Appendix D:

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.

Since approval of the 2012 amendments to the Cap-and-Trade Regulation relating to implementation and linkage, three subsequent public Board hearings have addressed ongoing program development. At the September 2012 and October 2012 Board hearings, the Board provided direction to ARB staff in the form of two Board Resolutions. Board Resolution 12-51 and Board Resolution 12-33 directed staff to analyze and, if necessary, propose amendments relating to resource shuffling, legacy contracts, combined heat and power, emissions leakage, allowance allocation to universities, cost containment, product-based benchmarks, and waste-to-energy facilities. In addition, Board Resolutions 11-32 and 12-33 also directed ARB staff to reconsider leakage risk determinations, the allowance allocation approach, and product benchmarks, as necessary. In response to these Board directives, staff began to identify and assess areas of the Regulation that might require amendments. A full list of topics for the proposed regulatory amendments, including those proposed as a result of Board direction through Resolutions, was initially described in the public document *Topics Subject to Potential Regulatory Amendments California Cap-and- Trade Regulation.* This document was posted on the Cap-and-Trade webpage for public review in May 2013 to allow for stakeholder comments and feedback early in the regulatory process.[1]

Starting in late 2012, staff held public workshops focused on specific topics that are the subject of the proposed amendments. 10 public workshops were held in 2012 and 2013 to present the proposed amendments and solicit public and stakeholder feedback. These are identified below:

- August 19, 2013: Proposed Draft Compliance Offset Protocol Workshop
- August 13, 2013: Public Workshop on Refineries and Related Industries
- July 18, 2013: Public Workshop on Proposed Amendments to the California Cap-and-Trade Program
- June 25, 2013: Public Workshop on Compliance Retirement, Market-Related Reporting, and Cost Containment

[1] http://www.arb.ca.gov/cc/capandtrade/2013summary.pdf

- June 3, 2013: Natural Gas Supplier Workshop
- May 1, 2013: Public Meeting to Discuss Universities, Legacy Contracts, and 'But for CHP' under the Cap-and-Trade Program
- March 28, 2013: Public Workshop on Addition of New Offset Protocols to the California Greenhouse Gas Cap-and-Trade Program
- January 25, 2013: Public Information Sharing in California's Cap-and-Trade Program
- August 28, 2012: Cap-and-Trade Technical Workshop to Discuss Refinery Benchmark in the Second Compliance Period
- July 30, 2012: Cap-and-Trade Technical Workshop to Discuss Emissions Leakage

ARB made available documents and presentations 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 all workshops and public meetings using the Cap-and-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

ARB accepted public comments on the draft proposed regulatory amendments presented at the July 18, 2013 workshop that are the basis for the proposed amendments discussed in this Staff Report until August 9, 2013. ARB received more than 75 written comments on the discussion draft amendments and met regularly with stakeholders to discuss concerns and recommendations. ARB also considered other comments provided to ARB outside of workshops.

The proposed amendments provide additional process for clarity in implementation, address stakeholder concerns on cost containment, extend the transition assistance for covered entities in the program and allow ARB to better oversee and implement the regulation. In a separate rulemaking action, ARB's mandatory reporting regulation is being amended to support some of the proposed changes to the Cap-and-Trade program.

Public Documents for Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance

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AUGUST 19, 2013 – PROPOSED DRAFT COMPLIANCE OFFSET PROTOCOL WORKSHOP

Agenda

- Status update on proposed cap-and-trade amendments
- Status update on Rice Cultivation Protocol
- Proposed Mine Methane Capture Protocol
  - Mine Methane Capture Protocol development
  - Presentation of Mine Methane Capture Protocol discussion draft
  - Environmental analysis of Mine Methane Capture Protocol
  - Proposed early action methodologies for Mine Methane Capture
  - Timeline for Mine Methane Capture Protocol
  - Questions/discussion of Mine Methane Capture Protocol

Update on Proposed Cap-and-Trade Amendments

- Public workshop on the proposed regulatory amendments - July 18, 2013
- A discussion draft available at: http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm
- Amended regulation and proposed Compliance Offset Protocol available in September 2013
- Consideration expected at the October 2013 Board hearing

Status Update on Rice Cultivation Protocol

- Staff has been working with stakeholders to develop a Rice Cultivation protocol
- Issues identified during stakeholder process:
  - Early drainage activities effects on:
    - Late broods
    - Mosquito abatement
    - Wetlands
  - Rice straw baling effects on:
    - Bird populations

Status Update on Rice Cultivation Protocol (2)

- Rice Cultivation Protocol expected Board consideration spring 2014
- Continued technical workgroup meetings
- Release of discussion draft of protocol
- Additional time for DNDC calibration and validation
- DNDC contract
- Interested parties should contact Yachun Chow, Staff Lead for Rice Cultivation Protocol at ychow@arb.ca.gov

Mine Methane Capture Protocol Development

- Process for the review and approval of Compliance Offset Protocols available at: http://www.arb.ca.gov/cc/capandtrade/compliance-offset-protocol-process.pdf.
- A public workshop to announce the development of new Compliance Offset Protocols - March 28, 2013
- Four MMC technical working group meetings held in the spring and summer
- Meeting materials are available at: http://www.arb.ca.gov/cc/capandtrade/protocols/mmcprotocol.htm.

Technical Working Group Issues

- Assessment of natural gas pipeline injection business-as-usual
- Feasibility of projects on federal lands
- Abandoned mine baseline emissions
- Spatial and temporal boundaries
- Non-methane hydrocarbons
- Project expansion

Offset Criteria

- Real, additional, quantifiable, permanent, verifiable, and enforceable
- Cannot credit covered activities (i.e., fossil fuel or electricity displacement)
- Must meet the same accuracy requirements as all other reported GHG emissions
- Participation in offset projects is voluntary, but once participating, project activities and participants are subject to all regulatory requirements

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Purpose of MMC Protocol

- 69.9 MMtCO2e mining methane emissions in 2011
- Nearly 12% of U.S. anthropogenic methane emissions and 1% of total U.S. GHG emissions
- Incentivize the reduction of GHG emissions from mining activities in the U.S.
- Quantify GHG emission reductions from capture and destruction of methane resulting from mining operations

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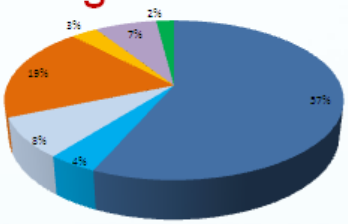
U.S. Mining Emissions (2011)



- Active Underground Coal Mines: VAM Vented (39.5 MMtCO2e)
- Active Underground Coal Mines: Drainage Vented (2.9 MMtCO2e)
- Active Underground Coal Mines: Post-mining (5.8 MMtCO2e)
- Active Surface Coal Mines: Vented (13.0 MMtCO2e)
- Active Surface Coal Mines: Post-mining (2.1 MMtCO2e)
- Abandoned Underground Coal Mines: Vented (4.9 MMtCO2e)
- Active Trona Mines: Vented (1.7 MMtCO2e)

Adapted from data presented in Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2011 (U.S. EPA 2013) and *Overview of Proposed Abandoned Mine Methane Protocol* (Ruby Canyon Engineering, Inc. 2013)

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MMC Protocol Structure

- Activity types:
  - Active underground mine ventilation air methane activities
  - Active underground mine methane drainage activities
  - Active surface mine methane drainage activities
  - Abandoned underground mine methane recovery activities
- VAM and drainage activities may operate as a single project or independently
- An abandoned underground mine project may include multiple mines

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MMC Project Definition

- Credits issued for reductions from the installation and operation of a device or set of devices that capture and destroy methane
- Eligible methane sources and spatial boundaries
- Eligible end-use management options
- GHG assessment boundaries
- Quantification methodologies

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General MMC Project Eligibility Criteria

- All coal and trona mines within the U.S.
- Offset Project Operator must demonstrate their legal authority to implement the offset project
- Continuous monitoring, annual reporting, and verification
- The reporting period: 1 year
- The crediting period: 10 years
- Offset project commencement date must be after December 31, 2006

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Activities Excluded from the MMC Protocol

- Virgin coal bed methane (CBM) capture
- Mountaintop removal
- CO_2, steam, or any other fluid/gas to enhance mine methane drainage
- Flooded abandoned mines
- Destruction devices operating prior to project commencement
- Ventilation shafts, wells, and boreholes connected to non-qualifying devices prior to project commencement

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Additionality

- Activities must not be required by law, regulation, or any legally binding mandates
- Must be activities that would not otherwise occur in a conservative business-as-usual scenario
- The MMC Protocol assesses additionality in two ways:
  - Legal Requirements Test
  - Performance Standard Evaluation

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Additionality (2)

- Legal Requirements Test
  - No regulations currently exist requiring methane destruction
- Performance Standard Evaluation
  - Establishes a threshold that is better than a conservative estimate of business-as-usual
  - End-use management options for captured methane have been deemed eligible or ineligible

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Eligible End Use Management Options

	Active Surface Mine Methane Drainage	Abandoned Underground Mine Methane Recovery	Active Underground Mine VAM	Active Underground Mine Methane Drainage
Oxidation	X	X	X	X
Production of transportation fuel (LNG/CNG)	X	X	Not feasible	X
Generation of thermal power and electricity	X	X	Not feasible	X
Flaring	X	X	Not feasible	X
Injection into natural gas pipeline	X	X	Not feasible	Not additional
Other, not listed	X	X	X	X

Quantification Methodology

- Emission reductions are the difference between project emissions and baseline emissions
- Project emissions take into account:
  - CO_2 from additional energy consumed to capture and destroy CH_4
  - CO_2 from the combustion of CH_4
  - Uncombusted CH_4 sent to destruction device
- Baseline emissions take into account:
  - CO_2 from the combustion of CH_4
  - CH_4 from the release of mine methane

Quantification Methodology (2)

- Active underground and surface mine baseline CH_4 emissions are the difference between the amount of methane sent to destruction devices in the project and baseline scenarios
- Abandoned mine baseline CH_4 emissions are the lesser of:
  - Calculated by a hyperbolic emissions rate decline curve
  - Measured methane sent to all qualifying and non-qualifying devices
- CH_4 still vented in the project scenario is not accounted for since it is vented in both scenarios

Hyperbolic Emissions Rate Decline Curve

- Decline curve is directly related the gassiness of the mine
- Relies upon the following inputs:
  - Time since mine closure
  - Methane emissions rate at time of closure
  - Default decline curve coefficients for sealed or venting mine, or mine-specific coefficients
- Emission reductions from abandoned mines must be ≤ the baseline emissions for that reporting period and are subject to an uncertainty deduction

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Leakage

- Considered leakage from an increase in coal production due to reduced constraints on mining as a result of an increase in drainage capacity
- Identified in the U.N.'s Clean Development Mechanism methodology
- Not applicable to mines in the United States
  - Coal revenue sufficient to incentivize drainage
  - Primarily an issue in China where gob wells are rare

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Environmental Analysis

- Environmental analysis (EA) for proposed actions which may result in significant environmental impacts
  - Prepared according to requirements of ARB's certified program under the California Environmental Quality Act (CEQA)
- The environmental analysis will be included as a chapter within the Staff Report and covers:
  - Foreseeable Methods of Compliance
  - Potential for Adverse Impacts
  - Feasible Mitigation Measures

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Environmental Analysis (2)

- The CEQA checklist is used to identify and evaluate potential impacts to environmental resource areas based on foreseeable methods of compliance
- Foreseeable methods of compliance include:
  - Gas Extraction
  - Gas Capture
  - Gas Transport
  - Gas Processing
  - Gas Destruction
  - Methane Destruction Monitoring

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Proposed Early Action Methodologies for MMC

- Proposing early action methodologies:
  - Climate Action Reserve's Coal Mine Methane Project Protocol version 1.0, October 7, 2009
  - Climate Action Reserve's Coal Mine Methane Project Protocol version 1.1, October 26, 2012
- ARB offset credits may be issued to projects that achieved verified greenhouse gas emission reductions between January 1, 2005 and December 31, 2014 using these methodologies
- Proposed amendments extend the early action listing deadline for MMC projects to January 1, 2015

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Timeline for Mine Methane Capture Protocol

- August 19, 2013: Workshop to present discussion draft
- August 22, 2013: Informal comments on discussion draft must be received by close of business
- September 4, 2013: Public release of staff report, including an environmental analysis, and proposed Compliance Offset Protocol for Board consideration
- September 9, 2013: 45-day comment period begins
- October 24 & 25, 2013: Board hearing in Sacramento
- If adopted, effective date will be in 2014

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Seeking Comment and Input

- Parameters for determining that a CBM well would be shut in as a result of encroaching mining
- Maximum on the absolute minimum (horizontal) distance for wells that are mined past rather than through
- ASTM methodology for measuring nitrogen and oxygen levels in mine gas to demonstrate that a pre-mining surface well is mined through
- How to deal with uncertainty in abandoned mine baseline calculation
- Scope and content of environmental analysis

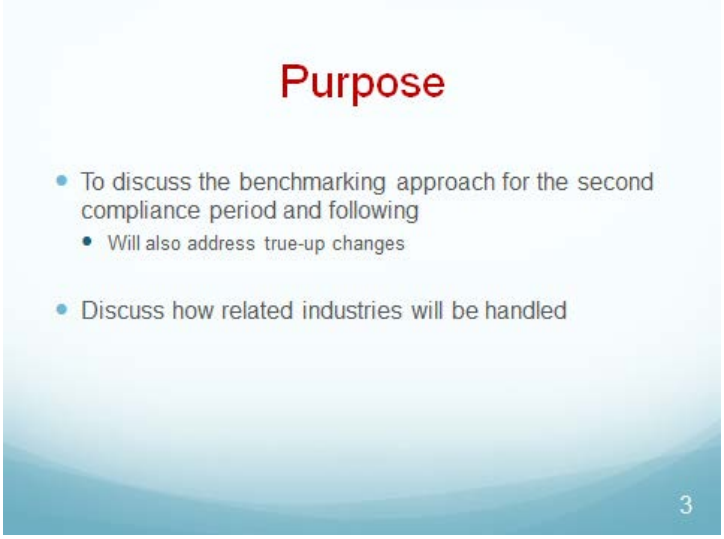
Program Contacts

Please provide comments and input by close of business on Thursday, August 22, 2013 to:

- Jessica Bede, Staff Lead, Coal Mine Methane Protocol
  - jbede@arb.ca.gov
  - 916-324-0311
- Greg Mayeur, Manager, Program Operations Section
  - gmayeur@arb.ca.gov
  - 916-324-8031

Questions and Discussion

AUGUST 13, 2013 – PUBLIC WORKSHOP ON REFINERIES AND RELATED INDUSTRIES WORKSHOP



Outline

- Purpose
- Status Update
- Product Based Benchmarking Principles
- Current Regulation and Options
- True-Up
- Solomon Presentation
- Discussion

4

Cap and Trade Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance began January 1, 2013
- Linkage Amendments approved April 19, 2013
- Investment Plan released May 14, 2013
- Additional Amendments and Offset Protocols
  - Anticipated Board consideration Fall 2013

5

General Product-Based Allocation Equation

- Refineries will receive allocations using the same basic equation used for other sectors
  - A_t = output* B* AF_t * c_t
- Benchmark B is set as
  - 0.9 * (emissions/output) or
  - Best in class if no one refinery meets the above
- One Product – One Benchmark
  - Plan to keep this approach unless data shows need for different approach

6

Benchmark Treatment of Electricity and Steam

- Carbon cost recovery approach
- Steam consumed on-site included
  - Both produced or purchased from a third-party
- Electricity
  - Generated on-site and consumed: included
  - Generated on-site and sold: excluded
  - Purchased from grid and third party CHP: excluded
    - CPUC proceedings for compensation
- Propose that bottoming cycle cogeneration electricity sales will not be subtracted off to maintain consistency with MRR and CPUC decisions

7

Current Second Compliance Period Approach

- Carbon Dioxide Weighted Tonne (CWT)
  - Provides a carbon dioxide weighted factor (CWF) for each process unit normalized to the distillation unit
  - Throughput provided by unit and multiplied by CWF
  - Added for total CWT
  - Benchmark based on total emissions and total CWT for refineries
- Benchmark from EU
  - Based on EU data
  - Different stringency level

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Option 1: Adjust CWT

- Base allocation on CWT with a few amendments:
  - Modify or add CA specific factors
  - Modify for treatment of electricity and steam
  - Modify stringency
  - Hydrogen included
  - Calcining excluded

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Option 2: CWB-Based Allocation with Adjustment

- Base allocation on Complexity Weighted Barrel (WSPA-CWB), with a few amendments:
  - Exclude units not currently in CA or expected in CA
  - Similar process units grouped to keep incentive to use more efficient process
  - Treat steam and electricity consistently with other benchmarks
  - Other factors with no direct product are excluded
    - Adjustment for off-sites
    - Electricity use adjustment
  - Hydrogen included
  - Calcining excluded

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Principles for Amending Process Unit Factors for CA CWB

- Group together units which accomplish the same purpose, i.e. have very similar inputs and outputs
  - Maintain incentive to use most efficient technology available
  - Use average of factors for each unit, weighted by CA volumes
  - For example, the "Reformer" unit already averages across distinct technologies
- Keep separate units which have substantially different inputs or outputs
  - Provide appropriate allocation for the production accomplished by different processes
  - For example, atmospheric and vacuum distillation have different output mixes despite both being distillers

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Tentative CWB Process Units for Use in CA – Feedback Needed

Coker	Delayed Coker
	Fluid Coker
	Flexicoker
Fluid Catalytic Cracking	Fluid Catalytic Cracking
	Mild Residual FCC
	Other FCC
	Thermal Cracking
Hydrogen Production	Hydrogen Production: Steam-Methane Reforming
	Hydrogen Production: Steam-Naphtha Reforming
	Hydrogen Production: Partial Oxidation

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Potential Adjustment of Process Unit Factors

- Most process unit factors are similar under CWT and CWB
- Sulfur is substantially different
  - 140, measured in light tons, under WSPA-CWB
  - 18.6, measured in metric tons, under EU-CWT
- ARB proposes to use sulfur factor based on EU-CWT
  - **Unless there are data available to support this difference**
- Most other units do not show such dramatic differences between WSPA-CWB and EU-CWT factors

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Option 3: CWB-Based Allocation without Grouping

- Base allocation on WSPA-CWB, with a few amendments:
  - Exclude units not currently in CA or expected in CA
  - Treat steam and electricity consistently with other benchmarks
  - Other factors with no direct product are excluded
    - Adjustment for off-sites
    - Electricity use adjustment
  - Hydrogen included
  - Calcining excluded
  - Still need explanation for sulfur unit differences

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Calcining

- Separate benchmark
- 90% or best-in-class
- Process-based cap decline factors

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Hydrogen

- Gaseous Hydrogen included in the CWB or CWT approach
- Liquid hydrogen proposed to have a separate benchmark based on quantity sold

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True-Up in Other Sectors

- Product based benchmarks in other sectors receive a true-up in allocation once actual output is available
- Initial allocation is based on data two years prior to the vintage year of the allowance allocation
  - Nov 2012 – allocation for year 2013, based on 2011 verified data
  - Nov 2014 – allocation for year 2015, based on 2013 verified data with a true-up for the difference between 2011 and 2013 product data
- The purpose is to account for what the facility should have gotten if ARB had the information at the time of allocation

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Refinery True-Up Proposal

- Adding a true-up for non-EII facilities

$$\text{minimum}\,(O_{X,t-2} * B_R * c_{\,t-2} * AF_{R,t-2}, AE_X * c_{\,t-2} * AF_{R,t-2}) - A_{X,t-2}$$

- Modifying the EII facility true-up to be consistent with other sectors and the purpose of the true-up (to update for actual information on production)
  - Making the credit and debit equation the same
  - Adding in a sector allocation true-up
    - Considering an alternate possibility of not modifying distribution factor Df – only the sector allocation SA and fraction F

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ARB Has Conducted Preliminary Analysis Using the Survey Data

- Equity for smaller refineries
  - Analysis does *not* suggest that smaller refineries and larger refineries systematically would get a different % of the allowances they need
- Considered whether EU process units not in CWB may be worth adding
- CWT v. CWB effect for individual refineries
  - Mostly similar, but some substantial changes; SD= 23% change
  - Still considering which of these are due to data anomalies
- Compared to CWT, some refineries will benefit and some will lose

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Additional Analysis

- Correlation(GHG emissions, EU-CWT) = 0.84
- Correlation(GHG emissions, WSPA-CWB) = 0.99

(note these would be slightly different without data problems)

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Next Steps

- Comments due by August 26th 5 PM at: http://www.arb.ca.gov/cc/capandtrade/comments.htm
- Board Hearing October 24-25th for both MRR and Cap and Trade
- MRR amendments would need to be in effect Jan. 1, 2014

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Contacts

- Cap and Trade Regulation – Refineries

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  ehlavka@arb.ca.gov (916) 322-7648

  Elizabeth Scheehle, manager

  escheehl@arb.ca.gov (916) 322-7630

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Complexity-Weighted Barrels Methodology for California Refineries (CA-CWB)

For CARB Refinery Workshop
August 13, 2013

About Solomon Associates

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Comprehensive	metrics across every area
Normalized	allowing better comparisons
Accurate	validated by industry professionals
Unique Methodologies	provides focus

Value

- "Fair, Independent, and Accurate" representation of client performance
- Objective standard for comparison to regional peer plants or other peers according to market mission
- Sufficient detail and tools to identify and quantify improvement opportunities
- Ability to compare all plants within company – resource allocation

Analyzing Performance Around the Globe

Fuels Refining
Worldwide

Gas Processing Plants
New Worldwide Study

Pipelines
Liquid Pipeline
NG Pipelines
Terminals

Lubes
Worldwide

Butadiene
Worldwide

Power
Coal
Gas & Oil
CCGT & Cogen

Styrene
Worldwide

Olefins
Worldwide

Upstream – NEW!
Worldwide

Companies in more than
70 countries rely
on Solomon; our metrics have become the standard for gauging performance around the world.

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Working with our clients and regulatory agencies

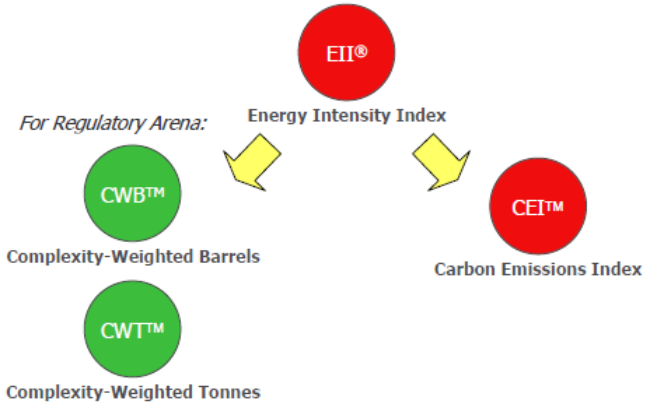
- Helping to find a way forward around the world
  - Europe
  - Japan
  - Netherlands
  - Canada
  - New Zealand
  - California
  - US EPA ENERGY STAR
  - Other countries
- Customized approaches to meet specific needs of each region

CWB and CWT

Both of the Complexity-Weighted Barrels (CWB™) and the Complexity-Weighted Tonnes (CWT™) methodologies are proprietary to Solomon.

Solomon grants the client (typically a regional Industry Association) limited rights to use or promote the methodology for the purpose of GHG regulations, under a Consulting Services Agreement.

Solomon Metrics for GHG Benchmarking



(1) "Benchmark": Divisor in an intensity metric, GHG emissions per CWB or CWT
(2) "Cap and Trade": Basis for allocating emission allowances

What are CWB and CWT?

CWB – an equivalent *barrel* divisor for refinery throughput indicative of GHG emissions potential based on a refinery's configuration and processing complexity

CWT – an equivalent *tonne* divisor for refinery throughput indicative of GHG emissions potential based on a refinery's configuration and processing complexity

CWB vs CWT

CWB

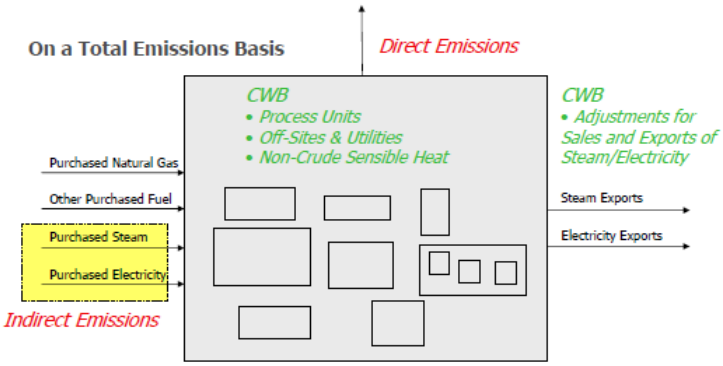
- Prototype developed during an *Emissions Allocation Study* for WSPA around 2008
- For North American refineries measuring throughput in barrels

CWT

- Developed for CONCAWE under the EU GHG Emissions Trading Scheme (ETS) Directive ("EU-CWT") in 2008–2009
- Customized for EU average fuel mix and feed characteristics
- Simplified vs CWB by combining a number of process unit categories and process types
- Can be modified for refineries in other regions using metric units of measure

Solomon CWB Boundary

On a Total Emissions Basis



CWB Boundary Conditions

Process CWB

Process CWB
= Σ (Daily Throughput Barrel [1] × CWB Factor)

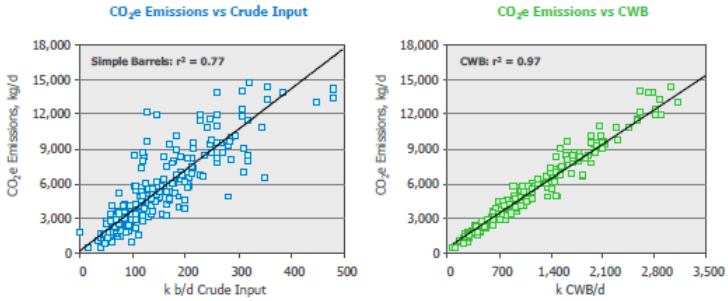
$$\text{CWB Factor } \textit{for Unit (or Unit Grouping) X} = \frac{\text{CO}_2\text{e Emissions Standard per barrel throughput}^1 \textit{ for Unit (or Unit Grouping) X}}{\text{CO}_2\text{e Emissions Standard per barrel throughput}^1 \textbf{ for CDU}}$$

- Accounts for Refinery Process Unit Configuration and Complexity
- Approx. 60 CWB Factors

[1] Units of Measure – Certain process units are based on product, rather than feed (throughput); alternative units are used in accordance with industry convention (e.g., short tons of product for coke calciner)

CWB Robustness in Allocating Emissions

Simple Barrels vs CWB



(Operating Year 2010; Approx. 200 OECD Refineries)

Summary

- CWB is robust to benchmark a wide range of refining process configurations
- CWB can be applied to big or small refineries
- CWB can be customized for
  - Boundary Conditions (Total vs Direct-Only Emissions)
  - Reference Fuel
  - Streamlining – Combination of process units
- "Atypical" refineries may be handled separately
  - Extremely small sizes
  - Performing predominantly specialized functions (such as bitumen production or lube oil manufacture)
  - Atypical product slate (such as <40% light products including motor gasoline, aviation gasoline, kerosene, and diesel/heating oil)

Contact Information

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DISCUSSION DRAFT JULY 2013

Adopt Subchapter 10 Climate Change, Article 5, Sections 95800 to 96023, Title 17, California Code of Regulations, to read as follows:

Article 5: CALIFORNIA CAP ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE MECHANISMS

Note: The pre-existing regulation text is set forth below in normal type. The staff draft amendments are shown in <u>underline</u> to indicate additions and ~~strikeout~~ to indicate deletions.

Subarticle 1: Table of Contents has been omitted.

Subarticle 2: Purpose and Definitions

§ 95801. Purpose.

The purpose of this article is to reduce emissions of greenhouse gases associated with entities identified in this article through the establishment, administration, and enforcement of the California Greenhouse Gas Cap-and-Trade Program by applying an aggregate greenhouse gas allowance budget on covered entities and providing a trading mechanism for compliance instruments.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95802. Definitions.

(a) Definitions. For the purposes of this article, the following definitions shall apply:

(1) "Account Viewing Agent" means an individual authorized by a registered entity to view all the information on the entity's accounts contained in the tracking system.

(2) "Accounts Administrator" means the entity acting in the capacity to administer the accounts identified in this regulation. This may be ARB, or could be an entity ARB enters into a contract with.

(3) “Activity-Shifting Leakage” means increased GHG emissions or decreased GHG removals that result from the displacement of activities or resources from inside the offset project’s boundary to locations outside the offset project’s boundary as a result of the offset project activity.

(4) “Additional” means, in the context of offset credits, greenhouse gas emission reductions or removals that exceed any greenhouse gas reduction or removals otherwise required by law, regulation or legally binding mandate, and that exceed any greenhouse gas reductions or removals that would otherwise occur in a conservative business-as-usual scenario.

(5) "Adjusted Clinker and Mineral Additives Produced" means annual amount of clinker and mineral additives (limestone and gypsum) derived by using the following metric: Adjusted clinker and mineral additives produced = clinker produced x (1 + (limestone and gypsum consumed)/clinker consumed)).

(6) “Adverse Offset Verification Statement” means an Offset Verification Statement rendered by a verification body attesting that the verification body cannot say with reasonable assurance that the submitted Offset Project Data Report is free of an offset material misstatement, or that it cannot attest that the Offset Project Data Report conforms to the requirements of this article or applicable Compliance Offset Protocol.

(7) “Air Dried Ton of Paper” means paper with 6 percent moisture content.

(X) Air Pollution Control District” or “Air Quality Management District” or “Air District” means any district created or continued in existence pursuant to the provisions of Part 3 (commencing with Section 40000) of Division 26 of the Health and Safety Code.

(8) “Allowance” means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent.

(9) “Alternate Account Representative” means an individual designated pursuant to section 95832 to take actions on an entity’s accounts.

(10) “Annual Allowance Budget” means the number of California Greenhouse Gas Allowances associated with one year of the Cap-and-Trade Program in subarticle 6.

(11) "API Gravity" means a scale used to reflect the specific gravity (SG) of a fluid such as crude oil, water, or natural gas. The API gravity is calculated as [(141.5/SG) - 131.5], where SG is the specific gravity of the fluid at 60°F, where API refers to the American Petroleum Institute.

(12) “ARB Offset Credit” means a tradable compliance instrument issued by ARB that represents a GHG reduction or GHG removal enhancement of one metric ton of CO_2e. The GHG reduction or GHG removal enhancement must be real, additional, quantifiable, permanent, verifiable, and enforceable.

(13) "Asphalt" means a dark brown-to-black, cement-like material obtained by petroleum processing and containing bitumens as the predominant component. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

(14) “Asset Controlling Supplier” means any entity that owns or operates inter-connected electricity generating facilities or serves as an exclusive marketer for these facilities even though it does not own them, and is assigned a supplier-specific identification number and system emission factor by ARB for the wholesale electricity procured from its system and imported into California. <u>Asset Controlling Suppliers are considered specified sources.</u>

(15) “Assigned Emissions” or “Assigned Emissions Level” means an amount of emissions, in CO_2e, assigned to the reporting entity by the Executive Officer under the requirements of section 95103(g) of MRR.

(16) “Associated Gas” or “Produced Gas” means a natural gas that is produced in association with the production of crude oil.

(17) “Auction” means the process of selling California Greenhouse Gas

Allowances, along with allowances from External Greenhouse Gas Emissions Trading Systems with which California has linked its Cap-and-Trade Program pursuant to subarticle 12, by offering them up for bid, taking bids, and then distributing the allowances to winning bidders.

(18) “Auction Purchase Limit” means the limit on the number of allowances one entity or a group of affiliated entities may purchase from the share of allowances sold at a quarterly auction.

(19) “Auction Reserve Price” means a price for allowances below which bids at auction would not be accepted.

(20) “Auction Settlement Price” means the price announced by the Auction Administrator at the conclusion of each quarterly auction. It is the price which all successful bidders will pay for their allowances and also the price to be paid to those entities which consigned allowances to the auction.

(21) “Authorized Project Designee” means an entity authorized by an Offset Project Operator to act on behalf of the Offset Project Operator.

(22) "Aviation Gasoline" means a complex mixture of volatile hydrocarbons, with or without additives, suitably blended to be used in aviation reciprocating engines. Specifications are as stated in MRR, section 95102(a).

(23) “Balancing Authority” means the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a balancing authority area, and supports interconnection frequency in real time.

(24) “Balancing Authority Area” means the collection of generation, transmission, and loads within the metered boundaries of a balancing authority. A balancing authority maintains load-resource balance within this area.

(25) “Banking” means the holding of compliance instruments from one compliance period for the purpose of sale or surrender in a future compliance period.

(26) "Barrel of Oil Equivalent," with respect to reporting of oil and gas production, means barrels of crude oil produced, plus associated gas produced converted to barrels at 5.8 MMbtu per barrel.

