change is needed to capture GHG emissions from fossil denaturant more accurately in an entity's total emissions and include all fossil denaturant emissions in an entity's covered emissions. The default value for denaturant of 2% is based on the maximum amount of denaturant reportable as alcohol to the Internal Revenue Service for fuel alcohol tax credit purposes (I.R.C. § 40(d)(4)).

4. This change is needed to capture GHG emissions from the hydrocarbon component of supplied E85 even in cases where the hydrocarbon component does not perfectly fit the definition for one of the regulated transportation fuels listed in Table 2-5 of MRR, such as when E85 is made using renewable naphtha.

5. This change is needed to require enterers to report imported volumes of all regulated transportation fuels delivered outside the bulk transfer/terminal system, which may include fuels used as blending components, such as biodiesel, that are blended outside the terminal system. This change is necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95121(d)(5)

a) Purpose

This amendment applies the requirements detailed in this subsection to refiners that produce biomass-derived LPG, in addition to refiners that produce fossil LPG.

b) Rationale

This change is necessary for imported volumes of biomass-derived LPG to be reported under MRR by refiners. Under the current regulation, only volumes of fossil LPG are required to be reported by refiners. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95121(d)(6)

a) Purpose

This section is modified to reference all regulated transportation fuels listed in Table 2-5, rather than specifically petroleum fuel, liquefied petroleum gas, and biomass-derived fuels reported in section 95121.

b) Rationale

These changes are needed for consistency with proposed amendments to add biomass-derived fuels, such as biomass-derived CARBOB, as regulated transportation fuels.

Subsection 95121(d)(8)

a) Purpose

Subsection 95121(d)(8) is modified to specify that only biodiesel and/or renewable diesel blended in California diesel that is ultimately marketed as CARB diesel is subject to reporting under this subsection.

b) Rationale

Section 95121(d)(8) establishes reporting requirements to collect data needed to assess a fee on entities subject to the AB 32 Cost of Implementation (COI) Fee Regulation. This change is needed to ensure the blended biodiesel or renewable diesel data collected under MRR and used to assess a COI fee is consistent with the COI Fee Regulation's point of regulation for transportation fuel, which includes "producers and importers of California gasoline or California diesel." Under the COI Fee Regulation, an entity is considered to "produce" California diesel when they blend biodiesel or renewable diesel into diesel and market the resulting product as "California diesel fuel," as defined in Title 13, section 2282: "... any fuel that is commonly or commercially known, sold or represented as diesel fuel."

Subsection 95121(d)(9)

a) Purpose

Section 95121(d)(9) is modified to:

1. Change a reference from Table 2-4 to Table 2-5.

2. Require transportation fuel suppliers to report fuel volumes excluded from emissions reporting per section 95121(a)(1) by reason for exclusion.

b) Rationale

1. This revision is necessary to correct a typographical error. Table 2-5 is the correct reference as it provides the list of transportation fuels subject to reporting under section 95121 of MRR.

2. This change is necessary to collect additional data for use by the GHG emissions inventory program. Specifically, this data will support the use of MRR distillate data for calculating marine and aviation sector emissions inventories and allow for more nuanced cross checks of MRR data against other data sources for transportation fuels.

Subsection 95121(d)(10)

a) Purpose

This amendment adds a new subsection requiring transportation fuel suppliers to report the LCFS pathway code, fuel type, point of regulation, and volume of fuel associated with each unique combination of the three prior data fields for all biomass-derived fuel volumes for which GHG emissions are reported.

b) Rationale

This amendment is needed for CARB staff to be able to assess the accuracy of reported GHG emissions from biomass-derived fuels under the proposed point of regulation for transportation fuel suppliers; specifically, in conjunction with data collected under the Low Carbon Fuel Standard Regulations (title 17, California Code of Regulations, section 95480 et seq.) (Low Carbon Fuel Standard Regulation),staff will be able to use this data to determine if the same biomass-derived fuel volumes are being reported at multiple different points of regulation by different suppliers.

Subsection 95121. Table 2-5: Blendstocks, Distillate Fuel Oils, and Biomass-Derived Fuels Subject to Reporting under section 95121.

a) Purpose

Section 95121, Table 2-5 is modified to:

1. Remove CBOB as a regulated transportation fuel.

2. Include Biomass-derived RBOB and Biomass-derived LPG as regulated transportation fuels.

b) Rationale

Table 2-5 in Section 95121 lists the transportation fuels for which GHG emissions must be reported by transportation fuel suppliers under MRR.

1. Conventional blendstock for oxygenate blending (CBOB) is not supplied in California by transportation fuel suppliers subject to MRR because it does not meet California specifications for gasoline blendstock. These changes are needed to remove terms that are obsolete and have caused confusion for new reporters.

2. This change is necessary to require transportation fuel suppliers to report GHG emissions from biomass-derived RBOB and biomass-derived LPG. This change is one of multiple amendments proposed to better capture GHG emissions from novel low carbon fuels under

MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

O. Section 95122. Suppliers of Natural Gas, Natural Gas Liquids, Liquefied Petroleum Gas, Compressed Natural Gas, and Liquefied Natural Gas.

Section 95122.

a) Purpose

The introductory text of section 95122 is modified to apply section 95122 reporting requirements to suppliers of biomass-derived equivalents of natural gas or natural gas liquids.

b) Rationale

Under the current regulation, only suppliers of fossil NGLs are subject to reporting. This change is necessary for GHG emissions data and other data required under section 95122 to be reported under MRR by suppliers of biomass-derived NGLs. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95122(a)(1)

a) Purpose

The proposed amendment requires natural gas liquid fractionators to report GHG emissions from biomass-derived LPG, rather than only fossil LPG, as is currently required.

b) Rationale

This change is necessary for GHG emissions data to be reported for biomass-derived LPG produced in California. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95122(a)(3)

a) Purpose

Section 95122(a)(3) is modified to:

1. Remove references to LPG and LPG importers from this section.

2. Apply GHG emissions data reporting requirements to importers of biomass-derived liquefied petroleum gas (LPG), compressed natural gas (CNG), and liquefied natural gas (LNG).

3. Exclude imported LPG, CNG, and LNG volumes used exclusively in ocean-going vessels from GHG emissions reporting.

b) Rationale

1. This change is needed because GHG reporting requirements for LPG importers are being moved into their own subsection, 95122(a)(4). This change supports the alignment of section 95122 reporting requirements with proposed amendments in sections 95101(c)(5) and 95102(a) to change the point of regulation for fossil and biomass-derived LPG imports from the "importer of fuel," as defined in section 95102(a), to the operator of an LPG receiving facility that supplies imported fossil or biomass-derived LPG at their facility for distribution in California.

2. This change is necessary for GHG emissions data to be reported for biomass-derived NGLs imported into California. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

3. This change is necessary to exclude GHG emissions that will be combusted primarily outside of California state boundaries from being included in MRR emissions reporting.

Subsection 95122(a)(4)

a) Purpose

The proposed amendments add a new subsection requiring the supplier of imported LPG to report GHG emissions from fossil or biomass-derived LPG for which they are the "supplier of imported LPG" as defined in section 95102(a) of this article, except for LPG for which a final destination outside of California or exclusive use in ocean-going vessels can be demonstrated. The amendments also include renumbering former subsection 95122(a)(4) to 95122(a)(5) to maintain numerical order.

b) Rationale

This change is needed to align section 95122 reporting requirements with proposed amendments in sections 95101(c)(5) and 95102(a) to change the point of regulation for imported fossil and biomass-derived LPG from the "importer of fuel," as defined in section 95102(a), to the operator of an LPG receiving facility that supplies imported fossil or biomass-derived LPG at their facility for distribution in California.

Subsection 95122(b)(1)

a) Purpose

The proposed amendments apply the existing CO_2 calculation methodology and emission factors for fossil NGLs produced and supplied by natural gas liquid fractionators to biomass-derived NGLs.

b) Rationale

This change is needed for GHG emissions from biomass-derived NGLs to be reported under MRR. This is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate

reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95122(b)(3)

a) Purpose

Section 95122(b)(3) prescribes how to calculate parameter CO_{2j}, which is one of the parameters used by local distribution companies (LDC) and intrastate pipelines to calculate the total MMBTU of natural gas for which GHG emissions must be reported. Section 95122(b)(3) is modified to require estimation of annual CO_2 emissions from natural gas redelivered to public utility gas corporations only if emissions from the redelivered gas equals or exceeds 25,000 MT CO_2e. Under the current regulation, there is no threshold for reporting CO_2 from redeliveries to public utility gas corporations.

b) Rationale

This change is needed to ensure that GHG emissions from supplied natural gas are comprehensively reported under MRR in cases where small quantities of gas are redelivered from one LDC to another. Redeliveries included under parameter CO_{2j} are subtracted out from the total MMBTU of natural gas for which a natural gas supplier must report GHG emissions. Thus, any redelivery included under CO_{2j} that is not also being reported separately under MRR by the receiving natural gas supplier would not be captured under MRR. The 25,000 MT CO_2e estimation threshold provides a means to ensure that only emissions from redeliveries to natural gas suppliers who are themselves subject to MRR and/or the Cap-and-Invest Program will be subtracted from the upstream natural gas supplier's reported emissions.

Subsection 95122(b)(7)

a) Purpose

The proposed amendments apply the existing CH_4 and N_2O calculation methodology and emission factors for fossil NGLs produced and supplied by natural gas liquid fractionators to biomass-derived NGLs.

b) Rationale

This change is needed for GHG emissions from biomass-derived NGLs to be reported under MRR. This is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95122(b)(9)

a) Purpose

1. The proposed amendments modify this subsection to incorporate the term "supplier of imported LPG," instead of "importer of LPG"

2. This section is modified to remove the requirement for suppliers of imported LPG who know the composition of imported LPG to report imported LPG by LPG components. This allows

suppliers of imported LPG in all cases to report imported LPG volumes as “LPG,” rather than as LPG components, and to calculate emissions from imported LPG using the default emission factor for LPG.

3. This section is modified to apply the existing CO_2 calculation methodology and emission factors for fossil LPG, CNG, and LNG to their biomass-derived equivalents.

b) Rationale

1. This deletion is needed for consistency with proposed amendments that change the point of regulation for fossil and biomass-derived LPG imports from the “importer of fuel,” as defined in section 95102(a), to the ”supplier of imported LPG.”

2. This revision is needed to simplify emissions reporting for imported LPG. The existing requirement is often burdensome for suppliers to implement and provides little additional precision in emissions reporting.

