State of California

AIR RESOURCES BOARD

## PROPOSED AMENDMENTS TO THE CALIFORNIA CAP ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE MECHANISMS

**Staff Report: Initial Statement of Reasons** 

Release Date: July 29, 2014

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State of California

#### AIR RESOURCES BOARD

## CALIFORNIA CAP ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE MECHANISMS

#### PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE CALIFORNIA CAP-AND-TRADE PROGRAM

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- A1. Proposed Regulation Order in single underline/single strikeout for Adding Updated Livestock, Ozone Depleting Substances, and updated Quantification Methodology for US Forest Projects Protocols
- B. Intentionally Omitted
- C. Staff Report and Compliance Offset Protocols for updates to Livestock, and Ozone Depleting Substances Projects Protocols
- D. Intentionally Omitted
- E. Quantification Methodology Updates to U.S. Forest Projects Protocol

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## **Executive Summary**

The California Global Warming Solutions Act of 2006, (AB 32, Nuñez, Chapter 488, Statutes of 2006) as codified at California Health and Safety Code sections 38500 *et seq.*, (AB 32) requires California to reduce greenhouse gas emissions (GHG) to 1990 levels by 2020 and to develop a comprehensive strategy to reduce dependence on fossil fuels, stimulate investment in clean and efficient technologies, and improve air quality and public health. AB 32 also requires the Air Resources Board (ARB or Board) to work with other states and nations to identify and facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs.

The Cap-and-Trade Program (Program) is a key element of California's GHG reduction strategy. It establishes a declining limit on 85 percent of statewide GHG emissions, and creates a powerful economic incentive for major investment in cleaner, more advanced technologies. The Cap-and-Trade Program also gives businesses the flexibility to choose the lowest-cost approach to reducing emissions.

This report presents the Staff proposal to amend the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Regulation or Regulation) to make minor adjustments in transition assistance for two covered entities, establish a compliance obligation for the carbon dioxide import sector, adopt a new offset protocol, update existing offset protocols and clarify provisions regarding implementation and oversight of the Regulation.

# A. Background

California's Cap-and-Trade Regulation was adopted by ARB in October 2011. The Regulation took effect on January 1, 2012. The first auction of emission allowances occurred in November 2012, and the first compliance period began on January 1, 2013. On January 1, 2014, California and Québec formally linked their Cap-and-Trade Programs, allowing transfers of compliance instruments between the two jurisdictions.

The Program establishes a hard declining cap on approximately 85 percent of total statewide GHG emissions. ARB will issue allowances equal to the total amount of permissible emissions over a given compliance period. One allowance equals one metric ton of GHG emissions. As the cap declines over time, fewer allowances will be issued, ensuring that emission reductions occur.

Under the Program, companies do not have individual or facility-specific reduction requirements. Rather, all companies covered by the regulation are required to surrender allowances in an amount equal to their total GHG emissions during each

compliance period. Companies can also meet a portion of their compliance requirements by surrendering offset credits, which are rigorously verified emission reductions that occur from projects outside the scope of the Cap-and-Trade Program.

The Program gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more will need to surrender more allowances or offset credits. Companies that can cut their emissions will need to surrender fewer allowances. As the cap declines, aggregate emissions must be reduced.

California's Cap-and-Trade Program is designed to leverage the power of the market in pursuit of an environmental goal. It opens the door for major investment in emissions-reducing technologies, and sends a clear economic signal that these investments will be rewarded.

## B. Previous Amendments to the Cap-and-Trade Regulation

In 2012, ARB proposed two sets of amendments to the Cap-and-Trade Regulation. The first set of amendments, related to program implementation, was approved by the Board in June 2012. These amendments took effect in September 2012. The second set of amendments, related to jurisdictional linkage with Québec, was approved by the Board in April 2013. These amendments took effect in October 2013 and specified a January 1, 2014 start date for the linked California and Québec Cap-and-Trade Programs.

In 2013, ARB proposed another set of amendments to the Cap-and-Trade Regulation. The amendments extended transition assistance for some covered entities, and provided a new methodology for refinery benchmarking and allocation. The market implementation part of the Cap-and-Trade Regulation was amended to refine the data collected from registered participants to support market oversight and to add an additional cost containment measure. These amendments also included a new Mine Methane Capture compliance offset protocol, updates to offset implementation, a clarification on offset usage limits, refinement of resource shuffling provisions and changes to the surrender order of compliance instruments. The Board approved these amendments in April 2014 and they took effect on July 1, 2014.

## C. Proposed Amendments to the Cap-and-Trade Regulation

In response to continued Board direction and further discussions with stakeholders, staff began a public process to propose additional amendments for Board consideration in Fall 2014. The section below provides a brief list of the regulatory amendments staff is proposing.

## Staff Proposal

The staff proposal is to amend the California Cap-and-Trade Regulation to provide additional clarity for implementation, address stakeholder concerns regarding registration of corporate associations, clarify offset transfer price reporting, modify allocation for two entities, and modify existing offset protocols. Specifically, the proposed amendments would:

- Clarify how producers quantify their product data;
- Alter allowance allocation for two covered entities based on new information;
- Include a compliance obligation for imported carbon dioxide;
- Update the Ozone Depleting Substances Protocol, the Livestock Protocol, and the U.S. Forest Protocol for quantification methods; and
- Modify requirements related to compliance, corporate association disclosures, and offset transfer price reporting.

This set of amendments include the proposed direct updates in the Regulation and the addition of updated Livestock, Ozone Depleting Substances, and updated quantification methodologies for the U.S. Forest Projects Protocol.

#### **Staff Recommendation**

Staff recommends that the Board approve for adoption the proposed regulation amendments. Climate change is a global problem that requires action by states, provinces, and nations. The proposed regulatory amendments offer technical updates to three previously approved offset protocols, modify allowance allocation, refine registration of corporate associations, and enhance ARB's ability to implement and oversee the regulation. In doing so, the amendments to the Program will enable the Program to run smoothly and reduce GHG emissions at a low cost, enabling California's economy to benefit from investment in clean energy technologies.

# I. BACKGROUND AND INTRODUCTION

This Staff Report presents ARB staff's rationale to amend the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms (Regulation) to respond to Board direction and new information, update three existing compliance offset protocols, and provide clarity for enhanced implementation and program oversight.

This introduction describes the structure of the Staff Report and provides a discussion of the public problem that the proposed amendments address, background information on California's Climate Change Scoping Plan, similar background information regarding

the Regulation, the objectives of the proposed amendments, and the public process used to develop the Cap-and-Trade Program.

This Staff Report, including the attached appendices, represents the Initial Statement of Reasons (ISOR) for Proposed Rulemaking required by the California Administrative Procedure Act (Government Code section 11340 et seq.).

The Staff Report is divided into the following chapters:

- Chapter I. Background and Introduction Describes the public problem this regulation seeks to address, provides background on California's Climate Change Scoping Plan, the Western Climate Initiative, and the public process used to develop the amendments.
- Chapter II. General Summary of the Proposed Amendments Discussion of the main amendments proposed in the regulation.
- Chapter III. Environmental Analysis of the Proposed Amendments Describes whether the proposed amendments may result in adverse impacts to the environment, including potential impacts from project-specific activities.
- Chapter IV. Economic Impacts of the Proposed Amendments Describes the economic impacts of the amendments
- Chapter V. Analysis of Alternatives to the Proposed Amendments Describes alternative amendments that were considered and why the alternatives are less effective.
- Chapter VI. Summary and Rationale for the Proposed Amendments Summarizes the proposed changes to the regulation and describes the rationale for each specific proposed amendment.
- Chapter VII. References Provides a list of references used for development of the Staff Report.
- Appendices include the proposed regulation amendments, the separate Staff Report prepared for the updated Livestock, and Ozone Depleting Substances protocols. Additionally, the proposed regulation order will be included as an appendix. Finally, an appendix is also included related to the quantification methodology updates to the U.S. Forest Projects protocol.

## A. Description of the Public Problem

Climate change is one of the most serious environmental threats facing the world today. Global warming is already impacting the Western United States, particularly California, in more severe ways than the rest of the country. The 2010 Climate Action Team (CAT) report (CAT 2010) concluded that climate change will affect virtually every sector of the State's economy and most of our ecosystems. Significant impacts will likely occur even under moderate scenarios of increasing global GHG emissions and associated climate change. Compared to the rest of the country, California is particularly vulnerable to significant resource and economic impacts from at least three effects of climate change. First, as sea level rises and coastal erosion and flooding increase, California (with its long coastline) will experience loss of, and damage to, coastal property, infrastructure, recreational beaches, wildlife habitat, and coastal water supplies. Second, California relies on its snowpack for water supply and storage, and this resource is predicted to decrease substantially this century. Third, California's urban, suburban, and rural areas are highly impacted by wildfires in ways most of the country does not face, and climate change will increase the incidence and severity of wildfires and resulting air quality and economic impacts.

North America as a whole is also experiencing the effects of climate change. Annual mean air temperature in North America has increased over the past forty years (Füssel 2009; Pederson et al. 2010). More frequent and intense extreme weather events have impacted ecosystems, increased coastal damage, and affected a considerable proportion of people (Christensen et al. 2007; Emanuel et al. 2008).

Extreme weather events have also had severe impacts on transportation systems, energy supplies, and other industries in North America. For example, major hurricanes in 2004 and 2005 in the United States affected oil and natural gas platforms and pipelines, creating billions of dollars in restoration costs for public utilities and transportation networks on the regional and national level (EEI 2005).

More cities are forecast to experience extreme heat waves, increasing sea levels, increased numbers of dangerous storm surges, water shortages, droughts, and increased flooding. In addition, severe heat waves, extreme weather events, and air pollution generated by climate change may cause social disruption and increase human losses and injuries, as well as vector-borne diseases.

It is important that California works to reduce GHG emissions to decrease the probability of these impacts.

## **B.** Background

Eight years ago, the Legislature enacted the California Global Warming Solutions Act of 2006 (AB 32, Nuñez, Chapter 488, Statutes of 2006) to begin addressing the public problem of climate change by reducing GHG emissions in a cost-effective manner. AB 32 encouraged ARB to continue to be a global leader in climate change mitigation and to develop integrated and cost-effective regional, national, and international greenhouse gas reduction programs (AB 32, Nuñez, Chapter 488, Statutes of 2006). The amendments proposed in this Regulation further California's progress toward this

goal by clarifying how producers must quantify their product data, modifying transition assistance for two covered entities, clarifying the length of time transition assistance will be provided to legacy contract generators with an industrial counterparty, including a compliance obligation for imported carbon dioxide, adjusting requirements to disclosure of corporate associations and offset transfer reporting, and updating three existing offset protocols.