(27) “Biodiesel” means a diesel fuel substitute produced from nonpetroleum renewable resources that meet the registration requirements for fuels and fuel additives established by the U.S. Environmental Protection Agency under section 211 of the Clean Air Act. It includes biodiesel that is all of the following:

(A) Registered as a motor vehicle fuel or fuel additive under 40 CFR Part 79;

(B) A mono-alkyl ester;

(C) Meets American Society for Testing and Material designation ASTM D 6751-08 (*Standard Specification for Biodiesel Fuel Blendstock (B100) for Middle Distillate Fuels, 2008*);

(D) Intended for use in engines that are designated to run on conventional diesel fuel; and

(E) Derived from nonpetroleum renewable resources.

(28) “Biogas” means gas that is produced from the breakdown of organic material in the absence of oxygen. Biogas is produced in processes including anaerobic digestion, anaerobic decomposition, and thermochemical decomposition. These processes are applied to biodegradable biomass materials, such as manure, sewage, municipal solid waste, green waste, and waste from energy crops, to produce landfill gas, digester gas, and other forms of biogas.

(29) “Biomass” means non-fossilized and biodegradable organic material originating from plants, animals, and microorganisms, including products, by-products, residues, and waste from agriculture, forestry, and related industries as well as the non-fossilized and biodegradable

organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material. For the purpose of this article, biomass includes both California Renewable Portfolio Standard (RPS) eligible and non-eligible biomass as defined by the California Energy Commission.

(30) "Biomass-Derived Fuels" or "Biomass Fuels" or "Biofuels" means fuels derived from biomass.

(31) "Biomethane" means biogas that meets pipeline quality natural gas standards.

(32) "Blendstocks" are petroleum products used for blending or compounding into finished motor gasoline. These include RBOB (reformulated blendstock for oxygenate blending) and CBOB (conventional blendstock for oxygenate blending), but exclude oxygenates, butane, and pentanes plus.

(33) "Budget Year" means the annual allowance budget assigned pursuant to subarticle 6.

(34) "Business-as-Usual Scenario" means the set of conditions reasonably expected to occur within the offset project boundary in the absence of the financial incentives provided by offset credits, taking into account all current laws and regulations, as well as current economic and technological trends.

(35) "Calcium Ammonium Nitrate Solution" means calcium nitrate that contains ammonium nitrate and water. Calcium ammonium nitrate solution is generally used as agricultural fertilizer.

(36) "Calendar Year" means the time period from January 1 through December 31.

(37) "California Balancing Authority" shall have the same meaning ascribed in section 95102(a) of MRR.

(38) "California Electricity Transmission and Distribution System" means the combination of the entire infrastructure within California that delivers

electric power from electric generating facilities to end users over single or multiple paths.

(39) “California Greenhouse Gas Emissions Allowance” or “CA GHG Allowance” means an allowance issued by ARB and equal to up to one metric ton of CO_2 equivalent.

(40) “Cap” means the total number of California GHG Allowances that the Executive Officer issues over a given period of time.

(41) “Cap-and-Trade Program” means the requirements of this article.

(42) “Carbon Dioxide” or “CO_2” means the most common of the primary greenhouse gases, consisting on a molecular level of a single carbon atom and two oxygen atoms.

(43) “Carbon Dioxide Equivalent" or “CO_2 equivalent” or “CO_2e” means the number of metric tons of CO_2 emissions with the same global warming potential as one metric ton of another greenhouse gas. Global warming potential values shall be determined consistent with the definition of Carbon Dioxide Equivalent in MRR section 95102(a).

(44) “Carbon Stock” means the quantity of carbon contained in an identified GHG reservoir.

(45) “Carbon Dioxide Supplier” or “CO_2 Supplier” means (a) facilities with production process units located in the State of California that capture a CO_2 stream for purposes of supplying CO_2 for commercial applications or that capture the CO_2 stream in order to utilize it for geologic sequestration where capture refers to the initial separation and removal of CO_2 from a manufacturing process or any other process, (b) facilities with CO_2 production wells located in the State of California that extract or produce a CO_2 stream for purposes of supplying CO_2 for commercial applications or that extract a CO_2 stream in order to utilize it for geologic sequestration, (c) exporters (out of the State of California) of bulk CO_2 that export CO_2 for the purpose of geologic sequestration, (d) exporters (out of the State of California) of bulk CO_2 that export for purposes other than geologic sequestration,

and (e) importers (into the State of California) of bulk CO_2. This source category is focused on upstream supply and is not intended to place duplicative compliance obligations on CO_2 already covered upstream. The source category does not include transportation or distribution of CO_2; purification, compression, or processing of CO_2; or on-site use of CO_2 captured on-site.

(46) "Carbon Dioxide Weighted Tonne" or "CO_2 Weighted Tonne" or "CWT" means a metric created to evaluate the greenhouse gas efficiency of petroleum refineries and related processes stated in units of metric tons. The CWT value for an individual refinery is calculated using actual refinery throughput to specified process units and emission factors for these process units. The emission factor is denoted as the CWT factor and is representative of the greenhouse gas emission intensity at an average level of energy efficiency, for the same standard fuel type for each process unit for production, and for average process emissions of the process units across a sample of refineries. Each CWT factor is expressed as a value weighted relative to crude distillation.

(47) "Cement" means a building material that is produced by heating mixtures of limestone and other minerals or additives at high temperatures in a rotary kiln to form clinker, followed by cooling and grinding with blended additives. Finished cement is a powder used with water, sand, and gravel to make concrete and mortar.

(48) "Cogeneration" means an integrated system that produces electric energy and useful thermal energy for industrial, commercial, or heating and cooling purposes, through the sequential or simultaneous use of the original fuel energy. Cogeneration must involve onsite generation of electricity and useful thermal energy and some form of waste heat recovery. Some examples of cogeneration include: (a) a gas turbine or reciprocating engine generating electricity by combusting fuel, which then uses a heat recovery unit to capture useful heat from the exhaust

stream of the turbine or engine; (b) Steam turbines generating electricity as a byproduct of steam generation through a fired boiler; (c) Cogeneration systems in which the fuel input is first applied to a thermal process such as a furnace and at least some of the heat rejected from the process is then used for power production. For the purposes of this article, a combined-cycle power generation unit, where none of the generated thermal energy is used for industrial, commercial, or heating and cooling purposes (these purposes exclude any thermal energy utilization that is either in support of or a part of the electricity generation system), is not considered a cogeneration unit.

(49) “Cold Rolling of Steel" means the changes in the structure and shape of steel through rolling, hammering or stretching the steel at a low temperature.

(50) “Cold Rolled and Annealed Steel Sheet" means steel that is cold rolled and then annealed. Cold rolling means the changes in the structure and shape of steel through rolling, hammering or stretching the steel at a low temperature. Annealing is a heat or thermal treatment process by which a previously cold-rolled steel coil is made more suitable for forming and bending. The steel sheet is heated to a designated temperature for a sufficient amount of time and then cooled.

(51) “Combustion Emissions” means greenhouse gas emissions occurring during the exothermic reaction of a fuel with oxygen.

(52) “Compliance Account” means an account created by the accounts administrator for a covered entity or opt-in covered entity with a compliance obligation, to which the entity transfers compliance instruments to meet its annual and triennial compliance obligations.

(53) Compliance Instrument” means an allowance or offset, issued by ARB or by an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12, or sector-based offset credit. Each compliance

instrument can be used to fulfill a compliance obligation equivalent to up to one metric ton of CO_2e.

(54) "Compliance Obligation" means the quantity of verified reported emissions or assigned emissions for which an entity must submit compliance instruments to ARB.

(55) "Compliance Offset Protocol" means an offset protocol adopted by the Board.

(56) "Compliance Period" means the three-year period for which the compliance obligation is calculated for covered entities except for the first compliance period. The compliance obligation for the first compliance period only considers emissions from data years of 2013 and 2014.

(XX) "Compressed natural gas" or "CNG" means natural gas in high-pressure containers that is highly compressed (though not to the point of liquefaction), typically to pressures ranging from 2900 to 3600 psi.

(57) "Conflict of Interest" means, for purposes of this article, a situation in which, because of financial or other activities or relationships with other persons or organizations, a person or body is unable or potentially unable to render an impartial Offset Verification Statement of a potential client's Offset Project Data Report, or the person or body's objectivity in performing offset verification services is or might be otherwise compromised.

(58) "Conservative" means, in the context of offsets, utilizing project baseline assumptions, emission factors, and methodologies that are more likely than not to understate net GHG reductions or GHG removal enhancements for an offset project to address uncertainties affecting the calculation or measurement of GHG reductions or GHG removal enhancements.

(59) "Consumer Price Index for All Urban Consumers" means a measure that examines the changes in the price of a basket of goods and

services purchased by urban consumers, and is published by the U.S. Bureau of Labor Statistics.

(60) "Container Glass Pulled" means the quantity of glass removed from the melting furnace in the container glass manufacturing process where "container glass" is defined as glass products used for packaging.

(61) “Counterparty” means the opposite party in a bilateral agreement, contract, or transaction.

(62) “Covered Entity” means an entity within California that has one or more of the processes or operations and has a compliance obligation as specified in subarticle 7 of this regulation; and that has emitted, produced, imported, manufactured, or delivered in 2009 or any subsequent year more than the applicable threshold level specified in section 95812(a) of this rule.

(63) “Crediting Baseline” refers to the reduction of absolute GHG emissions below the business-as-usual scenario or reference level across a jurisdiction’s entire sector in a sector-based crediting program after the imposition of greenhouse gas emission reduction requirements or incentives.

(64) “Crediting Period” means the pre-determined period for which an offset project will remain eligible to be issued ARB offset credits or registry offset credits for verified GHG emission reductions or GHG removal enhancements.

(65) “Data Year” means the calendar year in which emissions occurred.

(66) “Deforestation” means direct human-induced conversion of forested land to non-forested land.

(67) “Delivered Electricity” means electricity that was distributed from a PSE and received by a PSE or electricity that was generated, transmitted, and consumed.

(68) “Diesel Fuel” means Distillate Fuel No. 1 and Distillate Fuel No. 2, including dyed and non-taxed fuels.

(69) “Direct Delivery of Electricity” or “directly delivered” has the same meaning as ascribed to MRR section 95102(a).

(70) “Direct GHG Emission Reduction” means a GHG emission reduction from applicable GHG emission sources, GHG sinks, or GHG reservoirs that are under control of the Offset Project Operator or Authorized Project Designee.

(71) “Direct GHG Removal Enhancement” means a GHG removal enhancement from applicable GHG emission sources, GHG sinks, or GHG reservoirs under control of the Offset Project Operator or Authorized Project Designee.

(72) “Distillate Fuel No. 1” has a maximum distillation temperature of 550 F at the 90 percent recovery point and a minimum flash point of 100 F and includes fuels commonly known as Diesel Fuel No. 1 and Fuel Oil No. 1, but excludes kerosene. This fuel is further subdivided into categories of sulfur content: High Sulfur (greater than 500 ppm), Low Sulfur (less than or equal to 500 ppm and greater than 15 ppm), and Ultra Low Sulfur (less than or equal to 15 ppm).

(73) “Distillate Fuel No. 2” has a minimum and maximum distillation temperature of 540 F and 640 F at the 90 percent recovery point, respectively, and includes fuels commonly known as Diesel Fuel No. 2 and Fuel Oil No. 2. This fuel is further subdivided into categories of sulfur content: High Sulfur (greater than 500 ppm), Low Sulfur (less than or equal to 500 ppm and greater than 15 ppm), and Ultra Low Sulfur (less than or equal to 15 ppm).

(74) “Distillate Fuel No. 4” is a distillate fuel oil made by blending distillate fuel oil and residual fuel oil, with a minimum flash point of 131 F.

(75) “Distillate Fuel Oil” means a classification for one of the petroleum fractions produced in conventional distillation operations and from crackers and hydrotreating process units. The generic term “distillate fuel oil” includes kerosene, kerosene-type jet fuel, diesel fuels (Diesel

Fuels No. 1, No. 2, and No. 4), and fuel oils (Fuel Oils No. 1, No. 2, and No. 4).

(XX) “District Heating Facility” means a facility that, at a central plant, produces hot water, steam and/or chilled water that is distributed through underground pipes to buildings and facilities connected to the system that are not part of the same facility.

(76) "Dolime" is calcined dolomite.

(77) “Dry Gas” means a natural gas that is produced from gas wells not associated with the production of crude oil.

(78) “Early Action Offset Credit” means a tradable credit issued by an Early Action Offset Program that represents a GHG reduction or GHG removal enhancement equivalent to one metric ton of CO_2e and meets the requirements of section 95990(c).

(79) “Early Action Offset Program” means a program that meets the requirements of section 95990(a) and is approved by ARB.

(80) “Early Action Offset Project” means an offset project that is registered with an Early Action Offset Program and has been issued early action offset credits.

(XX) “Early action reporting period” means a reporting period in which GHG reductions and/or GHG removal enhancements are reported under an Early Action Offset Program.

(81) “Early Action Verification Report” means a verification report submitted to an Early Action Offset Program that covers GHG reductions or GHG removal enhancements achieved by an early action offset project over a specific time period.

(XX) “EIM Participating Resource Scheduling Coordinator” means an EIM Entity Scheduling Coordinator, EIM Entity, or a third-party designated by the EIM Entity, that is certified by the ISO and that enters into a pro forma EIM Participating Resource Scheduling Coordinator Agreement, under which it is responsible for meeting the requirements specified in CAISO Tariff Section 291 on behalf of the EIM Entity.

(82) "Electric Arc Furnace" or "EAF" means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. Furnaces that continuously feed direct-reduced iron ore pellets as the primary source of iron are not affected facilities within the scope of this definition.

(83) “Electrical Distribution Utility(ies)” means an entity that owns and/or operates an electrical distribution system, including: 1) a public utility as defined in the Public Utilities Code section 216 (referred to as an Investor Owned Utility or IOU); or 2) a local publicly owned electric utility (POU) as defined in Public Utilities Code section 224.3 or 3) an Electrical Cooperative (COOP) as defined in Public Utilities Code section 2776, that provides electricity to retail end users in California.

(84) “Electricity Generating Facility” means a facility that generates electricity and includes one or more generating units at the same location.

(85) “Electricity Importers” deliver imported electricity. For electricity that is scheduled with a NERC E-Tag to a final point of delivery inside the state of California, the electricity importer is identified on the NERC E-Tag as the purchasing-selling entity (PSE) on the last segment of the tag’s physical path with the point of receipt located outside the state of California and the point of delivery located inside the state of California. For facilities physically located outside the state of California with the first point of interconnection to a California balancing authority’s transmission and distribution system when the electricity is not scheduled on a NERC e-Tag, the importer is the facility operator or scheduling coordinator. Federal and state agencies are subject to the regulatory authority of ARB under this article, and include Western Area Power Administration (WAPA), Bonneville Power Administration (BPA) and California Department of Water Resources (DWR). <u>Electricity Importers include EIM Participating Resource</u>

Scheduling Coordinators serving the EIM market whose transactions result in electricity imports into California.

(86) “Eligible Renewable Energy Resource” has the same meaning as defined in Section 399.12 of the Public Utilities Code.

(87) “Emissions” means the release of greenhouse gases into the atmosphere from sources and processes in a facility, including from the combustion of transportation fuels such as natural gas, petroleum products, and natural gas liquids. In the context of offsets, "emissions" means the release of greenhouse gases into the atmosphere from sources and processes within an offset project boundary.

(88) “Emissions Data Report” or “greenhouse gas emissions data report” or “report” means the report prepared by an operator or supplier each year and submitted by electronic means to ARB that provides the information required by MRR.

(89) “Emissions Efficiency Benchmark” or “GHG emissions efficiency benchmark” means a performance standard used to evaluate GHG emissions efficiency between and amongst similar facilities or operations in the same industrial sector.

(90) “End User” means a final purchaser of an energy product, such as electricity, thermal energy, or natural gas not for the purposes of retransmission or resale. In the context of natural gas consumption, an “end user” is the point to which natural gas is delivered for consumption.

(91) “Enforceable” means the authority for ARB to hold a particular party liable and to take appropriate action if any of the provisions of this article are violated.

(92) “Enhanced Oil Recovery” or “EOR” means the use of certain methods such as steam (thermal EOR), water flooding or gas injection into existing wells to increase the recovery of crude oil from a reservoir. In the context of this rule, EOR also applies to injection of critical phase carbon dioxide into a crude oil reservoir to enhance the recovery of oil.

(93) "Enterer" means an entity that imports, into California, motor vehicle fuel, diesel fuel, fuel ethanol, biodiesel, or non exempt biomass-derived fuel or renewable fuel and who is the importer of record under federal customs law or the owner of fuel upon import into California, if the fuel is not subject to federal customs law. Only enterers that import the fuels specified in this definition outside the bulk transfer/terminal system are subject to reporting under the regulation.

(94) "Entity" means a person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, or government agency.

(95) "Environmental Impact Assessment" means a detailed public disclosure statement of potential environmental and socioeconomic impacts associated with a proposed project. Such disclosure is a matter of public record and provides detailed information to public agencies and the general public about the effect that a proposed project is likely to have on the environment and ways in which the significant effects of such a project might be minimized, and to indicate alternatives to such a project.

(XX) "Exchange" means a central marketplace with established rules and regulations where buyers and sellers meet to conduct trades.

(96) "Executive Officer" means the Executive Officer of the California Air Resources Board, or his or her delegate.

(97) "Exported Electricity" shall have the same meaning ascribed in section 95102(a) of MRR.

(98) "External Greenhouse Gas Emissions Trading System" or "External GHG ETS" means an administrative system, other than the California Cap-and-Trade Program, that controls greenhouse gas emissions from sources in its program.

(99) (A) "Facility," unless otherwise specified in relation to natural gas distribution facilities and onshore petroleum and natural gas production facilities as defined in section 95802(a), means any

physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties.

(B) "Facility," with respect to natural gas distribution for the purposes of sections 95150 through 95158 of MRR, means the collection of all distribution pipelines and metering-regulating stations that are operated by a Local Distribution Company (LDC) within the State of California that is regulated as a separate operating company by a public utility commission or that are operated as an independent municipally-owned distribution system.

(C) "Facility," with respect to onshore petroleum and natural gas production for the purposes of sections 95150 through 95158 of MRR, means all petroleum and natural gas equipment on a well-pad or associated with a well pad and CO_2 EOR operations that are under common ownership or common control including leased, rented, or contracted activities by an onshore petroleum and natural gas production owner or operator and that are located in a single hydrocarbon basin as defined in section 95102(a) of MRR. Where a person or entity owns or operates more than one well in a basin, then all onshore petroleum and natural gas production equipment associated with all wells that the person or entity owns or operates in the basin would be considered one facility.

(100) "Fiberglass Glass Pulled" means the quantity of glass removed from the melting furnace in the fiberglass manufacturing process where "Fiberglass" is defined as insulation products for thermal, acoustic and fire applications manufactured using glass.

(101) “Final Point of Delivery” means the sink specified on the NERC e-Tag, where defined points have been established through the NERC Registry. When NERC e-Tags are not used to document electricity deliveries, as may be the case within a balancing authority, the final point of delivery is the location of the load. Exported electricity is disaggregated by the final point of delivery on the NERC e-Tag.

(102) “First Deliverer of Electricity” or “First Deliverer” means the owner or operator of an electricity generating facility in California or an electricity importer.

(103) “First Point of Receipt” means the generation source specified on the NERC e-Tag, where defined points have been established through the NERC Registry. When NERC e-Tags are not used to document electricity deliveries, as may be the case within a balancing authority, the first point of receipt is the location of the individual generating facility or unit, or group of generating facilities or units. Imported electricity and wheeled electricity are disaggregated by the first point of receipt on the NERC e-Tag.

(104) “Flash Point” of a volatile liquid is the lowest temperature at which it can vaporize to form an ignitable mixture in air.

(105) "Flat Glass Pulled" means the quantity of glass removed from the melting furnace in the flat glass manufacturing process where "flat glass" is defined as glass initially manufactured in a sheet form.

(106) “Fluorinated Greenhouse Gas” means sulfur hexafluoride (SF6), nitrogen trifluoride (NF3), and any fluorocarbon except for controlled substances as defined at 40 CFR Part 82, subpart A and substances with vapor pressures of less than 1 mm of Hg absolute at 25 C. With these exceptions, “fluorinated GHG” includes any hydrofluorocarbon;

any perfluorocarbon; any fully fluorinated linear, branched, or cyclic alkane, ether, tertiary amine, or aminoether; any perfluoropolyether; and any hydrofluoropolyether.

(107) “Fluting” means the center segment of corrugated shipping containers, being faced with linerboard (testliner/kraftliner) on both sides. Fluting covers mainly papers made from recycled fiber but this group also holds paperboard that is made from chemical and semichemical pulp.

(108) “Forest Buffer Account” means a holding account for ARB offset credits issued to forest offset projects. It is used as a general insurance mechanism against unintentional reversals, for all forest offset projects listed under a Compliance Offset Protocol.

(109) “Forest Owner” means the owner of any interest in the real (as opposed to personal) property involved in a forest offset project, excluding government agency third party beneficiaries of conservation easements. Generally, a Forest Owner is the owner in fee of the real property involved in a forest offset project. In some cases, one entity may be the owner in fee while another entity may have an interest in the trees or the timber on the property, in which case all entities or individuals with interest in the real property are collectively considered the Forest Owners, however, a single Forest Owner must be identified as the Offset Project Operator.

(110) “Fossil Fuel” means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

(111) “Fractionates” means the process of separating natural gas liquids into their constituent liquid products.

(112) “Fuel” means solid, liquid, or gaseous combustible material. Volatile organic compounds burned in destruction devices are not fuels unless they can sustain combustion without use of a pilot fuel, and such destruction does not result in a commercially useful end product.

(113) “Fuel Analytical Data” means data collected about fuel usage (including mass, volume, and flow rate) and fuel characteristics (including heating value, carbon content, and molecular weight) to support emissions calculation.

(114) “Fuel supplier” means a supplier of petroleum products, a supplier of biomass-derived transportation fuels, a supplier of natural gas, or a supplier of liquid petroleum gas as specified in MRR.

(115) “Fugitive Emissions” means those emissions which are unintentional and could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

(XX) “Futures” means an agreement to purchase or sell a commodity for delivery in the future at a price that is determined at the initiation of the contract and that obligates each party to fulfill the contracts at a specified price.

(116) "Galvanized Steel Sheet" means steel coated with a thin layer of zinc to provide corrosion resistance for such products as garbage cans, storage tanks, or framing for buildings. Sheet steel normally must be cold-rolled prior to the galvanizing stage.

(117) “Gas” means the state of matter distinguished from the solid and liquid states by: relatively low density and viscosity; relatively great expansion and contraction with changes in pressure and temperature; the ability to diffuse readily; and the spontaneous tendency to become distributed uniformly throughout any container.

(118) "Gaseous Hydrogen" means hydrogen in a gaseous state.

(119) “Geologic Sequestration” means the process of injecting CO_2 captured from an emissions source into deep subsurface rock formations for long-term storage.

(120) “Global Warming Potential” or “GWP” means the ratio of the time-integrated radiative forcing from the instantaneous release of one kilogram of a trace substance relative to that of one kilogram of a reference gas, i.e., CO_2.

(121) “Greenhouse Gas” or “GHG” means carbon dioxide (CO_2), methane (CH_4), nitrogen trifluoride ($NF_{3)}$, nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated greenhouse gases as defined in this section.

(122) “Greenhouse Gas Emission Reduction” or “GHG Emission Reduction” or “Greenhouse Gas Reduction” or “GHG Reduction” means a calculated decrease in GHG emissions relative to a project baseline over a specified period of time.

(123) “Greenhouse Gas Emissions Source” or “GHG Emissions Source” means, in the context of offset credits, any type of emitting activity that releases greenhouse gases into the atmosphere.

(124) “Greenhouse Gas Removal” or “GHG Removal” means the calculated total mass of a GHG removed from the atmosphere over a specified period of time.

(125) “Greenhouse Gas Removal Enhancement” or “GHG Removal Enhancement” means a calculated increase in GHG removals relative to a project baseline.

(126) “Greenhouse Gas Reservoir” or “GHG Reservoir” means a physical unit or component of the biosphere, geosphere, or hydrosphere with the capability to store, accumulate, or release a GHG removed from the atmosphere by a GHG sink or a GHG captured from a GHG emission source.

(127) “Greenhouse Gas Sink” or “GHG Sink” means a physical unit or process that removes a GHG from the atmosphere.

(128) “HD-5” or “Special Duty Propane” has the same meaning as contained in MRR.

(129) “HD-10” has the same meaning as contained in MRR.

(130) "Heavy Crude Oil" means a category of crude oil characterized by relatively high viscosity, a higher carbon-to-hydrogen ratio, and a relatively higher density having an API gravity of less than 20.

(131) “Hold” in the context of a compliance instrument, is to have the serial number assigned to that instrument registered into an account assigned to an entity that is registered into the California Cap-and-Trade Program or an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12, or an account under the control of the Executive Officer.

(YYY) “Holding Account” or “General Holding Account” means an account created for each covered entity, opt-in covered entity, or voluntarily associated entity to hold compliance instruments.

(132) "Horsepower Tested" means the total horsepower of all turbine and generator set units tested prior to sale.

(133) "Hot Rolled Steel Sheet" means steel produced from the rolling mill that reduces a hot slab into a coil of specified thickness at a relatively high temperature.

(134) “Hydrocarbon” means a chemical compound containing predominantly carbon and hydrogen.

(135) “Hydrofluorocarbon” or “HFC” means a class of GHGs consisting of hydrogen, fluorine, and carbon.

(136) “Hydrogen” means the lightest of all gases, occurring chiefly in combination with oxygen in water; it exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

(137) “Imported Electricity” means electricity generated outside the state of California and delivered to serve load located inside the state of California. Imported electricity includes electricity delivered across balancing authority areas from a first point of receipt located outside the state of California, to the first point of delivery located inside the state of California, having a final point of delivery in California. Imported electricity includes electricity imported into California over a multi-jurisdictional retail provider’s transmission and distribution system, or electricity imported into the state of California from a facility

or unit physically located outside the state of California with the first point of interconnection into a California balancing authority's transmission and distribution system. Imported electricity includes electricity that is a result of cogeneration located outside the state of California. Imported electricity does not include electricity wheeled through California, defined pursuant to MRR section 95102(a). Imported electricity does not include electricity imported into the CAISO balancing authority area to serve retail customers that are located within the CAISO balancing authority area, but outside the state of California. Imported Electricity does not include electricity imported into California by an Independent System Operator to meet NERC Reliability Standard EOP-002.

(YYY) "Industrial Sector Legacy Contract Counterparty" means an entity that has been identified under industrial allocation pursuant to Table 8-1 to receive allowance allocation, and has a contract to purchase Qualified Thermal Output and/or electricity from a Legacy Contract.

(138) "Initial Crediting Period" means the crediting period that begins with the date that the first GHG emission reductions or GHG removal enhancements took place according to the first Positive Offset or Qualified Positive Offset Verification Statement that is received by ARB.

(139) "Intentional Reversal" means any reversal caused by a forest owner's negligence, gross negligence, or willful intent, including harvesting, development, and harm to the area within the offset project boundary.

(140) "Intrastate Pipeline" means any pipeline wholly within the state of California that is not regulated as a public utility gas corporation by the California Public Utility Commission (CPUC), not a publicly owned natural gas utility and is not regulated as an interstate pipeline by the Federal Energy Regulatory Commission.

(141) "Interstate Pipeline" means any entity that owns or operates a natural gas pipeline delivering natural gas to consumers in the state and is

subject to rate regulation by the Federal Energy Regulatory Commission.

(142) “Inventory Position” means a contractual agreement with the terminal operator for the use of the storage facilities and terminaling services for the fuel.

(143) “Issue” or “Issuance” means, in the context of offset credits, the creation of ARB offset credits or registry offset credits equivalent to the number of verified GHG reductions or GHG removal enhancements for an offset project over a specified period of time. In the context of allowances, issue means the placement of an allowance into an account under the control of the Executive Officer.

(144) “Joint Powers Agency(ies)” or “JPA” means an public agency that is formed and created pursuant to the provisions of Government Code sections 6500. et seq.

(145) “Kerosene” is a light petroleum distillate with a maximum distillation temperature of 400 F at the 10-percent recovery point, a final maximum boiling point of 572 F, a minimum flash point of 100 F, and a maximum freezing point of -22 F. Included are No. 1-K and No. 2-K, distinguished by maximum sulfur content (0.04 and 0.30 percent of total mass, respectively), as well as all other grades of kerosene called range or stove oil. Kerosene does not include kerosene-type jet fuel.

(146) "Kerosene-Type Jet Fuel" means a kerosene-based product used in commercial and military turbojet and turboprop aircraft. The product has a maximum distillation temperature of 400 °F at the 10 percent recovery point and a final maximum boiling point of 572 °F. Included are Jet A, Jet A–1, JP–5, and JP–8.

(147) “Lead Verifier” means, for purposes of this article, a person that has met all of the requirements in section 95132(b)(2) of MRR and who may act as the lead verifier of an offset verification team providing offset verification services or as a lead verifier providing an independent review of offset verification services rendered.

(148) "Lead Verifier Independent Reviewer" or "Independent Reviewer" means, for purposes of this article, a lead verifier within a verification body who has not participated in conducting offset verification services for an Offset Project Developer or Authorized Project Designee for the current Offset Project Data Report and who provides an independent review of offset verification services rendered for an Offset Project Developer or Authorized Project Designee as required in section 95977.1(b)(3)(R). The independent reviewer is not required to also meet the requirements for a sector specific or offset project specific verifier.

(YYY) "Legacy Contract" means a written contract or tolling agreement governing the sale of electricity and/or qualified thermal energy from an electric generating facility or cogeneration facility at a price, determined by either a fixed price or price formula, that does not allow for recovery of the costs associated with compliance with this regulation. For purposes of this regulation, legacy contracts exclude contracts with a privately owned utility as defined in the Public Utilities Code section 216 (referred to as an Investor Owned Utility or IOU) for contracts already addressed under the Combined Heat and Power Program Settlement pursuant to CPUC Decision number D-10-12-035, and only include contracts originally executed prior to September 1, 2006, that have remained in effect and have not been amended since September 1, 2006 to change the terms governing the California greenhouse gas emissions responsibility, price or amount of electricity or Qualified Thermal Output sold, or the expiration date. A legacy contract does not apply to opt-in covered entities.

(YYY) "Legacy Contract Emissions" means the emissions calculated, based on a positive or qualified positive emissions data verification statement issued pursuant to MRR, by the Legacy Contract Generator, that are a result of either electricity and/or Qualified Thermal Output sold to a Legacy Contract Counterparty, and calculated pursuant to section

95894(c) of this regulation. Legacy contract emissions do not include emissions that are included in the calculation of cost under the CPUC's Qualifying Facilities and Combined Heat and Power Program Settlement pursuant to CPUC Decision number D-10-12-035.

(YYY) "Legacy Contract Generator" means a covered entity which operates a stand-alone electricity generating unit or a cogeneration facility system and sells electricity or thermal energy pursuant to one or more legacy contracts.

(YYY) "Legacy Contract Qualified Thermal Output" means the thermal energy generated by a cogeneration unit that is sold to specific end-users, and reported pursuant to MRR section 95112(a)(5)(A), and the thermal energy used on-site by industrial processes or operations, and heating and cooling operations, that is not in support of or a part of the electricity generation or cogeneration system and is reported pursuant to MRR section 95112(a)(5)(C). Legacy Contract Qualified Thermal Output also includes any thermal energy generated by equipment that is not an integral part of the cogeneration unit that is provided to a Legacy Contract Counterparty and meets the eligibility requirements in section 95894. Legacy Contract Qualified Thermal Output does not include thermal energy that is vented, radiated, wasted, or discharged before it is utilized at industrial processes or operations.

(149) "Less Intensive Verification" means, for the purposes of this article, the offset verification services provided in interim years between full verifications of an Offset Project Data Report; less intensive verification of an Offset Project Data Report only requires data checks and document reviews of an Offset Project Data Report based on the analysis and risk assessment in the most current sampling plan developed as part of the most recent full offset verification services. This level of verification may only be used if the offset verifier can provide findings with a reasonable level of assurance.

(150) "Light Crude Oil" means a category of crude oil characterized by relatively low viscosity, a lower carbon-to-hydrogen ratio, and a relatively lower density having an API gravity of greater than or equal to 20.

(151) “Limited Use Holding Account” means an account in which allowances are placed after an entity qualifies for a direct allocation under section 95890(b). Allowances placed in this account can only be removed for consignment to the auction pursuant to section 95831(a)(3).

(152) “Linkage” means the approval of compliance instruments from an external greenhouse gas emission trading system (GHG ETS) to meet compliance obligations under this article, and the reciprocal approval of compliance instruments issued by California to meet compliance obligation in an external GHG ETS.

(153) "Liquefied Hydrogen" means hydrogen in a liquid state.

(YYY) “Liquefied natural gas” or “LNG” means natural gas (primarily methane) that has been liquefied by reducing its temperature to -260 degrees Fahrenheit at atmospheric pressure.

(154) “Liquefied Petroleum Gas” or “LPG” means a flammable mixture of hydrocarbon gases used as a fuel. LPG is primarily mixtures of propane, butane, propene (propylene) and ethane. The most common specification categories are propane grades, HD-5, HD-10, and commercial grade propane. LPG also includes both odorized and non-odorized liquid petroleum gas, and is also referred to as propane.

(155) “Listed Industrial Sector” means covered industrial sectors that are eligible for industry assistance specified in Table 8-1 of subarticle 8.