3. This change is needed for GHG emissions from biomass-derived LPG, CNG, and LNG to be reported under MRR. This change is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95122(b)(10)

a) Purpose

The proposed amendments apply the existing CH_4 and N_2O emissions calculation methodology and emission factors to suppliers of imported LPG (fossil and biomass-derived) and to importers of biomass-derived CNG and LNG.

b) Rationale

These changes are needed to align with proposed amendments that change the POR for imported LPG from the “importer of fuel” to the “supplier of imported LPG,” as defined in section 95102(a). These changes are also needed to require GHG emissions from importers of biomass-derived CNG and LNG to be reported under MRR. This is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

Subsection 95122(c)(1)-(2)

a) Purpose

The proposed amendment modifies sections 95122(c)(1) and (2) to apply to LDCs and intrastate pipelines rather than natural gas suppliers.

b) Rationale

Due to proposed revisions to the definition of “natural gas supplier” and “LDC,” these changes are needed to preserve the original applicability of the requirement. This amendment does not impact existing requirements.

Subsection 95122(c)(4)

a) Purpose

This section is modified to:

1. Incorporate the new term, “supplier of imported liquefied petroleum gas,” instead of “importer of LPG”

2. Revise the requirement for suppliers of imported LPG to record the composition for each shipment of imported fossil or biomass-derived LPG supplied to apply only to suppliers who choose to calculate LPG emissions by individual components and only for shipments for which LPG emissions are calculated by component, rather than all shipments.

b) Rationale

1. These changes are needed for consistency with other amendments that change the point of regulation for imported fossil and biomass-derived LPG from the “importer of fuel,” as defined in section 95102(a), to the “supplier of imported LPG,” as proposed to be defined in section 95102(a).

2. These changes are needed for consistency with the proposed amendment that removes the requirement for suppliers of imported LPG to calculate emissions for a shipment of fuel based on individual component volumes when the composition of fossil or biomass-derived is known. This gives suppliers of imported LPG the option to report imported LPG volume as a single volume of “LPG” in all cases.

Subsection 95122(d)(1)

a) Purpose

This amendment requires NGL fractionators to report non-emissions data required under this subsection for biomass-derived LPG, rather than only fossil LPG.

b) Rationale

This change is needed to align with proposed amendments to apply MRR reporting requirements to novel biomass-derived fuels. These changes provide for the collection of data that supports QA of MRR emissions data and tracking and analysis of California’s GHG emissions.

Subsection 95122(d)(2)(E)

a) Purpose

The proposed amendments modify this section to:

1. Replace “local distribution companies and intrastate pipelines” with “local distribution companies” in the first sentence.

2. Require intrastate pipelines to report customer data for all deliveries, regardless of the delivered amount.

b) Rationale

1. This change is needed for consistency with proposed amendments that include intrastate pipelines as a type of local distribution company (LDC). This change does not alter existing requirements.

2. Section 95122(d)(2)(E) currently requires LDCs and intrastate pipelines to report customer information for natural gas deliveries to end-users if the amount supplied to customers is equal to or greater than 188,500 MMBtu per calendar year. This change is needed to collect data for all deliveries less than 188,500 MMBTU, including to entities that may not be end-users, such as other pipeline operators. CARB staff needs this data to calculate natural gas covered emissions for intrastate pipelines.

Subsection 95122(d)(5)

a) Purpose

1. The proposed amendment modifies this section to incorporate the term “supplier of imported LPG,” instead of “importer of LPG.”

2. The proposed amendment applies this section’s requirements to importers of fossil or biomass-derived CNG or LNG.

3. This section is modified to remove the requirement for suppliers of imported LPG who know the composition of imported LPG to report imported and supplied LPG volume by LPG components. This gives suppliers of imported LPG the option to report imported LPG volume as a single volume of “LPG” in all cases.

b) Rationale

1. These changes are needed for consistency with other amendments that change the point of regulation for imported fossil and biomass-derived LPG from the “importer of fuel,” as defined in section 95102(a), to the “supplier of imported LPG,” as proposed to be defined in section 95102(a).

2. This change is needed for GHG emissions from importers of biomass-derived CNG and LNG to be reported under MRR. This is one of multiple amendments proposed to capture GHG emissions from novel, low carbon fuels under MRR. These changes are necessary for MRR to ensure adequate reporting of statewide GHG emissions in accordance with section 38530 of the Health and Safety Code.

3. This revision is needed to simplify emissions reporting for suppliers of imported LPG. The existing requirement to report LPG volumes by component is often burdensome for suppliers of imported LPG to implement and provides little additional precision in emissions reporting.

Subsection 95122(d)(8)

a) Purpose

The proposed amendments:

1. Require suppliers of imported LPG and importers of fossil or biomass-derived CNG or LNG to report the total barrels of fuel that are excluded from emissions reporting.

2. Require natural gas liquid fractionators, suppliers of imported LPG, and importers of fossil or biomass-derived CNG or LNG that exclude fuel from emissions reporting to report the quantity of fuel volume excluded from emissions reporting by reason of its exclusion (i.e., a final destination outside of California or exclusive use in ocean-going vessels).

b) Rationale

1. These changes are needed for CARB to collect data on volumes excluded from emissions reporting for all fuel types and supplier types eligible for emissions reporting exemptions under section 95122(a) of MRR. Requiring this data to be reported also facilitates verification of excluded volumes, which is needed because excluded volumes may substantively impact a reporter's total and covered and are otherwise invisible in the reported data.

2. These changes are needed for consistency with the proposed new exemption for fuel used exclusively in ocean-going vessels, and to collect data on the annual quantities of NGLs, CNG, and LNG exported out of California or used in ocean-going vessels, which will be used to support CARB programs, such as the GHG inventory.

P. Section 95125. Geologic Sequestration.

Section 95125

a) Purpose

The proposed amendment adds a new section to require geologic sequestration facilities to report emissions data required in Subpart RR of 40 C.F.R. § 98.

b) Rationale

The regulation already requires reporting from this industry type with no reporting threshold, meaning all facilities must report annual GHG emissions. The proposed amendments describe how those emissions are to be reported. Without these amendments, geologic sequestration facilities would not know how to report GHG emissions to CARB. Aligning with the U.S. EPA's current Mandatory Greenhouse Gas Reporting Regulation, as referenced in MRR, allows the facility operator to report GHG emissions to CARB using the same or similar methods they use for federal reporting. These reporting requirements may be updated as part of regulations developed to implement SB 905 (Carbon Capture, Removal, Utilization, and Storage Program, 2021-2022).

Q. Section 95126. Importers of Cement.

Section 95126

a) Purpose

This text is added to introduce a new section of reporting requirements that applies to importers of cement. The amendments establish that data is required to be reported starting in 2028 for 2027 data. The amendments also establish that the cement importer may exclude imported cement that is subsequently exported for use outside of California from data reported under section 95126.

b) Rationale

SB 596 (Greenhouse gases: cement sector: net-zero emissions strategy, 2021-2022) establishes a target of net-zero GHG emissions for the cement sector in California by 2045 and requires emissions reductions from all cement used in California, including imported cement. This amendment is necessary to collect the data needed to track and analyze GHG emissions associated with imported cement used in California to support emissions reductions per SB 596. This specific provision is needed to define the scope of section 95126 reporting. Cement that is exported is not required to be reported because the emissions associated with manufacturing of the imported cement are not associated with in-state activities.

Subsection 95126(a)

a) Purpose

The proposed section requires cement importers to report annual GHG emissions for each manufacturing facility of imported cement or clinker, as well as the combined total annual GHG emissions from the manufacture of all imported cement and clinker.

b) Rationale

This section is needed to specify the GHG emissions data cement importers are required to report under MRR. The data reported under this provision is needed for staff to track and analyze GHG emissions associated with imported cement used in California emissions reductions per SB 596 (Greenhouse gases: cement sector: net-zero emissions strategy, 2021-2022).

Subsection 95126(b)(1)

a) Purpose

The proposed section dictates how cement importers calculate annual GHG emissions from imported cement and clinker for a specific manufacturing facility and provides an equation for the calculation.

b) Rationale

This section is needed to ensure that reporters estimate GHG emissions using appropriate and consistent methods of estimation. The equation reflects that imported cement may be a fraction of the total production at a given manufacturing facility and so it is necessary to calculate GHG emissions from imported cement for a specific source as the GHG emissions intensity at the manufacturing facility multiplied by the quantity of cement imported to California from that manufacturing facility.

Subsection 95126(b)(2)(A)

a) Purpose

The proposed section dictates how cement importers calculate the GHG emissions intensity for a specific manufacturing facility when annual GHG emissions data and cement production for the source are known and provides an equation for the calculation. The calculated source

GHG emissions intensity is a parameter in the equation for GHG emissions for a specific source given in 95126(b)(1).

b) Rationale

This section is needed to ensure that reporters calculate GHG emissions intensity for a source, and consequently GHG emissions for a source, using appropriate and consistent methods of estimation.

Subsection 95126(b)(2)(B)

a) Purpose

The proposed section dictates that cement importers use a default GHG emissions intensity value of 0.758 MT CO_2e per short ton of cement when annual GHG emissions data and cement production for the manufacturing facility are not known. The source GHG emissions intensity is a parameter in the equation for GHG emissions for a specific source given in 95126(b)(1).

b) Rationale

This section is needed to ensure that reporters calculate source GHG emissions intensity, and consequently, source GHG emissions, using appropriate and consistent methods of estimation. As source-specific emissions and production data may not be available for all imported cement and clinker, it is necessary to allow for the use of a default emissions intensity factor to avoid missing data. The methods used to calculate the default emissions intensity factor for imported cement are provided in the Technical Support Document accompanying the ISOR for this regulation (CARB, December 2026).

Subsection 95126(b)(3)

a) Purpose

This section dictates how cement importers calculate the total annual GHG emissions for imported cement and provides an equation for the calculation.

b) Rationale

This section is needed ensure that reporters estimate GHG emissions using appropriate and consistent methods of estimation.

Subsection 95126(c)(1)

a) Purpose

Section 95126(c)(1) requires cement importers to use the best available data to report the quantities of cement and clinker imported from each manufacturing facility and, when possible, disaggregate the quantities by cement components.

b) Rationale

The amount of imported cement from each manufacturing facility is used by reporters to calculate facility-specific GHG emissions associated with imported cement as specified in

95126(b). Collecting data on the quantity of imported cement will allow CARB staff to assess the accuracy of the reported emissions, which is particularly important given that cement importer data is not subject to verification. Additionally, collecting data on cement components is needed to help CARB track the use of low-carbon materials in imported cement over time.