The California Climate Change Scoping Plan laid out a comprehensive program to reduce California's greenhouse gas emissions to 1990 levels by 2020, reduce California's dependence on fossil fuels, stimulate investment in clean and efficient technologies, and improve air quality and public health. The coordinated set of policies in the Scoping Plan employs strategies tailored to specific needs, including market-based compliance mechanisms, performance standards, technology requirements, and voluntary reductions. The Scoping Plan described a conceptual design for a cap-and-trade program that included eventual linkage to other cap-and-trade programs to form a larger regional trading program. ARB worked with other agencies to update the Scoping Plan (CARB 2014a) this year. This update provided a status report on progress in meeting the 2020 goals and laid the groundwork for meeting California's long-term climate goals, including the need to extend the existing climate change mitigation programs, such as the Cap-and-Trade Program, to ensure California meets its mid-term and long-term climate goals.

## C. Cap-and-Trade Regulation

In October 2011, the Board adopted the California Cap-and-Trade Regulation. The Cap-and-Trade Program is a key element of California's climate strategy. It creates an aggregate GHG emission limit on the sources responsible for approximately 85 percent of California's GHG emissions, establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy, and affords those regulated by the Program flexibility to seek out and implement the lowest-cost options to reduce emissions. The Cap-and-Trade Program was designed to work in concert with other measures, such as standards for cleaner vehicles, low-carbon fuels, renewable electricity, and energy efficiency. The Program also complements and supports California's existing efforts to reduce criteria and toxic air pollutants. California's Cap-and-Trade Regulation was developed concurrently with Western Climate Initiative (WCI) design documents that describe a template for a regional cap-and-trade program.

In 2012, ARB proposed two sets of amendments to the Cap-and-Trade Regulation. The Board approved the first set of amendments related to program implementation, in June 2012. The Board approved the second set of amendments related to jurisdictional linkage with Québec in April 2013.

In response to continued Board direction and further discussions with stakeholders, staff began a public process to propose additional amendments for Board consideration in the fall of 2013. That set of amendments was further refined before being presented to the Board for final approval in April 2014. The Board approved those amendments, which became effective on July 1, 2014.

In response to continued Board direction and further discussions with stakeholders, staff began a public process to propose additional amendments for Board consideration in spring 2013. This Staff Report presents these amendments to the Regulation, provides staff's rationale for making these changes, and provides additional information on these changes if available.

## D. Western Climate Initiative and Linkage with Québec

The WCI was initiated in February 2007 as a collaboration of independent jurisdictions working together to identify, evaluate, and implement policies to tackle climate change at a regional level, including the design and implementation of a market-based mechanism, such as a regional cap-and-trade program. As previously discussed, the Board approved linkage of California's Cap-and-Trade Program with Québec's in April 2013. Prior to voting to link California's and Québec's programs, ARB made a request to the Governor to make findings required under Senate Bill 1018. The findings under Senate Bill 1018 are required to link California's Program with any other jurisdictional program. The Governor must find that the other jurisdiction's program is equivalent to or stricter than California's Program, linking will allow California to enforce AB 32 to the maximum extent feasible under the United States and California Constitutions against an entity located in a linked jurisdiction, the enforceability of the jurisdiction's program is equivalent to or stricter than that required under California's Program, and linkage would not impose liability on California. The Québec linkage amendments became effective October 1, 2013, with a linked California and Québec Cap-and-Trade Program effective on January 1, 2014. To ensure continued harmonization between the programs, ARB has consulted with Québec on the proposed amendments and will continue to coordinate with Québec to ensure the smooth functioning of the linked program, consistent with the requirements in SB 1018.

## E. Public Process for Development of Amendments

ARB staff developed the proposed amendments through an extensive public process. Many of the proposed amendments were developed in response to Board direction through Resolutions, further discussions with stakeholders, and staff analysis. At the October 2011 Board hearing, the Board provided direction to ARB staff in the form of Board Resolution 11-32 to monitor and, if necessary, propose updates to existing offset protocols and to develop a process for considering new offset protocols. Moreover, in approving amendments at the April 2014 hearing, the Board provided further direction to staff to consider drought conditions in providing transition assistance to public wholesale water agencies and to contemplate future clarifying modifications to newly-adopted disclosure requirements, including those related to corporate associations. In response to these Board directives on allocation and market rules, staff began to identify and assess areas of the Regulation that might require amendments.

Two public workshops were held to present updates to existing protocols and solicit public and stakeholder feedback. These are identified below:

- August 19, 2013: Cap-and-Trade Offset Protocol Workshop
- June 20, 2014: Public Workshop on Proposed Rice Cultivation Offset Protocol and Updates to Existing Offset Protocols

ARB made documents and presentations for these workshops available to help stakeholders prepare for the discussions. For each workshop, ARB also invited stakeholders to participate and provide comments on the development of proposed amendments. Staff announced both workshops and public meetings using the Capand-Trade (capandtrade) list serve. Workshop information and materials are posted on ARB's Cap-and-Trade Workshops and Meetings

webpage: http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm

As discussed in detail in Chapter II of this Staff Report, Summary of Proposed Action, the proposed amendments provide additional process for clarity in implementation, make minor modifications to transition assistance for two entities, address stakeholder concerns on corporate association reporting requirements, and modify existing offset protocols.

ARB accepted public comments on the draft proposed protocols presented at the June 20, 2014 workshops that are the basis for the proposed amendments discussed in this Staff Report. ARB received many written comments on the discussion draft protocols and met regularly with stakeholders to discuss concerns and recommendations. ARB also considered other comments provided to ARB outside of workshops.

# II. SUMMARY OF PROPOSED ACTION

This chapter summarizes the proposed amendments to the Cap-and-Trade Regulation, including changes resulting from Board direction and stakeholder feedback to implement and oversee the regulation, as well as updating of existing protocols. In general, staff proposes amendments to the Regulation related to allocation, adding a new covered entity type, offset program implementation, and market program implementation.

Staff proposes clarifying how producers must report product data for allocation, amending allocation amounts to two entities based on new information, and clarifying the length of time transition assistance will be provided for legacy contract generators with an industrial counterparty.

Staff proposes including the carbon dioxide imported into the State in the compliance obligation of carbon dioxide suppliers.

Proposed amendments for market provisions related to modifications to corporate association information reported to ARB, as well as clarifications on applying holding account limits to exchange clearing holding accounts. Collectively, amendments relating to market provisions will help ARB to monitor the market and ensure compliance.

Staff proposes to update the three existing compliance offset protocols for Livestock (Digesters), Ozone Depleting Substances (ODS) and U.S. Forestry. The U.S. Forestry protocol is limited to updated quantification methodologies.

The sections below provide additional summary information for all proposed amendments to the Regulation as well as an expanded discussion of staff's rationale for these changes. These changes are discussed by major topic area: allowance allocation, offsets and offset program implementation, and market implementation.

## A. Allowance Allocation

Allocation is the process ARB uses to distribute the allowances it issues. Allowances can be sold, freely allocated based on specific criteria contained in the regulation, or some combination of the two. Freely allocated allowances are distributed to covered entities to prevent production and emissions leakage, provide transitional assistance to a lower-carbon economy, reward early action to reduce emissions, and, in the case of electricity distribution utilities and natural gas suppliers, on behalf of ratepayers. This section describes the changes made to allowance allocation.

## 1. Modification to Definitions Needed for Product Data Reporting

Staff proposes modifications to the definitions of several products used for allowance allocation to align with the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Regulation) and align with how producers already quantify production. These product data are used to calculate allowance allocation to certain industrial sectors.

## 2. Modification of Allocation to Public Wholesale Water Agencies

Staff proposes an amendment to the allocation for Public Wholesale Water Agencies. This applies to only one entity, Metropolitan Water District (MWD). Staff modified the methodology used for the allocation to reflect the fact that MWD supplies 70 percent of its load with electricity from large hydroelectric facilities.

#### 3. Modification of Allocation to City of Shasta Lake

Staff proposes modifications to the allocation methodology for the City of Shasta Lake. The new allocation methodology is based on new information about the cost burden for Cap-and-Trade Program compliance faced by the electricity distribution utility's ratepayers. The proposed allocation to the City of Shasta Lake is increased to reflect data that was not available to ARB at the time of the initial rulemaking in 2011. To accommodate this minor increase in allocation, staff is not proposing to recalculate all of the percentages in Table 9-3, but provide the additional allowances to City of Shasta Lake from the State-owned allowances. Any future changes to allocation for any one entity in Table 9-3 would be implemented by adjusting percentages in Table 9-3 for all impacted entities, because the table percentages for each year must always sum to 100 percent.

#### 4. Modification to Allocation to Legacy Contract Generators

Staff proposes clarifications to the methodology used for the allocation to a legacy contract generator with an industrial counterparty to reflect the continuation of allocation until the end of the legacy contract. The text changes address an inconsistency in the regulation related to the existing allocation equations for legacy contract generators with an industrial counterparty. The equations do not specify an end date except that of the termination date of the legacy contract.

## **B.** Compliance Obligations

## 1. Imports of Carbon Dioxide

Staff proposes a compliance obligation for imports of carbon dioxide. The compliance obligation for imported carbon dioxide is comparable to the compliance obligation for transportation fuels imported into the State.

## C. Offsets and Offset Program Implementation

#### 1. Updates to Existing Protocols

Staff developed updates to three of the existing compliance offset protocols which can be found in Appendices C and E of the Staff Report, for use in the compliance offset program. Staff updated the Livestock, Ozone Depleting Substances (ODS) and U.S. Forest Projects Protocols. These protocols are incorporated by reference in the proposed regulation and are being considered for adoption by the Board as part of this rulemaking package.

The updated U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation. AB 32 (Health and Safety Code, section 38571) exempts quantification methodologies from the Administrative Procedure Act (Government Code, section 11340 *et seq.*) (APA). Those elements of the Compliance Offset Protocol are still regulatory, but are exempt from the rulemaking process of the APA. The exemption allows future updates to the quantification methodologies and exempt from APA requirements. Any changes to the non-quantification elements of the Compliance Offset a regulatory update subject to the full regulatory development process pursuant to the APA.

## **D.** Implementation of Auction and Trading Requirements

#### 1. Offset Transfer Price Reporting

Staff proposes clarifications to the regulatory requirements for price reporting in the Cap-and-Trade Program. Certain offset transfers will not have a price because they are for conversion of the offsets into compliance instruments. In those cases, staff

proposes exempting the transfer from the requirement to report a price. Instead, a price of zero would be reported for these types of transfers. The changes are necessary to improve clarity regarding when price reporting is required and to assist in market monitoring.