(156) "Long-Term Contract" means a contract for the delivery of electricity entered into before January 1, 2006, for the term of five years or more.

(157) “Mandatory Reporting Regulation” or “MRR” means ARB’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions as set forth in title 17, California Code of Regulations, chapter 1, subchapter 10, article 2 (commencing with section 95100).

(158) “Market Index” means any published index of quantities or prices based on results of market transactions.

(159) “Marketer” means a purchasing-selling entity that delivers electricity and is not a retail provider.

(160) “Market-Shifting Leakage,” in the context of an offset project, means increased GHG emissions or decreased GHG removals outside an offset project’s boundary due to the effects of an offset project on an established market for goods or services.

(161) “Methane” or “CH_4” means a GHG consisting on the molecular level of a single carbon atom and four hydrogen atoms.

(162) “Metric Ton” or “MT” means a common international measurement for mass, equivalent to 2,204.6 pounds or 1.1 short tons.

(163) "Mixed Crude Oil" means a mix of both heavy and light crude oil.

(164) “Monitoring” means, in the context of offset projects, the ongoing collection and archiving of all relevant and required data for determining the project baseline, project emissions, and quantifying GHG reductions or GHG removal enhancements that are attributable to the offset project.

(165) "Motor Gasoline (finished)" has the same definition as MRR.

(166) “Multi-Jurisdictional Retail Provider” means a retail provider that provides electricity to consumers in California and in one or more other states in a contiguous service territory or from a common power system.

(167) “Municipal Solid Waste” or “MSW” means solid-phase household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, non-manufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material

discarded by schools, nonmedical waste discarded by hospitals, material discarded by non-manufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional wastes include yard waste, refuse-derived fuel, and motor vehicle maintenance materials. Insofar as there is separate collection, processing, and disposal of industrial source waste streams consisting of used oil, wood pallets, construction, renovation, and demolition wastes (which includes, but is not limited to, railroad ties and telephone poles), paper, clean wood, plastics, industrial process or manufacturing wastes, medical waste, motor vehicle parts or vehicle fluff, or used tires that do not contain hazardous waste identified or listed under 42 U.S.C. §6921, such wastes are not municipal solid waste. However, such wastes qualify as municipal solid waste where they are collected with other municipal solid waste or are otherwise combined with other municipal solid waste for processing and/or disposal.

(168) “Natural Gas” means a naturally occurring mixture or process derivative of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth’s surface, of which its constituents include methane, heavier hydrocarbons, and carbon dioxide. Natural gas may be field quality (which varies widely) or pipeline quality. For the purposes of this rule, the definition of natural gas includes similarly constituted fuels such as field production gas, process gas, and fuel gas.

(169) “Natural Gas Liquids” or “NGLs”, means those hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption, or other methods. Natural gas liquids can be classified according to their vapor pressures as low (condensate), intermediate (natural gasoline), and high (liquefied petroleum gas) vapor pressure. Generally, such liquids consist of ethane, propane, butanes, pentanes, and higher molecular weight

hydrocarbons. Bulk NGLs refers to mixtures of NGLs that are sold or delivered as undifferentiated product from natural gas processing plants.

(170) “NERC E-tag” means North American Electric Reliability Corporation (NERC) energy tag representing transactions on the North American bulk electricity market scheduled to flow between or across balancing authority areas.

(171) "Nitric Acid" means HNO_3 of 100% purity.

(172) “Non-exempt Biomass derived CO_2” means CO_2 emissions resulting from the combustion of fuel not listed under section 95852.2(a), or that is not verifiable under section 95131(i) of MRR.

(173) “Notice of Delegation” means a formal notice used to delegate authority to make an electronic submission to the accounts administrator.

(174) “Offset Material Misstatement” means a discrepancy, omission, misreporting, or aggregation of the three, identified in the course of offset verification services that leads an offset verification team to believe that an Offset Project Data Report contains errors resulting in an overstatement of the reported total GHG emission reductions or GHG removal enhancements greater than 5.00 percent. Discrepancies, omissions, or misreporting, or an aggregation of the three, that result in an understatement of total reported GHG emission reductions or GHG removal enhancements in the Offset Project Data Report is not an offset material misstatement.

(175) “Offset Project” means all equipment, materials, items, or actions that are directly related to or have an impact upon GHG reductions, project emissions, or GHG removal enhancements within the offset project boundary.

(176) “Offset Project Boundary” is defined by and includes all GHG emission sources, GHG sinks or GHG reservoirs that are affected by an offset project and under control of the Offset Project Operator or Authorized

Project Designee. GHG emissions sources, GHG sinks or GHG reservoirs not under control of the Offset Project Operator or Authorized Project Designee are not included in the offset project boundary.

(177) "Offset Project Commencement" means, unless otherwise specified in a Compliance Offset Protocol, the date of the beginning of construction, work, or installation for an offset project involving physical construction, other work at an offset project site, or installation of equipment or materials. For an offset project that involves the implementation of a management activity, "offset project commencement" means, unless otherwise specified in a Compliance Offset Protocol, the date on which such activity is first implemented.

(178) "Offset Project Data Report" means the report prepared by an Offset Project Operator or Authorized Project Designee each year that provides the information and documentation required by this article or a Compliance Offset Protocol.

(179) "Offset Project Operator" means the entity(ies) with legal authority to implement the offset project.

(180) "Offset Project Registry" means an entity that meets the requirements of section 95986 and is approved by ARB that lists offset projects, collects Offset Project Data Reports, facilitates verification of Offset Project Data Reports, and issues registry offset credits for offset projects being implemented using a Compliance Offset Protocol.

(181) "Offset Protocol" means a documented set of procedures and requirements to quantify ongoing GHG reductions or GHG removal enhancements achieved by an offset project and calculate the project baseline. Offset protocols specify relevant data collection and monitoring procedures, emission factors, and conservatively account for uncertainty and activity-shifting and market-shifting leakage risks associated with an offset project.

(182) “Offset Verification” means a systematic, independent, and documented process for evaluation of an Offset Project Operator’s or Authorized Project Designee’s Offset Project Data Report against ARB’s Compliance Offset Protocols and this article for calculating and reporting project baseline emissions, project emissions, GHG reductions, and GHG removal enhancements.

(183) “Offset Verification Services” means services provided during offset verification as specified in sections 95977.1 and 95977.2, including reviewing an Offset Project Operator’s or Authorized Project Designee’s Offset Project Data Report, verifying its accuracy according to the standards specified in this article and applicable Compliance Offset Protocol, assessing the Offset Project Operator’s or Authorized Project Designee’s compliance with this article and applicable Compliance Offset Protocol, and submitting an Offset Verification Statement to ARB or an Offset Project Registry.

(184) “Offset Verification Statement” means the final statement rendered by a verification body attesting whether an Offset Project Operator’s or Authorized Project Designee’s Offset Project Data Report is free of an offset material misstatement, and whether the Offset Project Data Report conforms to the requirements of this article and applicable Compliance Offset Protocol.

(185) “Offset Verification Team” means all of those working for a verification body, including all subcontractors, to provide offset verification services for an Offset Project Operator or Authorized Project Designee.

(186) “Operational Control” for a facility subject to this article means the authority to introduce and implement operating, environmental, health, and safety policies. In any circumstance where this authority is shared among multiple entities, the entity holding the permit to operate from the local air pollution control district or air quality management district is considered to have operational control for purposes of this article.

(187) “Operator” means the entity, including an owner, having operational control of a facility, or other entity from which an emissions data report is required under article 2, section 95104, title 17, Greenhouse Gas Emissions Data Report. For onshore petroleum and natural gas production, the operator is the operating entity listed on the state well drilling permit, or a state operating permit for wells where no drilling permit is issued by the state.

(188) “Opt-in Covered Entity” means an entity that meets the requirements of 95811 that does not exceed the inclusion thresholds set forth in section 95812 and may elect to voluntarily opt-in to the Cap-and-Trade Program and be willing to be subject to the requirements set forth in this article.

(YYY) “Over-the-Counter” means the trading of carbon compliance instruments, contracts, or other instruments not listed on any exchange.

(189) “Oxidation” means a reaction in which the atoms in an element lose electrons and the valence of the element is correspondingly increased.

(190) “Ozone Depleting Substances” or “ODS” means a compound that contributes to stratospheric ozone depletion.

(191) “Perfluorocarbons” or “PFCs” means a class of greenhouse gases consisting on the molecular level of carbon and fluorine.

(192) “Permanent” means, in the context of offset credits, either that GHG reductions and GHG removal enhancements are not reversible, or when GHG reductions and GHG removal enhancements may be reversible, that mechanisms are in place to replace any reversed GHG emission reductions and GHG removal enhancements to ensure that all credited reductions endure for at least 100 years.

(193) “Permanent Retirement Registry” means the publicly available registry in which the Executive Officer will record the ~~serial numbers of the~~ retired compliance instruments.

(194) “Petroleum” means oil removed from the earth and the oil derived from tar sands, and/or shale.

(195) “Petroleum Refinery” or “Refinery” means any facility engaged in producing gasoline, gasoline blending stocks, naphtha, kerosene, distillate fuel oils, residual fuel oils, lubricants, or asphalt (bitumen) through distillation of petroleum or through re-distillation, cracking, or reforming of unfinished petroleum derivatives. Facilities that distill only pipeline transmix (off-spec material created when different specification products mix during pipeline transportation) are not petroleum refineries, regardless of the products produced.

(196) "Pickled Steel Sheet" means hot rolled steel sheet that is sent through a series of hydrochloric acid baths that remove the oxides.

(197) “Pipeline Quality Natural Gas” means, for the purpose of calculating emissions under MRR, natural gas having a high heat value greater than 970 Btu/scf and equal to or less than 1,100 Btu/scf, and which is at least ninety percent (90%) methane by volume, and which is less than five percent (5%) carbon dioxide by volume.

(198) "Plaster" is calcined gypsum that is produced and sold as a finished product and is not used in the production of plasterboard at the same facility.

(199) "Plasterboard" is a panel made of gypsum plaster pressed between two thick sheets of paper.

(200) “Point of Delivery” or “POD” means the point on an electricity transmission or distribution system where a deliverer makes electricity available to a receiver or available to serve load. This point can be an interconnection with another system or a substation where the transmission provider’s transmission and distribution systems are connected to another system, or a distribution substation where electricity is imported into California over a multi-jurisdictional retail provider’s distribution system.

(201) “Point of Receipt” or “POR” means the point on an electricity transmission or distribution system where an electricity receiver receives electricity from a deliverer. This point can be an interconnection with another system or a substation where the transmission provider’s transmission and distribution systems are connected to another system.

(202) “Portable” means designed and capable of being carried or moved from one location to another. Indications of portability include wheels, skids, carrying handles, dolly, trailer, or platform. Equipment is not portable if any one of the following conditions exists:

(A) The equipment is attached to a foundation;

(B) The equipment or a replacement resides at the same location for more than 12 consecutive months;

(C) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least two years, and operates at that facility for at least three months each year; or

(D) The equipment is moved from one location to another in an attempt to circumvent the portable residence time requirements of this definition.

(203) “Position Holder” means an entity that holds an inventory position in motor vehicle fuel, ethanol, distillate fuel, biodiesel, or renewable diesel as reflected in the records of the terminal operator or a terminal operator that owns motor vehicle fuel or diesel fuel in its terminal. “Position holder” does not include inventory held outside of a terminal, fuel jobbers (unless directly holding inventory at the terminal), retail establishments, or other fuel suppliers not holding inventory at a fuel terminal.

(204) “Positive Emissions Data Verification Statement” means a verification statement rendered by a verification body attesting that the verification body can say with reasonable assurance that the covered emissions

data in the submitted emissions data report is free of material misstatement and that the emissions data conforms to the requirements of MRR. For purposes of this definition, ‘material misstatement’ shall have the same meaning as ascribed to it in section 95102(a) of MRR.

(205) “Positive Product Data Verification Statement” means a verification statement rendered by a verification body attesting that the verification body can say with reasonable assurance that the covered product data in the submitted emissions data report is free of material misstatement and that the product data conforms to the requirements of MRR. For purposes of this definition, ‘material misstatement’ shall have the same meaning as ascribed to it in section 95102(a) of MRR.

(206) “Positive Offset Verification Statement” means an Offset Verification Statement rendered by a verification body attesting that the verification body can say with reasonable assurance that the submitted Offset Project Data Report is free of an offset material misstatement and that the Offset Project Data Report conforms to the requirements of this article and applicable Compliance Offset Protocol.

(207) “Power” means electricity, except where the context makes clear that another meaning is intended.

(208) “Primary Account Representative” means an individual authorized by a registered entity through the registration process outlined in section 95832 to make submissions to the Executive Officer and the tracking system in all matters pertaining to this article that legally bind the authorizing entity.

(209) "Primary Refinery Products" means aviation gasoline, motor gasoline (finished), kerosene-type jet fuel, distillate fuel oil, renewable liquid fuels, and asphalt. For the purpose of calculating this value for each refinery ARB will convert blendstocks into their finished fuel volumes by multiplying blendstocks by an assumed blending ratio.

(210) “Primary Residence” means the property an individual uses as a residence the majority of the time during the year or as the principal place of abode of the individual's family members. The primary residence may be documented by the address listed on the individual's federal and state tax returns, driver's license, automobile registration, or voter registration card.

(211) “Proceeds” means monies generated as a result of an auction or from sales from the Allowance Price Containment Reserve.

(212) “Process” means the intentional or unintentional reactions between substances or their transformation, including the chemical or electrolytic reduction of metal ores, the thermal decomposition of substances, and the formation of substances for use as product or feedstock.

(213) “Process Emissions” means the emissions from industrial processes (e.g., cement production, ammonia production) involving chemical or physical transformations other than fuel combustion. For example, the calcination of carbonates in a kiln during cement production or the oxidation of methane in an ammonia process results in the release of process CO_2 emissions to the atmosphere. Emissions from fuel combustion to provide process heat are not part of process emissions, whether the combustion is internal or external to the process equipment.

(214) “Process Unit” means the equipment assembled and connected by pipes and ducts to process raw materials and to manufacture either a final or intermediate product used in the onsite production of other products. The process unit also includes the purification of recovered byproducts.

(215) “Producer” means a person who owns leases, operates, controls, or supervises a California production facility.

(216) “Product Data Verification Statement” means the final statement rendered by a verification body attesting whether a reporting entity’s

product data in their covered emissions data report is free of material misstatement, and whether the product data conforms to the requirements of the MRR. For purposes of this definition, 'material misstatement' shall have the same meaning as ascribed to it in section 95102(a) of MRR.

(217) "Professional Judgment" means the ability to render sound decisions based on professional qualifications and relevant greenhouse gas accounting and auditing experience.

(218) "Project Baseline" means, in the context of a specific offset project, a conservative estimate of business-as-usual GHG emission reductions or GHG removal enhancements for the offset project's GHG emission sources, GHG sinks, or GHG reservoirs within the offset project boundary.

(219) "Project Emissions" means any GHG emissions associated with the implementation of an offset project that must be accounted for in the Offset Project Data Report.

(220) "Propane" is a paraffinic hydrocarbon with molecular formula C_3H_8.

(221) "Property Right" means any type of right to specific property whether it is personal or real property, tangible or intangible.

(YYY) "Public Service Facility" means a facility that is a covered entity or opt-in covered entity owned by a local government as defined in Government Code section 53720(a), excluding facilities owned or operated by an electrical distribution utility, that provides steam and chilled water solely to buildings and facilities owned by the local government, and may also provide electricity to its own facilities or for sale to an electrical distribution utility.

(222) "Public Utility Gas Corporation" is a gas corporation defined in California Public Utilities Code section 222 that is also a public utility as defined in California Public Utilities Code section 216.

(223) "Publicly Owned Natural Gas Utility" means a municipality or municipal corporation, a municipal utility district, a public utility district, or a joint

powers authority that includes one or more of these agencies that furnishes natural gas services to end users.

(224) “Purchase Limit” means the maximum percentage of allowances that may be purchased by an entity of a group of affiliated entities at an allowance auction.

(225) “Purchasing-Selling Entity” or “PSE” means the same meaning as ascribed in MRR.

(226) “Qualified Export” means electricity that is exported in the same hour as imported electricity and documented by NERC E-tags. When imports are not documented on NERC E-tags, because a facility or unit located outside the state of California has a first point of interconnection with a California balancing authority area, the reporting entity may demonstrate hourly ~~electriticy~~electricity delivery consistent with the record keeping requirements of the California balancing authority area, including records of revenue quality meter data, invoices, or settlements data. Only electricity exported within the same hour and by the same importer as the imported electricity is a qualified export. It is not necessary for the imported and exported electricity (as defined in the MRR) to enter or leave California at the same intertie. Qualified exports shall not result in a negative compliance obligation for any hour.

(227) “Qualified Positive Offset Verification Statement” means an Offset Verification Statement rendered by a verification body attesting that the verification body can say with reasonable assurance that the submitted Offset Project Data Report is free of an offset material misstatement, but the Offset Project Data Report may include one or more nonconformance(s) with the quantification, monitoring, or metering requirements of this article and applicable Compliance Offset Protocol which do not result in an offset material misstatement. Non-conformance, in this context, does not include disregarding the explicit

requirements of this article or applicable Compliance Offset Protocol and substituting alternative requirements not approved by the Board.

(228) "Qualified Positive Emissions Data Verification Statement" means a statement rendered by a verification body attesting that the verification body can say with reasonable assurance that the covered emissions data in the submitted emissions data report is free of material misstatement and is in conformance with section 95131(b)(9) of MRR, but the emissions data may include one or more other nonconformance(s) with requirements of MRR which do not result in a material misstatement. For purposes of this definition, 'material misstatement' shall have the same meaning as ascribed to it in section 95102(a) of MRR.

(229) "Qualified Positive Product Data Verification Statement" means a statement rendered by a verification body attesting that the verification body can say with reasonable assurance that the covered product data in the submitted emissions data report is free of material misstatement and is in conformance with section 95131(b)(9) of MRR, but the product data may include one or more other nonconformance(s) with the requirements of MRR which do not result in a material misstatement. For purposes of this definition, 'material misstatement' shall have the same meaning as ascribed to it in section 95102(a) of MRR.

(YYY) "Qualified Thermal Output" means the thermal energy generated by a cogeneration unit or district energy facility that is sold to particular end-users and reported pursuant to MRR section 95112(a)(5)(A) and the thermal energy used on-site by industrial processes or operations and heating and cooling operations that is not in support of or a part of the electricity generation or cogeneration system and is reported pursuant to MRR sections 95112(a)(5)(C). Qualified thermal output does not include thermal energy that is vented, radiated, wasted, or discharged before it is utilized at industrial processes or operations, or any thermal

energy generated by equipment that is not an integral part of the cogeneration unit.

(230) “Quantifiable” means, in the context of offset projects, the ability to accurately measure and calculate GHG reductions or GHG removal enhancements relative to a project baseline in a reliable and replicable manner for all GHG emission sources, GHG sinks, or GHG reservoirs included within the offset project boundary, while accounting for uncertainty and activity-shifting leakage and market-shifting leakage.

(231) “Quantitative Usage Limit” means a limit on the percentage of an entity’s compliance obligation that may be met by surrendering offset credits, sector-based credits, or other compliance instruments designated to be subject to the limit under this article.

(232) “Rack” means a mechanism for delivering motor vehicle fuel or diesel from a refinery or terminal into a truck, trailer, railroad car, or other means of non-bulk transfer.

(233) “Radiative Forcing” means the change in the net vertical irradiance at the atmospheric boundary between the troposphere and the stratosphere due to an internal change or a change in the external forcing of the climate system such as a change in the concentration of carbon dioxide or the output of the Sun.

(234) “Real” means, in the context of offset projects, that GHG reductions or GHG enhancements result from a demonstrable action or set of actions, and are quantified using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources, GHG sinks, and GHG reservoirs within the offset project boundary and account for uncertainty and the potential for activity-shifting leakage and market-shifting leakage.

(235) “Reasonable Assurance” means a high degree of confidence that submitted data and statements are valid.

(236) "Recycled Boxboard" means containers of solid fiber made from recycled fibers, including cereal boxes, shoe boxes and protective

paper packaging for dry foods. It also includes folding paper cartons, set-up boxes, and similar boxboard products. Recycled boxboard is made from recycled fibers.

(237) "Recycled Linerboard" means types of paperboard made from recycled fibers that meet specific tests adopted by the packaging industry to qualify for use as the outer facing layer for corrugated board, from which shipping containers are made.

(238) “Recycled Medium" means the center segment of corrugated shipping containers, being faced with linerboard on both sides. Recycled medium is made from recycled fibers.

(239) “Reference Level” means the quantity of GHG emission equivalents that have occurred during the normal course of business or activities during a designated period of time within the boundaries of a defined sector and a defined jurisdiction.

(240) “Reformulated Gasoline Blendstock for Oxygenate Blending” or “RBOB” has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).

(241) “Register,” in the context of a compliance instrument, means the act of ~~entering~~assigning the serial number of a compliance instrument into an account.

(242) “Registrant” or “Registered Entity” means an entity that has completed the process for registration.

(243) “Registry Offset Credit” means a credit issued by an Offset Project Registry for a GHG reduction or GHG removal enhancement of one metric ton of CO_2e. The GHG reduction or GHG removal enhancement must be real, additional, quantifiable, permanent, verifiable, and enforceable and may only be issued for offset projects using Compliance Offset Protocols. Pursuant to section 95981.1, ARB may determine that a registry offset credit may be removed, retired, or cancelled from the Offset Project Registry system and issued as an ARB offset credit.

(244) “Registry Services” means all services provided by an ARB approved Offset Project Registry in section 95987.

(245) “Renewable Energy” means energy from sources that constantly renew themselves or that are regarded as practically inexhaustible. Renewable energy includes energy derived from solar, wind, geothermal, hydroelectric, wood, biomass, tidal power, sea currents, and ocean thermal gradients.

(246) “Renewable Energy Credit” or “REC” means a certificate of proof, issued through the accounting system established by the California Energy Commission pursuant to Public Utilities Code Section 399.13, that one megawatt hour of electricity was generated and delivered by an eligible renewable energy resource. As specified in Public Utilities Code Section 399.12, Subdivision (g)(2), a REC includes all renewable and environmental attributes associated with the production of electricity from an eligible renewable energy resource, except for an emissions reduction credit issued pursuant to Section 40709 of the Health and Safety Code and any credits or payments associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels.

(247) "Renewable Liquid Fuels" means fuel ethanol, biomass-based diesel fuel, other renewable diesel fuel and other renewable fuels.

(248) “Reporting Period” means, in the context of offsets, the period of time for which an Offset Project Operator or Authorized Project Designee quantifies and reports GHG reductions or GHG removal enhancements covered in an Offset Project Data Report. The first reporting period for an offset project in an initial crediting period may consist of 6 to 24 consecutive months; all subsequent reporting periods in an initial crediting and all reporting periods in any renewed crediting period must consist of 12 consecutive months. <u>For offset projects developed using the Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011, there may only be one Reporting Period per offset</u>

project. The Reporting Period may not be longer than 12 months and there is no minimum timeframe imposed for the Reporting Period.

(249) "Reporting Year" means data year.

(250) "Reserve Price" see "Auction Reserve Price."

(251) "Reserve Sale Administrator" means the operator of sales from the Allowance Price Containment Reserve account, which may be the Executive Officer or an entity designated by the Executive Officer.

(252) "Resource Shuffling" means any plan, scheme, or artifice ~~to receive credit based on emissions reductions that have not occurred, involving the delivery of electricity to the California grid~~ undertaken by a First Deliverer of Electricity to substitute electricity deliveries from sources with relatively lower emissions for electricity deliveries from sources with relatively higher emissions resources to reduce its emissions compliance obligation. Resource shuffling does not include substitution of electricity deliveries from sources with relatively lower emissions for electricity deliveries from sources with relatively higher emissions resources when the substitution occurs pursuant to the conditions listed in section 95852(b)(2)(A).

(253) "Retail Provider" means an entity that provides electricity to retail end users in California and is an electrical corporation as defined in Public Utilities Code section 218, electric service provider as defined in Public Utilities Code section 218.3, local publicly owned electric utility as defined in Public Utilities Code section 224.3, a community choice aggregator as defined in Public Utilities Code section 331.1, or the Western Area Power Administration. For purposes of this article, electrical cooperatives, as defined by Public Utilities Code section 2776, are excluded.

(254) "Retire" or "Retired" or "Retirement" means that the serial number for a compliance instrument is registered into the Retirement Account under the control of the Executive Officer. Compliance instruments registered into this account cannot be removed.

(255) “Reversal” means a GHG emission reduction or GHG removal enhancement for which an ARB offset credit or registry offset credit has been issued that is subsequently released or emitted back into the atmosphere due to any intentional or unintentional circumstance.

(256) “Sector” or “Sectoral,” when used in conjunction with sector-based crediting programs, means a group or subgroup of an economic activity, or a group or cross-section of a group of economic activities, within a jurisdiction.

(257) “Sector-Based Crediting Program” is a GHG emissions-reduction crediting mechanism established by a country, region, or subnational jurisdiction in a developing country and covering a particular economic sector within that jurisdiction. A program’s performance is based on achievement toward an emissions reduction target for the particular sector within the boundary of the jurisdiction.

(258) “Sector-Based Offset Credit” means a credit issued from a sector-based crediting program once the crediting baseline for a sector has been reached.

(259) “Self-Generation of Electricity” means electricity dedicated to serving an electricity user on the same location as the generator. The system may be operated directly by the electricity user or by an entity with a contractual arrangement.

(260) “Serial Number” means a unique number assigned to each compliance instrument for identification.

(261) “Sequestration” means the removal and storage of carbon from the atmosphere in GHG sinks or GHG reservoirs through physical or biological processes.

(262) “Sink” or “sink to load” or “load sink” means the sink identified on the physical path of NERC e-Tags, where defined points have been established through the NERC Registry. Exported electricity is disaggregated by the sink on the NERC e-Tag, also referred to as the final point of delivery on the NERC e-Tag.

(263) "Soda Ash Equivalent" means the total mass of all soda ash, biocarb, borax, V-Bor, DECA, PYROBOR, Boric Acid, Sodium Sulfate, Potassium Sulfate, Potassium Chloride, and Sodium Chloride produced.

(264) “Solomon Energy Intensity Index®” or “Solomon EII” or “EII” means a petroleum refinery energy efficiency metric that compares actual energy consumption for a refinery with the “standard” energy consumption for a refinery of similar size and configuration. The “standard” energy is calculated based on an analysis of worldwide refining capacity as contained in the database maintained by Solomon Associates. The ratio of a facility’s actual energy to the standard energy is multiplied by 100 to arrive at the Solomon EII for a refinery. “Solomon Energy Review” means a data submittal and review conducted by a petroleum refinery and Solomon Associates. This process uses the refinery energy utilization, throughput and output to determine the Solomon EII of the refinery.

(265) “Source” means greenhouse gas source; or any physical unit, process, or other use or activity that releases a greenhouse gas into the atmosphere.

(266) “Source of generation” or “generation source” means the generation source identified on the physical path of NERC e-Tags, where defined points have been established through the NERC Registry. Imported electricity and wheels are disaggregated by the source on the NERC e-Tag, also referred to as the first point of receipt.

(267) “Specified Source of Electricity” or “Specified Source” means a facility or unit which is permitted to be claimed as the source of electricity delivered. The reporting entity must have either full or partial ownership in the facility/unit or a written power contract as defined in MRR section 95102(a) to procure electricity generated by that facility/unit. Specified facilities/units include cogeneration systems.

Specified source also means electricity procured from an asset-controlling supplier recognized by ARB.

(YYY) “Spot” means a contract for the immediate delivery of and payment for a product.

(YYY) “Stand-Alone-Electricity Generating Facility” has the same meaning in this regulation as in section 95102(a) of MRR.

(268) “Standing Live Carbon Stocks” means the above ground carbon in live tree biomass. Live trees include the bole, stem, branches, roots, and leaves or needles.

(269) “Stationary” means neither portable nor self-propelled, and operated at a single facility.

(270) "Steel Produced Using an Electric Arc Furnace" means steel produced by electric arc furnace or "EAF". EAF means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes.

(271) “Supplier” means a producer, importer, exporter, position holder, or local distribution company of a fossil fuel or an industrial greenhouse gas.

(272) “Terminal” means a motor vehicle fuel or diesel fuel storage and distribution facility that is supplied by pipeline or vessel, and from which fuel may be removed at a rack. “Terminal” includes a fuel production facility where motor vehicle or diesel fuel is produced and stored and from which fuel may be removed at a rack.

(273) "Testliner" means types of paperboard that meet specific tests adopted by the packaging industry to qualify for use as the outer facing layer for corrugated board, from which shipping containers are made. Testliner is made primarily from fibers obtained from recycled fibers.

(274) “Tin Plate" means thin sheet steel with a very thin coating of metallic tin. Tin plate also includes Tin Free Steel or TFS which has an extremely thin coating of chromium, metallic, and oxide. Tin plate is used primarily in can making.

(275) “Tissue” means a class of papers which are characteristically gauzy in texture and, in some cases, fairly transparent. They may be glazed, unglazed, or creped and are used for a variety of purposes. Examples of different types of tissue papers include sanitary grades such as toilet, facial, napkin, towels, wipes, and special sanitary papers.

(XYZ) “Tracking System” means the Compliance Instrument Tracking System Service where ARB compliance instruments are issued, traded, and retired.

(276) “Transaction,” when referring to an arrangement between registered entities regarding allowances, means an understanding among registered entities to transfer the control of an allowance from one entity to another, either immediately or at a later date.

(277) “Transfer” of a compliance instrument means the movement ~~removal of the serial number~~ of a compliance instrument from one account and placement into another account.

(278) “Transfer Request” means the communication by an authorized account representative or an alternate authorized account representative to the accounts administrator to register into the tracking system the transfer of allowances between accounts.

(279) “Tribe” means a federally-recognized Indian tribe and any entity created by a federally-recognized Indian Tribe.

(YYY) "True-up allowance amount" is a quantity of California GHG allowances allocated for changes in production or allocation not properly accounted for in prior allocations pursuant to 95891(b) or (c).

(280) “Unintentional Reversal” means any reversal, including wildfires or disease that is not the result of the forest owner’s negligence, gross negligence, or willful intent.

(YYY) “University Covered Entity” means a facility that meets the definition of an educational facility pursuant to Education Code section 94110(e) and is a covered entity or opt-in covered entity starting with the 2015 data year.

(281) “Unspecified Source of Electricity” or “Unspecified Source” means a source of electricity that is not a specified source at the time of entry into the transaction to procure the electricity.

(282) “Vented Emissions” means intentional or designed releases of CH_4 or CO_2 containing natural gas or hydrocarbon gas (not including stationary combustion flue gas), including process designed flow to the atmosphere through seals or vent pipes, equipment blowdown for maintenance, and direct venting of gas used to power equipment (such as pneumatic devices).

(283) “Verifiable” means that an Offset Project Data Report assertion is well documented and transparent such that it lends itself to an objective review by an accredited verification body.

(284) “Verification Body” means a firm accredited by ARB, which is able to render an offset verification statement and provide offset verification services for Offset Project Operators or Authorized Project Designees subject to providing an Offset Project Data Report under this article.

(285) “Verifier” or “offset verifier” means an individual accredited by ARB to carry out offset verification services as specified in sections 95977.1 and 95977.2.

(286) “Vintage Year” means the budget year to which an individual Californian GHG allowance is assigned pursuant to subarticle 6.

(287) “Voluntarily Associated Entity” or “General Market Participant” means any entity which does not meet the requirements of section 95811 or 95813 in this article and that intends to purchase, hold, sell, or voluntarily retire compliance instruments or an entity operating an offset project or early action offset project that is registered with ARB pursuant to subarticle 13 or 14 in this article.

(288) “Voluntary Renewable Electricity” or “VRE” means electricity produced or RECs associated with electricity, produced by a voluntary renewable electricity generator, and which has not and will not be sold or used to

meet any other mandatory requirements in California or any other jurisdiction.

(289) “Voluntary Renewable Electricity Aggregator” or “VRE Aggregator” means the entity that is aggregating systems for the purpose of allowance retirement pursuant to section 95841.1.

(290) “Voluntary Renewable Electricity Generator” means any entity that produces renewable electricity and applies for allowance retirement pursuant to section 95841.1.

(291) “Voluntary Renewable Electricity Participant” or “VRE Participant” means a voluntary renewable electricity generator, a REC marketer, or entity that purchases voluntary renewable electricity or RECs as an end-user or on behalf of an end-user and is seeking allowance retirement pursuant to section 95841.1.

(YYY) “Waste-to-Energy” means a facility located in California that incinerates eligible municipal solid waste in accordance with a current permit issued by the local Air Pollution Control District or Air Quality Management District, to generate and distribute electricity over the electric power grid for wholesale or retail customers of the grid located in California.

(b) For the purposes of sections 95801 through 96023, the following acronyms apply:

(1) “AB 32” means Assembly Bill 32, the California Global Warming Solutions Act of 2006.

(2) “ARB” means the California Air Resources Board.

(3) “BAU” means business as usual.

(4) “BPA” means Bonneville Power Administration.

(5) “CAISO” means the California Independent System Operator.

(6) “CAR” means Climate Action Reserve.

(7) “CEC” means California Energy Commission.

(8) “CFR” means Code of Federal Regulations.

(9) “CH_4” means methane.