Subsection 95126(c)(2)

a) Purpose

Section 95126(c)(2) requires cement importers to provide data sources or GHG quantification methodologies used to calculate GHG emissions associated with imported cement specified in 95126(b).

b) Rationale

This information is necessary to verify the accuracy of reported GHG emissions data associated with imported cement.

Subsection 95126(c)(3)

a) Purpose

Section 95126(c)(3) requires the cement importer to report the name and location of the cement plant from which the cement was imported into California if that information is known.

b) Rationale

Requiring cement importers to report the cement manufacturer name and location allows staff to compare the GHG emissions intensity of different manufacturing facilities and aids staff in analyzing sector trends to inform emissions reductions per SB 596 (Greenhouse gases: cement sector: net-zero emissions strategy, 2021-2022). Facility location should be readily available to the cement importer in most cases because of the importance of chain of custody for materials where it is critically important to confirm the quality of the cement based on analytical testing performed at the location where the cement is produced or collected.

Subsection 95126(d)

a) Purpose

Section 95126(d) specifies that cement importer data is not subject to verification.

b) Rationale

Staff propose that cement importer data not be subject to verification because reported emissions are based on best available data and not subject to a Cap-and-Invest Program compliance obligation. At this time, the focus is on assessing and collecting what data is available.

R. Section 95127. Importers of Hydrogen and Producers of Hydrogen Utilizing Electricity.

Section 95127

a) Purpose

Section 95127 is added to introduce reporting requirements that apply to importers of hydrogen and in-state producers of hydrogen utilizing electricity, and to clarify that in-state hydrogen producers subject to reporting combustion and process emissions pursuant to section 95101(a)(1)(B)(3) of MRR do not report data under this section. The amendments establish that data reported under this section are not considered covered emissions data for purposes of determining compliance obligations under the Cap-and-Invest Program.

b) Rationale

The 2022 Scoping Plan Update signals the need for an aggressive reduction of fossil fuel use and a transition to lower carbon technologies. Meeting clean energy demand in California requires building out significant new low-carbon energy supply capacity, including an expected expansion of lower carbon hydrogen production (CARB, December 2022). Currently, in-state hydrogen producers exceeding 10,000 MT CO_2e of combustion and process emissions are required to report the emissions associated with hydrogen production. These existing provisions apply to traditional fossil-based hydrogen production technologies, as well as biomass-based production technologies that exceed the 10,000 MT MTCO2e threshold. Imported hydrogen and hydrogen produced utilizing electricity are currently not captured under MRR. This section is needed to ensure the MRR has a consistent reporting framework that captures emissions associated with the production and import of hydrogen into California, regardless of the technology utilized.

Subsection 95127(a)(1)(A)

a) Purpose

The proposed section specifies that operators of in-state facilities producing hydrogen utilizing electricity must report GHG emissions resulting from the consumption of electricity for hydrogen production procured from unknown generation sources as calculated in section 95127(a)(3).

b) Rationale

This section is needed to ensure that reporters estimate GHG emissions from the electricity procured from unknown generation sources using appropriate and consistent methods of estimation.

Subsection 95127(a)(1)(B)

a) Purpose

The proposed section specifies that operators of in-state facilities producing hydrogen utilizing electricity must report GHG emissions resulting from the consumption of electricity from known generation sources by fuel type or prime mover as calculated in section 95127(a)(4).

b) Rationale

This section is needed to ensure that reporters estimate GHG emissions from the electricity procured from known generation sources using appropriate and consistent methods of estimation. To reduce reporting burden and simplify the GHG emissions calculations, the operator does not have to report electricity consumption emissions separately for each known generation source, but rather aggregated by the fuel types or prime movers of the known generation sources.

Subsection 95127(a)(1)(C)

a) Purpose

The proposed section specifies that operators of in-state facilities producing hydrogen utilizing electricity quantify the total GHG emissions by summing the emissions from unknown generation sources and the emissions from known generation sources, as calculated in section 95127(a)(5).

b) Rationale

This section is needed to ensure operators use appropriate and consistent methods of estimation for quantifying and reporting the total emissions resulting from electricity consumed for hydrogen production.

Subsection 95127(a)(2)

a) Purpose

The proposed section requires operators of in-state facilities producing hydrogen utilizing electricity to report the annual MWh of electricity consumed by the facility for purposes of producing hydrogen. The section requires that operators report the consumed electricity in MWh aggregated by fuel type or prime mover from known generation sources, and the total consumed electricity in MWh from unknown sources. This section also specifies that operators of hydrogen production facilities that are not connected to the electricity grid must report the consumed electricity procured from the generation source or sources that directly provide electricity to the facility.

b) Rationale

This section is needed to specify how operators of in-state hydrogen production facilities utilizing electricity are required to report their consumed electricity under MRR. The data reported under this section is necessary to estimate electricity consumption emissions associated with known generation sources, if data is available to do so, and from unknown generation sources.

Subsection 95127(a)(3)

a) Purpose

The proposed section dictates how operators of in-state facilities producing hydrogen utilizing electricity calculate the annual GHG emission resulting from electricity consumed from unknown generation sources and provides an equation for the calculation. The equation

reflects that the emissions from unknown generation sources are based on the total MWh of electricity consumed, multiplied by a default emission factor. The equation also accounts for transmissions losses that occur between the unknown power sources and the hydrogen production facility.

b) Rationale

This section is needed to ensure that reporters estimate GHG emissions using appropriate and consistent methods of estimation. The default emission factor for unknown generation sources is equal to the default emission factor for unspecified electricity imports specified in section 95111(b)(1) of MRR and is discussed in more detail in Appendix B.

Subsection 95127(a)(4)

a) Purpose

The proposed section dictates how operators of in-state facilities producing hydrogen utilizing electricity calculate the annual GHG emission resulting from electricity consumed from contracted known generation sources and provides an equation for the calculation. The equation reflects that the emissions from known generation sources are based on the total contracted and delivered MWh, matched to hydrogen production on a calendar year basis prior to January 1, 2030, and on an hourly basis thereafter, multiplied by the fleet emission factor for the fuel type or prime mover as calculated by CARB pursuant to section 95111(b)(2) of MRR. The equation also accounts for transmission losses that occur between the known power sources and the hydrogen production facility.

b) Rationale

This section is needed to ensure that reporters estimate GHG emissions for each known generation sources using appropriate and consistent methods of estimation. This method utilizes fleet emission factors calculated by CARB to provide consistent emissions estimation and reduce the calculation burden on reporters. The calculation method also provides certainty to reporters regarding how to match contracted and delivered electricity to the electricity utilized by the facility for producing hydrogen and is consistent with the U.S. Internal Revenue Service (IRS) temporal matching requirements specified in 26 CFR 1.45V-4.

Subsection 95127(a)(5)

a) Purpose

The proposed section dictates how operators of in-state facilities producing hydrogen utilizing electricity calculate the total annual GHG emission resulting from electricity consumed from all generation sources and provides an equation for the calculation. The equation reflects that the total annual emissions are equal to the sum of emissions from unknown generation sources and known generation sources.

b) Rationale

This section is needed to ensure that reporters estimate GHG emissions for each known generation sources using appropriate and consistent methods of estimation.

Subsection 95127(b)(1)

a) Purpose

The proposed section requires importers of liquid or gaseous hydrogen to report GHG emissions that resulted from the production of the imported hydrogen and provides an equation for the calculation based on the identified producer of the imported hydrogen and a calculated producer-specific emission factor. If the source of the hydrogen is not known, the equation provides a default emissions factor in units of metric tons of carbon dioxide equivalent per metric ton of hydrogen.

b) Rationale

This section is needed to ensure that reporters estimate total GHG emissions from imported hydrogen based on the producer-specific emissions profile of each identified producer of the imported hydrogen. For each identified producer, the requirements dictate that the reporter use the equation specified in section 95127(b)(1)(B) to calculate a producer-specific emission factor using the same methods as specified in section 95127(a)(5) for calculating emissions from the electricity consumption used to produce the hydrogen. This is necessary to ensure that emissions from imported hydrogen from producers utilizing electricity for hydrogen production are calculated consistently with the calculation for in-state hydrogen producers utilizing electricity.

The section specifies that importers must calculate a producer- specific emission factor in cases where the data is available, or, in cases where data isn't available, use the default emission factor for imports provided in 95127(b)(1)(A). The default emission factor is equal to the average emissions intensity of hydrogen produced by in-state steam methane reformer (SMR) units, as calculated by CARB staff based on data reported to MRR by operators of SMR hydrogen production units in California. This approach provides a conservative estimate of production emissions associated with imported hydrogen when production emissions are not known.

Subsection 95127(c)

a) Purpose

The proposed section provides reporters subject to section 95127 the option of submitting alternative method requests to CARB pursuant to section 95103(m) for instances where quantification methods in 95127(a) and/or (b) are not applicable or not viable.

b) Rationale

This section is necessary to provide flexibility for reporters for purposes of measuring and quantifying the emissions from imported hydrogen and hydrogen produced utilizing electricity. This is necessary because the prescribed methods in section 95127(a) and (b) may not be viable or applicable for all hydrogen production technologies and reporting scenarios.

Subsection 95127(d)(1)

a) Purpose

Section 95127(d)(1) requires operators of facilities producing hydrogen subject to 95127 to report additional information on the electricity consumed from known generation sources, including the total MWh of electricity consumed, the source name, and the associated type of fuel type or prime mover for each source.

b) Rationale

This information is necessary to track the in-state and out-of-state generation sources used to create hydrogen in California. This information is needed to help CARB track the generation sources used to produce hydrogen over time and to enable CARB staff to assess the accuracy of reported GHG emissions.

Subsection 95127(d)(2)

a) Purpose

Section 95127(d)(2) requires importers of hydrogen subject to 95127 to report additional information on the production of imported hydrogen, including for each producer of imported hydrogen: the annual mass of hydrogen imported and the measurement point that is the basis of the reported data; the name, location, production technology, and date of commencement of the hydrogen plant; and, if applicable, the LCFS pathway code and annual imported mass associated with the pathway code.

b) Rationale

This information is necessary to track the origination of imported hydrogen over time, and to enable CARB staff to assess the accuracy of reported GHG emissions imported hydrogen in conjunction with LCFS data, when possible.

Subsection 95127(e)

a) Purpose

Section 95127(e) specifies that data reported pursuant to section 95127 is not subject to verification.

b) Rationale

Staff propose that the data required to be reported by importers and producers of hydrogen subject to section 95127 not be subject to verification because reported emissions are based on best available data and not subject to a Cap-and-Invest Program compliance obligation. At this time, the focus is on providing and emissions reporting framework and collecting what data is available.