#### 2. Disclosure of Corporate Associations

Staff proposes clarifications to the regulatory requirements for disclosing corporate association information through The Compliance Instrument Tracking System Service (CITSS). Based on Board direction and stakeholder feedback, staff proposes to make explicit that entities only need to disclose those related entities that qualify as "indirect corporate associates" if those related entities are registered in the Program. Staff also proposes to clarify that when reporting related entities that qualify as "direct corporate associates," these related entities would include both those that are registered in the Program and those that are not registered. Staff has also proposed to extend the amount of time between disclosures for changes to information regarding non-registered entities and for changes to information regarding employees with knowledge of an entity's market position from quarterly to annually. These changes are necessary to improve clarity, and address stakeholder concerns regarding disclosing corporate associations, while still providing information to ARB that is essential to effective market monitoring.

## 3. Exchange Clearing Holding Accounts

Staff proposes clarifications to the application of the holding account to exchange clearing holding accounts. Specifically, staff proposes modifications to clarify that the holding limit calculation will not include allowances contained in exchange clearing holding accounts. The change is needed to clarify that the holding limit is not intended to restrict the ability of exchange clearing entities to perform their clearing functions. The change restores the intent of a provision that was inadvertently removed in a previous revision. Entities may qualify for exchange clearing holding accounts pursuant to section 95814(a)(1)(C), if they take possession of allowances only for the purpose of clearing transactions, and not for their own trading purposes. The number of allowances in these entities' exchange clearing holding accounts will depend on the volume of transactions they clear and it is not staff's intent to restrict this function.

# III. ENVIRONMENTAL ANALYSIS

## A. Introduction

The current proposed amendments to Cap-and-Trade Regulation include changes in market program implementation and offset program implementation, changes in allocation and compliance obligation calculation, and updates to three existing offset protocols. Staff has determined that the proposed changes in market program implementation, offset program implementation, and allocation would not result in any new significant adverse impacts or an increase in the severity of any significant impacts than previously identified in the *Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms* (2010 FED) and may provide air emissions benefits as compared to current practices.

An environmental analysis (EA) for the proposed updated Compliance Offset Protocols for Livestock Projects (Livestock Protocol) and Ozone Depleting Substances Projects (ODS Protocol) is included in the Staff Report prepared for those proposed updates, included as Appendix C to this ISOR.

## 1. ARB's Certified Regulatory Program under the California Environmental Quality Act

ARB, as the lead agency for the proposed amendments to Cap-and-Trade Regulation, has prepared these EAs pursuant to its California Environmental Quality Act (CEQA) certified regulatory program. Section 21080.5 of the Public Resources Code (PRC) allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Natural Resources Agency has certified the regulatory program. ARB's regulatory program has been certified by the Secretary of the Natural Resources Agency (17 CCR 15251(d)).

As required by ARB's certified program, and the policy and substantive requirements of CEQA, ARB prepared EAs to provide a succinct analysis of the potential for significant adverse and beneficial environmental impacts associated with the proposed amendments to Cap-and-Trade Regulation, and updates to three existing offset protocols (17 CCR 60005). The resource areas from the CEQA Guidelines Environmental Checklist (Appendix G) were used as a framework for assessing potentially significant impacts.

Consistent with ARB's commitment to public review and input on regulatory actions, the EAs are subject to a public review process through the posting of the staff report for a

45-day public review period. The Board will hold a hearing on the proposed amendments where it may accept, modify, or reject the staff recommendations. If modifications are requested, staff will address the changes and release those for one or more additional 15-day review and comment periods. At the conclusion of all public review periods, staff will compile all comments and written responses, including any comments on the EAs, into the Final Statement of Reasons (FSOR). If the amendments are adopted, a Notice of Decision will be posted on ARB's website and filed with the Secretary of the Natural Resources Agency for public inspection.

## **B.** Prior Environmental Analysis

#### Cap-and- Trade Regulation (2010)

The Board adopted the Cap-and-Trade Regulation in October 2011. ARB prepared a programmatic EA for the Cap-and-Trade Regulation in a document entitled *Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms* (2010 FED), included as Appendix O to the Staff Report: Initial Statement of Reasons (ISOR) released for public review and comment in October 2010 (CARB 2010b). The 2010 FED analysis was based on the expected compliance responses of the covered entities, identified as: (1) upgrade equipment; (2) decarbonization (fuel switching); (3) implement process changes; and (4) surrender compliance instruments. The 2010 FED also analyzed the potential indirect impacts associated with development of offset projects based on the four Compliance Offset Protocols: (1) ODS Projects; (2) Livestock Projects; (3) Urban Forest Projects; and (4) U.S. Forest Projects.

The 2010 FED concluded that covered entities' compliance with the Cap-and-Trade Regulation would result in beneficial impacts to air quality through reductions in emissions, including GHGs, criteria pollutants, and toxics, and beneficial impacts to energy demand. It concluded there would be less-than-significant or no impact to aesthetics, agricultural and forest resources, hazards, land use, noise, employment, population and housing, public services, recreation, transportation and traffic, and utilities/service systems. The 2010 FED concluded there could be potentially significant adverse impacts to biological resources, cultural resources, geology/soils and minerals, and hydrology/water quality, largely due to construction activities for facility-specific projects. Although the potential for adverse localized air quality impacts were found to be highly unlikely, the 2010 FED conservatively considered them potentially significant. The 2010 FED concluded that implementation of offset projects under the four Compliance Offset Protocols would also result in beneficial impacts to GHG emissions and no adverse impacts or less-than-significant impacts in all resource areas except for the following: implementation of projects under the Livestock Protocol have the potential

for significant adverse impacts to odors, and construction impacts to cultural resources, noise, and transportation/traffic; implementation of projects under the Urban Forestry Protocol has the potential for significant adverse impacts to cultural resources; and implementation of projects under the Forestry Protocol has the potential for significant adverse impacts to biological resources and land use. There were no impacts identified for ODS.

The 2010 FED identified mitigation that could reduce most of the identified impacts to a less-than-significant level. The 2010 FED relied on the agencies with local permitting authority to analyze site-or project-specific impacts because the programmatic 2010 FED could not determine with any specificity the location of projects or project-level impacts, and ARB does not have the authority to require project-level mitigation for specific projects carried out to comply with the Cap-and-Trade Regulation. Since the programmatic analysis of the 2010 FED could not determine project-specific details of impacts and mitigation, and there is an inherent uncertainty in the degree of mitigation ultimately implemented to reduce the potentially significant impacts, the 2010 FED took a conservative approach in its post-mitigation significance conclusion finding potentially significant impacts to these resource areas as significant and unavoidable.

The Board approved written responses to comments on the 2010 FED and adopted findings for the significant adverse impacts in Resolution 11-32 adopting the Cap-and-Trade Regulation. The written responses to environmental comments were also included in the Final Statement of Reasons (FSOR) prepared for the regulation (CARB 2011a, CARB 2011b). The Board also adopted the *Adaptive Management Plan* (CARB 2011d) to address any unanticipated localized air quality impacts resulting from the Cap-and-Trade Regulation and any biological resource impacts resulting from implementation of projects under the Forestry Protocol. These documents can be found on the Cap-and-Trade Program

website, http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm.

#### Amendments to the Cap-and-Trade Regulation (2012)

In 2012, ARB proposed two sets of amendments to the Cap-and-Trade Regulation. The first set of amendments, related to program implementation, was approved by the Board in June 2012. The second set of amendments, related to jurisdictional linkage with Quebec, was approved by the Board in April 2013. The EA for these amendments was included in Chapter IV of the Staff Report: Initial Statement of Reasons entitled *Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions* (CARB 2012a).

The EA concluded the amendments to clarify the Cap-and-Trade Regulation to help ARB implement, oversee, and enforce the regulation would not change what was already required or the methods of compliance by covered entities evaluated in the 2010 FED (i.e., upgrade equipment, decarbonize, implement process changes, and surrender compliance instruments), and therefore, the potential for environmental impacts fell within the scope and scale of those already analyzed. The analysis also considered the potential for indirect environmental impacts resulting from Californiacovered entities acquiring offset credits from projects in Québec because implementation of the linkage amendments could result in California entities acquiring credits from offset projects under Québec's Digesters (i.e., Livestock), ODS, and Landfill Gas Offset Protocols. The EA relied on the prior EA conducted for California's ODS and Livestock Offset Protocols and ARB's Landfills Regulation because Québec's protocols are substantially similar. Those prior EAs concluded that implementation of these types of offset projects would result in beneficial impacts to GHG emissions and no adverse impacts, or less-than-significant impacts, in all resource areas, except implementation of the Québec's Digesters protocol has the potential for significant adverse impacts to odors, cultural resources, noise, and transportation/traffic. The analysis referenced recognized mitigation measures for these impacts and determined that these impacts can be avoided or reduced to a less-than-significant level. However, since the authority to determine project-level impacts and require project-level mitigation lies with the permitting agency for individual projects, in this case Québec agencies, and there is inherent uncertainty in the degree of mitigation ultimately implemented, the analysis took a conservative approach in its post-mitigation significance conclusions finding that impacts to odors, cultural resources, and transportation/traffic in Québec may remain significant after mitigation.

The Board approved written responses to comments on the EA and adopted findings for the significant adverse impacts in Resolution 13-7 adopting the linkage amendments. The written response to comments for the first set of amendments are also included in the FSOR released in July 2012 (CARB 2012b) and for the linkage amendments in the FSOR released May 2013 (CARB 2013a). These documents can be found on the Capand-Trade Program website, <u>http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm.</u>

#### Amendments to the Cap-and-Trade Regulation (2013)

In 2013, ARB proposed one set of amendments to the Cap-and-Trade Regulation. This set of amendments, related to program implementation, was approved by the Board in April 2014. The EA for these amendments was included in Chapter III of the Staff Report: Initial Statement of Reasons entitled Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms (CARB 2013d). The EA concluded the amendments to clarify the Cap-and-Trade

Regulation to help ARB implement, oversee, and enforce the regulation would not change what was already required or the methods of compliance by covered entities evaluated in the 2010 FED (i.e., upgrade equipment, decarbonize, implement process changes, and surrender compliance instruments), and therefore, the potential for environmental impacts fell within the scope and scale of those already analyzed. Relying on the 2010 FED, the EA found that the amendments to the market and offset program implementation did not change the environmental stringency established in 2010. With regard to the allowance allocation amendments, the EA did not find any significant environmental impacts as compared to the 2010 FED. The amendments related to resource shuffling were also analyzed in the EA and found to be consistent with the 2010 FED. Similarly, covered sectors and exempt emissions were analyzed in the 2010 FED. Therefore, the amendments in 2013 fell within the scope and scale of the 2010 findings. Staff also prepared an EA for the addition of the Mine Methane Capture (MMC) Protocol. The EA for the MMC Protocol found potentially significant and unavoidable biologic and cultural resource impacts. The EA identified mitigation that could reduce most of the identified impacts to a less-than-significant level. The EA relied on agencies with local permitting authority to analyze site-or project-specific impacts because the programmatic EA could not determine with any specificity the location of projects or project-level impacts, and ARB does not have the authority to require project-level mitigation for specific projects carried out under the MMC Protocol. Since the programmatic analysis of the EA could not determine project-specific details of impacts and mitigation, and there is an inherent uncertainty in the degree of mitigation ultimately implemented to reduce the potentially significant impacts, the EA took a conservative approach in its post-mitigation significance conclusion finding potentially significant impacts to these resource areas as significant and unavoidable.