(10) “CO_2” means carbon dioxide.

(11)"CO_2e" means carbon dioxide equivalent.

~~(12) “CRT” means Climate Reserve Tonne.~~

(13) “DWR” means California Department of Water Resources.

(14) “F” means Fahrenheit.

(15) “GHG" means greenhouse gas.

(16) “GHG ETS” means greenhouse gas emissions trading system.

(17) “GWP” means global warming potential.

(18) “HFC” means hydrofluorocarbon.

(19) “LPG” means liquefied petroleum gas.

(20) “MMBtu” means one million British thermal units.

(21) “MRR” means the Air Resources Board’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions.

(22) “Mscf” means one thousand standard cubic feet.

(23) “MWh” means megawatt-hour.

(24) “MT” means metric tons.

(25) “NAICS” means North American Industry Classification System.

(26) “NGLs” means natural gas liquids.

(27) “NERC” means North American Electric Reliability Corporation.

(28) “N_2O” means “nitrous oxide.”

(29) ”PFC” means perfluorocarbon.

(30) “PSE” means purchasing-selling entity.

(31) “PUC” means the Public Utilities Commission.

(32) “REC” means Renewable Energy Credit.

(33) “REDD” means reducing emissions from deforestation and degradation.

(34) “SCF” means standard cubic foot.

(35) “SF_6” means sulfur hexafluoride.

(XX) “TEAP” means the Technology and Economic Assessment Panel of the Montreal Protocol.

(36) “WAPA” means Western Area Power Administration.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 3: Applicability

This article applies to all of the entities identified in this subarticle.

§ 95810. Covered Gases.

This article applies to the following greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and other fluorinated greenhouse gases.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95811. Covered Entities.

This article applies to all of the following entities with associated GHG emissions pursuant to section 95812:

(a) Operators of Facilities. The operator of a facility within California that has one or more of the following processes or operations:

(1) Cement production;

(2) Cogeneration;

(3) Glass production;

(4) Hydrogen production;

(5) Iron and steel production;

(6) Lead Production;

(~~6~~7) Lime manufacturing;

(~~7~~8) Nitric acid production;

(~~8~~9) Petroleum and natural gas systems, as specified in section 95852(h);

(~~9~~10) Petroleum refining;

(1~~0~~1) Pulp and paper manufacturing;

(1~~1~~2) Self-generation of electricity; or

(1~~2~~3) Stationary combustion.

(b) First Deliverers of Electricity.

(1) Electricity generating facilities: the operator of an electricity generating facility located in California; or

(2) Electricity importers.

(c) Suppliers of Natural Gas. An entity that distributes or uses natural gas in California as described below:

(1) A public utility gas corporation operating in California;

(2) A publicly owned natural gas utility operating in California; or

(3) The operator of an intrastate pipeline not included in section 95811(c)(1) or section 95811(c)(2) that distributes natural gas directly to end users.

(d) Suppliers of RBOB and Distillate Fuel Oil. A position holder of one or more of the following fuels, or an enterer that imports one or more of the following fuels into California:

(1) RBOB;

(2) Distillate Fuel Oil No. 1; or

(3) Distillate Fuel Oil No. 2.

(e) Suppliers of Liquefied Petroleum Gas.

(1) The operator of a refinery that produces liquid petroleum gas in California;

(2) The operator of a facility that fractionates natural gas liquids to produce liquid petroleum gas; or

(3) A consignee of liquefied petroleum gas into California as defined under MRR.

(f) Sections 95811(c), (d), and (e) apply to suppliers of blended fuels that contain the fuels listed above.

(g) Carbon dioxide suppliers.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.

Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95812. Inclusion Thresholds for Covered Entities.

(a) The inclusion threshold for each covered entity is based on the subset of greenhouse gas emissions that generate a compliance obligation for that entity as specified in section 95852. The entity must report and verify annual emissions pursuant to sections 95100 through 95157 of MRR.

(b) If an entity's reported or reported and verified annual emissions in any data year from 2009 through 201~~1~~2 from the categories specified in section 95852(a) equal or exceed the thresholds identified below, that entity is classified as a covered entity as of January 1, 2013, and for all future years until any requirement set forth in section 95812(e) is met.

(c) The requirements apply as follows:

(1) Operators of Facilities. The applicability threshold for a facility is 25,000 metric tons or more of CO_2e per data year.

(2) First Deliverers of Electricity.

(A) Electricity Generating Facilities. The applicability threshold for an electricity generating facility is based on the annual emissions from which the electricity originated. The applicability threshold for an electricity generating facility is 25,000 metric tons or more of CO_2e per data year.

(B) Electricity importers. The applicability threshold for an electricity importer is based on the annual emissions from each of the electricity importer's sources of delivered electricity.

1. All emissions reported for imported electricity from specified sources of electricity that emit 25,000 metric tons or more of CO_2e per year are considered to be above the threshold.

2. All emissions reported for imported electricity from unspecified sources are considered to be above the threshold.

(3) Carbon Dioxide Suppliers. The applicability threshold for a carbon dioxide supplier is 25,000 metric tons or more of CO_2e per year. For purpose of comparison to this threshold, the supplier must include the sum of the CO_2 that it captures from its production process units for purposes of supplying CO_2 for commercial applications or that it captures from a CO_2 stream to utilize for geologic sequestration, and the CO_2 that it extracts or produces from a CO_2 production well for purposes of supplying for commercial applications or that it extracts or produces to utilize for geologic sequestration.

(4) Petroleum and Natural Gas Facilities. The applicability threshold for a petroleum and natural gas facility 25,000 metric tons or more of CO_2e per data year. This threshold is applied for each facility type specified in section 95852(h).

(d) If an entity's annual, assigned, or reported and verified emissions from any data year between 2011-2014 equal or exceed the thresholds identified below from the categories specified in sections 95851(a)~~ and ~~,(b),(c), and (d) then that entity is classified as a covered entity as of January 1, 2015, for the year in which the threshold is reached and for all future years until any requirement set forth in section 95812(e) is met.

(1) Fuel Suppliers. The threshold for a fuel supplier is 25,000 metric tons or more of CO_2e annually from the emissions of GHG that would result from full combustion or oxidation of the quantities of the fuels, identified in section 95811(c) through (f), which are imported and/or delivered to California.

(2) Electricity importers. The threshold for an electricity importer of specified source of electricity is zero metric tons of CO_2e per year and for unspecified sources is zero MWhs per year as of January 1, 2015.

(e) Effect of Reduced Emissions on an Entity's Compliance Obligation. A covered entity continues to have a compliance obligation for each data year of a compliance period, until the subsequent compliance period after one of the following conditions occurs:

(1) Annual reports demonstrate GHG emissions less than 25,000 metric tons of CO_2e per year during one entire compliance period; or

(2) A covered entity has ceased reporting and shuts down all processes, units, and supply operations subject to reporting, and has followed the requirements of section 95101(h) of MRR.

(f) Facility Closure. *For discussion: what happens to free allowances provided for transition assistance if the entity is no longer a covered entity prior to the first annual surrender obligation or triennial surrender obligation and those free allowances are no longer needed by the entity under the Cap-and-Trade Program?*

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95813. Opt-In Covered Entities.

(a) An entity that meets the requirements of section 95811, but does not exceed the inclusion thresholds set forth in section 95812 may elect to voluntarily opt-in to the Cap-and-Trade Program.

(b) An entity that voluntarily elects to participate in this program under this section must submit its request to the Executive Officer for approval pursuant to section 95830(c) by March 1 of the calendar year immediately preceding the first year in which it voluntarily elects to be subject to a compliance obligation pursuant to this section. The Executive Officer shall evaluate such applications and designate approved applicants as opt-in covered entities.

(c) An entity that voluntarily elects to participate in this program under this section may rescind its request to opt in to the program by October 1 of the calendar year prior to the first year in which it voluntarily elects to be subject to a compliance obligation pursuant to section 95813.

(~~c~~d) An opt-in covered entity is subject to all reporting, verification, enforcement, and compliance obligations that apply to covered entities. An

opt-in covered entity's first reporting and verification year shall be the calendar year immediately preceding the first year in which it voluntarily elects to be subject to a compliance obligation pursuant to this section.

(~~d~~e) An opt-in covered entity may be eligible to receive freely allocated allowances subject to subarticles 8 and 9.

(~~e~~f) Opt-in participation shall not affect the allowance budgets set forth in subarticle 6.

(~~f~~g) Opting out. After the end of any given compliance period an opt-in covered entity may choose to opt out of the program provided its annual emission levels for any data year remain below the inclusion thresholds set forth in section 95812. An entity choosing to opt out of the program must either fulfill its compliance obligations as required pursuant to subarticle 7 or surrender allowances equivalent to all the directly allocated allowances it has received from the budget years for the compliance period in question. An opt-in covered entity that wishes to opt-out of this program must apply to the Executive Officer.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95814. Voluntarily Associated Entities and Other Registered Participants.

(a) Voluntarily Associated Entities (VAE). An entity not identified as a covered entity or opt-in covered entity that intends to hold California compliance instruments may apply to the Executive Officer pursuant to section 95830(c) for approval as a voluntarily associated entity.

(1) The following entities may qualify as voluntarily associated entities:

(A) An individual, or an entity that does not meet the requirements of sections 95811 and 95813, that intends to purchase, hold, sell, or voluntarily retire compliance instruments;

(B) An entity operating an offset project or early action offset project that is registered with ARB pursuant to subarticles 13 or 14; or

(C) An entity providing clearing services in which it takes only temporary possession of compliance instruments for the purpose of clearing transactions between two entities registered with the Cap-and-Trade Program. A qualified entity must be a derivatives clearing organization as defined in the Commodities Exchange Act (7 U.S.C § 1a(9)) that is registered with the U.S. Commodity Futures Trading Commission pursuant to the Commodities Exchange Act (7 U.S.C. § 7a-1(a)).

(2) An individual registering as a voluntarily associated entity must have a primary residence in the United States.

(3) An individual employed by an entity subject to the requirements of MRR, or employed by an entity subject to the Cap-and-Trade Regulation, or by an organization providing consulting services related to those Regulations who chooses to register as a voluntarily associated entity in the tracking system, must provide a notarized letter from the individual's employer stating the employer is aware of the employee's plans to apply as a voluntarily associated entity in the Cap-and-Trade Program and that the employer has conflict of interest policies and procedures in place which prevent the employee from using information gained in the course of employment as an employee of the company and using it for personal gain in the Cap-and-Trade Program.

(4) An individual who meets the requirements of section 95814(a)(3) and is already registered in the tracking system must provide the notarized letter from his/her employer no later than January 31, 2015. Failure to provide such a letter by the deadline will result in suspension, modification, or revocation of his/her tracking system account.

(5)~~(3)~~ An entity registering as a voluntarily associated entity must be located in the United States, according to the registration information reported pursuant to section 95830(c).

(6) Individuals identified by registered entities pursuant to sections 95830(c)(1)(B),(C),(I), and (J) are not eligible to register as voluntarily associated entities.

(b) Restrictions on Other Registered Participants.

~~(1)~~ The following entities do not qualify to hold compliance instruments and do not~~but may~~ qualify as a Registered Participant:

(1~~A~~) An offset verifier accredited pursuant to section 95978;

(2~~B~~) A verification body accredited pursuant to section 95978;

(3~~C~~) Offset Project Registries; ~~or~~

(4~~D~~) Early Action Offset Programs approved pursuant to subarticle 14~~.~~;

(5) A MRR verifier accredited pursuant to the MRR.

~~(2) To qualify as a Registered Participant the entity must obtain registration approval from the Executive Officer pursuant to section 95830(c).~~

(c) A registered entity that has had its holding account revoked pursuant to section 95921(g)(3) may not hold compliance instruments or register with the accounts administrator in the Cap-and-Trade Program in any capacity.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 4: Compliance Instruments

§ 95820. Compliance Instruments Issued by the Air Resources Board.

(a) California Greenhouse Gas Emissions Allowances.

(1) The Executive Officer shall create California GHG allowances pursuant to the schedule set forth in subarticle 6.

(2) The Executive Officer shall assign each California GHG allowance a unique serial number that indicates the annual allowance budget from which the allowance originates.

(3) The Executive Officer shall place these allowances into a holding account under the control of the Executive Officer pursuant to section 95831(b).

(b) Offset Credits Issued by ARB.

(1) The Executive Officer shall issue and register ARB offset credits pursuant to the requirements of subarticles 13 and 14.

(2) Surrender of ARB offset credits shall be subject to the quantitative usage limit set forth in section 95854.

(c) Each compliance instrument issued by the Executive Officer represents a limited authorization to emit up to one metric ton in CO_2e of any greenhouse gas specified in section 95810, subject to all applicable limitations specified in this article. No provision of this article may be construed to limit the authority of the Executive Officer to terminate or limit such authorization to emit. A compliance instrument issued by the Executive Officer does not constitute property or a property right.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95821. Compliance Instruments Issued by Approved Programs.

The following compliance instruments may be used to meet a compliance obligation under this article:

(a) Allowances specified in section 95942(b) and issued by a program approved by ARB pursuant to section 95941;

(b) Offset credits specified in section 95942(c) and issued by a program approved by ARB pursuant to section 95941;

(c) ARB offset credits issued for purposes of early action pursuant to section 95990;

(d) Sector-based offset credits recognized pursuant to subarticle 14; and

(e) Compliance instruments specified in sections 95821(b) through (d) are subject to the quantitative usage limit set forth in section 95854.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 5: Registration and Accounts

§ 95830. Registration with ARB.

(a) The Executive Officer shall serve as accounts administrator or may contract with an entity to serve as accounts administrator.

(b) Eligibility and Restrictions:

(1) An entity must qualify for registration in the tracking system pursuant to section 95811, 95813, or 95814. If an entity is registering pursuant to section 95811 or 95813, the facility operator identified in section 95101(a)(3) of MRR must register pursuant to this section and meet all applicable requirements of this article. If the facility operators choose to consolidate accounts pursuant to Section 95833, then at least one facility operator of the facilities in the direct corporate association must be identified must register pursuant to this section and meet all applicable requirements of this article for all facilities included in the consolidated account.

(2) An entity qualified to register cannot apply for more than one Registration in the tracking system.

(3) An entity cannot hold a compliance instrument until the Executive Officer approves the entity's registration with ARB and an account in the tracking system.

(4) An entity seeking to list an offset project located on the categories of land in section 95973(d) must demonstrate the existence of a limited waiver of sovereign immunity entered into pursuant to section 95975(l) prior to registering pursuant to this section.

(c) Requirements for Registration.

(1) An entity must complete an application to register with ARB and for an account in the tracking system that contains the following information:

(A) Name, physical and mailing addresses, and contact information, type of organization, date and place of incorporation;

(B) Names and addresses of the entity's directors and officers;

(C) Names and contact information for persons controlling over 10 percent of the voting rights attached to all the outstanding voting securities of the entity;

(D) A business number, if one has been assigned to the entity by a California state agency;

(E) A U.S. Federal Tax Employer Identification Number, if assigned;

(F) Data Universal Numbering System number, if assigned;

(G) Statement of basis for qualifying for registration pursuant to sections 95811, 95813, or 95814; and

(H) Identification of all other entities ~~registered~~ pursuant to this article with whom the entity has a corporate association, direct corporate association, or indirect corporate association pursuant to section 95833, and a brief description of the association.

(I) Names and contact information for all persons employed by the entity that will either have access to any information regarding compliance instruments, transactions, or holdings; or be involved in decisions regarding transactions or holding of compliance instruments; or both. An entity already registered in the tracking system must provide the notarized letter from their employer no later than January 31, 2015. Failure to provide such a letter by the deadline will result in suspension, modification, or revocation of his/her tracking system account.

(J) Information required under section 95923 for individuals serving as consultants and bid advisors for entities participating in the Cap-and-Trade Program. An entity already registered in the tracking system must provide the notarized letter from their employer no later than January 31, 2015. Failure to provide

such a letter by the deadline will result in suspension, modification, or revocation of his/her tracking system account.

(2) Applicants may be denied registration in the tracking system: 1. based on information provided; or 2. if the Executive Officer determines the applicant has provided false or misleading information; or 3. if the Executive Officer determines the applicant has withheld information material to its application.

(3) Any individual listed by the registering entity in its registration application in a capacity requiring access to the tracking system must comply with the Know-Your-Customer requirements pursuant to section 95834 before access to the tracking system will be granted.

(4) An entity must designate a primary account representative, at least one and up to four alternate account representatives pursuant to section 95832. An individual registering as a voluntarily associated entity may elect to serve as both primary and alternate account representatives or designate additional persons.

(5) An individual registering as a voluntarily associated entity and having a primary residence in the United States, but not located in California, must designate an agent for service of process in California. The agent may be an individual who resides in California, or a corporation, that has previously filed a certificate pursuant to California Corporations Code section 1505.

(6) An entity applying for registration that is not an individual or an entity supplying exchange clearing services pursuant to section 95814(a)(1)(C) must designate, pursuant to section 95832, either:

(A) A primary account representative or at least one alternate account representative with a primary residence in California; or

(B) An agent for service of process in California. For entities registering into California, the agent may be an individual who resides in California, or a corporation, that has previously filed a

certificate pursuant to California Corporations Code section 1505.

(7) Any individual who requires access to the tracking system, including the primary account representative, alternate account representatives, or account viewing agents must first register as a user in the tracking system.

(A) An individual qualified to register as a user in the tracking system cannot apply for more than one user registration.

(B) An individual cannot be designated in a capacity requiring access to the tracking system until the Executive Officer approves the user's registration in the tracking system. This prohibition includes all primary account representatives, alternate account representatives, or account viewing agents.

(C) An individual registering in the tracking system must provide all applicable information required by sections 95832, 95833, and 95834.

(D) An individual registering in the tracking system must agree to the terms and conditions contained in Appendix B of this article.

(8) An individual may be denied registration:

(A) Based on the information provided;

(B) If the Executive Officer determines the individual has provided false or misleading information;

(C) If the Executive Officer determines the individual has withheld information material to his/her registration;

(D) If an individual fails to comply with section 95834 Know-Your-Customer Requirements; or

(E) If the individual is already registered and has a user account under the same or a different name. This provision applies to individuals registered in an approved external linked GHG emissions trading system.

(d) Registration Deadlines.

(1) An entity that meets or exceeds the inclusion thresholds in section 95812 or an opt-in covered entity must register with the accounts administrator pursuant to this section:

(A) Within 30 calendar days of the reporting deadline contained in MRR if the entity is not a covered entity as of January 1, 2013; or

(B) By January 31, 2012 or within 30 calendar days of the effective date of this regulation, whichever is later, for an entity that exceeds the inclusion thresholds in section 95812 for any data year 2008 through 2011.

~~(2) An opt-in covered entity must register with the accounts administrator by November 30 of the calendar year prior to the first year in which it voluntarily elects to be subject to a compliance obligation pursuant to section 95813.~~

(~~3~~2) Any voluntarily associated entity that intends to hold an ARB-issued compliance instrument must register with the accounts administrator prior to acquiring such compliance instruments.

(e) Completion of Registration. Registration is completed when the Executive Officer approves the registration and informs the entity and the accounts administrator of the approval.

(f) Updating Registration Information.

(1) Registrants must update their registration information within 10 working days of changes to the information listed in section 95830(c).

(2) Information may be directly entered into the tracking system operated by the accounts administrator or, if that is not available, submitted to the accounts administrator by the entity.

(3) Registration may be revoked, suspended, or restricted if an entity does not update its registration within 10 days of a change pursuant to section 95921(g)(3).

(g) Information Confidentiality. The following information collected about individuals during the registration process will be treated as confidential by

the Executive Officer and the accounts administrator to the extent possible, and except as needed in the course of oversight, investigation, enforcement and prosecution:

(1) Information collected pursuant to section 95830(c)(1)(B) and (C);

(2) Information collected about individuals pursuant to section 95834; and

(3) Information collected about individuals pursuant to section 95832.

(h) Linking. When California links to an External GHG ETS, each entity must register into a jurisdiction based on the physical location information the entity must provide pursuant to section 95830(c)(1)(A).

(1) An entity located in California or in a jurisdiction operating an External GHG ETS to which California has linked pursuant to subarticle 12 must register with the jurisdiction in which they are located.

(2) An entity located in the United States may only register with California to participate in its Cap-and-Trade Program.

(3) California will recognize the registration of an entity that registers into an External GHG ETS to which California has linked pursuant to subarticle 12 and allow that entity to participate in the California Cap-and-Trade Program.

(i) Change of ownership. When the ownership of a facility changes, the following information must be submitted within 30 days of finalization of ownership change:

(1) A description of the acquisition and the effective date of the change of ownership;

(2) Both the legal and operating names and the tracking system entity IDs of the entities being purchased;

(3) Both the legal and operating names and the tracking system entity ID of the purchasing entity, if any;

(4) Written direction whether the purchased entities will be added to a consolidated entity account or whether the purchased entities will opt-out of account consolidation pursuant to section 95833(f);

(5) Original signatures by a Director or Officer from the entities being purchased and the purchasing entity, authorizing the change of ownership.

(6) Any changes or new information pursuant to section 95833.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95831. Account Types.

(a) Accounts Created for Registered Entities.

(1) The Executive Officer shall not create more than one holding account, one limited use holding account, one compliance account, or one exchange clearing holding account for each entity registered pursuant to 95830.

(2) Holding Accounts. When the Executive Officer approves a registration for a covered entity, an opt-in covered entity, or a voluntarily associated entity, the accounts administrator will create a holding account for the registrant.

(3) Limited Use Holding Accounts. When an entity qualifies for a direct allocation under section 95890(b) the accounts administrator will create a limited use holding account for the entity that shall be subject to the following restrictions:

(A) The entity may not transfer compliance instruments from other accounts into the limited use holding account; and

(B) The entity may not transfer compliance instruments from the limited use holding account to any account other than the Auction Holding Account.

(4) Compliance Accounts. When the Executive Officer approves a registration for a covered entity or opt-in covered entity, the accounts administrator will create a compliance account for the entity.

(A) A covered entity or opt-in covered entity may transfer compliance instruments to its compliance account at any time.

(B) A compliance instrument transferred into a compliance account may not be removed by the entity.

(C) The Executive Officer may transfer compliance instruments into a compliance account. The Executive Officer may remove compliance instruments to satisfy a compliance obligation, or when closing an account.

(5) Exchange Clearing Holding Accounts. When the Executive Officer approves registration for an entity identified as a voluntarily associated entity pursuant to section 95814(a)(1)(C), then the accounts administrator will create an exchange clearing holding account for the entity.

(A) Entities may transfer compliance instruments to exchange clearing accounts only for the purpose of transferring control of the instruments to the entity performing the clearing function.

(B) The clearing entity may only transfer the compliance instruments in its exchange clearing holding account to the account designated by the entity receiving the allowances under the transaction being cleared.

(b) Accounts under the Control of the Executive Officer. The accounts administrator will create and maintain the following accounts under the control of the Executive Officer:

(1) A holding account to be known as the Allocation Holding Account into which the serial numbers of compliance instruments will be registered when the compliance instruments are created.

(2) A holding account to be known as the Auction Holding Account into which allowances are transferred to be sold at auction from:

(A) The Allocation Holding Account;

(B) The holding accounts of those entities for which allowances are being auctioned on consignment pursuant to section 95921(g)(3);

(C) The limited use holding accounts of those entities consigning allowances to auction pursuant to section 95910; and

(D) The compliance accounts of entities fulfilling an untimely surrender obligation pursuant to section 95857(d)(1)(A).

(3) A holding account to be known as the Retirement Account to which the Executive Officer will transfer compliance instruments from compliance accounts or from holding accounts under the control of the Executive Officer for the purpose of permanently retiring them. Alternatively, entities may voluntarily retire compliance instruments by transferring the ~~serial numbers of~~ compliance instruments ~~they are retiring~~ to the Retirement Account.

(A) When compliance instruments are registered into the Retirement Account, these compliance instruments cannot be returned to any other holding or compliance account.

(B) When compliance instruments are registered into the Retirement Account, any External GHG ETS to which California links pursuant to subarticle 12 will be informed of the retirements.

(C) The Executive Officer will record ~~the serial numbers of~~ the retired instruments to a publicly available Permanent Retirement Registry.

(4) A holding account to be known as the Allowance Price Containment Reserve Account:

(A) Into which the serial numbers of allowances directly allocated to the Allowance Price Containment Reserve pursuant to section 95870(a) will be transferred; and

(B) From which the Executive Officer will authorize the withdrawal of allowances for sale to covered entities pursuant to section 95913.

(5) A holding account to be known as the Forest Buffer Account:

(A) Into which ARB will place ARB offset credits pursuant to section 95983(a); and

(B) From which ARB may retire ARB offset credits pursuant to sections 95983(b)(2), (c)(3), and (c)(4) and place them into to the Retirement Holding Account.

(6) A holding account to be known as the Voluntary Renewable Electricity Reserve Account, which will be closed when it is depleted of the following originally allocated allowances:

(A) Into which the Executive Officer will transfer allowances allocated pursuant to section 95870(c); and

(B) From which the Executive Officer may retire allowances pursuant to section 95841.1.

(c) Account Closure.

(1) A registered entity's accounts will be closed after the Executive Officer receives a report that an entity has ceased operation pursuant to MRR section 95101(h).

(2) A voluntarily associated entity's accounts may be closed if no compliance instruments are transferred into or out of the accounts for a period of three years.

(3) Compliance instruments needed to fulfill the entity's compliance obligation will be drawn first from the entity's Compliance Account and then from the entity's Holding Account if the Compliance Account does not contain sufficient compliance instruments to meet the compliance obligation.

(~~3~~4) Compliance instruments remaining in accounts closed by the Executive Officer and not needed to fulfill a compliance

obligation will be consigned to auction pursuant to section 95910(d) on behalf of the registered entity.

(d) Additional accounts may be created by the Executive Officer to implement the Cap-and-Trade Program.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95832. Designation of Representatives and Agents.

(a) An application for registration into the California Cap-and-Trade Program for an account must designate a single primary account representative and at least one but no more than four alternate account representatives. Any communication between the accounts administrator and an alternate account representative must also be addressed to the primary account representative. A complete application for an account shall be submitted to the accounts administrator and shall include the following elements:

(1) Name, business and primary residence addresses, email addresses, and phone numbers, of the primary account representative and any alternate account representatives and account viewing agents;

(2) Name of the organization designating the primary account representative or any alternate account representative to represent its ownership interest with respect to the compliance instruments held in the account;

(3) The primary account representative and any alternate account representative must attest, in writing, to ARB as follows: "I certify under penalty of perjury under the laws of the State of California that I was selected as the primary account representative or the alternate account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to compliance instruments held in the account. I certify that I have all the necessary authority to carry out the duties and responsibilities

contained in title 17, article 5, sections 95800 et seq. on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the accounts administrator or a court regarding the account";

(4) An attestation verifying the selection of the primary account representative, alternate account representatives, and account viewing agents, signed by the officer of the entity who is responsible for the conduct of the primary account representative, alternate account representatives, and account viewing agents, and is one of the officers disclosed pursuant to section 95830(c)(1)(B);

(5) The signature of the primary account representative and any alternate account representative and the dates signed; and

(6) An attestation as follows: "I certify that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. I also certify under penalty of perjury of the laws of the State of California that all information required to be submitted to ARB is true, accurate, and complete."

(b) Unless otherwise required by the Executive Officer, documents of agreement referred to in section 95832(a) in the application for an account shall not be submitted to the accounts administrator. The accounts administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(c) Authorization of primary account representative. Upon receipt by the accounts administrator of a complete application for an account under section 95830(c):

(1) The accounts administrator will establish an account or accounts for the person or persons for whom the application is submitted pursuant to section 95831.

(2) The primary account representative and any alternate account representative for the account shall represent and, by his or her

representations, actions, inactions, or submissions, legally bind each entity that owns compliance instruments held in the account in all matters pertaining to this article, notwithstanding any agreement between the primary account representative or any alternate account representative and such entity.

(3) Any such entity shall be bound by any decision or order issued to the primary account representative or any alternate account representative by the Executive Officer or a court regarding the account. Any representation, action, inaction, or submission by any alternate account representative shall be deemed to be a representation, action, inaction, or submission by the primary account representative or any alternate account representative.

(d) Each submission concerning the account shall be submitted, signed, and attested to by the primary account representative or any alternate account representative for the entity that owns the compliance instruments held in the account. Each such submission shall include the following attestation statement by the primary account representative or any alternate account representative: "I certify under penalty of perjury under the laws of the State of California that I am authorized to make this submission on behalf of the entity that owns the compliance instruments held in the account. I certify under penalty of perjury under the laws of the State of California that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify under penalty of perjury under the laws of the State of California that the statements and information submitted to ARB are true, accurate, and complete." I consent to the jurisdiction of California and its courts for purposes of enforcement of the laws, rules and regulations pertaining to title 17, article 5, sections 95800 et seq., and I am aware that there are significant penalties for submitting false statements and

information or omitting required statements and information, including the possibility of fine or imprisonment."

(e) The accounts administrator will accept or act on a submission concerning the account only if the submission has been made, signed, and attested to in accordance with this section.

(f) Changing primary account representative and alternate account representative.

(1) The primary account representative for an account may be changed at any time upon receipt by the accounts administrator of a superseding complete application for an account under section 95830(c). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous primary account representative, or the previous alternate account representative prior to the time and date when the accounts administrator receives the superseding application for an account shall be binding on the new primary account representative and the entity that owns the compliance instruments in the account.

(2) The alternate account representative for an account may be changed at any time upon receipt by the accounts administrator of a superseding complete application for an account under section 95830(c). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous primary account representative, or the previous alternate account representative, prior to the time and date when the accounts administrator receives the superseding application for an account shall be binding on the new alternate account representative and the entity that owns the compliance instruments in the account.

(g) Objections Concerning Account Representatives.

(1) Once a complete application for an account under section 95830(c)-has been submitted and received, the accounts administrator will rely on the application unless and until a superseding complete

application for an account under section 95830(c) is received by the accounts administrator.

(2) Except as provided in section 95832(f)(1), no objection or other communication submitted to the accounts administrator concerning the authorization, or any representation, action, inaction, or submission of the primary account representative or any alternate account representative for an account shall affect any representation, action, inaction, or submission of the primary account representative or any alternate account representative or the finality of any decision or order by the accounts administrator under this article.

(3) The accounts administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the primary account representative or any alternate account representative for an account, including private legal disputes concerning the proceeds of compliance instrument transfers.

(h) Delegation by primary account representative and alternate account representatives.

(1) A primary account representative or an alternate account representative for a registered entity may authorize up to five natural persons per account that may view all information contained in the tracking system involving the entity's accounts, information, and transfer records (account viewing authority). The persons delegated shall not have authority to take any other action with respect to an account on the tracking system.

(2) In order to delegate account viewing authority in accordance with section 95832(h)(1) the primary account representative or alternate account representative, as appropriate, must submit to the accounts administrator a notice of delegation, that includes the following elements:

(A) The name, address, email address, and telephone number of such primary account representative or alternate account representative;

(B) The name, address, email address, and telephone number of each such natural person, herein referred to as “account viewing agent;” and

(C) An attestation verifying the selection of the account viewing agent, signed by the officer of the entity who is responsible for the conduct of the account viewing agent, and is one of the officers disclosed pursuant to section 95830(c)(1)(B).

(3) A notice of delegation submitted under section 95832(h)(2) shall be effective, with regard to the accounts identified in such notice, upon receipt of such notice by the accounts administrator and until receipt by the accounts administrator of a superseding notice of delegation by such primary account representative or alternate account representative as appropriate. The superseding notice of delegation may replace any previously identified account viewing agent, add a new account viewing agent, or eliminate entirely any delegation of authority.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95833. Disclosure of Corporate Associations.

(a) Criteria for Determining Corporate Associations.

(1) An entity has a corporate association with another entity<u>, regardless of whether the second entity is subject to the requirements of this article,</u> if either one of these entities:

(A) Holds more than 20 percent of any class of listed shares, the right to acquire such shares, or any option to purchase such shares of the other entity;

(B) Holds or can appoint more than 20 percent of common directors of the other entity;

(C) Holds more than 20 percent of the voting power of the other entity;

(D) In the case of a partnership other than a limited partnership, holds more than 20 percent of the interests of the partnership; ~~or~~

(E) In the case of a limited partnership, controls the general partner~~.~~; or

(F) In the case of a limited liability corporation, owns more than 20% of the other entity regardless of how the interest is held.

(2) An entity has a "direct corporate association" with another entity, regardless of whether the second entity is subject to the requirements of this article, if either one of these entities:

(A) Holds more than 50 percent of any class of listed shares, the right to acquire such shares, or any option to purchase such shares of the other entity;

(B) Holds or can appoint more than 50 percent of common directors of the other entity;

(C) Holds more than 50 percent of the voting power of the other entity;

(D) In the case of a partnership other than a limited partnership, holds more than 50 percent of the interests of the partnership; ~~or~~

(E) In the case of a limited partnership, controls the general partner~~.~~; or

(F) In the case of a limited liability corporation, owns more than 50% of the other entity regardless of how the interest is held.

(3) An entity has a "direct corporate association" with a second entity, regardless of whether the second entity is subject to the requirements

of this article, if the two entities are connected through a line of more than one direct corporate association.