S. Section 95130. Requirements for Verification of Emissions Data Reports.

Subsection 95130(a)(1)

a) Purpose

The proposed amendments remove the requirement for a verification body to conduct a site visit during the first year of every compliance period and instead require verification at least every three years after the first year of verification.

b) Rationale

Allowing site visits to occur primarily every three years without having to conduct an additional site visit for the first year of a Cap-and-Invest Program compliance period will reduce unnecessary costs incurred by reporting entities if a verification body is hired the year immediately before or after the start of the compliance period. This change will also allow verifiers to better spread out site visits and the associated workload across data years.

Subsection 95130(a)(1)(D)

a) Purpose

The proposed amendments remove the requirement that a verification body provide information on emission changes and justification for the absence of a full verification in the verification report when emissions change from the prior year's report by more than 25% and full verification is not conducted.

b) Rationale

These changes are needed to remove unnecessary verification requirements. While CARB expects verification teams to review changes in emissions as part of their sampling plan and risk assessment, CARB does not need specific justification beyond what is already included in the sampling plan for not conducting a full verification when one is not required. As described in this subsection, verification bodies always have the option to perform a full verification if deemed necessary.

Subsection 95130(a)(2)

a) Purpose

This section is modified to:

1. Limit the number of consecutive verifications that can be performed by verifiers/ verification bodies to six, in addition to the existing limit of six consecutive years.

2. Align MRR with CARB's LCFS & Offset program verification requirements by removing language specifying that non-CARB verifications and other non-consulting work count toward a verifier or verification body's six consecutive verifications/years limit for providing verification services. This amendment establishes that the consecutive six verifications or six-year limits apply only to verifications, validations, or audits that cover the same scope of activities or operations as the MRR emissions data report.

b) Rationale

1. This change is needed to reduce the administrative burden associated with tracking the eligibility of verifiers to conduct verifications. Because it is possible for some verification bodies to verify a seventh report within six calendar years, MRR staff is required to track each verification timeline to ensure the six-year limit is not exceeded. This requires additional time and resources and communication with verifiers and reporting entities without a corresponding benefit to the program.

2. As the MRR program has matured, staff have come to understand that non-CARB verifications are a low conflict of interest (COI) risk and are proposing these amendments to align MRR with the LCFS and C&T Offset program COI requirements.

T. Section 95131. Requirements for Verification Services.

Subsection 95131(a)

a) Purpose

The proposed amendments reduce the number of days the verification team must wait to conduct a site visit after submitting the notice of verification services from 14 to ten days.

b) Rationale

This change will allow verifiers to plan their site visit earlier. Historically, ten days has been sufficient for CARB staff to process the notice of verification services and to coordinate verification audits of site visits.

Subsection 95131(a)(2)(B)

a) Purpose

The proposed amendments incorporate “biorefineries” into the “Notice of Verification Services” requirements for oil and gas systems in section 95131(a)(2)(B). This modification requires biorefinery operators to have at least one verification team member that is accredited by CARB as an oil and gas systems specialist.

b) Rationale

This regulatory requirement ensures that verification teams possess the necessary expertise to conduct verifications for biorefineries, in line with requirements for verifications of petroleum refineries, hydrogen producers, and oil and gas producers.

Subsection 95131(a)(2)(C)

c) Purpose

The proposed amendment removes section 95131(a)(2)(C), which lists the facility types that require a process emissions specialist. In conjunction with proposed amendments to remove the definition for “Process emissions specialist” and the definition for “Sector specific verifier” from section 95102(a), this revision removes any reference to process emissions specialists from MRR.

d) Rationale

During the initial years of verification, CARB wanted to ensure that sufficient industry expertise to verify facilities with process emissions existed on each verification team. Now that the risks associated with misreporting for this sector are well understood by facility operators, verifiers, and CARB staff, the proposed amendments are needed to allow any verifier to provide verification services to facilities with process emissions.

Subsection 95131(a)(3)(A)

a) Purpose

The proposed amendments remove the requirement for verifiers to provide contact information for the reporting entity and facility address in their Notice of Verification Services (NOVS).

b) Rationale

These changes are needed to remove unnecessary reporting requirements. This information is not needed by CARB staff or is already submitted elsewhere in the reporting tool and does not need to be re-submitted by verifiers to CARB for each verification.

Subsection 95131(a)(3)(B)

a) Purpose

The proposed amendments:

1. Remove the existing subsection 95131(a)(3)(B), which requires verifiers to provide the reporting entity's NAICS code in their NOVS, and renumbers subsequent sections to retain numerical order.

2. Remove the requirement from former section 95131(a)(3)(C) for verifiers to provide the facility address and contact info for on-site site visits in their NOVS.

3. Clarify in former section 95131(a)(3)(C) that dates of on-site visits must be reported for all on-site visits, not only full verifications required under section 95130(a)(1).

b) Rationale

1. These changes are needed to remove unnecessary reporting requirements. This information is not needed by CARB staff or is already submitted elsewhere in the reporting tool and does not need to be re-submitted by verifiers to CARB for each verification.

2. These changes are needed to remove unnecessary reporting requirements. This information is not needed by CARB staff or is already submitted elsewhere in the reporting tool and does not need to be re-submitted by verifiers to CARB for each verification.

3. This clarification is needed for CARB staff to have sufficient notice to implement travel arrangements to attend an on-site visit if the verification body is selected for an audit. A verification body may be selected for an audit regardless of whether the entity being verified requires full verification in that reporting year.

Subsection 95131(a)(3)(C)

a) Purpose

The proposed amendment adds a new subsection requiring verifiers to report in their NOVS whether a remote site visit will be conducted.

b) Rationale

This change is needed for staff to know when the verifier intends to conduct a required site visit remotely to assess if the verification is eligible for a remote site visit pursuant to section 95131(b)(3)(A).

Subsection 95131(a)(3)(D)

a) Purpose

The proposed amendments remove the requirement for verifiers to provide the expected completion date for verification services in their NOVS.

b) Rationale

These changes are needed to remove unnecessary reporting requirements. This information is not needed by CARB staff.

Subsection 95131(a)(4)

a) Purpose

The proposed amendments set a 10-day minimum window for verification bodies to notify CARB if there is a change in conflict of interest (COI) or notice of verification services (NOVS) information prior to a scheduled site visit for a full verification.

b) Rationale

This amendment is needed to allow CARB staff time to review whether changes to submitted COI or NOVS information present any new conflicts or require updating verification services details.

Subsection 95131(b)(1)(B)4.

a) Purpose

The proposed amendment removes the requirement for the verification team to include in their verification plan the expected date for completing verification services.

b) Rationale

This change is needed to remove an unnecessary requirement. CARB does not rely on this information, and verifiers are only required to complete verification services by the verification deadline. Verifiers can still voluntarily communicate this information to reporting entities.

Subsection 95131(b)(3)

a) Purpose

1. The proposed amendments replace the terms “retail provider” and “marketer” with “EPE” to clarify that verification team member(s) are required to visit a location of central data management for all EPEs when a site visit is required by the regulation.

2. The proposed amendments allow verification teams to conduct remote site visits in limited circumstances. The amendments include eligibility criteria for conducting remote site visits and additional requirements specific to remote site visits. These amendments include new subsections to incorporate remote site visit provisions, and subsequent renumbering of subsections within 95131(b)(3) to maintain numerical order.

b) Rationale

1. This change is needed to accurately specify which entities require verification site visits at a location of central management. Retail providers are only a subset of EPEs, and “marketer” is not currently defined under MRR.

2. CARB staff has identified a limited subset of verifications where the cost of a site visit to a physical location is not justified. These include verifications for small fuel suppliers who are below the reporting threshold, but have not yet met the requirements for cessation of verification, electric power entities (EPE) who only import small volumes of power from certain sources, and suppliers or EPEs where the company does not have physical headquarters or other accessible location of central data management.

Subsection 95131(b)(8)(F)4.

a) Purpose

This section specifies that a verifier is required to review the covered emergency emissions reported by an electricity generation facility under proposed section 95112(j), if the facility was not a covered entity in the previous data year.

b) Rationale

Additional review during verification is needed to confirm whether covered emissions reported under proposed section 95112(j) are accurately calculated and eligible for exclusion from the Cap-and-Invest Program threshold calculation pursuant to section 95812(c)(2)(A)1 of the Cap-and-Invest Regulation. Along with the addition of section 95112(j), this amendment is needed to ensure that covered emissions from power generation during an emergency declared to mitigate high energy demand or grid reliability do not result in an entity becoming newly subject to Cap-and-Invest Program requirements.

Subsection 95131(b)(12)

a) Purpose

The proposed amendments add new text to clarify that the material misstatement assessment is not applicable in instances when entities report zero covered emissions or zero product data.

b) Rationale

Because the denominator of the percent error equation is covered emissions or covered product data, performing a material misstatement evaluation for an entity with no covered emissions results in division by zero. The amendments clarify that, in those circumstances, the verifier is required to ensure that all applicable requirements of MRR have been met, but is not required to assess material misstatement.

Subsection 95131(b)(12)(A)

a) Purpose

The proposed amendments clean up and correct the percent error calculation used for the material misstatement assessment. Specifically, they change the position of the sigma (i.e., the summation sign), 100% to 100, and “percent” to “%.” In the denominator the term “Total covered product data” is replaced with “Total reported covered product data”.

b) Rationale

The percent error equation is used by verifiers to determine if an emissions data report contains a material misstatement, i.e., reported emissions data or product data contains errors greater than 5 percent. An emissions data report must be free of material misstatement to receive a positive or qualified positive verification. The first two changes referenced above are needed to clearly establish that the overall percent error used for assessing material misstatement for emissions and product data should be calculated as the sum of identified discrepancies, omissions, and misreporting errors, divided by total reported covered emissions, and multiplied by 100. The third change is needed to fit the equation in the available page width. The last change is needed to ensure consistency with the terminology used in the equation and the description of equation terms, and to clarify that it is the total reported covered product data that is used as the denominator in the equation.

Subsection 95131(b)(12)(D)

a) Purpose

The proposed amendments remove the requirement start date of 2017 data reported in 2018.

b) Rationale

These changes are needed to remove start dates that are no longer applicable for this requirement. The current requirement to sum covered product data with the same units of measure should be applicable for all data years, including if a pre-2018 report required re-verification.