The Board approved written responses to comments on the MMC Protocol EA and adopted findings for the significant adverse impacts in Resolution 14-4 adopting the amendments. The written responses to comments for this set of amendments are included in the FSOR released in May 2014 (CARB 2014b). These documents can be found on the Cap-and-Trade Program

website, http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm.

## C. Current Proposed Amendments

As described earlier in this Staff Report, the current set of proposed amendments include: (1) changes in market program implementation; (2) changes in allocation; (3) adding carbon dioxide supplier imports as covered entities; (4) clarifications to product data reporting; and (5) updates to three existing offset protocols. Please refer to Chapter II of this ISOR for a description of the amendments and to the appropriate appendices for the updated protocols.

## D. Legal Standards for Determining When Additional Environmental Analysis is Required

Under its certified regulatory program, ARB prepares the required CEQA documentation as part of the Staff Report for the proposed action (17 CCR 60000-60008). When the equivalent of an EIR or negative declaration has been prepared for a rule, regulation, order, standard or plan, ARB looks to Public Resources Code section 21166 and CEQA Guidelines section 15162 for guidance on the triggers for further environmental review when considering approval of changes to that project. When an EIR for a project has been certified, that EIR is conclusively presumed valid unless a lawsuit challenging the EIR is timely filed (PRC section 21167.2). This presumption precludes reopening the prior CEQA process unless one of the events triggering additional review as specified in Public Resources Code section 21166 and CEQA Guidelines section 15162 has occurred.

CEQA Guidelines section 15162 states:

- (a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
  - Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
  - (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
  - (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
    - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

- (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

If a subsequent or supplemental EIR or negative declaration is not required, the lead agency may document its decision and supporting evidence in an addendum (14 CCR 15164(a), (e)). The addendum and lead agency's findings should include a brief explanation of the decision not to prepare a subsequent or supplemental EIR or negative declaration (14 CCR 15164(e)). An addendum doesn't need to be circulated for public review, but it must be considered by the lead agency prior to making a decision on the project (14 CCR 15164(c)-(d)).

This chapter serves as a substitute document equivalent to an addendum to the 2010 FED prepared under ARB's certified regulatory program to document ARB's determination that no subsequent or supplemental environmental analysis is required for the changes in market program implementation and changes in allocation. For the changes proposed to update the protocols, please refer to EA in Appendix C.

## E. Determination that No Additional Environmental Analysis is Required

Using CEQA Guidelines section 15162 as guidance, a brief explanation is provided below to document that none of the conditions requiring further environmental review are triggered by the proposed changes in market program implementation and changes in allocation and compliance obligation.

There are no substantial changes to the Cap-and-Trade Regulation occurring from the proposed amendments to market program implementation, allocation, or compliance obligation that change the covered entities methods of compliance previously analyzed in the 2010 FED which require major revisions to the 2010 FED due to the involvement of new significant environmental impacts or a substantial increase in the severity of previously identified impacts.

#### 1) Changes to Market Program and Offset Program Implementation

The proposed amendments to market program implementation and offset program implementation do not change the stringency or effectiveness of the current program provisions and would not change what is already required or the methods of compliance by covered entities as evaluated in the 2010 FED (i.e., upgrade equipment, decarbonization, process changes, and surrender of compliance instruments). As previously discussed, proposed amendments to provide clarity for market program implementation include refined CITSS information reporting. The amendments for the existing offset program implementation include administrative changes to add updated protocols to the Regulation. None of these proposed amendments would change the methods of compliance by covered entities as evaluated in the 2010 FED so the impacts of these actions falls within the scope and scale of those already analyzed in the 2010 FED. The compliance obligations available to covered entities would not change as a result of these amendments from what was previously analyzed in the 2010 FED. These changes are intended to serve an administrative function to aid in program implementation and would result in no additional or more severe environmental impacts. Therefore, these proposed amendments would not result in any additional or more severe environmental impact than previously analyzed and disclosed in the 2010 FED.

## 2) Changes to Allocation and Covered Emissions

This involves proposed changes to allocation of allowances to public wholesale water agencies (which is limited to the Metropolitan Water District) and the City of Shasta Lake. The Program would also cover carbon dioxide importers. These changes do not change the methods of compliance available to these entities as evaluated in the 2010 FED and would not result in any additional or more severe environmental impact than previously analyzed and disclosed. In its assessment of the changes, staff also considered the possibility that these entities may forego future planned efficiency improvements in anticipation of receiving a direct allocation of allowances, thereby resulting in fewer co-pollutant benefits from what was previously analyzed in the 2010 FED. However, it is not possible to determine whether these entities would forego additional improvements because an entity's decision to implement such changes is not mandated by the Program; Business decisions, including the cost of allowances compared to cost of changes, factor into their decision to make these process changes. So it is too speculative to determine whether an entity that may have planned to implement efficiency improvements would now forego these plans as a result of these proposed changes. Nonetheless, forgoing future potential co-pollutant benefits does not represent a significant adverse impact under CEQA, only a potential foregone cobenefit. These facilities would still be subject to applicable local air quality permits and

adherence to all required local permitting requirements that would evaluate any changes in emissions.

The proposed amendments relating to compliance obligation calculations should have no effect on environmental impacts, as analyzed in the 2010 FED. Staff does not expect these amendments to lead to any changes in activities for these facilities as explained in the environmental impacts section in the Chapter.

There are no substantial changes with respect to the circumstances under which the amendments are being undertaken which require major revisions to the 2010 FED due to the involvement of new significant environmental impacts or a substantial increase in the severity of previously identified impacts.

There are no substantial changes in the environmental circumstances under which the amendments will be implemented which would require major revisions to the 2010 FED. As explained above, the updates are administrative and procedural in nature and would not alter the way projects are implemented or result in any changes that affect the physical environment.

There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2010 FED was certified as complete, that changes the conclusions of the 2010 FED with regard to impacts, mitigation measures, or alternatives;

No new information of substantial importance has come to staff's attention that would change any of the conclusions of the 2010 FED for these administrative amendments.

## F. Conclusion

The 2010 FED certified by ARB in 2011 covered the Cap-and-Trade Regulation. ARB staff has determined that an EA equivalent to an addendum is appropriate for the Board's approval of the current proposed amendments to market program implementation, offset program implementation, and allocation described above because the updates do not result in any new significant environmental impacts or in a substantial increase in the severity of impacts than previously disclosed in the 2010 FED. Further, there are no changes in circumstances or new information that would otherwise warrant any subsequent environmental review, and therefore, the 2010 FED adequately address the potential environmental impacts of implementation of these proposed amendments and no additional environmental analysis is required.

Please refer to the EA in Appendices C and E for the analysis related to the updates to the existing protocols.

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# IV. ENVIRONMENTAL JUSTICE

State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. ARB is committed to making environmental justice an integral part of its activities. The Board approved its Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into ARB's programs consistent with the directives of State law. These policies apply to all communities in California, but recognize that environmental justice issues have been raised more in the context of low-income and minority communities.

As part of the economic, emissions, and environmental assessment of the Cap- and-Trade Regulation, staff assessed the emission reduction opportunities available to California sources covered by the proposed amendments to this regulation. This evaluation considered the potential for the incentives and flexibility inherent in the Capand-Trade Program to result in direct, indirect, and cumulative emission impacts, including localized impacts in communities that are already adversely affected by air pollution. Based on the available data and current law and policies that control localized air pollution, and expected compliance responses to the Cap-and-Trade Regulation, ARB concluded that increases in localized air pollution (including toxic air contaminants and criteria air pollutants) attributable to the Cap-and-Trade Program are extremely unlikely. For more information see Chapter VII. Co-Pollutant Emissions Assessment of the 2010 ISOR and Appendix P: Co-Pollutant Emissions Assessment (CARB 2010g).

As previously mentioned in the EA chapter, since the compliance response resulting from the proposed amendments and updated Livestock and ODS protocols is expected to be within those already evaluated in the 2010 FED, staff anticipates that the impacts and benefits will also be equivalent.

Nevertheless, as part of ARB's Adaptive Management Plan, at least once each compliance period, ARB will use information collected through the Mandatory Reporting Regulation, the Cap-and-Trade Regulation, the industrial efficiency audit, and other sources to evaluate how facilities are complying with the Cap-and-Trade Regulation (CARB 2011c). ARB will also solicit information from local air districts regarding permit modifications and new permit applications for covered sources. This information will be used to identify compliance activities that could lead to increased emissions and to determine whether further investigation of potential criteria pollutant and toxic emissions is warranted.

If unanticipated adverse localized emissions impacts in California can be attributed to the Cap-and-Trade Regulation (including the proposed amendments) during this periodic review, ARB will consider whether these impacts affect the achievement of the Program objectives. If so, ARB will promptly develop and implement appropriate responses. Potential responses ARB would consider include, but are not limited to, using allowance value from the Cap-and-Trade Program to mitigate localized emissions increases, providing incentives for energy efficiency and other emissions-reduction activities within the community, or restricting trading or prohibiting certain compliance responses in specifically identified communities. These potential future responses are not, however, warranted based on currently available information, and their imposition today would unnecessarily conflict with AB 32's other objectives.

# V. ECONOMIC IMPACT ANALYSIS / ASSESSMENT

# A. ECONOMIC AND ALTERNATIVES ASSESSMENT

## 1. Summary of Economic Impacts

The amendments proposed in this regulation clarify the existing Cap-and-Trade Regulation allowing ARB to implement, oversee, and enforce the Regulation.