(A) An entity (A) has a “direct corporate association” with another entity (B) if the two entities share a common parent that is not registered into the California Cap-and-Trade Program and that parent has a direct corporate association with each entity (A and B) when applying the indicia of control contained in section 95833(a)(2).

(B) An entity with a “direct corporate association” with a second registered entity has a direct corporate association with any registered entity with whom the second registered entity has a direct corporate association.

(4) An entity has an “indirect corporate association” with another entity if:

(A) The two entities do not have a direct corporate association;

(B) The two entities are connected through a line of more than one corporate association; and

(C) The controlling entity’s percentage of ownership or other indicia of control under section 95833(a)(1)(A), (B), (C), or (D) of the indirectly controlled entity is more than 20 percent but less than or equal to 50 percent after multiplying the percentages at each link in the chain of corporate associations.

(5) A publicly-owned electric utility or joint powers agency that is the operator of an electricity generating facility in California has a direct corporate association with the operator of another electricity generating facility in California if the same entity operates both generating facilities. A publicly-owned electric utility or joint powers agency that is the operator of an electricity generating facility in California has a direct corporate association with an electricity importer if the same entity operates the generating facility in California and is the entity importing electricity.

(b) If California links to one or more GHG ETS pursuant to subarticle 12, then entities shall disclose corporate associations with entities registered with those linked programs.

(c) Any registered entity subject to affiliate compliance rules promulgated by state or federal agencies shall not be required to disclose information or take other action that violates those rules.

(d) If an entity has a corporate, direct, or indirect association with another registered entity, or an unregistered entity involved in determinations made pursuant to 95833(a)(3), (4) or (5), it must disclose the following information for each associated entity:

(1) Information to identify the associated entity, including:

(A) Name, contact information, and physical address of the entity;

(B) Whether the entity is parent or subsidiary;

(C) Holding account number, if applicable;

(D) Primary account representative, if applicable;

(E) Data Universal Numbering System number, if assigned;

(F) A U.S. federal tax Employer Identification Number, if assigned; and

(G) Place and Date of Incorporation, if applicable;

(2) The type of corporate association and a brief description of the association, to include information sufficient to explain the entity's evaluation of the measures contained in section 95833(a) used to determine the type of corporate association disclosed.

(e) The entity must disclose the information pursuant to section 95833(d) to the Executive Officer:

(1) When registering pursuant to section 95830;

(2) At any time after registering when a corporate, direct, or indirect association is created or exists;

(3) Within 30 days of a change to the information disclosed on corporate, direct and indirect corporate associations; and

(4) No later than the auction registration deadline established in section 95912 when reporting a change to the information disclosed, otherwise the entity may not participate in that auction.

(f) Consolidation of Accounts for Corporate Associations.

(1) By January 1, 2013, the Executive Officer will consolidate the accounts held by entities registered into the California Cap-and-Trade Program pursuant to section 95830 that are part of a direct corporate association into a consolidated set of accounts.

(2) By October 1, 2012, the primary account representative or alternate account representative for all entities that are part of a direct corporate association and intend to have their accounts consolidated must provide to the Executive Officer:

(A) Confirmation of the corporate association if not already provided;

(B) Confirmation of the entity's intent to have its account consolidated with that of the other entities within the corporate association; and

(C) A change of primary account representative and alternate account representative to new representatives that will serve as the primary account representative and alternate account representatives for the consolidated accounts.

(3) To opt out of consolidation of accounts, the primary account representative or alternate account representative for an entity within the corporate association must provide to the Executive Officer ~~by October 1, 2012~~:

(A) Confirmation of the corporate association if not already provided;

(B) An attestation, signed by the officer of the entity who is responsible for the conduct of the account viewing agent and is one of the officers disclosed pursuant to section 95830(c)(1)(B),

that the entity seeks exclusion of its account from the consolidated set of accounts to be created; and

(C) Confirmation of the opt-out decision by the primary account representative or alternate account representative for any entity opting out of consolidation, as well as the primary account representative or alternate account representative designated for any entities remaining in the corporate association consolidated account pursuant to section 95833(f)(2)(C). This confirmation will include a distribution of the purchase and holding limits between the consolidated corporate association and any associated entities opting out of consolidation.

(D) If an entity registered in the California Cap-and-Trade Program has a direct corporate association with an entity(ies) registered in an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12, the entity registered in the California Cap-and-Trade Program must opt out of consolidation with the entity(ies) registered in an External Greenhouse Gas Emissions Trading System and meet all the requirements of section 95833(f)(3).

(4) If an entity registered in the California Cap-and-Trade Program has a direct corporate association with an entity(ies) registered in an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12, the entity registered in the California Cap-and-Trade Program must opt out of consolidation with the entity(ies) registered in an External Greenhouse Gas Emissions Trading System and meet all the requirements of section 95833(f)(3)~~ except for the October 1, 2012 deadline~~.

(5) To consolidate the accounts for a corporate association the Executive Officer shall instruct the accounts administrator to:

(A) Create a single consolidated set of accounts for members of a corporate association that accept consolidation;

(B) Include a compliance account only for a corporate association with at least one member entity that accepts consolidation that is eligible for a compliance account;

(C) Include a limited use holding account only for a corporate association with at least one member entity that accepts consolidation that is eligible for a limited use holding account;

(D) Complete all valid transfer requests in the system involving any accounts for the members of the corporate association;

(E) Transfer all compliance instruments in the existing accounts held by the member entities to the appropriate corporate association accounts; and

(F) Close the accounts held by the individual member entities of the corporate association that have not opted out.

(6) Entities with a direct corporate association may change their decision to consolidate accounts or opt-out of consolidation only once each compliance period.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95834. Know-Your Customer Requirements.

(a) General Requirements.

(1) The accounts administrator cannot provide access to the tracking system to an individual until the Executive Officer has determined the individual applying for participation has complied with the requirements of this section.

(2) The requirements of this section are in addition to any requirements contained elsewhere in this article that apply to the functions the individual will undertake in the tracking system.

(3) All documents submitted to the Executive Officer pursuant to this section shall be in English.

(4) Individuals with a criminal conviction in the five previous years constituting a felony in the United States are ineligible for registration and participation in the Cap-and-Trade Program.

(b) The individual must provide documentation of the following:

(1) Name;

(2) The address of the primary residence of the applicant, which may be shown by any of the following:

(A) A valid identity card issued by a state with an expiration date;

(B) Any other government-issued identity document containing an individual's primary address; or

(C) Any other document that is customarily accepted by the State of California as evidence of the primary residence of the individual;

(3) Date of birth;

(4) Employer name, contact information, and address;

(5) Either a passport number or driver's license number, if one is issued;

(6) An open bank account in the United States;

(7) Employment or other relationship to an entity that has registered or has applied to register with the California Cap-and-Trade Program if the individual is listed by an entity registering pursuant to section 95830;

(8) A government-issued document providing photographic evidence of identity of the applicant which may include:

(A) A valid identity card or driver's license issued by a state with an expiration date and date of birth; or

(B) A passport; and

(9) Any criminal conviction during the previous five years constituting a felony in the United States. This disclosure must include the type of violation, jurisdiction, and year.

(c) Verification of information.

(1) Any copy of a document submitted pursuant to section 95834 must be notarized by a notary public no more than three months before submittal.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 6: California Greenhouse Gas Allowance Budgets

§ 95840. Compliance Periods.

Duration of Compliance Periods is as follows:

(a) The first compliance period starts on January 1, 2013, and ends on December 31, 2014.

(b) The second compliance period starts on January 1, 2015, and ends on December 31, 2017.

(c) The third compliance period starts on January 1, 2018, and ends on December 31, 2020.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95841. Annual Allowance Budgets for Calendar Years 2013-2020.

The California GHG Allowance Budgets are set as described in Table 6-1.

Table 6-1: California GHG Allowances Budgets

	Budget Year	*Annual Allowance Budget (Millions of CA GHG Allowances)*
First Compliance Period	2013	162.8
	2014	159.7
Second Compliance Period	2015	394.5
	2016	382.4
	2017	370.4
Third Compliance Period	2018	358.3
	2019	346.3
	2020	334.2

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95841.1 Voluntary Renewable Electricity.

(a) Program Requirements: The end-user, or VRE participant acting on behalf of the end-user, must meet the requirements of this section. Generation must be new and not have served load prior to July 1, 2005. Allowance retirement for purposes of voluntary renewable electricity will begin in 2014 for 2013 generation. Voluntary renewable electricity must be directly delivered to California. <u>RECs, if created, must be retired within the year for which VRE retirements are requested.</u>

(b) Reporting Requirements. The end-user, or the VRE participant acting on behalf of the end-user, requesting allowance retirement for eligible generation must meet the following requirements for the period in which allowance retirement is being requested:

(1) By July 1 of each year, provide a written request for allowance retirement for the previous year's generation or REC purchases. Request must meet the requirements below:

(A) Report to ARB the quantity of renewable electricity in MWhs delivered to the California grid, and/or the number of RECs generated during the previous year from an eligible renewable electricity generator that meets the requirements of 95841.1(b)(2) or (3), as applicable;

(B) Generator of the renewable electricity or RECs must be certified as RPS eligible by the California Energy Commission, or must meet design and installation standards pursuant to the California Energy Commission's Guidelines for California's Solar Electric Incentive Programs, ~~third~~ fifth edition, June 201~~0~~3;

(C) For end-users, or the VRE participants acting on behalf of the end-user choosing to meet (B) above by meeting the California Energy Commission's design and installation standards pursuant to the California Energy Commission's Guidelines for California's Solar Electric Incentive Programs, ~~third~~ fifth edition, ~~June~~ January, 201~~0~~3, must submit an approval of incentive claim;

(D) Contract, tracking system data, or settlement data for the purchase of the electricity or RECs associated with the generation of the electricity must be submitted;

(E) Contract, tracking system data, or settlement data for sale of the electricity or RECs associated with the generation of the electricity to the end-user or entity purchasing on behalf of the end-user; and

(F) Submit the following attestations:

1. Attest, in writing, to ARB as follows: "I certify under penalty of perjury of the laws of the State of California that I have not authorized use of, or sold, any renewable electricity credits

or any claims to the emissions, or lack of emissions, for electricity for which I am seeking ARB allowance retirement, in any other voluntary or mandatory program."

2. Attest, in writing, to ARB as follows: "I understand I am voluntarily participating in the California Greenhouse Gas Cap-and-Trade Program under title 17, Cal. Code of Regs. article 5, and by doing so, I am now subject to all regulatory requirements and enforcement mechanisms of this voluntary renewable electricity program and subject myself to the jurisdiction of California as the exclusive venue to resolve any and all disputes."

(2) VRE Participants seeking allowance retirement for renewable electricity generation from an eligible facility > 200 KW nameplate capacity must submit the following with the report required in this section, for which the VRE participant is seeking allowance retirement:

(A) Provide the generator's RPS certification identification number, as determined by the California Energy Commission, or proof that each facility or system has met design and installation standards pursuant to the California Energy Commission's Guidelines for California's Solar Electric Incentive Programs, ~~third~~ fifth edition, J~~une~~anuary- 201~~0~~3;

(B) MWhs of renewable electricity generated designated for VRE retirement;

(C) Number of RECs designated for VRE retirement, as applicable; and

(D) WREGIS REC R~~r~~etirement Compliance R~~r~~eport ~~or tracking system data~~.

(3) VRE participants seeking allowance retirement for renewable electricity generating from an eligible facility ≤ 200 KW nameplate capacity must submit the following with the report required in this section. Applicants

may aggregate eligible systems, but must submit one application under one entity:

(A) Provide the generator's RPS certification identification number, as determined by the California Energy Commission, or must meet design and installation standards pursuant to the California Energy Commission's Guidelines for California's Solar Electric Incentive Programs, ~~third~~ fifth edition, J~~une~~anuary 201~~0~~3;

(B) MWhs of renewable electricity generated;

(C) Number of RECs, as applicable; and

(D) WREGIS REC ~~r~~Retirement Compliance R~~r~~eport ~~or tracking system data, as applicable~~.

(c) The allowances requested to be retired, calculated as follows:

$$\text{Number of MT } CO_2e = \text{MWh} \times \text{EF}$$

Where:

"Number of MT CO_2e," rounded down to the nearest whole ton, is the number of allowances to be retired from the Voluntary Renewable Electricity Reserve Account;

"MWh" is the MWh of voluntary renewable electricity claimed and generated from a generator that meets the requirements of this article; and

"EF" is the CO_2e emissions factor equivalent to the default emission factor for unspecified power, pursuant to section 95111 of MRR.

ARB shall determine the actual MWh of voluntary renewable electricity purchases that occurred during the period indicated in the documentation. ARB shall retire allowances from the Voluntary Renewable Electricity

Reserve Account in an amount up to the number of MT CO_2e represented by actual voluntary renewable electricity purchases, based on actual MWh purchases and the emissions factor determined pursuant to this section.

(d) Once a voluntary renewable electricity tracking system is approved by the Executive Officer and it is in place, a voluntary renewable electricity generator or REC marketer which meets requirements section 95841.1(b) will always be considered to have satisfied section 95841.1(b), if they participate in the tracking system.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 7: Compliance Requirements for Covered Entities

§ 95850. General Requirements.

(a) Reporting Requirements. Each covered entity identified in section 95811 is subject to MRR.

(b) An entity's compliance obligation is based on the emissions number for the emissions subject to a compliance obligation for every metric ton of CO_2e for which a positive or qualified positive emissions data verification statement is issued, rounded to the nearest whole ton, or for which there are assigned emissions pursuant to MRR.

(c) Record Retention Requirements. Each entity must retain all of the following records for at least 10 consecutive years and must provide such records within 20 calendar days of receiving a written request from ARB, including:

(1) Copies of all data and reports submitted under this article and section 95105 of MRR;

(2) Records used to calculate a compliance obligation as specified in section 95853;

(3) Emissions data and product data verification statements as required pursuant to section 95103(f) of MRR; and

(4) Detailed verification reports as required pursuant to section 95131 of MRR.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95851. Phase-in of Compliance Obligation for Covered Entities.

(a) Operators of facilities and first deliverers of electricity specified in sections 95811(a) and (b) and carbon dioxide suppliers specified in section 95811(g) that meet or exceed the annual emissions threshold in section 95812(c) have compliance obligations beginning with the first compliance period.

(b) Suppliers of natural gas, suppliers of RBOB and distillate fuel oils, and suppliers of liquefied petroleum gas specified in sections 95811(c), (d), (e), and (f) that meet or exceed the annual threshold in section 95812(d) will have a compliance obligation beginning with the second compliance period.

(c) Operators of cogeneration facilities and district heating facilities that have been approved by the Executive Officer for a limited exemption of emissions from the production of qualified thermal output pursuant to section 95852(j), that meet or exceed the annual threshold in section 95812(d) will have a compliance obligation beginning with the second compliance period.

(d) Operators of eligible Waste-to-Energy facilities, pursuant to section 95852.2(c) that meet or exceed the annual threshold in section 95812(d) will have a compliance obligation beginning with the second compliance period.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95852. Emission Categories Used to Calculate Compliance Obligations.

(a) Operators of Facilities.

(1) An operator of a facility covered under sections 95811(a) and 95812(c)(1) has a compliance obligation for every metric ton of CO_2e for which a positive or qualified positive emissions data verification statement is issued per section 95131 of MRR, including process emissions, stationary combustion emissions and vented emissions. If ARB has assigned emissions for the sources subject to a compliance obligation pursuant to this section, the facility will have a compliance obligation equal to the value of every metric ton of CO_2e assigned emissions. The entity's compliance obligation will be assessed at the facility level unless otherwise noted under section 95812(c).

(2) Beginning in 2015, combustion emissions resulting from burning RBOB, distillate fuel oils, or natural gas liquids are not included when calculating an operator's compliance obligation.

(b) First Deliverers of Electricity. A first deliverer of electricity covered under sections 95811(b) and 95812(c)(2) has a compliance obligation for every metric ton of CO_2e emissions calculated pursuant to section 95852(b)(1) for which a positive or qualified positive emissions data verification statement is issued pursuant to MRR, or for which there are assigned emissions, when such emissions are from a source in California or in a jurisdiction where a GHG emissions trading system has not been approved for linkage by the Board pursuant to subarticle 12.

(1) Calculation of emissions for compliance obligation.

(A) For first deliverers that are operators of an electricity generating facility in California, the calculation for compliance obligation includes all emissions reported and verified or assigned pursuant to MRR, except emissions without a compliance obligation pursuant to section 95852.2.

(B) For first deliverers that are electricity importers, emissions with a compliance obligation are calculated using the following equation:

$$CO_2e_{covered} = CO_2e_{unspecified} + (CO_2e_{specified} - CO_2e_{specified-not\,covered}) - CO_2e_{RPS_adjustment} - CO_2e_{QE_adjustment} - CO_2e_{linked}$$

Where:

$CO_2e_{covered}$ = Annual metric tons of CO_2e with a compliance obligation.

$CO_2e_{unspecified}$ = Annual metric tons of CO_2e from unspecified imported electricity calculated pursuant to MRR 95111.

$CO_2e_{specified}$ = Annual metric tons of CO_2e from imported electricity from specified sources that meet the requirements of MRR section 95111.

$CO_2e_{specified\text{-}not\ covered}$ = Annual metric tons of CO_2e without a compliance obligation pursuant to section 95852.2.from specified sources that meet the requirements in MRR section 95111,

$CO_2e_{RPS_adjustment}$ = Annual metric tons of CO_2e calculated pursuant to MRR that meets the requirements of section 95852(b)(4).

$CO_2e_{QE_adjustment}$ = Annual metric tons of CO_2e from qualified exports pursuant to MRR section 95111 that meet the requirements of section 95852(b)(5).

CO_2e_{linked} = Annual metric tons of CO_2e from electricity with a first point of receipt located in a jurisdiction where a GHG emissions trading system has been approved for linkage by the Board pursuant to subarticle 12.

(C) All deliveries of electricity not meeting the requirements for specified sources pursuant to MRR will have emissions calculated using the default emission factor for unspecified electricity pursuant to section MRR 95111.

(2) Resource shuffling is prohibited and is a violation of this article. ~~First Deliverers must submit the following attestations annually to ARB, by June 1, in writing, by certified mail only:~~

~~(A) "I certify under penalty of perjury of the laws of the State of California that [facility or company name] for which I am an agent has not engaged in the activity of resource shuffling to reduce compliance obligation for emissions, based on emission reductions that have not occurred as reported under MRR."~~

~~(B) "I understand [facility or company name], for which I am an agent, is participating in the Cap-and-Trade Program under title 17, California Code of Regulations, article 5, and by doing so, it now subjects itself to all regulatory requirements and enforcement mechanisms of this program and subjects itself to the jurisdiction of California as the exclusive venue to resolve disputes."~~

(A) The following substitutions of electricity deliveries from a lower emission resource for electricity deliveries from a higher emission resource shall not constitute resource shuffling:

(1) Electricity deliveries that are caused by the procurement of electricity eligible to be counted towards and purchased for Renewable Portfolio Standard (RPS) compliance in California.

(2) Electricity deliveries made for the purpose of compliance with state or federal laws and regulations, including the Emission Performance Standard (EPS) rules established by CEC and the CPUC pursuant to public utilities code section 8340 et. seq.

(3) Electricity deliveries made for the purpose of compliance with requirements related to maintaining reliable grid operations, such as North American Electric Reliability Corporation (NERC) Reliability Standards, and Reliability

Coordinator directives, including the provision of electricity between balancing authorities or load-serving entities when required to alleviate emergency grid conditions.

(4) Electricity deliveries made for the purpose of compliance with either a judicially approved settlement of litigation or a settlement of a transaction dispute pursuant to the dispute resolution terms and conditions of a contract for reasons other than reducing GHG compliance obligations.

(5) Electricity deliveries that substitute for power previously supplied by a specified source that has been retired.

(6) Electricity deliveries that substitute for deliveries that have been discontinued because of termination of a contract or divestiture of resources for reasons other than reducing GHG compliance obligation.

(7) Electricity deliveries that are necessitated by early termination of a contract for, or full or partial divestiture of, resources subject to the EPS rules.

(8) Electricity deliveries that are necessitated by expiration of a contract.

(9) Electricity deliveries pursuant to contracts for short term delivery of electricity with terms of no more than 12 months, for either specified or unspecified power, linked to the selling off of power from, or assigning of a contract for, electricity subject to the EPS rules from a power plant that does not meet the EPS with which a California Electrical Distribution Utility has a contract, or in which a California Electrical Distribution Utility has an ownership share, and based on economic decisions including congestion costs but excluding implicit and explicit GHG

costs. In evaluating these short term deliveries of electricity, ARB will consider the levels of past sales and purchases from similar resources of electricity, among other factors, to judge whether the activity is resource shuffling.

(10) Short-term transactions and contracts for delivery of electricity with terms of no more than 12 months, or resulting from an economic bid or self-schedule that clears the CAISO day-ahead or real-time market, for either specified or unspecified power, based on economic decisions including implicit and explicit GHG costs and congestion costs, unless such activity is linked to the selling off of power from, or assigning of a contract for, electricity subject to the EPS rules from a power plant that does not meet the EPS with which a California Electricity Distribution Utility has a contract, or in which a California Electricity Distribution Utility has an ownership share, that is not covered under paragraphs 11, 12 or 13 below.

(11) Electricity deliveries that are necessitated by operational emergencies or transmission or distribution constraints, including constraints caused by the inability to obtain or retain transmission rights, transmission curtailments or outages, or emergencies.

(12) Electricity deliveries that are necessitated because a First Deliverer has more than enough electricity to meet demand as a result of the First Deliverer being required to take electricity from specific generating units, including requirements due to electricity contracts with “must-take” or “must-run” provisions.

(13) Deliveries of electricity that are required to make up for transmission losses associated with electricity deliveries in California.

(B) Prohibited substitutions of electricity deliveries from a higher emission resource with electricity deliveries from a lower emission resource include:

(1) Substituting relatively lower emission electricity to replace electricity generated at a high emission power plant procured by a First Deliverer under a long-term contract or ownership arrangement, when the power plant does not meet California's EPS, and the substitution is made to reduce a First Deliverer's compliance obligation.

(2) Assigning a long-term contract for high emission electricity specified in section 95852(b)(2)(B)(1) directly above to a third party, for the purpose of reducing a compliance obligation.

(3) The following criteria must be met for electricity importers to claim a compliance obligation for delivered electricity based on a specified source emission factor or asset controlling suppler emission factor. ~~less than the default emission factor:~~

(A) Electricity deliveries must be reported to ARB and emissions must be calculated pursuant to MRR section 95111.

(B) The electricity importer must be the facility operator or have right of ownership or a written power contract, as defined in MRR section 95102(a), to the amount of electricity claimed and generated by the facility or unit claimed;

(C) The electricity must be directly delivered, as defined in MRR section 95102(a), to the California grid; and

(D) If RECs were created for the electricity generated and reported pursuant to MRR, then the REC~~s~~ serial numbers must be ~~retired~~ reported and verified pursuant to MRR.

(4) RPS adjustment. Electricity ~~imported or~~ procured by an electricity importer from an eligible renewable energy resource reported pursuant to MRR must meet the following conditions to be included in the calculation of the RPS adjustment:

(A) The electricity importer must have ~~either:~~

1. Ownership or contract rights to procure the electricity and the associated RECs generated by the eligible renewable energy resource; or
2. Have a contract to ~~import~~ procure electricity and the associated RECs on behalf of an ~~California~~ entity subject to the California RPS that has ownership or contract rights to the electricity and associated RECs generated by the eligible renewable energy resource, as verified ~~under~~ pursuant to MRR.

(B) The RECs associated with the electricity claimed for the RPS adjustment must be placed in the retirement subaccount of the entity party to the contract in 95852(b)(4)(A), in the accounting system established by the CEC pursuant to PUC 399.13 and designated as retired for the purpose of compliance with the California RPS program ~~used to comply with California RPS requirements~~ during the same year ~~in~~ for which the RPS adjustment is claimed.

(C) The quantity of emissions included in the RPS adjustment is calculated as the product of the default emission factor for unspecified sources, pursuant to MRR, and the reported electricity generated (MWh) that meets the requirements of this section, 95852(b)(4).

(D) No RPS adjustment may be claimed for an eligible renewable energy resource when its electricity is directly delivered.

(E) No RPS adjustment may be claimed for electricity generated by

an eligible renewable energy resource in a jurisdiction where a GHG emissions trading system has been approved for linkage by the Board pursuant to subarticle 12.

(F) Only RECs representing electricity generated after 12/31/2012 are eligible to be used towards the RPS adjustment.

(5) QE adjustment. An adjustment to the compliance obligation pursuant to the calculation in 95852(b)(1) may be made for exported and imported electricity during the same hour by the same PSE. Emissions included in the QE adjustment for qualified exports claimed by a first deliverer must meet the following requirements:

(A) During any hour in which an electricity importer claims qualified exports and corresponding imports, the maximum amount of QE adjustment for the hour shall not exceed the product of:

1. The lower of either the quantity of exports or imports (MWh) for the hour; multiplied by
2. The lowest emission factor of any portion of the qualified exports or corresponding imports for the hour.

(B) Emissions and MWhs included in the QE adjustment must be reported and verified or assigned pursuant to MRR, and must be documented by hourly import and export data pursuant to MRR.

(c) Suppliers of Natural Gas. A supplier of natural gas covered under sections 95811(c) and 95812(d) has a compliance obligation for every metric ton CO_2e of GHG emissions that would result from full combustion or oxidation of all fuel delivered to end users in California contained in an emissions data report that has received a positive or qualified positive emissions data verification statement or for which emissions have been assigned, less the fuel that is delivered to covered entities, as follows:

(1) Suppliers of natural gas shall report the total metric tons CO_2e of GHG emissions delivered to all end users in California pursuant to section 95122 of MRR;

(2) ARB shall calculate the metric tons CO_2e of GHG emissions for natural gas delivered to covered entities which are customers of the supplier. The emissions will be calculated according to section 95122 of MRR using the reported deliveries (in mmBtu) in emissions data reports that received a positive or qualified positive emissions data verification statement, or the assigned emissions from natural gas delivered to the covered entity by the supplier of natural gas;

(3) ARB shall provide the supplier of natural gas a listing of all customers and aggregate natural gas (in mmBtu) and emissions calculated from the supplier's natural gas delivered to covered entities; and

(4) The Executive Officer shall calculate the metric tons CO_2e for which the supplier will be required to hold a compliance obligation based on the supplier's reported emissions less ARB's calculated emissions from deliveries to covered entities which are customers of the supplier. The Executive Officer shall provide this value to the supplier of natural gas within 30 days of the verification deadline in section 95103 of MRR.

(d) Suppliers of RBOB and Distillate Fuel Oils. A supplier of petroleum products covered under sections 95811(d) or 95812(d) has a compliance obligation for every metric ton CO_2e of GHG emissions included in an emissions data report that has received a positive or qualified positive emissions data verification statement or for which emissions have been assigned that would result from full combustion or oxidation of the quantities of the following fuels that are removed from the rack in California, sold to entities not licensed by the California Board of Equalization as a fuel supplier, or imported into California and not directly delivered to the bulk-transfer/terminal system as defined in section 95102 of MRR, except for products for which a final destination outside California can be demonstrated:

(1) RBOB;

(2) Distillate Fuel Oil No. 1; and

(3) Distillate Fuel Oil No. 2.

(e) Suppliers of Natural Gas Liquids:

(1) A producer of liquefied petroleum gas covered under sections 95811(e) and 95812(d) has a compliance obligation for every metric ton CO_2e of GHG emissions included in an emissions data report that has received a positive or qualified positive emissions data verification statement or for which emissions have been assigned that would result from full combustion or oxidation of all fuel sold, distributed, or otherwise transferred for consumption in California; and

(2) An importer consignee, as defined under MRR, of liquefied petroleum gas covered under section 95811(e) has a compliance obligation for every metric ton CO_2e of GHG emissions included in an emissions data report that has received a positive or qualified positive emissions data verification statement or for which emissions have been assigned that would result from full combustion or oxidation of all fuel imported into California.

(f) Suppliers of Blended Fuels. An entity that supplies any of the fuels covered under sections 95811(f) and 95812(d) as blended fuels has an aggregated compliance obligation for every metric ton of CO_2e of GHG emissions based on the separate constituents of the blend included in an emissions data report that has received a positive or qualified positive emissions data verification statement or for which emissions have been assigned that would result from full combustion or oxidation of the fuel.

(g) Carbon Dioxide Suppliers. An entity that supplies carbon dioxide (defined in section 95802(a)(47) covered under sections 95811(g) and 95812(c)(3) has an aggregated compliance obligation based on the sum of MT CO_2 included in an emissions data report that has received a positive or qualified positive emissions data verification statement or for which emissions have been assigned and which are defined in sections 95802(a)(47)(a), 95802(a)(47)(b), and 95802(a)(47)(c), minus CO_2 verified to be geologically sequestered through use of a Board-approved

carbon capture and geologic sequestration quantification methodology that ensures that the emissions reductions are real, permanent, quantifiable, verifiable, and enforceable.

(h) Petroleum and Natural Gas Systems. Operators of the facilities specified in section 95101(e)(2)-(5) of MRR have a compliance obligation for every metric ton of CO_2e from the source types specified in sections 95152(c)-(f) of MRR, except as specified in section 95852.2 of this article, that is contained in an emissions data report that has received a positive or qualified positive emissions data report, or for which emissions have been assigned.

(i) The compliance obligation for sources specified in sections 95852(a) through (h) is calculated based on the sum of the following, as applicable:

(1) Emissions of CO_2, CH_4, and N_2O which resulted from combustion of fossil fuel;

(2) Emissions of CH_4 and N_2O which resulted from combustion of all biomass-derived fuel;

(3) Emissions of CO_2 which resulted from combustion of biomass-derived fuels that do not meet the requirements in section 95852.2(a);

(4) Emissions of CO_2 which resulted from combustion of biomass-derived fuels pursuant to section 95852.1; and

(5) All process and vented emissions of CO_2, CH_4, and N_2O as specified in the MRR except for those listed in section 95852.2(b).

(j) Limited Exemption of Emissions from the Production of Qualified Thermal Output During the First Compliance Period. During the first compliance period, emissions from the production of qualified thermal output from a district heating facility or a facility with a cogeneration unit that meets the requirements of this section and has been approved by the Executive Officer for an emissions exemption shall not have a compliance obligation and shall not count toward the inclusion threshold of section 95812(c)(1).

(1) A facility with a cogeneration unit may apply for the emissions exemption for the first compliance period if it meets the following two

conditions for each year from 2008-2013, based on data reported pursuant to MRR:

(A) The facility's annual emissions associated with the production of qualified thermal output, calculated using the following equation, are less than 25,000 metric tons of CO_2e:

$$GHG_{QTO} = Q_{produced} * 0.06244$$

Where:

"GHG_{QTO}" is the annual emissions for each calendar year, in metric tons of CO_2e, associated with the production of qualified thermal output;

$Q_{produced}$ is the annual amount of qualified thermal output produced for each calendar year, measured in MMBtu, at the cogeneration facility; and,

(B) The facility's remaining emissions, calculated pursuant to the following equation, are less than 25,000 metric tons of CO2e:

$$GHG_R = GHG_{Total} - GHG_{QTO}$$

Where:

"GHG_R" is the annual remaining emissions, in metric tons of CO_2e.

"GHG_{Total}" is total annual emissions, in metric tons of CO_2e.

(2) A district energy facility may apply for the emissions exemption for the first compliance period if the annual emissions associated with energy

distributed to each single facility on its system do not exceed 25,000 MTCO2e:

(A) Emissions associated with a single facility are calculated using the following equation:

$$GHG_{sf} = Q_{sf} * 0.06244 + e_{sf} * B_{electricity}$$

Where:

"GHG_{sf}" is the emissions associated with a single facility

"Q_{sf}" is the amount of Qualified Thermal Output provided to a single facility, measured in MMBtu.

"e_{sf}" is the amount of electricity provided to a single facility, in MWh

"$B_{electricity}$" is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances per MWh

(3) Data Sources. The Executive Officer may employ all available data reported to ARB under MRR for data years 2008-2013 to determine a facility's eligibility for the limited exemption of emissions from the production of qualified thermal output.

(4) A facility with a cogeneration unit or a district energy facility must apply to the Executive Officer for the emissions exemption for the first compliance period by providing the following data:

(A) Annual qualified thermal output for each year from 2009 to 2013, in MMBtu.

(B) A district energy facility must provide the amount of qualified thermal output and electricity provided to each single facility it serves.

(C) The application must include the following attestation:
" I certify under penalty of perjury of the laws of the State of California that I am duly authorized by [name of entity] to sign this attestation on behalf of [name of entity], and that the information submitted herein is true, accurate, and complete."

(5) A facility that is approved for an emissions exemption that has received an industrial allocation of allowances for the 2013 or 2014 budget years will have its future allocations reduced by an equivalent amount. Allowances shall be subtracted from the facility's budget year 2015 allocation and from subsequent budget year's industrial allocations each year until the total amount subtracted equals the sum of the facility's 2013 and 2014 allowance allocations.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95852.1. Compliance Obligations for Biomass-Derived Fuels.

An entity that has emissions from combustion of biomass-derived fuels is required to report and verify its emissions pursuant to MRR and has a compliance obligation for every metric ton of CO_2e emissions:

(a) From combustion of fuel types that are not listed under section 95852.2; or

(b) From combustion of fuels that do not meet the requirements of section 95852.1.1; or

(c) That are reported as non-exempt biomass derived CO_2 under MRR.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95852.1.1. Eligibility Requirements for Biomass-Derived Fuels.