Subsection 95131(b)(12)(E)

a) Purpose

This section is modified to:

1. Remove the requirement start date of 2019 data reported in 2020.

2. Require the verifier's material misstatement assessment for crude oil and associated gas to be on a "barrel of oil equivalent" basis.

b) Rationale

1. These changes are needed to remove start dates that are no longer applicable for this requirement. The current requirement to sum covered product data with the same units of measure should be applicable for all data years, including if a pre-2019 report required re-verification.

2. When evaluating material misstatement, verifiers are required to sum covered product data for multiple products if the products can be converted to a consistent unit of measurement. A conversion factor of 5.8 MMBtu per barrel is provided in the MRR definition of "barrel of oil equivalent," which allows verifiers to convert associated gas measured in MMBtu to barrel of oil equivalent. This amendment clarifies that verifiers are required to convert associated gas into barrels of oil equivalent to allow the verifier to sum crude oil (in barrels of oil) and associated gas (in barrels of oil equivalent) product data for the material misstatement evaluation for thermal and non-thermal production.

Subsection 95131(e)

a) Purpose

The proposed amendment allows errors in the emissions data report to be corrected by the reporting entity and verified by the same verification body without a set aside of the verification statement when CARB determines that the errors do not impact covered emissions or covered product data.

b) Rationale

Under the existing regulation, the Executive Officer may set aside a verification statement and require a reporting entity to have the emissions data report re-verified by a different verification body within 90 days if an error is identified, unless the error does not impact <u>any</u> emissions data or covered product data. This change is needed to broaden the exemption to all errors that do not impact <u>covered</u> emissions or covered product data. These types of errors do not impact an entity's compliance obligation or allocation of allowances under the Cap-and-Invest program, and thus do not warrant a set aside and re-verification by a different verification body. This change would provide cost and time savings to the entity as re-verification could occur within 1-2 days with the same verification body, rather than several weeks with a new verification body.

Subsection 95131(i)(1)(B)-(C)

a) Purpose

These amendments replace references to sections 95852.1.1 and 95852.2 of the Cap-and-Invest Regulation with a reference to section 95852.1 to align MRR with proposed updates to section 95852.1 of the Cap-and-Invest Regulation.

b) Rationale

Section 95852.1 of the Cap-and-Invest Regulation establishes compliance obligations and requirements for exemption from a compliance obligation for biomass-derived fuels. Given the proposed amendments to 95852.1, these changes are needed to ensure that MRR continues to reference all potentially applicable Cap-and-Invest Program requirements for biomass-derived fuels, including the clarified requirement that an entity claiming use of an exempt biomass-derived fuel have sole ownership or contract rights to the fuel and associated emissions exemptions or emissions reductions attributed to the fuel.

Subsection 95131(i)(2)(B)

a) Purpose

The proposed amendments add renewable diesel to the list of fuels for which verifiers are required to verify compliance with section 95103(j) and the requirements detailed in this subsection.

b) Rationale

This change is needed for consistency with verification requirements for other biomass-derived transportation fuels, like biodiesel and fuel ethanol.

Subsection 95131(i)(2)(D)2

a) Purpose

These amendments replace references to sections 95852.1.1 and 95852.2 of the Cap-and-Invest Regulation with a reference to section 95852.1 to align MRR with proposed updates to section 95852.1 of the Cap-and-Invest Regulation.

b) Rationale

Section 95852.1 of the Cap-and-Invest Regulation establishes compliance obligations and requirements for exemption from a compliance obligation for biomass-derived fuels. Given the proposed amendments to 95852.1, these changes are needed to ensure that MRR continues to reference all potentially applicable Cap-and-Invest Program requirements for biomass-derived fuels, including the updated requirement that an entity claiming use of an exempt biomass-derived fuel have sole ownership or contract rights to the fuel and associated emissions exemptions or emissions reductions attributed to the fuel.

Subsection 95131(i)(2)(E))

c) Purpose

These amendments replace references to sections 95852.1.1 and 95852.2 of the Cap-and-Invest Regulation with a reference to section 95852.1 to align MRR with proposed updates to section 95852.1 of the Cap-and-Invest Regulation.

d) Rationale

Section 95852.1 of the Cap-and-Invest Regulation establishes compliance obligations and requirements for exemption from a compliance obligation for biomass-derived fuels. Given the

proposed amendments to 95852.1, these changes are needed to ensure that MRR continues to reference all potentially applicable Cap-and-Invest Program requirements for biomass-derived fuels, including the updated requirement that an entity claiming use of an exempt biomass-derived fuel have sole ownership or contract rights to the fuel and associated emissions exemptions or emissions reductions attributed to the fuel.

U. Section 95132. Accreditation Requirements for Verification Bodies, Lead Verifiers, and Verifiers of Emissions Data Reports and Offset Project Data Reports.

Subsection 95132(b)(5)(B)

a) Purpose

The proposed amendments simplify the qualification requirements for an individual seeking to be accredited as an offset project verifier. Specifically, they remove the offset project specific verifier professional experience requirements and consolidate the remaining verification training requirements under section 95132(b)(5)(B). These changes result in the deletion of sections 95132(b)(5)1. and 2. This subsection is only applicable to offset project verifiers, which are referenced in section 95978 of the Cap-and-Invest Regulation.

b) Rationale

These changes are needed to remove outdated and redundant requirements for offset project specific verifier accreditation. The pre-2011 experience required under section 95132(b)(5)(B)2. is no longer applicable to verifiers seeking to be accredited as an offset project verifier and the experience referenced under section 95132(b)(5)(B)1. is already covered under accredited lead verifier or verifier qualification requirements, which offset project specific verifiers must meet per section 95132(b)(5)(B).

Subsection 95132(c)(4)

a) Purpose

The proposed amendments apply the existing three-year lifespan for verifier accreditation to the initial accreditation only and extend the lifespan for renewed accreditations to up to six years.

b) Rationale

These changes are needed to reduce significant administrative costs associated with granting executive orders for accreditation to verifiers and verification bodies. CARB provides oversight of the quality of verification services provided by verifiers irrespective of the duration for which the verifier is accredited, and CARB retains the option to revoke or modify executive orders with good cause at any time, or to grant accreditation for time periods shorter than six years.

V. Section 95133. Conflict of Interest Requirements for Verification Bodies.

Subsection 95133(b)(1)

a) Purpose

The proposed amendments require that the potential for a conflict of interest (COI) be deemed high when any management staff of the reporting entity have been employed by the verification body within the previous five years, or vice versa, not just senior management.

b) Rationale

This change is needed to improve CARB's monitoring of cases with a high potential for COI due to an overlap in staff employed by the reporting entity and verification body in the past five years. Any manager, senior or otherwise, who was previously employed by their client or verification body presents a potential high-risk COI. In addition, there is no definition for "senior" management in MRR.

Subsection 95133(b)(5)

a) Purpose

The proposed amendments require that the potential for a conflict of interest (COI) be deemed high when a staff member of the verification body provided consulting services for Low Carbon Fuels Standard (LCFS) reporting in the previous five years.

b) Rationale

This change is needed to improve CARB's monitoring of cases with a high potential for COI due to an overlap in staff employed by the reporting entity and verification body in the past five years. Verifiers may continue to provide both MRR and LCFS verification services, subject to the limitations in section 95130(a)(2).

Subsection 95133(e)(1)

a) Purpose

The proposed amendments allow the verification body to begin providing verification services prior to receiving authorization from the Executive Officer for low COI verifications.

b) Rationale

These changes are needed to align MRR with Low Carbon Fuels Standard (LCFS) Regulation requirements for low COI verifications and remove an unnecessary requirement. In cases of low COI, both CARB staff and existing verification bodies have successfully disclosed and managed COI risk, and a delay is not needed for CARB to review COI details before verifiers begin providing verification services. The proposed amendments do not change the existing policy that if a verification body has not correctly evaluated and disclosed the COI risk associated with the verification, CARB approval would not be granted and the verification body would need to cease providing verification services.

Subsection 95133(e)(1)(C)

c) Purpose

The proposed amendment limits what is meant by a “related entity” to entities that share operational control with the reporting entity for the purposes of disclosing COI risk under this section.

d) Rationale

COI risk is deemed to be high when the verification body staff, related entities, and/or subcontractors provide services to the reporting entity or related entities pursuant to section 95133(b)(2). However, MRR does not currently define what is meant by a “related entity.” The proposed change is needed to limit the interpretation of “related entity” to entities that share operational control with the reporting entity, which aligns with the existing and proposed MRR definitions for “facility” and “entity,” respectively.

W. Section 95150. Definition of the Source Category.

Subsection 95150(a)(8)

a) Purpose

The proposed amendment adds transmission pipelines to the definition for the “natural gas distribution” source category in Subarticle 5 of MRR.

b) Rationale

This change is needed to capture GHG emissions from transmission pipeline blowdowns under MRR, which supports the statewide GHG Inventory and aligns MRR with U.S. EPA requirements in Subpart W of 40 C.F.R. § 98.

X. Section 95152. Greenhouse Gasses to Report.

Subsection 95152(i)(9)

a) Purpose

The proposed amendments establish that natural gas distribution operators are required to report GHG emissions from transmission pipeline blowdowns.

b) Rationale

This change, in tandem with the proposed amendment to section 95150(a)(8), is needed to capture GHG emissions from transmission pipeline blowdowns under MRR, which supports the statewide GHG Inventory and aligns MRR with U.S. EPA requirements in Subpart W of 40 C.F.R. § 98.

Y. Section 95156. Additional Data Reporting Requirements.

Subsection 95156(c)(12)

a) Purpose

The proposed amendments change a reference in section 95156(c)(12) to read 95156(c)(1)-(11) instead of 95156(d)(1)-(11).

b) Rationale

This change is needed to correct a typo.

Z. Section 95157. Activity Data Reporting Requirements.

Subsection 95157(c)(16)(Y)

a) Purpose

The proposed amendment requires local distribution companies to report the number of transmission pipeline blowdowns that occurred during the reporting year.

b) Rationale

These changes are needed to collect data on the frequency of transmission pipeline blowdowns and more closely align MRR requirements with U.S. EPA requirements in Subpart W of 40 C.F.R. § 98.

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

The estimated benefits of the proposed amendments to the regulation are unquantified. The anticipated benefits include improved clarity for reporting entities as to their reporting requirements, more complete and accurate GHG emissions estimates, improved clarity and data to support the statewide greenhouse inventory program, and continued robust methods for reporting emissions and product data in order to support CARB's Cap-and-Invest Program and other related programs.