The proposed amendments provide more specificity and clarification regarding the information required for registration of corporate associations and the reporting of transactions in the compliance instrument tracking system, as well as clarifications on applying holding account limits to exchange clearing holding accounts. Since the amendments proposed related to information disclosure merely clarify existing requirements, the collection of this information does not add cost to covered entities over what has been previously estimated for the existing Cap-and-Trade Regulation. The clarification regarding exchange clearing holding accounts applies to the holding limit calculations, and exempting these accounts from the calculation will not add any cost to entities with these types of accounts.

The proposed amendments in this regulation specify the mechanism for allocation of allowances to Public Wholesale Water Agencies that are currently covered by the Capand-Trade Program, the City of Shasta Lake that is currently covered by the Cap-and-Trade Program, and clarifications for legacy contract generators with an industrial counterparty that are currently covered by the Cap-and-Trade Program. Allocation of allowances will reduce the near-term compliance cost for covered facilities that receive allowances. The amendments also clarify how producers must quantify product data used for allocation; because the new requirements align with both the Mandatory Reporting Regulation and how producers currently quantify product data for other purposes, near-term, costs should be reduced or stay the same.

The proposed amendments include implementation-related provisions to update existing offset protocols to the Regulation. As participation in the offset program is voluntary and these amendments are related to implementation, the proposed changes do not add cost to the covered entities in addition to what has been previously estimated for the existing Regulation.

The proposed amendments in this regulation remove the compliance obligation exemption for carbon dioxide imports. Any covered entities importing carbon dioxide imports would be affected by this modification. The inclusion of these imports in the Program does not represent new impacts to the State as there are currently no imports of carbon dioxide. These amendments will not require additional ARB resources to administer or enforce.

The collection of changes does not add any additional costs over what was anticipated in the original Cap-and-Trade Regulation to regulated entities and some changes will have the effect of reducing costs to some regulated entities in the early years of the Program.

#### 2. Legal Requirements

Section 11346.3 of the Government Code requires State agencies to assess the potential for adverse economic impacts on California business enterprises and individuals when proposing to adopt or amend any administrative regulation. The assessment must include consideration of the impact of the proposed regulation on California jobs; the expansion, elimination, or creation of businesses; and the ability of California businesses to compete with businesses in other states.

Also, State agencies are required to estimate the cost or savings to any State or local agency and school district in accordance with instructions adopted by the Department of Finance (DOF). The estimate shall include any non-discretionary cost or savings to local agencies and the cost or savings in federal funding to the State.

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) – Note: Health and Safety Code Section 57005(b) For purposes of this section, "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. These amendments do not meet the requirements for a major regulation.

#### 3. Costs to State Government and Local Agencies

ARB anticipated, when it adopted the regulation in 2011, that government entities covered by the regulation would need to register for accounts, report transactions and disclose corporate associations; the proposed regulation clarifies exactly what information will be required. Additionally, the proposed amendments remove the exemption for imported carbon dioxide. Complying with these requirements does not add any additional costs over what was originally assumed in the Regulation.

The proposed regulatory action would not create costs or savings, as defined in Government Code sections 11346.5(a)(5) and 11346.5(a)(6), to State agencies or in federal funding to the State.

The proposed regulatory action would not create costs and would not impose a mandate on State and local agencies, or school districts. Because the regulatory requirements apply equally to all covered entities and unique requirements are not imposed on local agencies, the Executive Officer has determined that the proposed regulatory action imposes no costs on local agencies that are required to be reimbursed by the State pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, and does not impose a mandate on local agencies or school districts that is required to be reimbursed pursuant to section 6 of Article XIII B of the California Constitution.

#### 4. Costs to Businesses and Private Individuals

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. Staff anticipated that regulated business would need to register for accounts, report transactions and disclose corporate associations. The proposed regulation clarifies exactly what information will be required. Staff also anticipated that any covered entities importing carbon dioxide will have to purchase compliance instruments to meet any obligation from the removal of the exemption for imported carbon dioxide. Complying with these requirements does not add any additional costs over what was assumed in the original Cap-and-Trade Regulation, as there are currently no imports of carbon dioxide. There are no requirements placed on non-covered businesses or private individuals.

The Executive Officer has determined that representative private persons and businesses would not be affected by the proposed regulatory action. Pursuant to Government Code section 11346.5(a)(7)(C), the Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, and little or no impact on the ability of California businesses to compete with businesses in other states.

The proposed regulation would not impose sufficient direct or indirect costs to eliminate businesses in California.

## 5. STATEMENT OF THE RESULTS OF THE ECONOMIC IMPACT ASSESSMENT PREPARED PURSUANT TO GOVERNMENT CODE SEC. 11346.3(b)

In accordance with Government Code section 11346.3, the staff has determined that the proposed regulatory action would not eliminate existing businesses within the State

of California, and would not affect the creation of new businesses or the expansion of existing businesses currently doing business in California. The proposed regulatory action would not eliminate jobs within the State of California, and would not affect the creation of jobs within California.

In general, small businesses in regulated sectors would not be subject to the proposed regulation because their total GHG emissions are below the GHG reporting threshold, thereby exempting them from compliance obligations under the proposed regulation.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), staff found that the reporting requirements of the proposed regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

## **B. ALTERNATIVES ANALYSIS**

Staff is required to consider alternatives to the proposed amendments for the Cap-and-Trade Regulation. For discussion of the alternatives considered, please refer to Chapter VI of this ISOR, Alternatives Analysis.
# **VI. ALTERNATIVES ANALYSIS**

This Chapter provides an analysis of the alternatives to the proposed amendments for the Cap-and-Trade Regulation that staff considered. The discussion below describes the alternatives to the proposed changes. For each of the alternatives, staff outlines the costs and benefits of the approach and explains why it chose to propose the Cap-and-Trade Regulation and incorporated design features.

# A. Alternatives to the Proposed Amendments to the Cap-and-Trade Program

Staff analyzed two alternatives to the proposed amendments to the Cap-and-Trade Regulation:

- Do not amend the Cap-and-Trade Regulation (No Project Alternative);
- Alternative to revise corporate disclosure requirements to only require disclosure upon request by ARB.

In evaluating these alternative approaches to the proposed regulation, ARB staff found that none were as effective, or more effective, than the proposal in carrying out the goals of AB 32. Further, none of the options that would have enabled California to meet AB 32 goals were as cost-effective as the proposed Regulation and substantially address the public problem stated in the notice. Staff provides a discussion of each alternative in the following sections.

# 1. No Amendments (No Project Alternative)

The No Project Alternative defines a scenario in which ARB would not amend the Regulation with the proposed changes. Staff has assessed this alternative for each category of changes, as provided below.

# a) Allocation

Under the No Project Alternative, proposed changes relating to the provision of allocation to public wholesale water agencies, the City of Shasta Lake, and clarifications for legacy contract generators with an industrial counterparty, and changes relating to product data quantification used for allocation would not be implemented.

The modification of the amount of direct allocation to public wholesale water agencies reflects an updated allocation methodology to be consistent with the treatment of utilities that import electricity to serve load. The allocation to the City of Shasta Lake reflects

updated data used to calculate the allocation. The allocation to the legacy contract generators with an industrial counterparty clarifies and ensures the text is consistent with the equations to provide allocation beyond 2017 until the end of the legacy contract. The definitions of product data are modified to align with the Mandatory Reporting Regulation and current industry quantification methodologies. Without these changes, the cost of compliance would be greater for all four groups.

# b) Market Implementation

Under the No Project Alternative, proposed changes relating to market implementation (i.e., corporate association disclosure.) would not be implemented. The proposed amendments relating to market implementation are intended to allow ARB to continue to properly implement and oversee the regulation while clarifying the corporate association disclosure requirements for covered entities. Without these changes, program implementation and oversight would be less efficient and effective.

# c) Offset Protocols and Offset Program Implementation

Under the No Project Alternative, proposed changes relating to both offset program implementation and the updated offset protocols would not be implemented. The changes made for offset program implementation are intended to aid ARB in continuing to successfully implement and oversee the offset program. Without these changes, ARB's offset protocols would not reflect the most current science and technologies.

Under the No Project Alternative, staff would not make changes to the Program, which are necessary to achieve the goals of the Regulation. Staff has considered alternative means of achieving these goals and none were found to be as effective, or more effective, than the proposal in carrying out the goals of AB 32. 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 and less burdensome to affected individuals and businesses than the proposed regulation.

### d) Covered Emissions

Under the No Project Alternative, proposed changes relating to the removal of the compliance obligation exemption for carbon dioxide imports would not be implemented. The proposed amendments relating to compliance obligation calculation are intended to allow the cap to include all major sources of emissions in California. Without these changes, program implementation and oversight would be less efficient and effective.

Therefore staff believes the amendments proposed in this regulation are necessary.

# 2. Alternative to Only Require Corporate Association Disclosure Upon Request by ARB

During the 2013 amendment process, stakeholders suggested limiting corporate association disclosure requirements to only requiring disclosure when ARB requested it on an individual entity-by-entity basis.

Staff considered restructuring the corporate disclosure requirements in section 95833 so that disclosures were only required when ARB makes a specific request to an entity. While such an approach would lessen the disclosure requirements related to tracking system registration and entity registration updates, it would not provide ARB with information necessary to conduct effective market monitoring. As ARB stated in the FSOR to the 2013 amendments, ARB staff believes that identifying direct corporate associations regardless of registration status is vital to properly analyze secondary and related energy markets on the periphery of the primary Cap-and-Trade market. Entities not registered in the Program, but operating in related energy or carbon markets, may have undue influence on the market. By identifying relationship between entities across markets and commodities, ARB can better ensure a well-functioning primary market (CARB 2014b). To address stakeholder concerns, as well as respond to the Board's direction, ARB has proposed changes to explicitly clarify that disclosure of indirect corporate associates only applies to those related entities that are registered in the program. ARB staff believes this change will reduce the amount of information reported by covered entities, while still maintaining ARB's ability to conduct market oversight. As such, staff believes the amendments proposed in this regulation are a better alternative.

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 or less burdensome to affected private persons than the proposed regulation.

# VII.SUMMARY AND RATIONALE FOR PROPOSED REGULATION

The proposed amendments to the Cap-and-Trade Regulation are designed to help staff implement the Cap-and-Trade Program and increase market security. This section discusses the requirements and rationale for each provision of the proposed amendments to the Cap-and-Trade Regulation.

#### Section 95802. Definitions.

#### Summary of Section 95802(a)

The following definitions were added:

Casein and Raw TSS.

The following definitions were removed:

Non-Aseptic tomato puree, Powdered milk (High Heat (HH)), Powdered milk (Low Heat (LH)), and Powdered milk (Medium Heat (MH)).