(a) Biomass-derived fuel procured under contracts for biogas and biomethane must meet one of the following criteria. Only the portion of the fuel that meets one of these criteria will be considered a biomass-derived fuel. Emissions from combustion of this fuel will not be subject to a compliance obligation when reported as Biomass CO_2 in an emissions data report that has received a positive or qualified positive emissions data verification statement and determined as exempt pursuant to section 95852.2 and 95103(g) of MRR.

(1) The contract for purchasing any biomass-derived fuel must be executed prior to January 1, 2012 and remain in effect or have been renegotiated with the same California operator within one year of contract expiration. The delivery of the fuel under the contract must commence by one of the following dates to be eligible under this provision:

(A) 90 days after the execution date of the signed contract; or

(B) January 1, 2012; or

(C) 10 days after the date on which the CEC provides notice that the operator's electricity generating facility is certified as eligible for California's Renewables Portfolio Standard for the contracted biomass-derived fuel, or cannot be so certified, provided that the application for certification was submitted to the CEC before January 1, 2012.

(2) ~~The fuel being provided under a contract dated on or after January 1, 2012 must only be for an amount of fuel that is associated with~~ <u>If the biomass-derived fuel does not meet the requirements of 95852.1.1(a)(1) then the biomass-derived fuel must meet one of the following requirements and the entity claiming the biomass-derived fuel must be the first entity to contract for the biomass-derived fuel</u>:

(A) An increase in the biomass derived fuel production capacity, at a particular site, where an increase is considered any amount

over the average production at that site over the last three years; or

(B) Recovery of the fuel at a site where the fuel was previously being vented or destroyed for at least three years or since commencement of fuel recovery operations, whichever is shorter, without producing useful energy transfer.

~~(3) The fuel being provided under a contract is for a fuel that was previously eligible under sections 95852.1.1(a)(1) or (2), and the verifier is able to track the fuel to the previously eligible contract; or~~

~~(4)~~(3) If the biogas or biomethane is used at the site of production, and not transferred to another operator, thus not requiring a contract, the operator must demonstrate one of the following:

(A) The fuel has been combusted in California prior to January 1, 2012; or

(B) The fuel was not previously used to produce useful energy transfer for at least three years or since commencement of fuel recovery operations, whichever is shorter.

(4) The fuel being provided under a contract is for a fuel that was previously eligible under sections 95852.1.1(a)(1),(2) or (3), and the verifier is able to track the fuel to the previously eligible contract.

(b) An entity may not sell, trade, give away, claim, or otherwise dispose of any of the carbon credits, carbon benefits, carbon emissions reductions, carbon offsets or allowances, howsoever entitled, attributed to the fuel production that would, when combined with the CO_2 emissions from complete combustion of the fuel, result in more CO_2e emissions than would have occurred in the absence of the fuel production. In the case of biomethane or biogas produced from digesters or landfills, the resulting credit for avoided methane emissions may not exceed ~~23.75~~ the global warming potential as listed in MRR for methane plus 2.75 in metric tons of CO_2e per ton of captured methane. This includes any credit received by an entity in the Carbon Intensity calculation under the Low Carbon Fuel

Standard Regulation (title 17, California Code of Regulations (CCR), sections 95480-95490) for methane capture. All calculations of CO_2e emissions are based on the 100-year global warming potentials included in MRR. Generation of Renewable Energy Credits is excluded from this analysis and will not prevent a biomass-derived fuel that meets the requirements in this section from being exempt from a compliance obligation.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95852.2. Emissions without a Compliance Obligation.

Emissions from the following source categories and from the combustion of the following fuel types count toward applicable reporting thresholds, as applicable in MRR, but do not count toward a covered entity's compliance obligation set forth in this article unless those emissions are reported as non-exempt biomass-derived CO_2 under MRR. Emissions without a compliance obligation include:

(a) CO_2 emissions from combustion of the following biomass-derived fuels:

(1) The biogenic fraction of solid waste materials as reported under MRR;

(2) Waste pallets, crates, dunnage, manufacturing and construction wood wastes, tree trimmings, mill residues, and range land maintenance residues;

(3) All agricultural crops or waste;

(4) Wood and wood wastes identified to follow all of the following practices:

(A) Harvested pursuant to an approved timber management plan prepared in accordance with the Z'berg-Nejedly Forest Practice Act of 1973 or other locally or nationally approved plan; and

(B) Harvested for the purpose of forest fire fuel reduction or forest stand improvement.

(5) Biodiesel:

(A) Agri-biodiesel derived solely from virgin oils, including esters derived from virgin vegetable oils from corn, soybeans, sunflower seeds, cottonseeds, canola, cramble, rapeseeds, safflowers, flaxseeds, rice bran, mustard seeds, and camelina, and from animal fats.

(B) Biodiesel is defined as monoalkyl esters of long chain fatty acids derived from the following plant or animal matter that meets the requirements of the American Society of Testing Materials (ASTM) D6751:

1. Waste oils;
2. Tallow; or
3. Virgin oils.

(6) Fuel ethanol (including denaturant):

(A) Cellulosic biofuel produced from lignocellulosic or hemicellulosic material that has a proof of at least 150 without regard to denaturants;

(B) Corn starch; or

(C) Sugar cane.

(7) The biogenic fraction of municipal solid waste as reported under MRR, including MSW directly combusted or converted to a cleaner-burning fuel;

(8) Biomethane and biogas from the following sources:

(A) All animal, plant and other organic waste; or

(B) Landfills and wastewater treatment plants;

(b) The following additional process, vented, and fugitive emissions:

(1) Emissions from geothermal generating units and geothermal facilities, including geothermal geyser steam or fluids;

(2) Emissions from natural gas hydrogen fuel cells;

(3) Vented and fugitive emissions from storage tanks used in petroleum and natural gas production and natural gas transmission;

(4) Vented and fugitive emissions reported under section 95153 of MRR by local distribution companies that report under section 95122 of MRR;

(5) Vented and fugitive emissions from natural gas transmission storage tanks used in petroleum and natural gas production and natural gas transmission, and from produced water;

(6) Emissions reported by petroleum refineries from asphalt blowing operations, equipment leaks, storage tanks, and loading operations;

(7) Emissions from low bleed pneumatic devices;

(8) Emissions from high bleed pneumatic devices reported prior to January 1, 2015;

(9) Vented emissions from well-site centrifugal and reciprocating compressors with a rated horsepower less than 250hp;

(10) Sources for which fugitive emissions are estimated using leak detection and leaker emission factors, as required by section 95153(~~q~~o) of MRR, and sources for which vented and fugitive emissions are estimated using a population count and emissions factors, as required by section 95153(p) of MRR; ~~and~~

(11) Sources for which emissions originate from offshore petroleum and natural gas production facilities, as provided in section 95153(q) of MRR; and

(1~~1~~2) Carbon dioxide that is imported, or that is exported for purposes other than geologic sequestration.

(c) ~~Additional~~ Other Exemptions. The operators of facilities with any of the following activities ~~NAICS code 92811~~ are exempt from compliance with this article ~~through December 31, 2013.~~:

(1) NAICS Code 92811,

(2) Emissions reported and verified in the first compliance period for the direct combustion of municipal solid waste in a waste-to-energy facility that had started operation before 2009. The exempted waste-to-energy facility must meet the following criteria:

(A) Report and verify emissions pursuant to MRR

(B) The generated electricity must be provided or sold to a retail provider or electricity marketer who distributes the electricity over the electric power grid for wholesale or retail customers of the grid.

(C) Must be operating under a current permit issued by the local Air Pollution Control District or Air Quality Management District.

(D) Municipal solid waste fuel must be derived from a municipal solid waste facility, as defined in the PUC – or as defined in the definition section of this article and MRR.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95853. Calculation of Covered Entity's Triennial Compliance Obligation.

(a) A covered entity that exceeds the threshold in section 95812 in any of the three data years preceding the start of a compliance period is a covered entity for the entire compliance period. The covered entity's triennial compliance obligation in this situation is calculated as the total of the emissions with a compliance obligation that received a positive or qualified positive emissions data verification statement, or were assigned emissions pursuant to section 95131 of MRR from all data years of the compliance period.

(b) A covered entity that initially exceeds the threshold in section 95812 in the first year of a compliance period is a covered entity for the entire compliance period. The covered entity's triennial compliance obligation in this situation is calculated as the total of the emissions that received a positive or qualified positive emissions data verification statement, or were assigned emissions pursuant to section 95131 of MRR from all data years of the compliance period.

(c) A covered entity that initially exceeds the threshold in section 95812 in the second year of the second or subsequent compliance period is a covered entity for the second and third years of this compliance period. The covered entity's triennial compliance obligation in this situation is calculated as the total of the emissions that received a positive or qualified positive emissions data verification statement, or were assigned emissions pursuant to section 95131 of MRR for the second and third data years of the compliance period.

(d) A covered entity that initially exceeds the threshold in section 95812 in the second year of the first compliance period or the third year of a later compliance period has a compliance obligation for its emissions that received a positive or qualified positive emissions data verification statement, or were assigned emissions pursuant to section 95131 of MRR for that year, but the entity's triennial compliance obligation for the current compliance period is not due the following year. Instead the entity's reported and verified or assigned emissions for this year will be added to the entity's triennial obligation for the subsequent compliance period.

~~(e) For a new entrant that is eligible to receive free allowances pursuant to subarticles 8 and 9, the first year for this entity to receive free allowances is the year following the first year in which its emissions exceed the threshold in section 95812. The number of free allowances for this new entrant to receive in that year is twice the number calculated pursuant to section 95891.~~

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95854. Quantitative Usage Limit on Designated Compliance Instruments—Including Offset Credits.

(a) Compliance instruments identified in section 95820(b) and sections 95821 (b), (c), and (d) are subject to a quantitative usage limit when used to meet a compliance obligation.

(b) The total number of compliance instruments identified in section 95854(a) that each covered entity may surrender to fulfill the entity's compliance obligation for a compliance period must conform to the following limit:

$$O_O/S \text{ must be less than or equal to } L_O$$

In which:

O_O = Total number of compliance instruments identified in section 95854(a) submitted to fulfill the entity's compliance obligation for the compliance period.

S = Covered entity's compliance obligation.

L_O = Quantitative usage limit on compliance instruments identified in section 95854(a), set at 0.08.

(c) The number of sector-based offset credits that each covered entity may surrender to meet the entity's compliance obligation for a compliance period must not be greater than 0.25 of the L_O for the first and second compliance periods and not more than 0.50 of the L_O for subsequent compliance periods.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95855. Annual Compliance Obligation.

(a) An entity has an annual compliance obligation for any year when the entity is a covered entity except for the condition specified in section 95853(d); and

(b) The annual compliance obligation for a covered entity equals 30 percent of emissions with a compliance obligation reported from the previous data year that received a positive or qualified positive emissions data verification statement, or were assigned emissions pursuant to section 95131 of MRR.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95856. Timely Surrender of Compliance Instruments by a Covered Entity.

(a) A covered entity must surrender one compliance instrument for each metric ton of CO_2e of GHG emissions for the annual and triennial compliance obligations calculated pursuant to this subarticle beginning with the emissions data report for 2013 emissions and each subsequent year in which the covered entity has a compliance obligation.

(b) Compliance Instruments Valid for Surrender.

(1) A compliance instrument listed in subarticle 4 may be used to satisfy a compliance obligation.

(2) To fulfill a compliance obligation, a compliance instrument <u>issued pursuant to sections 95820(a) and 95821(a)</u> must be issued from an allowance budget year within or before the year for which an annual compliance obligation is calculated or the last year of a compliance period for which a triennial compliance obligation is calculated, unless:

(A) The allowance was purchased from the Allowance Price Containment Reserve pursuant to section 95913; or

(B) The allowance is used to satisfy an excess emissions obligation<u>; or</u>

<u>(C) The allowance is eligible for compliance use pursuant to sections 95856(h)(1)(C) and 95856(h)(2)(C)</u>.

(c) A covered entity must transfer from its holding account to its compliance account a sufficient number of compliance instruments to meet the compliance obligation set forth in sections 95853 and 95855.

(d) Deadline for Surrender of Annual Compliance Obligations. For any year in which a covered entity has an annual compliance obligation pursuant to section 95855, it must fulfill that obligation:

(1) By November 1, 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect), of the calendar year following the year for which the obligation is calculated if the entity reports by April 10 pursuant to section 95103 of MRR; or

(2) By November 1, 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect), of the calendar year following the year for which the obligation is calculated if the entity reports by June 1 pursuant to section 95103 of MRR.

(3) In years 2015, 2018, and 2021 there is no annual compliance obligation for the preceeding compliance period, only a triennial compliance obligation.

(e) Determination of Triennial Compliance Obligation.

(1) When a positive or qualified positive emissions data verification statement or assigned emissions for any year is received by ARB, then those emissions for the source categories in section 95852 equal the triennial compliance obligation pursuant to section 95853.

(2) If a positive or qualified positive emissions data verification statement for any year of the compliance period is not received by ARB by the applicable verification deadline as set forth in MRR, ARB will assign emissions according to the requirements set forth in section 95103(g) of MRR for the emissions for the source categories in section 95852. The assigned emissions value then equals the compliance obligation.

(f) Surrender of Triennial Compliance Obligation.

(1) The covered entity must transfer sufficient valid compliance instruments to its compliance account to fulfill its triennial compliance

obligation by November 1, 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect), of the calendar year following the final year of the compliance period.

(2) The total number of compliance instruments submitted to fulfill the triennial compliance obligation is subject to the quantitative use limit pursuant to section 95854.

(3) The surrender of compliance instruments must equal the triennial compliance obligation calculated pursuant to section 95853 less compliance instruments surrendered to fulfill the annual compliance obligation for the years in the compliance period.

(g) When the Executive Officer has determined the covered entity has met its compliance obligations, the Executive Officer shall:

(1) Retire the compliance instruments surrendered; and

(2) Inform programs to which California is linked or recognizes, pursuant to subarticles 12 and 14, of the retirements, including the serial numbers of the compliance instruments retired.

(h) Compliance Instrument Retirement Order

(1) When a covered entity or opt-in covered entity surrenders compliance instruments to meet its annual compliance obligation pursuant to section 95856(d), the Executive Officer will retire them from the Compliance Account in the following order:

(A) Offset credits specified in section 95820(b) and sections 95821(b) through (d) with oldest credits retired first and without consideration of the quantitative usage limit set forth in section 95854;

(B) Allowances specified in section 95820(a) and 95821(a) with earlier vintage allowances retired first;

(C) The current calendar year's vintage allowances and allowances allocated just before the annual surrender deadline up to the True-up allowance amount as determined in sections 95891(b), 95891(c)(3)(B), 95891(d)(1)(B), 95891(d)(2)(B), or 95891(e)(1) if

an entity was eligible to receive true up allowances pursuant to sections 95891(b), 95891(c)(3)(B), 95891(d)(1)(B), 95891(d)(2)(B), or 95891(e)(1); and

(D) Allowances purchased from the Allowance Price Containment Reserve.

(2) When a covered entity or opt-in covered entity surrenders compliance instruments to meet its triennial compliance obligation pursuant to section 95856(f), the Executive Officer will retire them from the Compliance Account in the following order:

(A) Offset credits specified in section 95820(b) and sections 95821(b) through (d) with oldest credits retired first and subject to the quantitative usage limit set forth in section 95854:

(1) If offset credits were used to meet annual compliance obligations in the compliance period and exceed the quantitative usage limit set forth in section 95854, then the quantity of offset credits eligible to fulfill the entity's compliance obligations will be limited to the quantitative usage limit and the oldest offset credits will be retired first;

(2) Offset credits retired in excess of the quantitative usage limit will not count toward the triennial compliance obligation;

(3) If offset credits were not used to meet annual compliance obligations in the compliance period or were used to meet annual compliance obligations in the compliance period but did not exceed the quantitative usage limit set forth in section 95854, then the oldest credits will be retired first up to the quantitative offset usage limit;

(B) Allowances specified in section 95820(a) and 95821(a) with earlier vintage allowances retired first;

(C) The current calendar year's vintage allowances and allowances allocated just before the triennial surrender deadline up to the true-up allowance amount as determined in section 95891(b),

95891(c)(3)(B), 95891(d)(1)(B), 95891(d)(2)(B), or 95891(e)(1) if an entity was eligible to receive true up allowances pursuant to section 95891(b), 95891(c)(3)(B), 95891(d)(1)(B), 95891(d)(2)(B), or 95891(e)(1); and

(D) Allowances purchased from the Allowance Price Containment Reserve.

(3) An entity that is not eligible to receive true up allowances pursuant to section 95891(b), 95891(c)(3)(B), 95891(d)(1)(B), 95891(d)(2)(B), or 95891(e)(1), cannot use the current calendar year's vintage allowances or allowances allocated just before the current surrender deadline to meet the timely surrender of compliance instrument requirements in section 95856.

(4) If an entity used any offsets to meet its annual timely surrender pursuant to section 95856(d) and the cumulative offsets retired by the Executive Officer exceed the quantitative usage limit pursuant to section 95854 at the time of the triennial timely surrender pursuant to section 95856(f), the offsets already retired will remain in the Retirement Account and the entity must ensure they it has sufficient compliance instruments other than offsets to meet its triennial timely surrender pursuant to section 95856(e).

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95857. Untimely Surrender of Compliance Instruments by a Covered Entity.

(a) Applicability.

(1) A covered entity or opt-in covered entity that does not meet the compliance deadline for surrendering its annual or triennial compliance obligation pursuant to section 95856 is subject to the compliance obligation for untimely surrender as described in this section; and

(2) The compliance obligation for untimely surrender ("excess emissions") will not apply to a covered entity or opt-in covered entity which is determined to have transferred insufficient instruments to meet the compliance obligations of section 95856 solely because of the invalidation of an ARB offset credit by the Executive Officer pursuant to section 95985 until six months after notice of invalidation.

(b) Calculation of the Untimely Surrender Obligation.

(1) The quantity of excess emissions is the difference between the compliance obligation calculated pursuant to this section and any compliance instruments timely surrendered by the entity;

(2) The entity's compliance obligation for untimely surrender is calculated as four times the entity's excess emissions;

(3) At least three-fourths of an entity's compliance obligation for untimely surrender may only be fulfilled with CA GHG allowances or allowances issued by a GHG ETS pursuant to subarticle 12;

(4) Up to one-fourth of an entity's compliance obligation for untimely surrender may be fulfilled with ARB offset credits or compliance instruments listed in sections 95821(b), (c), and (d);

(5) The quantitative usage limit provided in section 95854 will apply to the compliance instruments listed in section 95857(b)(4) for the compliance period for which the untimely surrender obligation applies; and

(6) The untimely surrender obligation is due within five days of the first auction or reserve sale conducted by ARB following the applicable surrender date, whichever is the latter, and for which the registration deadline has not passed when the untimely surrender obligation is assessed.

(c) If an entity with an untimely surrender obligation fails to satisfy this obligation pursuant to section 95857(b)(6) then:

(1) ARB will determine the number of violations pursuant to section 96014;

(2) If a portion of the untimely surrender obligation is not surrendered as required, the entity will have a new untimely surrender obligation equal to the amount of the previous untimely surrender obligation which was not satisfied by the deadline stated in section 95857(b)(6) upon which the number of violations will be calculated pursuant to section 96014. The new untimely surrender obligation is due immediately; and

(3) The calculation of the untimely surrender obligation shall only apply once for each untimely surrender of compliance instruments per annual or triennial compliance obligation.

(d) When the covered entity or opt-in covered entity meets its untimely surrender obligations pursuant to sections 95857(a) through (c), the Executive Officer shall:

(1) Transfer the compliance instruments used to fulfill the untimely surrender obligation in the following manner:

(A) At least three fourths of the compliance instruments to the Auction Holding Account. The three fourths of the compliance instruments transferred to the Auction Holding Account shall only be comprised of allowances; and

(B) The remaining one fourth of compliance instruments to the Retirement Account.

(2) Inform programs to which California is linked or recognizes, pursuant to subarticles 12 and 14, of the retirements, including the serial numbers of the compliance instruments retired.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95858. Compliance Obligation for Under-Reporting in a Previous Compliance Period.

If, after an entity has surrendered its compliance instruments for a compliance period pursuant to section 95856, the Executive Officer determines, through an

audit or other information, that the entity under-reported its emissions under MRR for any emissions sources that form the basis for entity's the compliance obligation, then the following shall apply:

(a) If the difference between the emissions used to calculate the compliance obligation and subsequently used to calculate the number of compliance instruments surrendered pursuant to section 95856 and the emissions-determined by the Executive Officer to be under-reported for the sum of those emissions is less than five percent of the emissions number used to calculate the compliance obligation and subsequently used to calculate the number of compliance instruments surrendered pursuant to section 95856, then the entity is not required to take any further action.

(b) If the difference between the emissions used to calculate the compliance obligation and subsequently calculate the number of compliance instruments surrendered pursuant to section 95856 and the emissions determined by the Executive Officer to be under-reported for the sum of those emissions is more than five percent of the emissions number used to calculate the compliance obligation and subsequently used to calculate the number of compliance instruments surrendered pursuant to section 95856, then the entity must surrender compliance instruments in the following amount:

$$\mathrm{Cla} = \mathrm{EMd} - \mathrm{CO} - (\mathrm{CO} * 0.05)$$

Where:

'Cla' is the number of additional compliance instruments that must be surrendered to ARB to cover under-reported emissions;

'CO' is the emissions number used to determine the compliance obligation surrendered pursuant to section 95856 for any previous compliance period; and

'EMd' is the number of the emissions determined by the Executive Officer for the sum of the emissions sources subject to a compliance obligation;

(c) The entity will have six months from the time of notification by the Executive Officer to surrender additional compliance instruments for under- reporting emissions under MRR for the previous compliance period as determined pursuant to this section. The provisions of sections 95857 and 96014 shall not apply during these six months. The entity may use compliance instruments from subsequent compliance periods to meet these requirements. The entity may only use CA GHG allowances or allowances issued by a GHG ETS approved pursuant to subarticle 12 to meet the requirements of this section.

(d) Any determination that an entity under-reported its emissions for a previous compliance period shall be made by the Executive Officer no later than eight years from the applicable verification deadline for the emissions data report which contained the under-reporting of emissions.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 8: Disposition of Allowances

§ 95870. Disposition of Allowances.

(a) Allowance Price Containment Reserve. Upon creation of the Allowance Price Containment Reserve Account, the Executive Officer shall transfer allowances to the Allowance Price Containment Reserve, as follows:

(1) One percent of the allowances from budget years 2013-2014;

(2) Four percent of the allowances from budget years 2015-2017; and

(3) Seven percent of the allowances from budget years 2018-2020.

(b) Advance Auction. Upon creation of the Auction Holding Account, the Executive Officer shall transfer 10 percent of the allowances from budget years 2015-2020 to the Auction Holding Account.

(1) These allowances will be eligible to be sold pursuant to section 95913(f)shall be auctioned pursuant to section 95910.

(2) All Advance Auction allowances not sold pursuant to section 95913(f) will be auctioned pursuant to section 95910.

(23) The proceeds from the sale of these allowances will be deposited into the Air Pollution Control Fund Greenhouse Gas Reduction Fund created pursuant to Government Code section 16428.8, and will be available for appropriation by the Legislature for the purposes designated in California Health and Safety Code sections 38500 et seq. and consistent with the requirements of Chapter 4.1 (commencing with Section 39710) of Part 2 of Division 26 of the California Health and Safety Code and Article 9.7 (commencing with Section 16428.8) of Chapter 2 of Part 2 of Division 4 of Title 2 of the Government Code.

(c) Upon creation of the Voluntary Renewable Electricity Reserve Account, the Executive Officer shall transfer allowances to the Voluntary Renewable Electricity Reserve Account, as follows:

(1) 0.5 percent of the allowances from budget years 2013-2014; and

(2) 0.25 percent of the allowances from budget years 2015-2020.

(d) Electrical Distribution Utility Sector Allocation. Allowances available for allocation to electrical distribution utilities each budget year shall be 97.7 million metric tons multiplied by the cap adjustment factor in Table 9-2 for each budget year 2013-2020. The Executive Officer will allocate to electrical distribution utilities on September 14, 2012 for vintage 2013 allowances and October 15November 1, or the first business day thereafter, of each calendar year from 2013-2019 for allocations from 2014-2020 annual allowance budgets.

(e) Allocation to Industrial Covered Entities. Allowances allocated for the purposes of industry assistance shall be transferred to holding accounts for industrial sectors listed in Table 8-1.

(1) The Executive Officer will allocate allowances from 2013-2020 annual allowance budgets to place an annual individual allocation in the

~~holding account of~~ each eligible covered entity on or before October 15~~November 1~~, or the first business day thereafter, of each calendar year 2012-2019. ~~for allocations from 2013-2020 annual allowance budgets.~~

(2) Allocation to eligible covered entities shall be conducted using the assistance factors specified for each listed industrial activity found in Table 8-1 and the methodology set forth in section 95891.

(A) First Compliance Period Refining Sector Allocation. Allowances available for allocation to petroleum refineries from the 2013-2014 allowance budgets shall be calculated using the following equation. Individual petroleum refiners will receive a portion of this sector allocation under the method calculated pursuant to section 95891(d).

$$SA_t = O_{t-2} * B_R * AF_{R,t} * c_t$$

Where:

"SA_t" is the allocation to the refining sector from budget year "t";

"O_{t-2}" is the output of primary refinery products, in barrels, from the refining sector in year "t-2";

"B_R" is the benchmark for primary products produced by the refining sector, equal to 0.0462 metric tons of allowances per barrel of primary refinery product;

"$AF_{R,t}$" is the assistance factor for budget year "t" assigned to petroleum refining as specified in Table 8-1; and

"c_t" is the cap adjustment factor for budget year "t" assigned to petroleum refining to account for cap decline as specified in Table 9-2.

(B) Second and Third Compliance Period Refining Sector Allocation. For budget years 2015-2020, allowances available for allocation to individual petroleum refineries shall be calculated using the product

output-based allocation calculation methodology in section 95891(b).

(3) The total amount of allowances allocated for the purposes of industry assistance shall not exceed the available amount of allowances after accounting for allocations made pursuant to section 95870(a) through (d). If the amount calculated under the methodology set forth in section 95891 exceeds the amount of allowances available, the number of allowances available will be prorated equally across all eligible industrial covered entities. The proration will be calculated using the share of allowances available after accounting for all allocations made pursuant to sections 95870(a) through (d) compared to total allowances that would be distributed according to the methodology set forth in section 95891.

(4) Industrial entities who purchase electricity or qualified thermal output pursuant to a legacy contract and who receive allocation under this section shall have their allocation reduced as specified in section 95891(h).

(f) Allocation to University Covered Entities and Public Service Facilities. The Executive Officer will place an annual individual allocation from budget year 2015 in the holding account of each eligible university covered entity for calendar years 2013, 2014, and 2015 on or before October 15, 2014. The Executive Officer will place an annual individual allocation in the holding account of each eligible university covered entity on or before October 15, or the first business day thereafter, of each calendar year from 2015-2019 for allocations from 2016-2020 annual allowance budgets.

(g) The Executive Officer shall retire allowances equal to the quantity of emissions that do not have a compliance obligation based on the exemption of emissions pursuant to section 95852(j).

(h) Allocation to Legacy Contract Generators. Allowances will be allocated to legacy contract generators for 2013 and 2014 for transition assistance.

The Executive Office will transfer allowance allocations into each eligible generator's holding account by October 15, 2014 for eligible Legacy Contract Emissions pursuant to the methodology set forth in section 95894.

(i) Natural Gas Supplier Sector Allocation. Allowances available for allocation to natural gas suppliers each budget year shall be calculated as set forth in section 95893. The Executive Officer will allocate to natural gas suppliers on October 15, or the first business day thereafter, of each calendar year from 2014 through 2019 for allocations from 2015 through 2020 annual allowance budgets.

(~~f~~j) Auction Proceeds for AB 32 Statutory Objectives.

(1) Beginning in 2015, 10% of all remaining allowances from each vintage not allocated for uses specified in section 95870(a) are eligible to be sold pursuant to section 95913(f).

(~~1~~2) All remaining allowances not allocated for uses specified in sections 95870(a) through (e) will be designated for sale at auction. The proceeds from the sale of these allowances will be deposited into the ~~Air Pollution Control Fund~~ Greenhouse Gas Reduction Fund created pursuant to Government Code section 16428.8, and will be available for appropriation by the Legislature for the purposes designated in California Health and Safety Code sections 38500 et seq. and consistent with the requirements of Chapter 4.1 (commencing with Section 39710) of Part 2 of Division 26 of the California Health and Safety Code and Article 9.7 (commencing with Section 16428.8) of Chapter 2 of Part 2 of Division 4 of Title 2 of the Government Code.

Table 8-1: Industry Assistance

Leakage Risk Classification	*NAICS Sector Definition*	*NAICS Code*	*Activity(a)*	*Industry Assistance Factor (AF_a) by Budget Year*		
				2013-2014	*2015-2017*	*2018-2020*
High	Crude Petroleum and Natural Gas Extraction	211111	Thermal EOR Crude Oil Extraction	100%	100%	100%
			Non-Thermal Crude Oil Extraction	100%	100%	100%
	Natural Gas Liquid Extraction	211112	Natural Gas Liquid Processing	100%	100%	100%
	Potash, Soda, and Borate Mineral Mining	212391	Mining and Manufacturing of Soda Ash and Related Products	100%	100%	100%
	All Other Nonmetallic Mineral Mining	212399	Diatomaceous Earth Mining	100%	100%	100%
	Paper (except Newsprint) Mills	322121	Tissue Manufacturing	100%	100%	100%
	Paperboard Mills	322130	Recycled Boxboard Manufacturing	100%	100%	100%
			Recycled Linerboard (Testliner) Manufacturing	100%	100%	100%
			Recycled Medium (Fluting) Manufacturing	100%	100%	100%
	All Other Petroleum and Coal Products Manufacturing	324199	Coke Calcining	100%	100%	100%
	All Other Basic Inorganic Chemical Manufacturing	325188	All Other Basic Inorganic Chemical Manufacturing	100%	100%	100%
	All Other Basic Organic Chemical Manufacturing	325199	All Other Basic Organic Chemical Manufacturing	100%	100%	100%
	Nitrogenous Fertilizer	325311	Nitric Acid Production	100%	100%	100%

Leakage Risk Classification	NAICS Sector Definition	NAICS Code	Activity(a)	Industry Assistance Factor (AF_a)		
	Manufacturing		Calcium Ammonium Nitrate Solution Production	100%	100%	100%
	Flat Glass Manufacturing	327211	Flat Glass Manufacturing	100%	100%	100%
	Glass Container Manufacturing	327213	Container Glass Manufacturing	100%	100%	100%
	Cement Manufacturing	327310	Cement Manufacturing	100%	100%	100%
	Lime Manufacturing	327410	Dolime Manufacturing	100%	100%	100%
	Iron and Steel Mills	331111	Steel Production Using Electric Arc Furnace	100%	100%	100%
	Rolled Steel Shape Manufacturing	331221	Hot Rolled Steel Sheet Production	100%	100%	100%
	All Other Metal Ore Mining	212299	Rare Earth Production	100%	100%	100%
	Mineral Wool Manufacturing	327993	Fiber Glass Manufacturing	100%	100%	100%
Medium	Food Manufacturing	311	Food Manufacturing	100%	100~~75~~%	75~~50~~%
	Cut and Sew Apparel Manufacturing	3152	Cut and Sew Apparel Manufacturing	100%	100~~75~~%	75~~50~~%
	Breweries	312120	Brewing	100%	100~~75~~%	75~~50~~%
	Petroleum Refineries	324110	Petroleum Refining	100%	100~~75~~%	75~~50~~%
					100~~75~~%	75~~50~~%
	Industrial Gas Manufacturing	325120	Gaseous Hydrogen Production	100%	100~~75~~%	75~~50~~%
			Liquefied Hydrogen Production	100%	100~~75~~%	75~~50~~%
	Biological Product (Except Diagnostic) Manufacturing	325414	Biological Product (Except Diagnostic) Manufacturing	100%	100~~75~~%	75~~50~~%
	Gypsum Product Manufacturing	327420	Plaster Manufacturing	100%	100~~75~~%	75~~50~~%
			Plaster Board Manufacturing	100%	100~~75~~%	75~~50~~%
	~~Mineral Wool Manufacturing~~	~~327993~~	~~Fiber Glass Manufacturing~~	~~100%~~	~~75%~~	~~50%~~
	Rolled Steel Shape Manufacturing	331221	Picked Steel Sheet Production	100%	100~~75~~%	75~~50~~%

Leakage Risk Classification	NAICS Sector Definition	NAICS Code	Activity(a)	Industry Assistance Factor (AF_a)		
			Cold Rolled and Annealed Steel Sheet Production	100%	100~~75~~%	75~~50~~%
			Galvanized Steel Sheet Production	100%	100~~75~~%	75~~50~~%
			Tin Steel Plate Production	100%	100~~75~~%	75~~50~~%
	Secondary Smelting and Alloying of Aluminum	331314	~~Secondary Smelting and Alloying of Aluminum~~ Aluminum Alloy Billet Manufacturing	100%	100~~75~~%	75~~50~~%
	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)	331492	~~Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)~~Lead Acid Battery Recycling	100%	100~~75~~%	75~~50~~%
	Iron Foundries	331511	Iron Foundries	100%	100~~75~~%	75~~50~~%
	Turbine and Turbine Generator Set Units Manufacturing	333611	Testing of Turbines and Turbine Generator Sets	100%	100~~75~~%	75~~50~~%
Low	Pharmaceutical and Medicine Manufacturing	325412	Pharmaceutical and Medicine Manufacturing	100%	100~~50~~%	50~~30~~%
	Aircraft Manufacturing	336411	Aircraft Manufacturing	100%	100~~50~~%	50~~30~~%
	Support Activities for Air Transportation	4881	Support Activities for Air Transportation	100%	100~~50~~%	50~~30~~%
	Guided Missile and Space Vehicle Manufacturing	336414	Guided Missile and Space Vehicle Manufacturing	100%	100%	50%
TBD	Ethyl Alcohol Manufacturing	325193	Ethyl Alcohol Manufacturing	100%	100%	
	Asphalt Paving Mixture and Block Manufacturing	324121	Asphalt Paving Mixture and Block Manufacturing	100%	100%	
	Metal Forging	33211	Ferrous and nonferrous Metal Forging	100%	100%	
	Hardware Manufacturing	332510	Hardware Manufacturing	100%	100%	

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code~~.~~ and Section 16428.8, Government Code.