V. Air Quality

The regulation, as modified by the proposed amendments, continues to provide regulated entities with a reporting program for submitting GHG emissions data reports to CARB. The proposed amendments affect only program administration and do not involve or result in any changes to the physical environment. The proposed amendments make administrative and procedural changes to clarify and amend existing requirements and definitions in MRR. These changes do not directly alter the compliance with MRR in any way that could affect air emissions, the physical environment, or result in adverse impacts to the environment.

VI. Environmental Analysis

The portion of CARB's regulatory program that 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 Secretary for Natural Resources pursuant to Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA Guidelines § 15251(d)). Public Resources Code section 21080.5 exempts public agencies with certified regulatory programs from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. Under its certified program, CARB as a lead agency prepares a substitute environmental document (referred to as an Environmental Analysis or EA) as part of the Staff Report to comply with CEQA's goals and policies and to provide public review of the analysis. (Cal. Code Regs, tit. 17, §§ 60000 – 60008).

CARB staff has determined the proposed amendments to MRR are exempt from the requirements of CEQA under CEQA Guidelines section 15061, subdivision (b)(3) ("common sense" exemption) because it can be seen with certainty that the proposed changes do not alter compliance with MRR in any way that could affect air emissions, the physical environment, or result in adverse impacts to the environment. The regulation, as modified by the proposed amendments, continues to provide regulated entities with a reporting program for submitting GHG emissions data reports to CARB. The proposed amendments affect only program administration and contents of databases and do not involve or result in any changes to the physical environment. After the amendments are finalized, a Notice of Exemption will be filed with the Secretary of Natural Resources for public inspection.

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: (A) The availability of a healthy environment for all people. (B) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities. (C) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision making process. (D) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions (Gov. Code, § 65040.12, subd. (e)(2)). The Board approved its Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into CARB's programs consistent with the directives of State law. 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.

Adoption and implementation of the proposed amendments to the reporting regulation will have no negative environmental impacts on environmental justice communities. Facilities throughout the state will be required to report their GHG emissions, with the focus on those facilities producing the highest levels of emissions. The amended regulations continue to include mandatory reporting for over 90% of the stationary source GHG emissions in California, including specified combustion, process, and fugitive emissions. Emissions information from these reports is made available to the public, providing accurate and transparent GHG emissions data to environmental justice communities via the CARB Pollution Mapping Tool.

VIII. Economic Impacts Assessment

In this chapter, CARB staff provides the estimated costs to businesses and public agencies to comply with staff's proposed amendments to the reporting regulation. Staff is proposing that the proposed amendments would be applicable to 2027 emissions data reported in 2028, unless otherwise specified. The amendments are expected to affect approximately 570 business entities. This includes 270 California businesses (15 of which are small businesses), 61 local government agencies, five state government agencies, and 232 businesses outside of California that are not analyzed in this economic impacts assessment. Two-hundred thirty California businesses will have cost increases, such as oil and gas producers, hydrogen production plants, hydrogen importers and producers utilizing electricity, refineries, cement importers, suppliers of natural gas and natural gas liquids, transportation fuel suppliers, and industrial facilities, including electric generation entities. Forty other California businesses will have cost savings, including electric power entities, natural gas suppliers, and industrial facilities, including electric generation entities.

Of the 270 California businesses, almost all are already subject to the MRR regulation, though some would be subject to additional requirements. Staff estimates that under the proposed amendments, approximately 20 new reporters, such as transportation fuel suppliers, suppliers of natural gas and natural gas liquids, hydrogen importers and producers utilizing electricity, and importers of cement products would become subject to reporting under the MRR regulation, and some of these would be subject to third-party verification.

The following provides a summary of the proposed amendments that result in cost impacts for California businesses.

General Changes

- Add "sweet whey powder" as a reportable covered product, resulting in cost-increases
- Require all reporters to designate an Alternate Designated Representative (ADR) in CARB's online reporting tool, resulting in cost-increases
- Establish remote site visit eligibility criteria and requirements for certain low-risk reporters, resulting in cost-savings
- Require verification site visits once every three years instead of once every compliance period, resulting in cost-savings
- Establish initial reporting requirements for geological sequestration of CO_2, resulting in cost-increases

Imported Electricity[6]

- Remove requirements for electric power entities (EPE) to report certain redundant information associated with registering specified sources, resulting in cost-savings

Petroleum and Natural Gas Systems, Hydrogen Production Plants, and Refineries[7]

- Require operators of natural gas distribution pipelines to report data for transmission pipeline blowdowns, resulting in cost-increases
- Apply petroleum refinery MRR requirements to biorefineries, including reporting of vented and fugitive emissions, resulting in cost-increases
- Require emissions from process vents to be reported by stand-alone hydrogen plants that are not integrated with a refinery, resulting in cost-increases
- Require reporting of bio-feedstock data to coordinate with Low Carbon Fuel Standard (LCFS) requirements, resulting in cost-increases

Hydrogen Imports and Production Utilizing Electricity

- Require operators of hydrogen plants utilizing electricity above a minimum production threshold to report emissions and production data with no verification requirement, resulting in cost-increases
- Require importers of hydrogen to report emissions data from the production of imported hydrogen with no verification requirement, resulting in cost increases

Imported Cement

- Establish reporting requirements for importers of cement,[8] resulting in cost-increases

Suppliers of Natural Gas and Natural Gas Liquids [9]

- Simplify reporting requirements for imported liquified petroleum gas (LPG) volumes, resulting in cost-savings
- Change point of regulation for LPG importers to the operator of an LPG receiving facility that supplies imported fossil or biomass-derived LPG at their facility for distribution in

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[6] Staff is proposing amendments to require that existing EPEs account for efficiency losses from power stored in out of state batteries or other energy storage systems (ESS). Staff estimates this requirement will not have an extra impact on the reporting costs borne by existing EPEs that are already subject to reporting. Staff is also proposing changes to how CARB calculates the Western Energy Imbalance Market Outstanding Emissions in response to the implementation of the Extended Day Ahead Market (EDAM), whose transactions are settled in the existing WEIM market. No new requirements are imposed on existing EPEs already subject to reporting.

[7] Staff is proposing amendments to revise product data reporting requirements for refineries to replace reporting Complexity Weighted Barrel (CWB) data with product data for liquid hydrocarbon fuel and asphalt production data in line with proposed Cap-and-Invest Regulation amendments. Staff estimates that the cost savings from replacing CWB requirements with the cost increases from adding asphalt and liquid hydrocarbon fuel production reporting will have a zero net cost impact on the businesses subject to reporting in this sector.

[8] Staff proposes that the GHG emissions data from cement imports would not be subject to verification.

[9] One out-of-state natural gas supplier will incur costs associated with a proposed amendment to require biomass-derived natural gas liquids (NGL) to be reported by LPG importers and NGL fractionators. That cost is not included in this analysis as it affects only an out-of-state entity.

California, resulting in cost-increases and cost-savings depending on the California facility

Transportation Fuel Suppliers

- Require exempt fuels to be broken into categories (marine, aviation, exports, prior to rack), resulting in cost-increases to mainly out-of-state entities
- Expand the point of regulation for transportation fuel suppliers to include in-state producers and enterers of biofuels delivered outside the bulk system, resulting in cost-increases to mainly out-of-state entities
- Require suppliers to report LCFS pathway code and point of regulation data for biomass-derived fuels subject to emissions reporting

Summary of Economic Impacts

The primary costs to reporters to comply with the proposed amendments are costs incurred for recordkeeping activities and preparation of an annual emissions data report.

In developing the amendments to the GHG reporting regulation, staff attempted to minimize costs while complying with the specific reporting requirements of AB 32 and collecting high quality data to support the market-based Cap-and-Invest Program, the statewide GHG inventory, and the Cost of Implementation Fee Program. The amended regulation will have minimal cost impacts for reporters affected by the amendments and the vast majority of reporters will not experience a noticeable change in the cost of compliance.

The proposed amendments will have cost impacts for an estimated 270 California businesses. Two-hundred thirty California businesses will have cost increases, such as oil and gas producers, hydrogen production plants, hydrogen importers and producers utilizing electricity, refineries, cement importers, suppliers of natural gas and natural gas liquids, transportation fuel suppliers, and industrial facilities, including electric generation entities. Forty other California businesses will have cost savings, including electric power entities, natural gas suppliers, and industrial facilities, including electric generation entities.

For the proposed amendments, staff assumed a 6-year time horizon for evaluating the impact of the proposed amendments to align with the verification cycle as many businesses are affected by verification-related amendments. The estimated net impact over 6 years to California businesses is a cost of $900,000, which is the sum of cost increases of $1,000,000 and cost savings of $100,000. The cost estimates are based on approximations of the amount of time required to comply with each of the amended provisions for each affected industry sector. The approximations of costs provide a general estimate of the economic impacts that California businesses subject to the proposed amendments might encounter. The estimated cost impacts provided in this chapter are based on a series of assumptions that each have an inherent uncertainty. No forecasted cost related assumptions can perfectly predict the future and the economic analysis is transparent on assumptions needed, but final costs may vary depending on real world conditions. Individual companies may experience different impacts than those projected here, depending on various factors such as complexity of operation, types of emission units on-site, and existing compliance practices.

Table 1 summarizes the cost increases for California businesses in each sector and the percentage share of the total cost increases of the proposed regulation. Table 1 only includes

changes that increase costs and does not include cost savings. Costs to local and state government agencies are not included in Table 1 and are analyzed later in this chapter.

Table 1. Share of Cost Increases for Affected Industry Sectors Over 6 Years*

Industry Sector	Cost Increases Resulting from Regulation Updates ($)	Share of Total Cost Increase
General Stationary Combustion/Industrial[9]	110,000	11%
Oil & Gas Production	2,000	0%
Hydrogen Imports and Hydrogen Production Utilizing Electricity	20,000	2%
Refineries and Hydrogen Production Plants	90,000	9%
Cement	50,000	5%
Suppliers of Natural Gas and Natural Gas Liquids	440,000	44%
Transportation Fuel Suppliers	300,000	30%
Totals	**1,000,000**	**100%**

*This table only includes approximate costs for proposed amendments that increase costs and does not include cost savings for sectors.

Because of the relatively minimal additional costs, CARB staff does not expect businesses to be adversely affected by the costs of the proposed amendments. As a result, staff does not expect a noticeable change in employment, business creation, expansion, or elimination, or business competitiveness in California. The reporting regulation amendments would have no discernible impact on the ability of California businesses to compete with businesses in other states. This is because the regulation does not impose a significant cost impact on California businesses.