The following definitions were modified:

Aseptic tomato paste, Milk, Non-Aseptic tomato paste, Non-Aseptic whole and diced tomato, On-purpose hydrogen gas, Pickled Steel Sheet, Pretzel, Primary Refinery Products, Recycled Boxboard, Reporting Period, Tin Plate, Tissue, Tomato soluble solids, Water absorption capacity and Whole chicken and chicken parts.

#### Rationale for Section 95802(a)

This section is necessary to ensure consistent interpretation of terms used in the Capand-Trade Regulation and include additions and modifications to product definitions to conform to industry standards for reporting and to the Mandatory Reporting Regulation. Reporting Period was modified to make it applicable for both existing and newly adopted protocols. Deleted definitions are not referenced in the Regulation so they are no longer necessary.

### Section 95830. Registration with ARB.

### Summary of Section 95830(c)(1)(H)

Section 95830(c)(1)(H) was modified to remove the term "corporate association" to reflect the changes made to section 95833 regarding which types of corporate

associations must be disclosed. This change also required the removal of a nowunnecessary comma.

# Rationale for Section 95830(c)(1)(H)

These changes are needed to ensure consistency with modifications to section 95833 and to improve clarity in the disclosure requirements to ensure regulated entities are informed of their disclosure requirements.

# Summary of Section 95830(f)(1)

Section 95830(f)(1) was modified to provide additional time for entities to disclose corporate association information submitted pursuant to section 95830(c)(1)(H) for direct corporate association entities which are not registered in the Cap-and-Trade Program or within a linked GHG ETS, and information submitted pursuant to section 95830(c)(1)(I) for employees with knowledge of an entity's market position. The sections were modified to require such disclosures on at least an annual basis, rather than within 30 calendar days or each calendar quarter of a change, respectively. Additional modifications were made to add in the word "section" before applicable section numbers and to ensure consistency within the section as to changes being related to "information submitted pursuant to" applicable section requirements.

# Rationale for Section 95830(f)(1)

These changes are necessary to provide further administrative flexibility on timing related to disclosing required corporate association and knowledgeable employee information. The changes are also necessary to improve clarity and internal consistency within section 95830(f)(1).

# Section 95833. Disclosure of Corporate Associations.

### Summary of Section 95833(a)(4)

Section 95833(a)(4) was modified to make explicit that indirect corporate associations only include those entities that meet the requirements of section 95833(a)(4)(A)-(C) and are registered in the Cap-and-Trade Program.

### Rationale for Section 95833(a)(4)

This change is necessary to provide clarity in the disclosure requirement by explicitly defining which entities constitute indirect corporate associates.

### Summary of Section 95833(a)(4)(A)

Section 95833(a)(4)(A) was modified to ensure the connecting conditions within the section are clear, and to reflect the deletion of previous section 95833(a)(4)(B).

# Rationale for Section 95833(a)(4)(A)

This change is necessary to ensure clarity in the section and in the definitions of which entities constitute indirect corporate associates to ensure ARB receives information necessary to appropriately monitor the compliance instrument market without overburdening covered entities.

# Summary of Section 95833(a)(4)(B)

Former section 95833(a)(4)(B) was deleted to reflect the change to section 95833(a)(4), and to clarify that indirect corporate associations are not just those entities that are connected through a line of one or more corporate associations. Rather, indirect corporate associations could include entities that are connected through such a line. Former section 95833(a)(4)(C) becomes (a)(4)(B), and has been modified to ensure the definition of indirect corporate association still includes the subset of such associations which are connected through a chain of more than one corporate association.

# Rationale for Section 95833(a)(4)(B)

This change is necessary to ensure clarity in the section and in the definitions of which entities constitute indirect corporate associates, and to ensure that the definition still includes chains of corporate associations.

# Summary of Section 95833(a)(4)(C)

Former section 95833(a)(4)(C) was modified to become section 95833(a)(4)(B). New section 95833(a)(4)(C) was added to ensure that entities calculating whether they have an indirect corporate association with another entity through a chain of corporate associations understand which percentage of control should be calculated for instances where the entity controls a general partner in that chain.

# Rationale for Section 95833(a)(4)(C)

This change is necessary to ensure clarity in the section and in the definitions of which entities constitute indirect corporate associates, and how to calculate percentages of control, which ensures covered entities report the appropriate information to ARB without overly burdening those same covered entities.

### Summary of Section 95833(b)

Section 95833(b) has been modified to clarify that only entities which fit the categories of direct and indirect corporate associations registered in linked jurisdictions are required to be disclosed, rather than all corporate associations.

## Rationale for Section 95833(b)

This change is needed to ensure entities understand which corporate associations need to be disclosed for entities registered in linked program. Stakeholders previously indicated some confusion regarding the intent of this section, which these changes should alleviate.

### Summary of Section 95833(d)

Section 95833(d) has been modified to remove the generic term "corporate association" and to specify that only direct corporate associations and indirect corporate associations (rather than all corporate associations) need to be disclosed. The section has also been modified to explicitly reference all paragraphs within section 95833 that set forth the criteria for direct and indirect corporate associations (reference to paragraph 95833(a)(2) was added to the existing list).

### Rationale for Section 95833(d)

These changes are necessary to improve clarity of which corporate associations must be disclosed and to more directly reference the criteria defining the types of direct and indirect corporate associations.

### Summary of Section 95833(e)(2)

Section 95833(e)(2) has been modified to reflect the changes made to section 95833(d) and to ensure consistency between the sections.

### Rationale for Section 95833(e)(2)

These changes are needed to ensure consistency with revisions to section 95833(d) and to ensure covered entities understand their disclosure requirements.

### Summary of Section 95833(e)(3)

Section 95833(e)(3) has been modified to reflect the changes made to section 95833(d), and to reflect the timing changes made to section 95830(f)(1).

Rationale for Section 95833(e)(3)

These changes are needed to ensure consistency with revisions to section 95833(d) and section 95830(f)(1).

# Section 95852. Emission Categories Used to Calculate Compliance Obligation.

## Summary of Proposed Updates Section 95852(g)

This section was modified to remove the exemption of imported CO<sub>2</sub> from a compliance obligation.

# Rationale for Proposed Updates Section 95852(g)

Imported  $CO_2$  was always meant to have a compliance obligation, because imported  $CO_2$  is assumed to be emitted within the State. The compliance obligation for imported  $CO_2$  is comparable to the compliance obligation for transportation fuels imported into the State.

# Section 95852.2. Emissions without a Compliance Obligation.

### Summary of Proposed Updates Section 95852.2(b)(12)

This section was modified to remove the exemption of imported CO<sub>2</sub> from a compliance obligation.

### Rationale for Proposed Updates Section 95852.2(b)(12)

These edits are made to conform to 95852. Imported  $CO_2$  was always meant to have a compliance obligation, because imported  $CO_2$  is assumed to be emitted within the State. The compliance obligation for imported  $CO_2$  is comparable to the compliance obligation for transportation fuels imported into the State.

# Section 95890. General Provisions for Direct Allocation.

### Summary of Proposed Updates Section 95890(e)

This section was modified to clarify that allowance allocation to a legacy contract generator with an industrial counterparty will continue through the end of the legacy contract.

### Rationale for Proposed Updates Section 95890(e)

These edits address an inconsistency in the 2013 modifications to the Regulation. As correctly noted in the other relevant sections of the regulation, and particularly within the equations contained in section 95894, the intention was to allocate through the term of

the contact for these generators. This change makes section 95890(e) consistent with section 95894.

# Section 95892. Allocation to Electrical Distribution Utilities for Protection of Electricity Ratepayers.

#### Summary of Section 95892(a)

Section 95892(a) is modified to refer to allocation that will occur pursuant to new Table 9-3A.

#### Rationale for Section 95892(a)

Because the new annual allocation to the City of Shasta Lake for each of the budget years 2016–2020 is provided in Table 9-3A, it was necessary for this section to refer to Table 9-3A in addition to Table 9-3 for allowance allocations to individual EDUs.

#### Summary of Section 95892, Table 9-3

Table 9-3 is modified to refer to new Table 9-3A for the allowance allocation to City of Shasta Lake for budget years 2016–2020.

#### Rationale for Section 95892, Table 9-3

Because the new annual allocation to City of Shasta Lake for each of the budget years 2016–2020 is an absolute quantity of allowances instead of a percentage, Table 9-3 was modified to refer to the new Table 9-3A for the allowance allocation.

#### Summary of Section 95892, Table 9-3A

New Table 9-3A was added to provide the total quantity of allowances to be allocated to City of Shasta Lake for budget years 2016–2020.

#### Rationale for Section 95892, Table 9-3A

Staff proposes to change the allocation to the City of Shasta Lake based on new information about the cost burden for Cap-and-Trade Program compliance faced by the electricity distribution utility's ratepayers. The data used for the original allocation was incorrect. Table 9-3A is added to adjust the allocation of budget year 2016–2020 allowances to the City of Shasta Lake to correctly reflect the cost burden faced by its ratepayers.

# Section 95895. Allocation to Public Wholesale Water Agencies for Protection of Water Ratepayers.

## Summary of Section 95895

Table 9-5 in section 95895 is modified to increase the quantity of allowances to be allocated to a public wholesale water agency from budget years 2016–2020.

## Rationale for Section 95895

Staff proposes to increase the number of allowances to be allocated to a public wholesale water agency from budget years 2016–2020. This increased allocation takes account of the fact that application of the updated allocation calculation methodology for budget years 2013 through 2015 is evenly distributed over the years 2016-2020. The number of allowances is based on the compliance obligation for electricity used to convey water, assuming that the water agency would meet the renewable energy percentages required under California's Renewable Portfolio Standard to account for the large share of large hydropower under contract to the agency.

# Section 95920. Trading.

# Summary of Section 95920(b)(2)

The section is modified to explicitly exempt allowances held in exchange clearing holding accounts from inclusion in the calculation of the holding limit.

### Rationale for Section 95920(b)(2)

The change is needed to clarify that the holding limit is not intended to restrict the ability of exchange clearing entities to perform their clearing functions. The change restores the intent of a provision that was inadvertently removed in a previous revision. Entities may qualify for exchange clearing holding accounts pursuant to section 95814(a)(1)(C) if they take possession of allowances only for the purpose of clearing transactions, and not for their own trading purposes. The number of allowances in these entities' exchange clearing holding accounts will depend on the volume of transactions they clear and it is not staff's intent to restrict this function.

### Section 95921. Conduct of Trade.

### Summary of Section 95921(b)(6)(H)

The section was modified to provide an exemption from the requirements in sections 95921(b)(2)(C) and 95921(b)(4)(E), (F), and (G) that the transfer request must contain a specific price for the compliance instruments being transferred. The exemption applies to transfers that result from transaction agreements to produce ARB-issued offsets or transition early action offset credits to ARB-issued offset credits. These agreements often contain provisions such as a fee for service or specify roles or investment shares

in an offset project, but do not mention the price of the ARB-issued offset credit that is ultimately transferred. Under the modifications, entities would enter a price of zero into CITSS in these cases.