Subarticle 9: Direct Allocations of California GHG Allowances

§ 95890. General Provisions for Direct Allocations.

(a) Eligibility Requirements for Industrial Facilities. A covered entity or opt-in covered entity from the industrial sectors listed in Table 8-1 shall be eligible for direct allocations of California GHG allowances if it has complied with the requirements of MRR and has obtained a positive or qualified positive product data verification statement for the prior year pursuant to MRR.

(b) Eligibility Requirements for Electrical Distribution Utilities. An electrical distribution utility shall be eligible for direct allocation of California GHG allowances if it has complied with the requirements of MRR and has obtained a positive or qualified positive emissions data verification statement for the prior year pursuant to MRR.

(c) Electrical Distribution Utilities that are not covered entities but are listed in Table 9-3 must register pursuant to section 95830 to receive allowances.

(d) Eligibility Requirements for University Covered Entities and Public Service Facilities. A University Covered Entity or public service facility shall be eligible for direct allocations of California GHG allowances if it has complied with the requirements of MRR and has obtained a positive or qualified positive verification statement for the prior year pursuant to MRR.

(e) Eligibility Requirements for Legacy Contract Generators. A Legacy Contract Generator that has demonstrated its eligibility to the satisfaction of the Executive Officer pursuant to section 95894 of this regulation shall be eligible for direct allocation of allowances if it has complied with the requirements of the MRR, section 95112 and has obtained a positive or a qualified positive verification statement for pursuant to MRR.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95891. Allocation for Industry Assistance.

(a) The Executive Officer shall determine the amount of allowances directly allocated to each eligible covered entity or opt-in covered entity using the product output-based allocation calculation methodology specified in section 95891(b) if the entity conducts an activity listed in both Table 8-1 and Table 9-1. The Executive Officer shall determine the amount of allowances directly allocated to each eligible covered entity or opt-in covered entity using the energy-based allocation calculation methodology specified in section 95891(c) if the entity conducts an activity listed in Table 8-1 but not listed in Table 9-1.

(1) First Compliance Period Refining Sector Allocation Exception. For budget years 2013-2014 petroleum refineries shall receive their allocation of allowances pursuant to the methodology stated in section 95891(d).

(2) Second and Third Compliance Period Refining Sector Allocation. For budget years 2015-2020 petroleum refineries shall receive their allocation of allowances pursuant to the product output-based allocation calculation methodology stated in section 95891(b).

(3) New Entrant Industrial Allocation Without Leakage Risk. Covered facilities that were not covered under the California Cap-and-Trade Program prior to 2012 and do not have a leakage risk in Table 8-1 are eligible to receive allocated allowances under the new entrant energy-based allocation methodology pursuant to 95891(b)(3) if the first three digits of the facility NAICS code matches a NAICS code in Table 8-1. The leakage risk classification shall be low until a leakage risk classification is added for that sector. Food processors

that are only classified by a three digit NAICS code are exempt from this classification.

(b) Product Output-Based Allocation Calculation Methodology. The Executive Officer shall calculate the amount of California GHG Allowances directly allocated under a product output-based methodology annually using the following formula:

$$\cancel{A_t = \sum_{a=1}^{n} O_{a,initial} * B_a * AF_{a,t} * c_{a,t} + \sum_{a=1}^{n} O_{a,trueup} * B_a * AF_{a,t-2} * c_{a,t-2}}$$

$$\underline{A_t = \left(\sum_{a=1}^{n} O_{a,initial} * B_a * AF_{a,t} * c_{a,t}\right) + TrueUp}$$

Where:

"A_t" is the amount of California GHG allowances directly allocated to the operator of an industrial facility for all activities with a product output-based allocation from budget year "t";

"t" is the budget year from which the direct allocation occurs;

"t-2" is the year two years prior to year "t";

~~"t-4" is the year four years prior to year "t";~~

"a" is each eligible activity as defined in Table 9-1;

"n" is the number of eligible activities at a facility;

"$O_{a,\ initial}$" will be calculated by the Executive Officer as the output in year "t-2" as reported to ARB.

~~"$O_{a,trueup}$" adjusts for any output in year "t" not properly accounted for in prior allocations. The Executive Officer will calculate this term using the difference between the output reported in data year "t-2" and the output reported in data year "t-4."~~

"B_a" is the emissions efficiency benchmark per unit of output for each eligible activity defined in Table 9-1;

"$AF_{a,t}$" is the assistance factor for budget year "t" assigned to each activity "a" as specified in Table 8-1; ~~and~~

"$c_{a,t}$" is the adjustment factor for budget year "t" assigned to each activity;

"a" to account for cap decline as specified in Table 9-2~~.~~; and

"trueup" is the amount true-up allowances allocated to account for changes in production or allocation not properly accounted for in prior allocations. This value of allowances for budget year "t" shall be allowed to be used for budget year "t-2" pursuant to 95856(h)(1)(C) and 95856(h)(2)(C). This value is calculated using the following formula:

$$TrueUp = \left(\sum_{a=1}^{n} O_{a,t-2} * B_a * AF_{a,t-2} * c_{a,t-2}\right) - A_{t-2}$$

Where:

"$O_{a,\,t-2}$" will be calculated by the Executive Officer as the output in year "t-2" as reported to ARB;

"A_{t-2}" is the amount of California GHG allowances directly allocated to the operator of an industrial facility for all activities from budget year "t-2";

“$AF_{a,\ t-2}$” is the assistance factor for budget year “t-2” assigned to each activity “a” as specified in Table 8-1; and

“$c_{a,t-2}$” is the adjustment factor for budget year “t-2” assigned to each activity.

Table 9-1: Product-Based Emissions Efficiency Benchmarks

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Crude Petroleum and Natural Gas Extraction	211111	Thermal EOR Crude Oil Extraction	~~0.0816~~0.0811	Allowances / Barrel of Thermal Crude Oil Eqv.
		Non Thermal Crude Oil Extraction	~~0.0082~~0.0076	Allowances / Barrel of Non Thermal Crude Oil Eqv.
Natural Gas Liquid Extraction	211112	Natural Gas Liquid Processing	~~0.0146~~0.0118	Allowances / Barrel of Natural Gas Liquids Produced
Onshore Natural Gas Processing Plants	211111	Natural Gas Processing ≥ 25MMscf/day	0.0220	Allowances / Barrel of Gas Processed Eqv.
Potash, Soda, and Borate Mineral Mining	212391	Mining and Manufacturing of Soda Ash and Related Products	0.948	Allowances / Short Ton of Soda Ash Equivalent (Soda Ash, Biocarb, Borax, V-Bor, DECA, PYROBOR, Boric Acid, and Sulfate)
All Other Nonmetallic Mineral Mining	212399	Freshwater Diatomite Filter Aids Manufacturing	0.418	Allowances / Short Ton of Freshwater Diatomite Filter Aids

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Fruit and vegetable canning	311421	Tomato Processing (TBD)	TBD	TBD
Poultry Processing	311615	Whole Chicken and Parts Processing	TBD	Allowances / lb Whole Chicken and Parts
		Poultry Deli Product Processing	TBD	Allowances / lb Poultry Deli Product
		Protein Meal Processing	TBD	Allowances / lb Protein Meal
Dried and Dehydrated Food Manufacturing	311423	Dehydrated Garlic Processing	TBD	TBD
		Dehydrated Onion Processing	TBD	TBD
		Dehydrated Chili Pepper Processing	TBD	TBD
		Dehydrated Spinach Processing	TBD	TBD
		Dehydrated Parsley Processing	TBD	TBD
Food Manufacturing	311	Dairies (TBD)	TBD	TBD
Food Manufacturing	311	Pistachios and Almond Processing (TBD)	TBD	TBD
Food Manufacturing	311	Snack Chips (TBD)	TBD	TBD

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Food Manufacturing	311	Juice Manufacturing (TBD)	TBD	TBD
Beet sugar manufacturing	311313	Beet sugar manufacturing	TBD	Allowances / short ton Granulated-Refined Sugar
Breweries	312120	Lager Beer Manufacturing	TBD	Allowances / Barrel of Lager Beer
Wineries	312130	Spirits Manufacturing (TBD)	TBD	TBD

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Paper (except Newsprint) Mills	322121	Tissue Manufacturing	~~1.14~~TBD	Allowances / Air Dried Short Ton of tissue produced adjusted by water absorption capacity
Paperboard Mills	322130	Recycled Boxboard Manufacturing	0.499	Allowances / Air Dried Short Ton of recycled boxboard
		Recycled Linerboard (Testliner) Manufacturing	0.562	Allowances / Air Dried Short Ton of recycled linerboard
		Recycled Medium (Fluting) Manufacturing	0.392	Allowances / Air Dried Short Ton of recycled medium
Petroleum Refineries	324110	Petroleum Refining ~~(CO_2 Weighted Tonne)~~ TBD	~~0.0295~~ TBD	Allowances / ~~CO_2 Weighted Tonne~~ TBD
All Other Petroleum and Coal Products Manufacturing	324199	Coke Calcining	~~0.341~~ TBD	Allowances/ TBD ~~Short Ton~~ Calcined Coke
Industrial Gas Manufacturing	325120	Gaseous Hydrogen Production	~~8.85~~TBD	Allowances / TBD ~~Metric Ton~~ of Hydrogen Gas
		Liquid Hydrogen Production	~~8.85~~TBD	Allowances / TBD ~~Metric Ton~~ of Liquid Hydrogen

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Nitrogenous Fertilizer Manufacturing	325311	Nitric Acid Production	0.349	Allowances / Short ton of nitric acid (HNO3 100%)
		Calcium Ammonium Nitrate Solution Production	0.0902	Allowances / Short ton of calcium ammonium nitrate solution
Flat Glass Manufacturing	327211	Flat glass Manufacturing	~~0.471~~0.495	Allowances / Short Ton of Flat Glass Pulled
Glass Container Manufacturing	327213	Container Glass Manufacturing	~~0.264~~ (TBD)[1]	Allowances / Short Ton of Container Glass Pulled
Mineral Wool Manufacturing	327993	Fiber Glass Manufacturing	0.394	Allowances / Short Ton of Fiberglass Pulled
Cement Manufacturing	327310	Cement Manufacturing	~~0.718~~ TBD[2]	Allowances / Short ton of adjusted clinker and mineral additives produced
Lime Manufacturing	327410	Dolime Manufacturing	1.40	Allowances / Short Ton of Dolime Produced
Gypsum Product Manufacturing	327420	Plaster Manufacturing	0.0454	Allowances / Short Ton of Plaster
		Plaster Board Manufacturing	0.134	Allowances / Short Ton of Plaster Board

[1] Benchmark value is being reviewed based on newly available data.
[2] Benchmark value is being revised including biomass emission.

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Iron and Steel Mills	331111	Steel Production Using an Electric Arc Furnace	0.170	Allowances / Short ton of Steel produced using EAF
Secondary smelting and alloying of aluminum	331314	Aluminum Alloy Billet Manufacturing	0.371	Allowances / Short ton of Aluminum Billet
Secondary smelting, refining, and alloying of nonferrous metal (except copper and aluminum)	331492	Lead Acid Battery Recycling (TBD)	TBD	TBD
Iron Foundries	331511	Ductile Iron Pipe Manufacturing	0.561	Allowances / Short ton of Ductile Iron Pipe
Iron and Steel Forging	332111	TBD	TBD	TBD
Nonferrous Forging	332112	TBD	TBD	TBD

NAICS Sector Definition	NAICS code	Activity (a)	Benchmark (B_a)	Benchmark Units
Rolled Steel Shape Manufacturing[3]	331221	Hot Rolled Steel Sheet Production	0.0843	Allowances / Short ton of hot rolled steel
		Picked Steel Sheet Production	0.0126	Allowances / Short ton of pickled steel
		Cold Rolled and Annealed Steel Sheet Production	0.0313	Allowances / Short ton of cold rolled and annealed steel
		Galvanized Steel Sheet Production	0.0504	Allowances / Short ton of galvanized steel
		Tin Steel Plate Production	0.0610	Allowances / Short ton of tin plate
Turbine and Turbine Generator Set Units Manufacturing	333611	Testing of Turbines and Turbine Generator Sets	0.00782	Allowances / Horsepower tested

(c) Energy-Based Allocation Calculation Methodology. The Executive Officer shall calculate the amount of California GHG Allowances directly allocated under the energy-based methodology annually using the following formula:

$$A_t = \left(S_{Consumed} * B_{Steam} + F_{Consumed} * B_{Fuel} - e_{Sold} * B_{Electricity}\right) * AF_{\cancel{a,}t} * c_{\cancel{a,}t}$$

Where:

[3] Cold rolling benchmark values (may affect pickled steel sheet production, cold rolled and annealed sheet production, galvanized steel sheet production and tin steel plate production) are being reviewed based on newly available data.

"A_t" is the amount of California GHG allowances directly allocated to the operator of an industrial facility with an energy-based allocation from budget year "t";

"t" is the budget year from which the direct allocation occurs;

"$S_{Consumed}$" is the historical baseline annual arithmetic mean amount of steam consumed, measured in MMBtu, at the industrial facility for any industrial process, including heating or cooling applications. This value shall exclude any steam used to produce electricity. This value shall exclude steam produced from an onsite cogeneration unit;

"B_{Steam}" is the emissions efficiency benchmark per unit of steam, 0.06244 California GHG Allowances/MMBtu Steam;

"$F_{Consumed}$" is the historical baseline annual arithmetic mean amount of energy produced due to fuel combustion at a given facility, measured in MMBtus. The Executive Officer shall calculate this value based on measured higher heating values or the default higher heating value of the applicable fuel in Table C–1 of subpart C, title 40, Code of Federal Regulations, Part 98. This value shall include any energy from fuel combusted in an onsite electricity generation or cogeneration unit. This value shall exclude energy to generate the steam accounted for in the "$S_{Consumed}$" term;

"B_{Fuel}" is the emissions efficiency benchmark per unit of energy from fuel combustion, 0.05307 California GHG Allowances/MMBtu**;**

"e_{Sold}" is the historical baseline annual arithmetic mean amount of electricity sold or provided for off-site use, measured in MWhs;

"$B_{Electricity}$" is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances/MWh;

"$AF_{\cancel{a,}\,t}$" is the assistance factor for budget year "t" assigned to the facility ~~each~~ activity ~~"a"~~ as specified in Table 8-1; and

"$c_{a,t}$" is the adjustment factor for budget year "t" assigned to the facility ~~each~~ activity ~~"a"~~ to account for cap decline as specified in Table 9-2.

(1) Data Sources.

(A) In determining the appropriate baseline values, the Executive Officer may employ all available data reported to ARB under -MRR for data years 2008-2010. If necessary, the Executive Officer will solicit additional data to establish a representative baseline allocation.

(B) Recognition of California Climate Action Registry membership. If a facility reported facility level, third-party verified, greenhouse gas emissions data to the California Climate Action Registry for data years 2000-2007, the Executive Officer may consider these years in determining the representative annual baseline value. If necessary the Executive Officer will solicit additional data for these data years.

(2) Maximum Free Allocation. The Executive Officer shall ensure that the annual amount of California GHG Allowances directly allocated under the energy-based methodology to a covered entity for operations at a facility shall not exceed 110% of the maximum annual level of greenhouse gas emissions, adjusted for steam purchases and sales and electricity sales, emitted during the historical data years used in establishing the baseline allocation for the facility in question.

(3) New Entrants. For c~~C~~overed ~~entities of~~ facilities that were not ~~in operation~~ covered under the California Cap-and-Trade Program prior to ~~2011~~ 2012 and are eligible for free allocation under the energy-based methodology, allowances shall be ~~assessed a baseline annual allocation based on expected activity levels as~~ determined by the Executive Officer using the following methodology.

(A) Opt-In Covered Entities without Historical Baseline Emissions Data. For opt-in covered entities of facilities that have no historical emissions data reported to ARB under MRR, the Executive Officer shall calculate the amount of California GHG Allowances directly allocated under the energy-based methodology annually using the following formula:

$$A_t = \left(F_{Consumed,est} * B_{Fuel} - e_{sold,est} * B_{Elect}\right) * AF_{t-2} * c_{t-2}$$

Where:

"A_t" is the amount of California GHG Allowances directly allocated to the operator of an industrial facility with an energy-based allocation from budget year "t";

"t" is the budget year from which the direct allocation occurs;

"$F_{Consumed,est}$" is the estimated amount of energy produced due to fuel combustion at a given facility, measured in MMBtu. This value shall exclude fuel used to produce steam that is provided or sold offsite. The Executive Officer shall calculate this value based on measured higher heating values or the default higher heating value of the applicable fuel in Table C–1 of subpart C, title 40, Code of Federal Regulations, Part 98. The Executive

Officer shall calculate this value utilizing any available data on the design of the facility and equipment;

"B_{Fuel}" is the emissions efficiency benchmark per unit of energy from fuel combustion, 0.05307 California GHG Allowances/MMBtu;

"$e_{Sold,est}$" is the estimated amount of electricity sold or provided for off-site use, measured in MWh. The Executive Officer shall calculate this value utilizing any available data on the design of the facility and equipment;

"$B_{Electricity}$" is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances/MWh;

"AF_t" is the assistance factor for budget year "t" assigned to the facility activity as specified in Table 8-1; and

"c_t" is the adjustment factor for budget year "t" assigned to the facility activity to account for cap decline as specified in Table 9-2.

(B) Entities with Transitional Emissions Data. For covered entities or opt-in covered entities that are classified as transitional in the stability formula in 95891(c)(3)(D), the Executive Officer shall calculate the amount of California GHG Allowances directly allocated under the energy-based methodology annually using the following formula:

$$A_t = \left(F_t * 0.05307 + \left(S_{Purchased,t} - S_{Sold,t}\right) * 0.06244 - e_{sold,t} * 0.431\right) * AF_t * c_t + TrueUp$$

Where:

"A_t" is the amount of California GHG Allowances directly allocated to the operator of an industrial facility with an energy-based allocation from budget year "t";

"t" is the budget year from which the direct allocation occurs;

"F_t" is the annual amount of energy produced due to fuel combustion at a given facility, measured in MMBtus. The Executive Officer shall calculate this value based on measured higher heating values or the default higher heating value of the applicable fuel in Table C–1 of subpart C, title 40, Code of Federal Regulations, Part 98. This value shall include any energy from fuel combusted in an onsite electricity generation or cogeneration unit;

"$S_{Purchased,t}$" is the annual amount of steam purchased for year "t" by the facility in MMBtu as reported to ARB under MRR;

"$S_{Sold,t}$" is the annual amount of steam provided or sold for year "t" from the facility in MMBtu as reported to ARB under MRR;

"$e_{Sold,t}$" is the annual amount of electricity sold for year "t" from the facility in MWh as reported to ARB under MRR;

"AF_t" is the assistance factor for budget year "t" assigned to the facility activity as specified in Table 8-1;

"c_t" is the adjustment factor for budget year "t" assigned to the facility activity to account for cap decline as specified in Table 9-2; and

"trueup" is the amount of true-up allowances allocated to account for changes in production or allocation not properly accounted for in prior allocations. This value of allowances for budget year "t" shall be allowed to be used for budget year "t-2" pursuant to section 95856(h)(1)(C) and 95856(h)(2)(C). This value is calculated using the following formula:

$$TrueUp = (BE_{t-2} * AF_{t-2} * c_{t-2} - A_{t-2})$$

Where:

"A_{t-2}" is the amount of California GHG Allowances directly allocated to the operator of an industrial facility with an energy-based allocation from budget year "t-2";

"t-2" is the year two years prior to year "t";

"AF_{t-2}" is the assistance factor for budget year "t-2" assigned to the facility activity as specified in Table 8-1;

"c_{t-2}" is the adjustment factor for budget year "t-2" assigned to the facility activity to account for cap decline as specified in Table 9-2;

"BE_{t-2}" is the baseline annual greenhouse gas emissions for year "t-2" adjusted for steam purchases and sales and electricity sales using the following equation:

$$BE_{t-2} = F_{t-2} * 0.05307 + \left(S_{Purchased,t-2} - S_{Sold,t-2}\right) * 0.06244 - e_{sold,t-2} * 0.431$$

Where:

"F_t" is the annual amount of energy produced due to fuel combustion at a given facility, measured in MMBtus. The Executive Officer shall calculate this value based on measured higher heating values or the default higher heating value of the applicable fuel in Table C–1 of subpart C, title 40, Code of Federal Regulations, Part 98. This value shall include any energy from fuel combusted in an onsite electricity generation or cogeneration unit;

"$S_{Purchased,t-2}$" is the annual amount of steam purchased for year "t-2" by the facility in MMBtu;

"$S_{Sold,t-2}$" is the annual amount of steam sold for year "t-2" from the facility in MMBtu; and

"$e_{Sold,t-2}$" is the annual amount of electricity sold for year "t-2" from the facility in MWh.

(C) Entities with Stable Emissions Data. For covered entities or opt-in covered entities classified as stable in the stability formula in 95891(c)(3)(D), the Executive Officer shall calculate the amount of California GHG Allowances directly allocated under the energy-based methodology annually using the methodology in

95891(c). The allocation for all subsequent years shall be determined using this methodology.

(1) Data Years. The data years used in determining the appropriate baseline values shall match "t-2", "t-3", and "t-4" used in the stability formula when the emissions were first classified stable. The Executive Officer may employ all available data reported to ARB under MRR. If necessary, the Executive Officer will solicit additional data to establish a representative baseline allocation.

(D) Stability Formula for New Entrants. The following formula classifies the allocation methodology for budget year "t":

$$0.10 \geq \frac{BE_{t-2} - \frac{BE_{t-4} + BE_{t-3}}{2}}{BE_{t-2}} \text{ (Stable)}$$

$$0.10 < \frac{BE_{t-2} - \frac{BE_{t-4} + BE_{t-3}}{2}}{BE_{t-2}} \text{ (Transitional)}$$

Where:

"t" is the budget year from which the direct allocation occurs;

"t-2" is the year two years prior to year "t";

"t-3" is the year three years prior to year "t";

"t-4" is the year four years prior to year "t"; and

"BE_t" is the baseline annual greenhouse gas emissions for year "t" adjusted for steam purchases and sales and electricity sales using the following equation:

$$BE_t = F_t * 0.05307 + \left(S_{Purchased,t} - S_{Sold,t}\right) * 0.06244 - e_{sold,t} * 0.431$$

Where:

"F_t" is the annual amount of energy produced due to fuel combustion at a given facility, measured in MMBtus. The Executive Officer shall calculate this value based on measured higher heating values or the default higher heating value of the applicable fuel in Table C–1 of subpart C, title 40, Code of Federal Regulations, Part 98. This value shall include any energy from fuel combusted in an onsite electricity generation or cogeneration unit;

"$S_{Purchased,t}$" is the annual amount of steam purchased for year "t" by the facility in MMBtu;

"$S_{Sold,t}$" is the annual amount of steam sold for year "t" from the facility in MMBtu; and

"$e_{Sold,t}$" is the annual amount of electricity sold for year "t" from the facility in MWh.

(4) Facility Closures. Covered entities that are no longer subject to the Cap-and-Trade Program due to reduced emissions or facility closure as determined pursuant to section 95812(e) shall no longer be eligible to receive allowances.

(d) First Compliance Period Refining Sector Allocation Calculation Methodology. For the budget years 2013-2014, the Executive Officer shall calculate the amount of California GHG allowances allocated to an individual petroleum refinery annually using the following methodology.

(1) Facilities without an EII value. For refineries that did not participate in the 2008 Solomon Energy Review, or that do not have a representative EII value as determined by the Executive Officer, allowances will be allocated using the following ~~equation~~ approach:

(A) Initial allocations for 2013 and 2014 vintage allowances will be allocated using the following equations:

If: $O_{X,t-2} * B_R * c_t * AF_{R,t} \leq BE_X * c_t * AF_{R,t}$

Then: $A_{X,t} = O_{X,t-2} * B_R * c_t * AF_{R,t}$

If: $O_{X,t-2} * B_R * c_t * AF_{R,t} > BE_X * c_t * AF_{R,t}$

Then: $A_{X,t} = BE_X * c_t * AF_{R,t}$

Where:

"$A_{X,t}$" is the allocation to refinery "X" without an EII value for year "t";

"$O_{X,t-2}$" is the output of primary refinery products, in barrels, from refinery "X" in year "t-2";

"B_R" is the benchmark for primary products produced by the refining sector, equal to 0.0462 metric tons of allowances per barrel of primary product;

"$AF_{R,t}$" is the assistance factor for budget year "t" assigned to petroleum refining as specified in Table 8-1; and

"c_t" is the adjustment factor for budget year "t" assigned to petroleum refining to account for cap decline as specified in Table 9-2.

"BE_X" is the baseline average annual greenhouse gas emissions for refinery "X" adjusted for steam purchases and sales and electricity sales using the following equation:

$$BE_X = GHG + (S_{Purchased} - S_{Sold}) * 0.06244 - e_{Sold} * 0.431$$

"GHG" is the annual arithmetic mean amount of greenhouse gas emissions from the refinery;

"$S_{Purchased}$" is the annual arithmetic mean amount of steam purchased by the refinery in MMBtu;

"S_{Sold}" is the annual arithmetic mean amount of steam sold from the refinery in MMBtu;

"e_{Sold}" is the annual arithmetic mean amount of electricity sold from the refinery in MWh;

To calculate these values, the Executive Officer may employ data reported to ARB for data years 2008-2010. If the facility reported facility-level, third-party verified, greenhouse gas emissions data to the California Climate Action Registry for data years 2006-2007, the Executive Officer may consider these years in determining representative baseline values. If necessary, the Executive Officer will solicit data to establish a representative baseline.

(B) Trueup. In 2015 and 2016, allowance values as calculated in for petroleum refineries Section 95891(b) will be adjusted to account for actual 2013 and 2014 product output. The following equations will be used to calculate the trueup using actual output:

If: $O_{X,t-2} * B_R * c_{\ t-2} * AF_{R,t-2}$
$\leq BE_X * c_{\ t-2} * AF_{R,t-2}$

Then: $TrueUp_{X,t} = (O_{X,t-2} * B_R * c_{\ t-2} * AF_{R,t-2}) - A_{X,t-2}$

Where:

"$TrueUp_{X,t}$" is the amount true-up allowances allocated to account for changes in production or allocation not properly accounted for in prior allocations for refinery "X". This value of allowances for budget year "t" shall be allowed to be used for budget year "t-2" pursuant to 95856(h)(1)(C) and 95856(h)(2)(C).

If: $O_{X,t-2} * B_R * c_{\ t-2} * AF_{R,t-2}$
$> BE_X * c_{\ t-2} * AF_{R,t-2}$

Then: $TrueUp_{X,t} = (BE_X * c_{\ t-2} * AF_{R,t-2}) - A_{X,t-2}$

(2) Facilities with an EII value. For refineries that participated in the 2008 Solomon Energy Review and have a representative EII value, allowances will be allocated using the following approach:

(A) Initial Allocations. 2013 and 2014 vintage allowances will be allocated using the following equation:

$$A_{Y,t} = BE_Y * DF_{Y,t} * F_t$$

Where:

"$A_{Y,t}$" is the initial allocation to refinery "Y" that has an EII value for year "t";

"BE_Y" is the baseline average annual greenhouse gas emissions for refinery "Y" adjusted for steam purchases and sales and electricity sales using the following equation:

$$BE_Y = GHG + (S_{Purchased} - S_{Sold}) * 0.06244 - e_{Sold} * 0.431$$

"GHG", for the purposes of this calculation, is the annual arithmetic mean amount of greenhouse gas emissions from the refinery;

"$S_{Purchased}$" is the annual arithmetic mean amount of steam purchased by the refinery in MMBtu;

"S_{Sold}" is the annual arithmetic mean amount of steam sold from the refinery in MMBtu;

"e_{Sold}" is the annual arithmetic mean amount of electricity sold from the refinery in MWh;

To calculate these values, the Executive Officer may employ data reported to ARB for data years 2008-2010. If the facility reported facility level, third-party verified, greenhouse gas emissions data to the California Climate Action Registry for data years 2006-2007, the Executive Officer may consider these years in determining representative baseline values. If necessary, the Executive Officer will solicit data to establish a representative baseline allocation;

"$DF_{Y,t}$" is a distribution factor calculated as:

$$DF_{Y,t} = ((Avg / EII_Y) + Adj_t) / (1 + Adj_t)$$

"Avg" is the weighted average EII for all facilities with EII values calculated as:

$$Avg = \frac{\sum BE_Y}{\sum (BE_Y / EII_Y)}$$

"EII_Y" is the Solomon Energy Intensity Index (EII) for facility Y for 2008, 2009 or 2010 as determined to be representative by the Executive Officer. For the purposes of this calculation, EII values shall be rounded to one digit after the decimal;

"Adj" is an adjustment factor designed to provide the facility with the best EII the most allowances relative to its baseline level:

$$Adj_t = ((Avg / EII_{Best}) * F_t - 1) / (1 - F_t)$$

"EII_{Best}" is the EII of most efficient facility (lowest EII in sector);

"F_t" is a fraction calculated as:

$$F_t = \frac{SA_t - \sum A_{X,t}}{\sum BE_Y}$$

"SA_t" is the allocation to refining sector for year "t" specified in section 95870(e)(2)(A);

~~(B) True-up Debit. If actual 2013 and 2014 emissions are less than the amount of allowances allocated, the entity will need to surrender additional allowances according to the following equation:~~

~~If: $(AE_{Y,2013} + AE_{Y,2014}) < (A_{Y,2013} + A_{Y,2014})$~~

~~Then: $A_{Y,Debit} = 0.8 * [(AE_{Y,2013} + AE_{Y,2014}) - (A_{Y,2013} + A_{Y,2014})]$~~

~~Where:~~

~~"$AE_{Y,t}$" = Actual GHG emissions from a facility in year "t" adjusted for heat sales and purchases and electricity purchases.~~

~~"$A_{Y,Debit}$" = A debit (shown as a negative value in the equation above) to be surrendered in addition to the triennial compliance obligation for refinery "Y."~~

(~~C~~B) True-up ~~Credit. If actual 2013 and 2014 emissions are greater than the assumed baseline emissions, a true-up allocation will be conducted using 2015 vintage allowances and the following equation:~~

~~If: $(2 * BE_Y) < (AE_{Y,2013} + AE_{Y,2014})$~~

~~Then: $A_{Y,Credit} = (AE_{Y,2013} * DF_{Y,2013} * F_{2013} * AF_{2013} + AE_{Y,2014} * DF_{Y,2014} * F_{2014} * AF_{2014}) - (A_{Y,2013} + A_{Y,2014})$~~

Allowance values for 2015 and 2016 as calculated for petroleum refineries in Section 95891(b) will be adjusted to account for actual 2013 and 2014 output and emissions. The following equation will be used to calculate the TrueUp allowance value:

$$\mathrm{TrueUp}_{Y,t} = \left[(AE_{Y,t} * DF'_{Y,t} * F'_t) - (\mathrm{A}_{Y,t})\right]$$

Where:

~~"$A_{Y,Credit}$" = An additional true-up allocation distributed by the Executive Officer to refinery "Y" using 2015 vintage allowances.~~

"$DF'_{Y,t}$" and F'_t are calculated using actual 2013 and 2014 emissions and a revised sector allocation reflecting actual 2013 and 2014 output

"$AE_{Y,t}$" = Actual GHG emissions from a facility in year "t" adjusted for heat sales and purchases and electricity sales.

"$TrueUp_{Y,t}$"is the amount true-up allowances allocated to account for changes in production or allocation not properly accounted for in prior allocations for refinery "Y". This value of allowances for budget year "t" shall be allowed to be used for budget year "t-2" pursuant to 95856(h)(1)(C) and 95856(h)(2)(C).