The proposed amendments will not require additional CARB funding. The amendments will be implemented using existing CARB staffing. Any CARB fiscal expenses needed for implementing the proposed amendments are already accounted for in the current operational budget that was approved as a part of the previous rule amendments.

Summary of Fiscal Impacts for California Businesses (Not Including Small Businesses)

There are 255 California businesses with cost impacts (215 with cost increases and 40 with cost savings). For these businesses, the first-year costs are estimated to be $780 per typical California business. The annual average ongoing costs to comply with the proposed revisions are estimated to be $600 per typical California business throughout the remaining 6-year period.

The 6-year costs range from an increase of approximately $50 over six years for each of the 150 California facilities that would be required to designate an ADR in the MRR reporting tool (the total cost for all 150 businesses over the 6-years would be $7,500) to an increase of approximately $56,000 for each of the eight LPG importers that would come into the program as a result of changing the point of regulation for LPG importers (the total cost for all eight businesses over the 6-years would be $450,000). Costs for other sectors and entities fall within these ranges.

Summary of Fiscal Impacts for California Small Businesses

CARB staff has also determined, based on analysis of existing reporters and data reported under section 95104(a) of MRR, that 15 total California small businesses will have cost changes due to the proposed regulation updates. Based on the analysis of reported data from 2024, 6% of the California businesses that are affected are considered small businesses (15 of the 270 California businesses). For small businesses, the first-year costs are estimated to be $720 per small business. The annual average ongoing costs to comply with the proposed revisions are estimated to be $540 per small business throughout the remaining 6-year period.

The six-year costs range from an increase of $37,000 for one small California business[10] that would come into the program as a result of expanding the point of regulation for transportation fuel suppliers, to a cost of $50 over six years for each of the 12 small California businesses that would be subject to the new requirement that every reporter must designate an ADR in the MRR reporting tool (the total cost for all 12 small businesses over the 6-years would be $600). Costs for other specific small California businesses fall within these ranges.

The cost of the proposed amendments is not expected to have a significant material impact on any affected small businesses because the GHG MRR program is mature, and because the amendments the affect small businesses are minor.

Legal Requirements for Fiscal Analysis

Section 11346.3 of the Government Code requires that, in proposing to adopt or amend any administrative regulation, State agencies must assess the potential for adverse economic impacts on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states. The assessment must also include the

[10] Expanding the point of regulation for transportation fuel suppliers is expected to result in two new small businesses coming into the MRR program. The one small business indicated in the text is estimated to be over the threshold for verification, and therefore, incur costs associated with ongoing verification. The other small business that is expected to be subject to MRR due to this amendment is expected to be below the verification threshold, and therefore, only be subject to reporting requirements, which results in a six-year cost increase of $19,000 to the one small business.

potential impact of the regulation on California jobs, business expansion, elimination or creation, and the ability of California businesses to compete with businesses in other states.

Also, State agencies are required to estimate the costs or savings to any State or local agency and school districts in accordance with instructions adopted by the Department of Finance. The estimate shall include any non-discretionary cost or savings to local agencies, and the cost or savings in federal funding to the State.

Health and Safety Code section 57005 requires CARB to perform an economic impact analysis of submitted alternatives to the proposed regulation before adopting any major regulation. A major regulation is defined as a regulation that will have a potential cost for California business enterprises in an amount exceeding ten million dollars in any single year. CARB staff has determined that the amendments to the proposed regulation are not a major regulation as defined above.

The following is a description of the methodology used to estimate costs, as well as CARB staff's analysis of the economic impact on California businesses and State and local agencies.

Estimating Costs of Compliance for Businesses and Government Agencies

As a part of developing the regulatory amendments, CARB staff estimated the costs of compliance for reporting entities subject to the amendments. For the purposes of the Form 399 and this Economic Impacts Assessment (EIA), staff refers to a reporting entity synonymous with a private business. Only costs and cost savings associated with California businesses and California state and local government agencies are addressed in this EIA.

The reporting regulation focuses on the largest stationary sources of GHG emissions and other sources that provide for an effective Cap-and-Invest Program. The specific cost for a reporting entity subject to GHG reporting can vary significantly depending on each entity's unique situation in terms of its sector designation, type and size of its fuel combustion equipment, facility complexity, emissions level, and its current monitoring and sampling practices as compared to its requirements under this proposal.

For an individual reporting entity (which may be an oil and gas producer, hydrogen producer and importer, refinery, cement importer, supplier of natural gas and natural gas liquids, transportation fuel supplier, electric power entity, and industrial facility, including electric generation entity as defined in the reporting regulation), the cost per entity may range widely. Additional costs for California businesses subject to the proposed amendments will generally be small, because the bulk of the baseline costs are incurred complying with the existing CARB reporting regulation.

The main steps taken to estimate costs for reporting entities, which translates to businesses, were as follows:

- Review individual amended requirements to identify those that may have noticeable cost impact on affected reporting entities.
- Identify the new tasks that each facility type will need to perform to comply with the amended regulation, as well as the existing tasks that each facility type will no longer need to perform.

- Estimate the incremental time requirements of different compliance tasks that are expected for each amended provision.
- Calculate the cost impacts (number of labor hours per facility) for each amended requirement that has been identified to lead to a noticeable cost impact.
- Review the list of reporting entities (oil and gas producers, hydrogen producers, refineries, cement manufacturers, natural gas suppliers, transportation fuel suppliers, electric power entities, and industrial facilities, including electric generation entities) and the information they included in their previous emissions data reports to estimate the number of reporting entities affected by each amended requirement.
- Review the estimated number of reporting entities to identify how many are owned by local and state government entities, group these facilities by their common local government entity owner, and quantify costs similar to those calculated for private businesses described above.
- Calculate the total costs in the initial year, ongoing costs and total costs over six years per amendment.

Some of the proposed updates produce minor cost savings, while others impose minor additional costs.

Costs to State Government and Local Agencies

GHG data reporting is mandatory for any facility or entity that meets the regulation's applicability requirements, including state and local agencies. The proposed amendments affect approximately 61 local government agencies and five state government agencies that operate general stationary combustion sources or provide electricity (generated in-state and/or imported).

Cost Impacts for Local Government Agencies

The proposed amendments that result in either cost-increases or cost-savings for local government agencies include:

- Revising the intrastate pipeline definition to ensure coverage of natural gas distributed from interstate pipelines that is not otherwise being reported under MRR, resulting in a cost-increase to one local agency;
- Requiring all reporters to designate an Alternate Designated Representative (ADR) in CARB's online reporting tool, resulting in cost-increases for 12 local agencies;
- Establishing remote site visit eligibility criteria and requirements for certain low-risk reporters, resulting in cost-savings for 14 local agencies;
- Requiring verification site visits once every three years instead of once every compliance period, resulting in cost-savings for five local agencies;
- Removing requirements for EPEs to report certain redundant information associated with registering specified sources, resulting in cost-savings for 26 local agencies;
- Requiring information related to CAISO sales to be reported on a Cap-and-Invest Program compliance period basis instead of annually, resulting in cost-savings for the same 26 local agencies as mentioned in the previous amendment;

- Removing the requirement that Renewable Energy Credit (REC) serial reporting issues for specified sources result in a qualified positive verification, resulting in cost-savings for one local agency;[11] and
- Updating references to Cap-and-Invest Regulation for Renewable Portfolio Standard (RPS) adjustment requirements, resulting in cost-savings for two local agencies.[12]

The impact to affected local government agencies is a cumulative cost-savings of $70,000 for all agencies over a 6-year time horizon, which is the sum of the total costs of $20,000 and total cost savings of $90,000. The total cost for local government agencies is estimated to be $5,000 in Fiscal Year 2026/27 and $3,000 in the subsequent five fiscal years.

The cumulative six-year cost impacts range from a cost-increase of approximately $19,000 for one local agency that would come into the program as a result of revising the intrastate pipeline definition to ensure coverage of natural gas distributed from interstate pipelines that is not otherwise being reported under MRR, to a cost-savings of approximately $3,000 over six years for an estimated 14 local agencies due to establishing remote site visit eligibility criteria and requirements for certain low-risk reporters (the total cost savings for all 14 local agencies over the 6-years would be $45,000). Cost impacts for other specific local government agencies fall within these ranges.

Cost Impacts for State Government Agencies

The proposed amendments that result in either cost-increases or cost-savings for state government agencies include:

- Establishing remote site visit eligibility criteria and requirements for certain low-risk reporters, resulting in cost-savings for two state agencies;
- Requiring verification site visits once every three years instead of once every compliance period, resulting in cost-savings for one state agency; and
- Requiring all reporters to designate an Alternate Designated Representative (ADR) in CARB's online reporting tool, resulting in cost-increases for two state agencies.

The impact to affected state government agencies is a cumulative cost-savings of $8,0004 for all agencies over a 6-year time horizon, which is the sum of the total costs of $100 and total cost savings of $7,900. There is expected to be an estimated cost-increase for two state agencies in the amount of $100 in Fiscal Year 2026/27 and no cost increases in the subsequent five fiscal years.

The six-year cost impacts range from a cost-increase of approximately $50 for each of the two state agencies that would be subject to the proposed amendment that requires all reporters to designate an Alternate Designated Representative in CARB's online reporting tool (the total cost-increase for both state agencies over the 6-years would be $100), to a cost-savings of

[11] Removing the requirement that REC serial reporting issues for specified sources result in a qualified positive verification will only result in cost savings in the years that a site visit is not required under the regulation, which would affect four years of the 6-year timeframe analyzed in this Form 399.

[12] Reference updates related to the RPS adjustment will be effective for 2031 data reported in 2032. Therefore, cost savings associated with this amendment will only result in the last two years of the 6-year timeframe analyzed in this Form 399.

approximately $3,000 over six years for each of the two state agencies due to establishing remote site visit eligibility criteria and requirements for certain low-risk reporters (the total cost-savings for both state agencies over the 6-years would be $6,000). The amendments will be implemented using existing CARB staffing, and no change in staffing level is needed to administer the program under the amended rule. Any CARB fiscal expenses needed for implementing the proposed amendments are already accounted for in the current operational budget that was approved as a part of the previous rule amendments.

Significant Statewide Adverse Economic Impact Directly Affecting Business, Including Ability to Compete

The proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses. The cumulative cost impacts over six years for affected reporters are estimated to range from a total cost increase of $1,200 for California businesses due to adding “sweet whey powder” as a reportable covered product, to an increase of $450,000 for changing the point of regulation for LPG importers .

The Creation or Elimination of Jobs within the State of California

Based on the economic impacts of the proposed amendments as noted above, the Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California because the GHG MRR program is mature, and because the amendments are minor.