# Rationale for Section 95921(b)(6)(H)

ARB developed the transfer request model in CITSS for transactions involving the transfer of existing compliance instruments. The proposed modification would cover cases which govern the production of new offset credits or the transition of early action offset credits into ARB-issued offset credits. The transaction agreements are often between service providers, project partners, or a project operator and project investors. These agreements often do not contain a gross price specific to the offsets, but instead cover fees for service, required activities by each party to the agreement, fixed payments unrelated to the number of offsets to be transferred, and other terms related to the distribution of offset credits resulting from a project. In these cases, there is no gross credit price that is comparable to the price reported for arms'-length trades of an existing compliance instrument. Allowing entities to enter a zero price in the CITSS transfer request would enable staff to separate these transfers from transfers resulting from transaction agreements that include a price.

# Section 95973. Requirements for Offset Projects Using ARB Compliance Offset Protocols.

### Summary of Section 95973(a)(2)(C)

Existing section 95973(a)(2)(C) was modified to describe which version of the Compliance Offset Protocol must be used.

### Rationale for Section 95973(a)(2)(C)

These changes are necessary to clarify which version of a protocol should be used after the addition of a new version protocol for that project type.

### Summary of Section 95973(a)(2)(C)1.

Existing section 95973(a)(2)(C)1. was modified to list the new Ozone Depleting Substances Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

### Rationale for Section 95973(a)(2)(C)1.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions.

#### Summary of Section 95973(a)(2)(C)2.

Existing section 95973(a)(2)(C)2. was modified to include the new Livestock Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

#### Rationale for Section 95973(a)(2)(C)2.

This change is necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions.

### Summary of Section 95973(a)(2)(C)4.

Existing section 95973(a)(2)(C)4. was modified to include a new U.S. Forest Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board and to support the addition of a potential Compliance Offset Protocol to the list. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation. AB 32 (Health and Safety Code, section 38571) exempts quantification methodologies from the Administrative Procedure Act (Government Code, section 11340 et seq.) (APA), however those elements of the Compliance Offset Protocol are still regulatory. The exemption allows future updates to the quantification methodologies to be made through a public review and Board adoption process but without the need for rulemaking documents. Each Compliance Offset Protocol identifies sections that are considered quantification methodologies and exempt from APA requirements. Any changes to the non-quantification elements of the Compliance Offset Protocols would be considered a regulatory update subject to the full regulatory development process pursuant to the APA.

#### Rationale for Section 95973(a)(2)(C)4.

This change is necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions. The quantification methodology update incorporates the latest data from the U.S. Forest Service and makes minor corrections and clarifications. . More detail on this update can be found in appendix E of this Staff Report.

### Summary for Section 95973(a)(2)(D)

New section 97973(a)(2)(D) was added to explain how an Offset Project Operator or Authorized Project Designee can transition an existing offset project to a new versions of the Compliance Offset Protocol.

# Rationale for Section 95973(a)(2)(D)

This change is necessary to support the potential adoption of new Compliance Offset Protocols by the Board and provide flexibility for Offset Project Developers or Authorized Project Designees to update their projects to the new version of the Compliance Offset Protocols.

# Summary for Section 95973(a)(2)(E)

New section 97973(a)(2)(E) was added to require that an offset project meet all the requirements for the protocol version that the project was originally listed under or for the version to which the project transitioned.

# Rationale for Section 95973(a)(2)(E)

This change is necessary to support the potential adoption of new Compliance Offset Protocols by the Board and provide clarity on which requirements apply to an offset project when there are several versions of Compliance Offset Protocols for that project type.

# Summary for Section 95973(a)(2)(F)

New section 97973(a)(2)(F) was added to clarify which version of a Compliance Offset Protocol must be used throughout the Regulation when the use of a Compliance Offset Protocol is required.

# Rationale for Section 95973(a)(2)(F)

This change is necessary to clarify which version of the Compliance Offset Protocol must be used by the Offset Project Operator or Authorized Project Designee. The Offset Project Operator or Authorized Project Designee must use the version of the protocol that they listed under or transitioned to whenever the Regulation calls for the use of a Compliance Offset Protocol.

# Section 95975. Listing of Offset Projects Using ARB Compliance Offset Protocols.

### Summary of Section 95975(e)

Existing section 95975(e) was modified to clarify which version of the Compliance Offset Protocol should be used for listing.

#### Rationale for Section 95975(e)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The most recent version of the protocol must be used when listing new projects.

#### Summary of Section 95975(e)(1)

Existing section 95975(e)(1) was modified to include the new Ozone Depleting Substances Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board and remove the existing version which Offset Project Operators and Authorized Project Designees will no longer be able to list under after the adoption of an updated version of the Compliance Offset Protocol.

#### Rationale for Section 95975(e)(1)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions.

#### Summary of Section 95975(e)(2)

Existing section 95975(e)(2) was added to include the new Livestock Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board and remove the existing version which Offset Project Operators and Authorized Project Designees will no longer be able to list under after the adoption of an updated version of the Compliance Offset Protocol.

#### Rationale for Section 95975(e)(2)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions.

#### Summary of Section 95975(e)(4)

Existing section 95975(e)(4) is modified to include the new U.S. Forest Projects Compliance Offset Protocols that staff is proposing to be adopted by the Board and remove the existing version which Offset Project Operators and Authorized Project Designees will no longer be able to list under after the adoption of a new version.

### Rationale for Section 95975(e)(4)

This change was necessary to clarify that an Offset Project Operator or Authorized Project Designee must list under the most recent version of the protocol in the Regulation. The U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

# Section 95976. Monitoring, Reporting, and Record Retention Requirements for Offset Projects.

# Summary of Section 95976(c)

Existing section 95976(c) was modified to clarify which version of the Compliance Offset Protocol must be used for determining the monitoring requirements.

### Rationale for Section 95976(c)

This change is necessary to clarify which version of the Compliance Offset Protocol must be used by the Offset Project Operator or Authorized Project Designee. The Offset Project Operator or Authorized Project Designee must use the version of the protocol that they listed under or transitioned to whenever the Regulation calls for the use of a Compliance Offset Protocol.

### Summary of Section 95976(c)(1)

Existing section 95976(c)(1) was modified to include the new Ozone Depleting Substances Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

### Rationale for Section 95976(c)(1)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions.

# Summary of Section 95976(c)(2)

Existing section 95976(c)(2) was added to include the new Livestock Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

### Rationale for Section 95976(c)(2)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. ARB will insert the date of adoption if the Board approves the proposed protocol revisions. The protocol was updated to include the latest data from the U.S. Environmental Protection agency as well as provide minor corrections and clarifications. More detail on this update can be found in appendix C of this Staff Report.

#### Summary of Section 95976(c)(4)

Existing section 95976(c)(4) was modified to include a new U.S. Forest Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

#### Rationale for Section 95976(c)(4)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation. More detail on these updates can be found in appendix E of this Staff Report.

#### Summary of Section 95976(d)

Existing section 95976(d) was modified to clarify which version of the Compliance Offset Protocol must be used for determining the monitoring requirements.

#### Rationale for Section 95976(d)

This change is necessary to clarify which version of the Compliance Offset Protocol must be used by the Offset Project Operator or Authorized Project Designee. The Offset Project Operator or Authorized Project Designee must use the version of the protocol that they listed under or transitioned to whenever the Regulation calls for the use of a Compliance Offset Protocol.

#### Summary of Section 95976(d)(1)

Existing section 95976(d)(1) was modified to include the new Ozone Depleting Substances Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

#### Rationale for Section 95976(d)(1)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board.

#### Summary of Section 95976(d)(2)

Existing section 95976(d)(2) was added to include the new Livestock Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

#### Rationale for Section 95976(d)(2)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board.

#### Summary of Section 95976(d)(4)

Existing section 95976(d)(4) was modified to include a U.S. Forest Projects Compliance Offset Protocol that staff is proposing to be adopted by the Board.

#### Rationale for Section 95976(d)(4)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

### Section 95983. Forestry Offset Reversals

#### Summary of Section 95983(a)(1)

Existing section 95983(a)(1) was modified to include the U.S. Forest Projects Compliance Offset Protocols that have been adopted by the Board.

#### Rationale for Section 95983(a)(1)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The updated U.S. Forest Protocol includes quantification

methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation. The Offset Project Operator or Authorized Project Designee must use the protocol version in place at the time of listing or transition.

## Section 95985. Invalidation of ARB Offset Credits

#### Summary of Section 95985(b)(1)(B)5.a.

Existing section 95985(b)(1)(B)5.a. was modified to reference the section which first identifies the Compliance Offset Protocol.

#### Rationale for Section 95985(b)(1)(B)5.a.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. This clarifies that all versions of a protocol are subject to the invalidation provisions of the Regulation.

### Section 95990. Recognition of Early Action Offset Credits

#### Summary of Section 95990(c)(5)(D)

Existing section 95990(c)(5)(D) was modified to incorporate the reversal risk rating calculation from the most current version of the U.S. Forest Offset Protocol.

#### Rationale for Section 95990(c)(5)(D)

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation

#### Summary of Section 95990(i)(1)(D)2.

Existing section 95990(i)(1)(D)2. was modified to incorporate the reversal risk rating calculation from the most current version of the U.S. Forest Offset Protocol.

### Rationale for Section 95990(i)(1)(D)2.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

## Summary of Section 95990(i)(1)(D)2.a.

Existing section 95990(i)(1)(D)2.a. was modified to incorporate the reversal risk rating calculation from the most current version of the U.S. Forest Offset Protocol.

### Rationale for Section 95990(i)(1)(D)2.a.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

#### Summary of Section 95990(i)(1)(D)2.b.

Existing section 95990(i)(1)(D)2.b. was modified to incorporate the reversal risk rating calculation from the most current version of the U.S. Forest Offset Protocol.

### Rationale for Section 95990(i)(1)(D)2.b.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

### Summary of Section 95990(i)(1)(D)3.a.

Existing section 95990(i)(1)(D)3.a. was modified to incorporate the reversal risk rating calculation from the most current version of the U.S. Forest Offset Protocol.

### Rationale for Section 95990(i)(1)(D)3.a.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

### Summary of Section 95990(i)(1)(D)3.b.

Existing section 95990(i)(1)(D)3.b. was modified to incorporate the reversal risk rating calculation from the most current version of the U.S. Forest Offset Protocol.

#### Rationale for Section 95990(i)(1)(D)3.b.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

#### Summary of Section 95990(i)(1)(D)4.

Existing section 95990(i)(1)(D)4. was modified to include all U.S. Forest Projects Compliance Offset Protocols adopted by the Board.

#### Rationale for Section 95990(i)(1)(D)4.

This change was necessary to support the potential adoption of updated Compliance Offset Protocols by the Board.

#### Summary of Section 95990(i)(1)(D)5.

Existing section 95990(i)(1)(D)5. was modified to include all U.S. Forest Projects Compliance Offset Protocols that have been adopted by the Board.

#### Rationale for Section 95990(i)(1)(D)5.

This change was necessary to support the potential adoption of updated Compliance Offset Protocols by the Board.

### Summary of Section 95990(i)(1)(H).

Existing section 95990(i)(1)(H) was modified to require transitioning early action offset projects under the Climate Action Reserve Forest Project Protocol version 2.1 to use the most recent version of the U.S. Forest Projects Compliance Offset Protocol.

# Rationale for Section 95990(i)(1)(H).

This change was necessary to support the adoption of an updated Compliance Offset Protocol by the Board. The new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

# Summary of Section 95990(i)(1)(H)1.

Existing section 95990(i)(1)(H)1. was modified to add the new U.S. Forest Projects Compliance Offset Protocols as eligible methods for quantifying any additional offset credits based on a re-accounting of the project baseline when transitioning an early action offset project under the Climate Action Reserve Forest Project Protocol version 2.1 to the most recent version of the U.S. Forest Projects Compliance Offset Protocol.

## Rationale for Section 95990(i)(1)(H)1.

This change was necessary to support the potential adoption of an updated Compliance Offset Protocol by the Board. The first new U.S. Forest Protocol only includes quantification methodology changes to the existing U.S. Forest Protocol (2011). The quantification methodology changes to the Compliance Offset Protocol U.S. Forest Projects will be incorporated by reference into proposed amendments to the Cap-and-Trade Regulation. This incorporation makes the offset protocol document an enforceable regulation.

### Summary of Section 95990(k)(1)(A)

Existing section 95990(k)(1)(A) was modified to describe how an early action offset project under the Climate Action Reserve U.S. Livestock Project Protocol versions 1.0 through 3.0 can transition to the most recent version of the Livestock Projects Compliance Offset Protocol.

### Rationale for Section 95990(k)(1)(A)

This change was necessary to support the potential adoption of updated Compliance Offset Protocols by the Board.

# Summary of Section 95990(k)(1)(C)

Existing section 95990(k)(1)(C) was modified to describe how an early action offset project under the Climate Action Reserve U.S. Ozone Depleting Substances Project Protocol version 1.0 can transition to the most recent version of the Ozone Depleting Substances Compliance Offset Protocol.

### Rationale for Section 95990(k)(1)(C)

This change was necessary to support the potential adoption of updated Compliance Offset Protocols by the Board.

### Summary of Section 95990(k)(1)(D)

Existing section 95990(k)(1)(D) was modified to describe how an early action offset project under the Climate Action Reserve Forest Project Protocol version 2.1 can transition to the most recent version of the U.S. Forest Projects Compliance Offset Protocol.

### Rationale for Section 95990(k)(1)(D)

This change was necessary to support the potential adoption of updated Compliance Offset Protocols by the Board.

### Summary of Section 95990(k)(1)(E)

Existing section 95990(k)(1)(E) was modified to describe how an early action offset project under the Climate Action Reserve Forest Project Protocol version 3.0 through 3.2 can transition to the most recent version of the U.S. Forest Projects Compliance Offset Protocol.

### Rationale for Section 95990(k)(1)(E)

This change was necessary to support the potential adoption of updated Compliance Offset Protocols by the Board.

# **VIII. REFERENCES**

# CITED REFERENCES

California Air Resources Board (2001), Policies and Actions for Environmental Justice <u>http://www.arb.ca.gov/ch/programs/ej/ejpolicies.pdf</u>

California Air Resources Board (2007). Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, California Air Resources Board. <u>http://www.arb.ca.gov/regact/2007/ghg2007/frofinoal.pdf</u>

California Air Resources Board (2008), Climate Change Scoping Plan: A Framework for Change. <u>http://www.arb.ca.gov/cc/scopingplan/document/adopted\_scoping\_plan.pdf</u>

California Air Resources Board (2010a), Rulemaking To Consider The Adoption Of A Proposed California Cap On Greenhouse Gas Emissions And Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm</u>

California Air Resources Board (2010b), Proposed Regulation to Implement the Capand-Trade Program Staff Report: Initial Statement of Reasons (ISOR). <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capisor.pdf</u>

California Air Resources Board (2010c), Proposed Regulation to Implement the Capand-Trade Program Staff Report: Initial Statement of Reasons (ISOR) Appendix D. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capv2appd.pdf</u>

California Air Resources Board (2010d), Proposed Regulation to Implement the Capand-Trade Program Staff Report: Initial Statement of Reasons (ISOR) Appendix E Setting the Program Emissions Cap. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capv3appe.pdf</u>

California Air Resources Board (2010e), Proposed Regulation to Implement the Capand-Trade Program Staff Report: Initial Statement of Reasons (ISOR) Appendix N. Economic Analysis. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capv4appn.pdf</u>

California Air Resources Board (2010f), Proposed Regulation to Implement the Capand-Trade Program Staff Report: Initial Statement of Reasons (ISOR) Appendix O. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capv5appo.pdf</u>

California Air Resources Board (2010g), Proposed Regulation to Implement the Capand-Trade Program Staff Report: Initial Statement of Reasons (ISOR) Appendix P. Co-Pollutant Emissions Assessment.

http://www.arb.ca.gov/regact/2010/capandtrade10/capv6appp.pdf

California Air Resources Board (2010h), Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions. Final Regulation Order. http://www.arb.ca.gov/regact/2010/ghg2010/mrrfro.pdf

California Air Resources Board (2010i), Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear Final Regulation Order. <u>http://www.arb.ca.gov/regact/2010/sf6elec/completesf6.pdf</u>

California Air Resources Board (2010j), Staff Report: Initial Statement of Reasons for Rulemaking, Revisions to the Regulation for Mandatory Reporting of Greenhouse Gas Emissions.

http://www.arb.ca.gov/regact/2010/ghg2010/ghgisor.pdf

California Air Resources Board (2011a), California's Cap-and-Trade Program Final Statement of Reasons (FSOR). <u>http://www.arb.ca.gov/regact/2010/capandtrade10/fsor.pdf</u>

California Air Resources Board (2011b), California's Cap-and-Trade Program Supplement to the Final Statement of Reasons (FSOR). <u>http://www.arb.ca.gov/regact/2010/capandtrade10/suppfsor.pdf</u>

California Air Resources Board (2011c), California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Final Regulation Order. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/finalrevfro.pdf</u>

California Air Resources Board (2011d), Adaptive Management Plan for the Cap-and-Trade Regulation.

http://www.arb.ca.gov/cc/capandtrade/adaptive\_management/plan.pdf

California Air Resources Board (2011e), Compliance Offset Protocol Ozone Depleting Substances Projects. Adopted: October 2011. <u>http://www.arb.ca.gov/regact/2010/capandtrade10/copodsfin.pdf</u>

California Air Resources Board (2011f), Compliance Offset Protocol Livestock Projects. Adopted: October 2011.

http://www.arb.ca.gov/regact/2010/capandtrade10/coplivestockfin.pdf

California Air Resources Board (2012a), Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions Staff Report: Initial Statement of Reasons.

http://www.arb.ca.gov/regact/2012/capandtrade12/isormainfinal.pdf

California Air Resources Board (2012b), Amendments to California's Cap-and-Trade Program Final Statement of Reasons (FSOR). http://www.arb.ca.gov/regact/2012/capandtrade12/fsor.pdf California Air Resources Board (2013a), Amendments to California's Cap-and-Trade Program Final Statement of Reasons (FSOR) (Linkage). http://www.arb.ca.gov/regact/2012/capandtrade12/linkfsor.pdf

California Air Resources Board (2013b). Addendum to the Final Statement of Reasons for Rulemaking 2013 Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms.

http://www.arb.ca.gov/regact/2013/capandtrade13/ctfsoradd.pdf

California Air Resources Board (2013c). Topics Subject to Potential Regulatory Amendments California Cap-and-Trade Regulation (2013). http://www.arb.ca.gov/cc/capandtrade/2013summary.pdf

California Air Resources Board (2013d). Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Staff Report: Initial Statement of Reasons. http://www.arb.ca.gov/regact/2013/capandtrade13/capandtrade13isor.pdf

California Air Resources Board (2014a), First Update to the Climate Change Scoping Plan: Building on the Framework. http://www.arb.ca.gov/cc/scopingplan/2013 update/first update climate change scopi ng plan.pdf

California Air Resources Board (2014b), Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Final Statement of Reasons (FSOR).

http://www.arb.ca.gov/regact/2013/capandtrade13/ctfsor.pdf

Christensen, J.H., B. Hewitson, A. Busuioc, A. Chen, X. Gao, I. Held, R. Jones, R.K. Kolli, W.-T. Kwon, R. Laprise, V. Magaña Rueda, L. Mearns, C.G. Menéndez, J. Räisänen, A. Rinke, A. Sarr and P. Whetton, 2007: Regional Climate Projections. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Climate Action Team (2010), Biennial Report http://www.energy.ca.gov/2010publications/CAT-1000-2010-004/CAT-1000-2010-004.PDF

EEI (2005). After the Disaster: Utility Restoration Cost Recovery. Edison Electric Institute (EEI), Washington, District of Columbia, 27. Accessed 02 September 2009. Emanuel, K, Sundararajan, R., & Williams, J. (2008). Hurricanes and global warmingresults from downscaling IPCC AR4 simulations. *Bull Am Meteorol Soc, 89*(3):347–367.

Füssel, H.M. (2009). An updated assessment of the risks from climate change based on research published since the IPCC Fourth Assessment Report. *Climatic Change, 97*, 469–482.

Pederson, G.T., Graumlich, L.J., Fagre, D.B., Kipfer, T., & Muhlfeld, C.C. (2010). A century of climate and ecosystem change in Western Montana: what do temperature trends portend? *Climatic Change, 98*, 133–154.

Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition. California Energy Commission, Efficiency and Renewable Energy Division. Publication Number: CEC-300-2013-005-ED7-CMF Available at: <u>http://www.energy.ca.gov/2013publications/CEC-300-2013-005/CEC-300-2013-005-ED7-CMF.pdf</u>