The Creation of New Business or the Elimination of Existing Businesses within the State of California

Based on the economic impacts of the proposed amendments as noted above, the Executive Officer has determined that the proposed regulatory action would not affect the creation of new businesses or elimination of existing businesses within the State of California because the GHG MRR program is mature, and because the amendments are minor.

The Expansion of Businesses Currently Doing Business within the State of California

Based on the economic impacts of the proposed amendments as noted above, the Executive Officer has determined that the proposed regulatory action would not affect the expansion of businesses currently doing business within the State of California because the GHG MRR program is mature, and because the amendments are minor.

Benefits of the Proposed Amendments, Including the Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State’s Environment

The proposed amendments ensure accurate and complete GHG reporting needed to support CARB’s climate change programs. The proposed amendments also result in cost savings for electric power entities, that may or may not be covered under the Cap-and-Invest Regulation. There are additional unquantified benefits to the proposed amendments. These include improved clarity in reporting requirements, better accuracy and coverage of estimated GHG emissions, more data to support the statewide GHG emissions inventory program, and robust

methods for reporting emissions and product data to support CARB's Cap-and-Invest Program and other related programs. Collectively, these benefits will contribute to achieving the emissions targets specified in SB 32 and AB 1279.

The estimated benefits of the proposed amendments are unquantified, which include any benefits to the health and welfare of California residents, worker safety, and the state's environment.

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 than ensures full compliance with the authorizing law. The Board has not identified any reasonable alternatives that would lessen any adverse impact on small business.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected reporting entities than the proposed action, or would be more cost-effective to affected reporting entities and equally effective in implementing the statutory policy or other provision of law.

Because the proposed amendments are made to the existing reporting regulation and given that these proposed amendments do not have a significant adverse fiscal or economic impact, no alternatives, other than making no changes, or attempting to obtain required data from other third-party sources were considered. In conclusion, no alternative considered by the agency would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective as or less burdensome to affected private persons than the proposed regulation.

A. Alternative 1: No Verification Requirements for LPG and Transportation Fuel Suppliers Newly Subject Under Proposed Amendments

Under the proposed amendments, additional entities in the following sectors would become newly subject to MRR reporting requirements: importers of cement, importers of hydrogen, producers of hydrogen utilizing electricity, operators of LPG receiving facilities that supply imported LPG for distribution in California, and enterers of biomass-derived fuels and in-state producers of biomass-derived fuels that supply outside of the bulk transfer/terminal system. Staff proposes to require verification for newly subject LPG suppliers and transportation fuel suppliers, but not for importers of cement, importers of hydrogen, or producers of hydrogen utilizing electricity.

The first alternative CARB considered does not include verification requirements for LPG and transportation fuel suppliers who would be newly subject under the proposed amendments. Not requiring verification for the newly subject entities in these sectors would result in lower

overall costs for California businesses than the proposed amendments. Under this alternative, over six years, the estimated net impact to California businesses and local and state government agencies is a *cost* of $370,000, which is the sum of cost increases of $580,000 for the majority of the proposed amendments, and cost *savings* of $210,000 for the other proposed amendments. Over the 6-year period, the first alternative lowers the overall cost for California businesses and local and state government agencies compared to implementing the proposed regulation.

The MRR verification requirements are critical to ensuring that CARB collects robust and accurate data to support CARB's key climate programs, especially California's market-based Cap-and-Invest Program. As is the case for most entities subject to MRR, verification would only be required for newly subject suppliers of imported LPG and transportation fuels when reportable emissions equal or exceed the verification threshold of 25,000 MT CO_2e established in section 95103(f) of MRR, which mitigates adverse impacts to small businesses resulting from the proposed amendments. In the case of importers of cement, importers of hydrogen, and producers of hydrogen utilizing electricity, staff proposes to not require verification because reported data would be based on best available data and not subject to a Cap-and-Invest Program compliance obligation, which does not allow for and makes unnecessary the level of data accuracy required under MRR verification provisions. At this time, requirements for these sectors are focused on assessing what data is available and providing a framework for reporting emissions. However, suppliers of imported LPG and transportation fuels would be subject to the Cap-and-Invest Regulation and have a compliance obligation associated with their emissions, which necessitates that the reported data be accurate to the level required under CARB's verification requirements. Although excluding newly subject suppliers of imported LPG and transportation fuels from verification requirements imposes lower costs on California businesses and local and state government agencies than the proposed regulation, CARB rejected this alternative because verified data are critical to ensuring that CARB collects robust and accurate data to support its programs, especially the Cap-and-Invest Program.

B. Alternative 2: CARB Collects Data from Individual Reporters and Other Sources

The second alternative considered is to rely on CARB collecting the required data directly from individual reporters and other sources (public or private) that may have relevant information rather than including reporting requirements in MRR. Staff estimates that the lack of a unified regulation specifying a clear process for reporting and verification would add significant uncertainty and higher costs for businesses than the proposed amendments. The entities would incur the same costs to monitor and collect the required data that CARB is proposing to collect through the amendments to quantify GHG emissions, as well as higher costs for the entities interfacing and coordinating with CARB staff directly to collect the relevant data as opposed to self-reporting standardized data into CARB's current streamlined online reporting tool. Reporting entities would also need to provide the required data directly to the verification bodies as opposed to CARB providing a standardized repository of the information for verifiers to review and verify, which would result in additional costs associated with verification.

The second alternative would involve significant CARB staff time to identify alternative data sources, collect the data, input the data into a database, and calculate entity specific emissions. It is also highly likely that the alternative data sources would not have all the data at

the resolution required to develop entity specific emissions necessitating CARB staff to reach out individuality to entities to obtain any missing data. It would significantly increase the costs to CARB for attempting to obtain and manage the relevant data from individual reporters and other entities as opposed to relying on standardized self-reported data that is input by entities into CARB's current streamlined online reporting tool. Thus, the second alternative would result in a less effective program for quantifying GHG emissions as required by California statute, reduced data quality, higher costs to business, substantial fiscal impacts to CARB, and would not provide any additional benefits beyond the proposed amendments. The second alternative was rejected for these reasons.

C. Small Business Alternative

The Board has not identified any reasonable alternatives that would lessen any adverse impact on small businesses.

D. Performance Standards in Place of Prescriptive Standards

California Government Code 11346.2(b)(4)(A) provides that, "In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific actions or procedures, the imposition of performance standards shall be considered as an alternative." A non-prescriptive performance standard would not meet the purposes required by MRR or the underlying statute. The reporting regulation must set forth a well-defined and consistent set of procedures for emission estimation, reporting, and verification to meet specific CARB requirements under AB 32 and in support of the Cap-and-Invest and Cost of Implementation Fees Programs. A general performance standard, which does not define specific means of compliance, would not be reasonable because it would not allow CARB to maintain the necessary GHG reporting and verification requirements that support critical CARB program requirements. Therefore, because these core requirements are not compatible with performance standards, it was not considered further.

E. Health and Safety Code section 57005 Major Regulation Alternatives

For a major regulation proposed on or after January 1, 2014, a standardized regulatory impact analysis is required. (A major regulation is one "that will have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars [$50,000,000], as estimated by the agency." [Govt. Code Section 11342.548]). CARB staff has determined that the amendments to the proposed regulations are not a major regulation as defined above.

Similarly, under Health and Safety Code Section 57005, subdivision (b), "major regulation" means any regulation that will have an economic impact on the state's business enterprises in an amount exceeding ten million dollars ($10,000,000), as estimated by the board, department, or office within the agency proposing to adopt the regulation in the assessment required by subdivision (a) of Section 11346.3 of the Govt. Code. The proposed regulation will not result in a total economic impact on state businesses of more than $10 million in one or more years of implementation. Therefore, this proposal is not a major regulation as defined by Health and Safety Code section 57005.

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

The U.S. EPA requires mandatory GHG reporting (Mandatory Reporting of Greenhouse Gases; Final Rule. 40 C.F.R. § 86, 87, 89, 90, 94, and 98.United States Environmental Protection Agency. October 30, 2009). While U.S. EPA has proposed eliminating various reporting requirements under that rule, U.S. EPA's proposal is not final.[13] If U.S. EPA finalized eliminating these reporting requirements, there would not be a need to justify the adoption of these regulations. Currently, the federal reporting requirements remain in effect, and staff believe the proposed regulation is consistent with existing federal law. This proposed amended regulation was developed to minimize, to the greatest extent possible, any redundant State and federal reporting, while also ensuring that CARB is collecting the necessary additional information required by California's various GHG programs, including the Cap-and-Invest Regulation, Cost of Implementation Fee Regulation, and the statewide GHG inventory.

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, CARB staff held CARB staff held five public workshops between 2020 and 2025 and had other meetings with interested persons during the development of the proposed regulation. These informal pre-rulemaking discussions provided staff with useful information that was considered during development of the regulation that is now being proposed for formal public comment. Other changes are considered to be relatively minor clarifications, and have not been a subject of pre-rulemaking workshops.

XII. Documents Relied Upon

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2. California Air Resources Board (CARB). (2022, December). *2022 Scoping Plan for Achieving Carbon Neutrality.* https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.
3. California Air Resources Board (CARB). (2026, January). *Technical Support Document: Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions.*
4. California Air Resources Board Planning and Technical Support Division Emission Inventory Branch (CARB PTSD/EIB). (2010, October 28). *Staff Report: Initial Statement of Reasons for Rulemaking; Revisions to the Regulation for Mandatory Reporting of*

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13. South Coast Air Quality Management District (SCAQMD). (2023, November 3). Rule 1110.3: Emissions from Linear Generators. https://www.energy.ca.gov/sites/default/files/2024-05/CEC-500-2024-037.pdf
14. Internal Revenue Service (IRS). (2024). Instructions for Form 3468. https://www.irs.gov/pub/irs-pdf/i3468.pdf
15. United States Environmental Protection Agency (U.S. EPA). (2009, September). *Regulatory Impact Analysis for the Mandatory Reporting of Greenhouse Gas Emissions Final Rule (GHG Reporting)*. https://www.epa.gov/sites/default/files/2015-07/documents/regulatoryimpactanalysisghg.pdf.
16. United States Bureau of Labor Statistics 2024: United States Bureau of Labor Statistics. (2025, September 29). May 2024 Occupational Employment and Wage Estimates [Dataset]. https://www.bls.gov/oes/current/oes_ca.htm#00-0000.

XIII. Appendices

Appendix A: Proposed Regulation Order

Appendix A-1: Proposed Regulation Order