(e) Allocation to University Covered Entities and Public Service Facilities. The Executive Officer shall calculate the amount of allowances directly allocated to a University or a public service facility using the following formulas:

(1) Budget Year 2015 Allocation. For budget year 2015, the Executive Officer shall calculate the amount of California GHG Allowances directly allocated to eligible University Covered Entities or Public Service Facilities using the following formula.

$$A_{2015} = \left(F_{consumed} * B_{Fuel} - e_{sold} * B_{electricity}\right) * c_t + \sum_{y=2013}^{2014} TrueUp_y$$

Where:

"A_{2015}" is the amount of California GHG allowances directly allocated to a university or public service facility from budget year 2015;

"$F_{consumed}$" is the historical baseline annual arithmetic mean amount of energy produced due to fuel combustion at the facility, measured in MMBtus. The Executive Officer shall calculate this value based on measured higher heating values or the default higher heating

value of the applicable fuel in Table C–1 of subpart C, title 40, Code of Federal Regulations, Part 98. This value shall include any energy from fuel combusted in an onsite electricity generation or cogeneration unit.

"B_{Fuel}" is the emissions efficiency benchmark per unit of energy from fuel combustion, 0.05307 California GHG Allowances/MMBtu; "e_{Sold}" is the historical baseline annual arithmetic mean amount of electricity sold or provided for off-site use, measured in MWhs; "$B_{Electricity}$" is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances/MWh;

"c_t" is the adjustment factor for budget year "t" to account for cap decline as specified in Table 9-2.

"TrueUp" is the amount of true-up allowances allocated to account for changes in allocation not properly accounted for in prior allocations. This value of allowances for budget year 2015 shall be allowed to be used for budget year 2013 pursuant to section 95856(h)(1)(C) and 95856(h)(2)(C). This value is calculated using the following formula:

$$TrueUp_y = \left(F_{consumed} * B_{Fuel} - e_{sold} * B_{electricity}\right) * c_y$$

Where:

"y" is the calendar year to which the trueup is correcting, 2013 and 2014.

(2) Budget Years 2016 to 2020 Allocation. For budget years 2016 to 2020, the Executive Officer shall calculate the amount of California GHG Allowances directly allocated to eligible University Covered Entities or Public Service Facility using the following formula.

$$A_t = \left(F_{consumed} * B_{Fuel} - e_{sold} * B_{electricity}\right) * c_t$$

Where:

"A_t" is the amount of California GHG allowances directly allocated to a university or public service facility for budget years "t" from 2016 to 2020.

(3) Data Sources. In determining the appropriate baseline values, the Executive Officer may employ all available data reported to ARB under MRR for data years 2008 through 2013.

(4) Reporting on the Use of Allowance Value. No later than June 30, 2016, and each calendar year thereafter, each university and public service facility shall submit a report to the Executive Officer describing the disposition of any allowance value received in the prior calendar year, and how the allowance value was used to reduce greenhouse gas emissions and achieve additional environmental and economic benefits for California. This report shall include:

(A) The monetary value of allowances received by the university or public service facility. The university or public service facility shall calculate the value of these allowances based on the average market clearing price of the four quarterly auctions held in the same calendar year that the allowances are allocated; and

(B) How the university or public service facility's disposition of the monetary value of allowances complies with the requirements of California Health and Safety Code sections 38500 et seq.

(f) Adjustment to Allowance Allocation of a Legacy Contract Counterparty. The Executive Officer shall subtract the allocation adjustment from the number of California GHG Allowances directly allocated to Legacy Contract Counterparty pursuant to 95891(b) through 95891(d):

$$Adj_{2015} = \sum_{t=2013}^{2014} GHG_{LC} * c_t$$

Where:

"Adj_{2015}" is the allocation adjustment for budget year 2015. This number shall be subtracted from the number of California GHG allowances directly allocated to a legacy contract counterparty for budget year 2015.

"GHG_{LC}" are the Legacy Contract Emissions calculated pursuant to data reported to MRR under the legacy contract for 2012 emissions; and

(1) In the case that the allocation adjustment is greater than the number California GHG Allowances directly allocated to a Legacy Contract Counterparty pursuant to 95891(b) through 95891(d), the allocation adjustment shall be equal to the number California GHG Allowances directly allocated to the legacy contract counterparty.

Table 9-2: Cap Adjustment Factors for Allowance Allocation

Budget Year	***Cap Adjustment Factor (c) for All Other Direct Allocation***	***Cap Adjustment Factor (c) for Sectors with Process Emissions Greater Than 50%***		
		Sector	**NAICS**	**Activity**
		Nitrogenous Fertilizer Manufacturing	325311	Nitric Acid Production
				Calcium Ammonium Nitrate Solution Production
		Cement manufacturing	327311	Cement manufacturing
		Lime manufacturing	327410	Dolime Manufacturing
2013	0.981	0.991		
2014	0.963	0.981		
2015	0.944	0.972		
2016	0.925	0.963		
2017	0.907	0.953		
2018	0.888	0.944		
2019	0.869	0.935		
2020	0.851	0.925		

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

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

(a) Allocation to Individual Electrical Distribution Utilities. The allowances allocated to each electrical distribution utility from each budget year shall be the electrical distribution utility sector allocation calculated pursuant to section 95870(d) for the budget year multiplied by the percentage allocation factors specified in Table 9-3. Any allowance allocated to electrical distribution utilities must be used exclusively for the benefit of retail ratepayers of each such electrical distribution utility, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers.

(b) Transfer to Utility Accounts.

(1) Investor Owned Utilities. The Executive Officer will place allowances in the limited use holding account created for each electrical corporation.

(2) Publicly Owned Electric Utilities or Electrical Cooperatives. When a publicly owned electric utility or electrical cooperative is eligible for a direct allocation, it shall inform the Executive Officer of the amounts to be placed:

(A) In the compliance account of an electrical generating facility operated by a publicly owned electric utility, an electrical cooperative, or a Joint Powers Agency in which the electrical distribution utility or electrical cooperative is a member and with which it has a power purchase agreement; or

(B) In the publicly owned electric utility's or electrical cooperative's limited use holding account.

(3) Publicly owned electric utilities or electrical cooperatives receiving a direct allocation must inform the Executive Officer of the accounts in which the allocations are to be placed by September 1, or the first business day thereafter.

(c) Monetization Requirement.

(1) In 2012 an electrical distribution utility must offer one third of the allowances placed in its limited use holding account in 2012 for sale at the auction scheduled for 2012.

(2) Within each calendar year after 2012, an electrical distribution utility must offer for sale at auction all allowances in its limited use holding account that were issued:

(A) From budget years that correspond to the current calendar year; and

(B) From budget years prior to the current calendar year.

(d) Limitations on the Use of Auction Proceeds and Allowance Value.

(1) Proceeds obtained from the monetization of allowances directly allocated to a publicly owned electric utility shall be subject to any limitations imposed by the governing body of the utility and to the additional requirements set forth in sections 95892(d)(3-5) and 95892(e).

(2) Proceeds obtained from the monetization of allowances directly allocated to investor owned utilities shall be subject to any limitations imposed by the California Public Utilities Commission and to the additional requirements set forth in sections 95892(d)(3-5) and 95892(e).

(3) Auction proceeds and allowance value obtained by an electrical distribution utility shall be used exclusively for the benefit of retail ratepayers of each electrical distribution utility, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers.

(4) Investor owned utilities shall ensure equal treatment of their own customers and customers of electricity service providers and community choice aggregators.

(5) Prohibited Use of Allocated Allowance Value. Use of the value of any allowance allocated to an electrical distribution utility, other than for

the benefit of retail ratepayers consistent with the goals of AB 32 is prohibited, including use of such allowances to meet compliance obligations for electricity sold into the California Independent System Operator markets.

(e) Reporting on the Use of Auction Proceeds and Allowance Value. No later than June 30, 2014, and each calendar year thereafter, each electrical distribution utility shall submit a report to the Executive Officer describing the disposition of any auction proceeds and allowance value received in the prior calendar year. This report shall include:

(1) The monetary value of auction proceeds received by the electrical distribution utility;

(2) How the electrical distribution utility's disposition of such auction proceeds complies with the requirements of this section and the requirements of California Health and Safety Code sections 38500 et seq.;

(3) The monetary value of allowances received by the electrical distribution utility which were deposited directly into electrical generating facility compliance accounts. The electrical distribution utility shall calculate the value of these allowances based on the average market clearing price of the four quarterly auctions held in the same calendar year that the allowances are allocated; and

(4) How the electrical distribution utility's disposition of the monetary value of allowances, deposited directly into compliance accounts, complies with the requirements of this section and the requirements of California Health and Safety Code sections 38500 et seq.

Table 9-3: Percentage of Electric Sector Allocation Allocated to Each Utility

Utility Name	Utility Type (1)	Annual % of Total Electric Sector Allocation to Utility							
		2013	2014	2015	2016	2017	2018	2019	2020
PG&E	IOU	26.02909%	26.34522%	26.01510%	26.21500%	27.21147%	26.91164%	27.21091%	27.22981%
LADWP	POU	14.18332%	14.18925%	14.00829%	14.43473%	14.91438%	15.28169%	14.96326%	14.04837%
SCE	IOU	34.01733%	33.58115%	34.04480%	32.69831%	30.32124%	29.84140%	29.46661%	29.71342%
SDG&E	IOU	7.21940%	6.96087%	6.96792%	7.08933%	7.29010%	7.24815%	7.28721%	7.38964%
SMUD	POU	3.28172%	3.28283%	3.21338%	3.30147%	3.44817%	3.57259%	3.70519%	3.83415%
City of Anaheim	POU	2.07532%	2.12074%	2.11355%	2.19270%	2.20963%	2.27089%	2.30639%	2.35434%
City of Azusa (Azusa Light & Water)	POU	0.18055%	0.18489%	0.18858%	0.19402%	0.20119%	0.20555%	0.21082%	0.21761%
City of Banning	POU	0.09772%	0.10169%	0.10327%	0.10646%	0.11074%	0.11334%	0.11631%	0.12050%
City of Burbank	POU	0.65354%	0.66027%	0.66532%	0.67128%	0.68296%	0.68319%	0.68787%	0.69354%
City of Cerritos	POU	0.01827%	0.01887%	0.01945%	0.02004%	0.02090%	0.02128%	0.02186%	0.02240%
City of Colton	POU	0.24485%	0.25185%	0.25876%	0.26535%	0.27437%	0.27891%	0.28559%	0.29302%
City of Glendale (Water and Power)	POU	0.65850%	0.66238%	0.66100%	0.67150%	0.69049%	0.69592%	0.68391%	0.70039%

Utility Name	Utility Type (1)	Annual % of Total Electric Sector Allocation to Utility							
		2013	2014	2015	2016	2017	2018	2019	2020
City of Pasadena (Pasadena Water and Power)	POU	0.80141%	0.80710%	0.80920%	0.82057%	0.83784%	0.86949%	0.87876%	0.89190%
City of Riverside	POU	1.12865%	1.13669%	1.13121%	1.17999%	1.20482%	1.24829%	1.27103%	1.30954%
City of Vernon	POU	0.41385%	0.42014%	0.42987%	0.43256%	0.44276%	0.44174%	0.42961%	0.42477%
Imperial Irrigation District	POU	1.77241%	1.81456%	1.82936%	1.90056%	1.97281%	2.00476%	2.05350%	2.11597%
Modesto ID	POU	1.26426%	1.28335%	1.27289%	1.30523%	1.34388%	1.35267%	1.36746%	1.40098%
City of Alameda	POU	0.05321%	0.05746%	0.05675%	0.06140%	0.06253%	0.07244%	0.07403%	0.07561%
City of Biggs	POU	0.00680%	0.00729%	0.00674%	0.00681%	0.00733%	0.00711%	0.00710%	0.00721%
City of Gridley	POU	0.01517%	0.01551%	0.01571%	0.01601%	0.01650%	0.01657%	0.01654%	0.01666%
City of Healdsburg	POU	0.03290%	0.03271%	0.03126%	0.03325%	0.03567%	0.03777%	0.03889%	0.04195%
City of Lodi	POU	0.16616%	0.16780%	0.16385%	0.16740%	0.17419%	0.17518%	0.17494%	0.17995%
City of Lompoc	POU	0.04956%	0.04985%	0.04887%	0.05136%	0.05400%	0.05438%	0.05442%	0.05635%

Utility Name	Utility Type (1)	Annual % of Total Electric Sector Allocation to Utility							
		2013	2014	2015	2016	2017	2018	2019	2020
City of Palo Alto	POU	0.35530%	0.35717%	0.34944%	0.35460%	0.36639%	0.36628%	0.36537%	0.37403%
City of Redding	POU	0.44750%	0.50262%	0.50106%	0.51053%	0.52983%	0.54582%	0.54607%	0.55913%
City of Roseville	POU	0.48831%	0.50123%	0.50861%	0.53058%	0.55609%	0.54800%	0.54623%	0.55111%
City of Ukiah	POU	0.03536%	0.03503%	0.03265%	0.03550%	0.03905%	0.04202%	0.04340%	0.04460%
Plumas-Sierra Rural Electric Cooperation	COOP	0.06414%	0.06559%	0.06670%	0.06763%	0.06929%	0.06923%	0.06894%	0.06892%
Port of Oakland	POU	0.03277%	0.03345%	0.03411%	0.03438%	0.03491%	0.03467%	0.03451%	0.03432%
Silicon Valley Power	POU	1.13125%	1.14819%	1.13895%	1.20823%	1.29624%	1.33330%	1.33645%	1.38438%
Truckee-Donner Public Utility District	POU	0.12089%	0.12415%	0.12749%	0.13067%	0.13480%	0.13722%	0.14051%	0.14406%
Turlock Irrigation District	POU	0.94012%	0.97157%	0.98772%	1.01291%	1.05443%	1.06803%	1.06840%	1.08659%
Anza Electric Cooperative, Inc.	COOP	0.02028%	0.02102%	0.04803% ~~0.02181%~~	0.04922% ~~0.02237%~~	0.05093% ~~0.02320%~~	0.05159% ~~0.02348%~~	0.05284% ~~0.02405%~~	0.05386% ~~0.02443%~~
~~Bear Valley Electric Service~~ Golden State Water Company	IOU	0.00006%	0.00006%	0.00006%	0.00007%	0.00007%	0.00007%	0.00007%	0.00007%

Utility Name	Utility Type (1)	Annual % of Total Electric Sector Allocation to Utility							
		2013	2014	2015	2016	2017	2018	2019	2020
City of Needles	POU	0.01027%	0.01086%	0.01148%	0.01183%	0.01248%	0.01250%	0.01284%	0.01316%
City of Rancho Cucamonga	POU	0.02559%	0.02653%	0.02753%	0.02822%	0.02928%	0.02961%	0.03034%	0.03104%
City and County of San Francisco	POU	0.09929%	0.11620%	0.13435%	0.15375%	0.17430%	0.19643%	0.22009%	0.24157%
City of Shasta Lake (Shasta Dam Area Public Utility District)	POU	0.05182%	0.05360%	0.05499%	0.05689%	0.05994%	0.06088%	0.06253%	0.06489%
Lassen Municipal Utility District	POU	0.05079%	0.05279%	0.05492%	0.05638%	0.05866%	0.05927%	0.06075%	0.06219%
Merced Irrigation District	POU	0.17105%	0.17687%	0.18268%	0.18770%	0.19525%	0.19791%	0.20285%	0.20835%
Moreno Valley Utilities	POU	0.03929%	0.04073%	0.04227%	0.04334%	0.04495%	0.04547%	0.04657%	0.04765%
~~Mountain Utilities~~ Kirkwood Meadows Public Utility District	~~IOU~~ POU	0.00306%	0.00317%	0.00329%	0.00337%	0.00350%	0.00354%	0.00362%	0.00369%
Port of Stockton	POU	0.00538%	0.00558%	0.00579%	0.00594%	0.00616%	0.00623%	0.00638%	0.00648%
Power and Water Resource Pooling Authority	POU	0.06650%	0.06899%	0.07018%	0.07365%	0.07980%	0.08118%	0.08378%	0.08727%
~~Sierra Pacific Power Company~~California	~~POU~~ IOU	0.22625%	0.23453%	0.24340%	0.24957%	0.25888%	0.26194%	0.26839%	0.27259%

Pacific Electric Company									
Utility Name	**Utility Type (1)**	**Annual % of Total Electric Sector Allocation to Utility**							
		2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Surprise Valley Electrical Corporation	COOP	0.05381%	0.05578%	0.03167% ~~0.05789%~~	0.03251% ~~0.05936%~~	0.03384% ~~0.06158%~~	0.03419% ~~0.06230%~~	0.03505% ~~0.06384%~~	0.03541% ~~0.06484%~~
Trinity Public Utility District	POU	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%
WAPA	POU	0.33271%	0.35496%	0.37846%	0.39096%	0.41612%	0.41522%	0.42716%	0.43040%
Valley Electric Association, Inc.	COOP	0.00012%	0.00012%	0.00013%	0.00013%	0.00014%	0.00014%	0.00014%	0.00014%
Victorville Municipal	POU	0.02385%	0.02472%	0.02566%	0.02631%	0.02729%	0.02761%	0.02829%	0.02873%
Hercules	POU	0.00656%	0.00674%	0.00687%	0.00711%	0.00747%	0.00761%	0.00782%	0.00813%
City of Industry	POU	0.00910%	0.00945%	0.00982%	0.01008%	0.01047%	0.01058%	0.01085%	0.01101%
Corona	POU	0.06050%	0.06248%	0.06438%	0.06621%	0.06897%	0.06999%	0.07176%	0.07331%
Pittsburg Power (Island)	POU	0.00407%	0.00429%	0.00452%	0.00466%	0.00492%	0.00494%	0.00507%	0.00513%
Eastside	POU	0.00487%	0.00522%	0.00558%	0.00577%	0.00616%	0.00613%	0.00631%	0.00635%
PacifiCorp	IOU	0.75511%	0.77388%	0.79208%	0.81600%	0.84143%	0.86742%	0.89439%	0.92339%
(1) IOU = Investor Owned Electric Utility, POU = Publicly Owned Electric Utility, COOP = Rural Electric Cooperative									

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95893. Allocation to Natural Gas Suppliers for Protection of Natural Gas Ratepayers.

(a) Allocation to Individual Natural Gas Suppliers. For each budget year, each natural gas supplier's allocation will be calculated as follows Any allowance allocated to natural gas suppliers must be used exclusively for the benefit of retail ratepayers of each such natural gas supplier, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers.

$$A_{S,t} = E_{2013} * c_{a,t}$$

Where:

"$A_{S,t}$" is the amount of California GHG allowances directly allocated to the natural gas supplier "S" from budget year "t";

"E_{2013}" is the emissions for natural gas supplier "S" for budget year 2013, as calculated using the compliance obligation calculation methods under section 95852(c);

"$c_{a,t}$" is the adjustment factor for budget year "t" to account for cap decline as specified in Table 9-2; and

(b) Transfer to Utility Accounts.

(1) When a natural gas supplier as defined in section 95811(c) is eligible for a direct allocation, it shall inform the Executive Officer by September 1, or the first business day thereafter of the amount of

allowances to be placed into its Compliance and Limited Use Holding Account with the following constraints:

(A) The quantity of allowances placed into the Limited Use Holding Account will equal at least the amount of allowances provided in section 95893(a) multiplied by the applicable percentage in Table 9-4.

(B) The remaining allowances from the allowances allocated in section 95893(a) and the allowances placed into the Limited Use Holding Account in section 95893 (b)(1)(A) will be placed into the Compliance Account.

(c) Monetization Requirement.

(1) Beginning in 2015 and each calendar year thereafter, a natural gas supplier must offer for sale at auction specified allowances in its limited use holding account equal to at least the amount of allowances provided in section 95893(a) multiplied by the applicable percentage in Table 9-4;

(d) Limitations on the Use of Auction Proceeds and Allowance Value.

(1) Proceeds obtained from the monetization of allowances directly allocated to a publicly owned natural gas utility shall be subject to any limitations imposed by the governing body of the utility and to the additional requirements set forth in sections 95893(d)(3) through 95893(d)(5) and 95893(e).

(2) Proceeds obtained from the monetization of allowances directly allocated to public utility gas corporations shall be subject to any limitations imposed by the California Public Utilities Commission and to the additional requirements set forth in sections 95893(d)(3) through 95893(d)(5) and 95893(e).

(3) Auction proceeds and allowance value obtained by a natural gas supplier shall be used exclusively for the benefit of retail ratepayers of each natural gas supplier, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other

than such ratepayers. Any revenue returned to ratepayers must be done in a non-volumetric manner.

(4) Public utility gas corporations shall ensure equal treatment of their procurement and delivery customers and delivery-only customers.

(5) Prohibited Use of Allocated Allowance Value. Use of the value of any allowance allocated to a natural gas supplier, other than for the benefit of retail ratepayers consistent with the goals of AB 32 is prohibited.

(e) Reporting on the Use of Auction Proceeds and Allowance Value. No later than June 30, 2016, and each calendar year thereafter, each natural gas supplier shall submit a report to the Executive Officer describing the disposition of any auction proceeds and allowance value received in the prior calendar year. This report shall include:

(1) The monetary value of auction proceeds received by the natural gas supplier;

(2) How the natural gas supplier's disposition of such auction proceeds complies with the requirements of this section and the requirements of California Health and Safety Code sections 38500 et seq.;

(3) The monetary value of allowances received by the natural gas supplier which were deposited directly into its compliance account. The natural gas supplier shall calculate the value of these allowances based on the average market clearing price of the four quarterly auctions held in the same calendar year that the allowances are allocated; and

(4) How the natural gas supplier's disposition of the monetary value of allowances, including those deposited directly into its compliance account, complies with the requirements of this section and the requirements of California Health and Safety Code sections 38500 et seq.

Table 9-4: Percentage Consignment Requirements for Natural Gas Utilities by Year

Compliance Period	2			3		
Year	2015	2016	2017	2018	2019	2020
Percent Consigned	25%	30%	35%	40%	45%	50%

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95894. Allocation to Legacy Contract Generators for Transition Assistance.

(a) Demonstration of Eligibility. To be eligible to receive a direct allocation of allowances under this section, the primary or alternate account representative of a legacy contract generator shall submit the following in writing via certified mail to the Executive Officer by June 30, 2014 or within 30 days of the effective date of this regulation, whichever is later:

(1) A letter to ARB stating covered entity name, identification of legacy contract counterparty, and statement requesting transition assistance for emissions reported and verified for the previous year's legacy contract emissions.

(2) Copy of the following portions from the legacy contract for which it is seeking an allocation;

(A) Dates of effective commencement and cessation of terms of contract.

(B) Terms governing price per unit of product

(C) Signature page

(3) An attestation under penalty of perjury under the laws of the State of California that:

(A) Each legacy contract does not allow the covered entity to recover the cost of legacy contract emissions from the legacy contract counterparty purchasing electricity and/or Qualified Thermal Output from the unit or facility;

(B) The legacy contract was originally executed prior to September 1, 2006, remains in effect, and has not been amended since that date to change the terms governing the price or amount of electricity or Qualified Thermal Output sold, the GHG costs, or the expiration date;

(C) The legacy contract emissions are not emissions accounted for under the QF/CHP settlement; and

(D) The operator of the legacy contract generator made a good faith effort, but was unable to renegotiate the legacy contract with the counterparty to address recovery of the costs of compliance with this regulation.

(4) Data requested pursuant to Section 95894(d).

(5) Opt-in covered entities are not eligible for transition assistance due to legacy contract emissions.

(6) If, subsequent to the submittal of the foregoing information and supporting documentation, there is any material change in the information and statements provided to the Executive Officer, the party who submitted such information and statements shall submit a supplemental attestation and supporting materials addressing any such material change to the Executive Officer within 30 days after the change occurs.

(b) Determination of Eligibility. Upon receipt of the information required by paragraph (a) of this section, the Executive Officer shall determine whether the party submitting such information has demonstrated that it is eligible to receive a direct allocation of allowances pursuant to this section and shall notify that party by September 30, 2014 if it is eligible to receive allocation for the following compliance year.

(c) The Executive Officer shall calculate the number of California GHG Allowances directly allocated due to the emissions under a legacy contract from stand-alone electricity generating unit using the following formula:

(1) Using 2012 reported and verified legacy contract emissions for 2012 and 2013 from a stand-alone generation facility:

$$A_{2015} = \left(EEm_{lc} * C_{a,2013}\right) + \left(EEm_{lc} * C_{a,2014}\right)$$

Where

"A_{2015}" is the number of vintage 2015 allowances directly allocated to the Legacy Contract Generator based on calendar year 2012 Legacy Contract Emissions reported and verified pursuant to MRR;

"EEm_{lc}" is the emissions reported, in MTCO2e, associated with electricity sold under the legacy contract in 2012; and

"$c_{a,t}$" is the adjustment factor for budget year "t"
"a" to account for cap decline as specified in Table 9-2.

(d) The Executive Officer shall calculate the number of California GHG Allowances directly allocated due to the emissions under a legacy contract from a Cogeneration system using the following formula:

(1) For 2012 reported and verified legacy contract emissions from a cogeneration system:

$$A_{2015} = ((Q_{lc} * B_s + E_{lc} * B_e) * C_{a,2013}) + ((Q_{lc} * B_s + E_{lc} * B_e) * C_{a,2014})$$

Where:

"A_{2015}" is the number of vintage 2015 allowances directly allocated to the Legacy Contract Generator based on calendar year 2012 Legacy Contract Emissions reported and verified pursuant to MRR;

"$Q_{lc,}$" is the Qualified Thermal Output in MMBtu sold under a legacy contract in data year 2012, as reported to MRR;

"E_{lc}" is the electricity, in MWh, sold under the legacy contract in data year 2012;

"B_e" is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances/MWh;

"B_s" is the emissions efficiency benchmark per unit of Qualified Thermal Output, 0.06244 California GHG Allowances/MMBtu thermal; and

"$C_{a,t}$" is the cap decline factor for budget year "t" as specified in table 9-2.

(e) Data Sources. In determining the appropriate values for section 95894(c), the Executive Officer may employ all available data reported to ARB under

MRR for 2012 and all other relevant data, including invoices, demonstrating the amount of electricity and Qualified Thermal Output sold or provided for off-site use that does not include a carbon cost in the budget year for which it is seeking an allocation. If necessary, the Executive Officer will solicit additional data to establish a representative allocation.

(f) Contract Expiration or Amendment. Once a legacy contract expires or the legacy contract generator closes operations, the legacy contract generator will no longer be eligible for free allocation. If the legacy contract expires before 2015, the allocation will be prorated for the time in which the contract was eligible.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 10: Auction and Sale of California Greenhouse Gas Allowances

§ 95910. Auction of California GHG Allowances.

(a) Timing of the Allowance Auctions.

(1) In 2012, an auction will held on November 14.

(2) Beginning in 2013 and through 2014, the auctions shall be conducted on the twelfth business day in California or a jurisdiction operating an External GHG ETS to which California has linked pursuant to subarticle 12 of the second month of each calendar quarter.

(3) Beginning in 2015, auctions shall be conducted on the schedule according to Appendix C.

(b) General Requirements.

(1) Allowances allocated to the Auction Holding Account pursuant to section 95870(b)(1)-(2) and (~~f~~j) will be designated to specific auctions pursuant to section 95910(c).

(2) An allowance may be designated for auction prior to or after its vintage year.

(c) Allowances from future vintages will be auctioned separately from allowances from current and previous vintages each quarter.

(1) Auction of Allowances from the Current and Previous Budget Years.

(A) This auction will be known as the Current Auction.

(B) Beginning in 2013, one quarter of the allowances allocated for auction from the current calendar year's budget <u>and the allowances designated pursuant to Section 95911(f)(3)(D)</u> will be designated for sale at each Current Auction.

(C) The Current Auction will include allowances consigned to auction pursuant to section 95910(d).

(D) The Current Auction may include allowances from the current and previous budget years which remained unsold at previous auctions and which are designated for auction pursuant to section 95911(f)(3). [staff considering multiple "current auctions."]

(2) Auction of Allowances from Future Budget Years.

(A) This auction will be known as the Advance Auction.

(B) At the one Advance Auction taking place in 2012, the Executive Officer will designate for sale all of the allowances allocated for Advance Auction from the 2015 budget.

(C) Beginning in 2013, one quarter of the allowances allocated for Advance Auction from the budget year three years subsequent to the current calendar year will be designated for sale at each Advance Auction.

(D) The Advance Auction will include allowances which were returned to the Auction Holding Account following an Advance Auction which resulted in unsold allowances, and which are designated for auction pursuant to section 95911(f)(3).

(d) Auction of Consigned Allowances.

(1) An entity may consign allowances to the Executive Officer for sale at the quarterly auctions only from a limited use holding account.

(2) When the Executive Officer withdraws compliance instruments from accounts closed pursuant to section 95831(c), accounts containing allowances in excess of the holding limit pursuant to section 95920(b)(5), or accounts suspended or revoked pursuant to section 95921(g)(3):

(A) Allowances shall be consigned to the next auction;

(B) If, after review, the Executive Officer determines the withdrawn ARB offset credits are valid, the Executive Officer will retire them, withdraw a similar number of allowances from the Auction Holding Account, and consign those allowances to auction in place of the retired ARB offset credits.

(3) Each consigning entity agrees to accept the auction settlement price for allowances sold at auction.

(4) Deadline for Consignment.

(A) For the auction conducted in 2012, allowances designated for consignment pursuant to section 95892(c) must be transferred to the Auction Holding Account at least 10 days before the auction.

(B) Beginning in 2013 and through 2014, allowances consigned to auction through a transfer to the Auction Holding Account at least 75 days prior to the regular quarterly auction will be offered for sale at that auction. This transfer must be completed by 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect) on the 75th day before the auction.

(C) Beginning in 2015, allowances designated for consignment pursuant to section 95892(c) and 95893(c) must be transferred to the Auction Holding Account at least 75 days before the auction as scheduled in Appendix C. This transfer must be

completed by 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect) on the 75th day before the auction.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95911. Format for Auction of California GHG Allowances.

(a) Auction Bidding Format.

(1) The auction will consist of a single round of bidding.

(2) Bids will be sealed.

(3) Bid quantities must be submitted as multiples of 1,000 California GHG allowances.

(4) Entities registered into the California Cap-and-Trade Program must submit bids in whole U.S. dollars and whole cents.

(5) The allowances for auction in section 95911(a)(3) will also include allowances from a jurisdiction operating an External GHG ETS system to which California has linked pursuant to subarticle 12.

(b) Auction Reserve Price Schedule.

(1) Each auction will be conducted with an auction reserve price.

(2) No allowances will be sold at bids lower than the auction reserve price.

(c) Method for Setting the Auction Reserve Price.

(1) The Auction Reserve Price for vintage 2013 allowances auctioned in 2012 will be $10 per allowance. For Advance Auctions conducted in 2012, the Reserve Price shall be $10 per allowance for vintage 2015 allowances.

(2) Beginning in 2012, and each year thereafter, the Auction Administrator will announce the Auction Reserve Price for auctions to be conducted the following calendar year on the first day in December that is a business day in California. The Reserve Price shall be stated in U.S. dollars.

(3) The Auction Administrator will calculate the Auction Reserve Price using the following procedure:

(A) The Auction Reserve Price in U.S. dollars shall be the U.S. dollar Auction Reserve Price for the previous calendar year increased annually by 5 percent plus the rate of inflation as measured by the most recently available twelve months of the Consumer Price Index for All Urban Consumers.

(B) Prior to the opening of the auction window on the day of the auction, the Auction Administrator shall announce the Auction Reserve Price.

(C) The auction administrator shall set the exchange rate as the most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada, and shall announce the exchange rate prior to the opening of the auction window.

(D) The Auction Reserve Price in Canadian dollars shall be the Canadian dollar Auction Reserve Price for the previous calendar year increased annually by 5 percent plus adjusted in the manner provided for in section 83.3 of the Financial Administration Act (R.S.Q., c. A-6.001) of Quebec.

(E) The auction administrator will use the announced exchange rate to convert to a common currency the Auction Reserve Prices previously calculated separately in U.S. and Canadian dollars. The auction administrator will set the Auction Reserve Price equal to the higher of the two values.

(4) The Auction Reserve Price will be announced prior to the opening of the auction window at 10 a.m. Pacific Standard Time (or Pacific Daylight Time when in effect) on the day of the auction, and will be in effect until the window closes at 1 p.m. Pacific Standard Time (or Pacific Daylight Time when in effect).

(5) The Auction Reserve Price in section 95911(c)(2) will be announced on the first day in December that is a business day in California and in any jurisdiction operating an External GHG ETS to which California has linked pursuant to subarticle 12 and the Reserve Price shall also be stated in the currency (or currencies) used in an External GHG ETS to which California has linked pursuant to subarticle 12.

(d) Auction Purchase Limit.

(1) The auction purchase limit is the maximum number of allowances offered at each quarterly auction which can be purchased by any entity or group of entities with a direct corporate association pursuant to section 95833.

(2) The auction purchase limit will apply to auctions conducted from January 1, 2012 through December 31, 2014.

(3) For the Advance Auction of future vintage allowances conducted pursuant to section 95910(c)(2) the purchase limit is 25 percent of the allowances offered for auction.

(4) For the auction of current vintage allowances conducted pursuant to section 95910(c)(1):

(A) The purchase limit for covered entities and opt-in covered entities will be 15 percent of the allowances offered for auction;

(B) The purchase limit for electrical distribution utilities will be 40 percent of the allowances offered for auction; and

(C) The purchase limit for all other auction participants is four percent of the allowances offered for auction.

(e) Determination of Winning Bidders and Settlement Price. The following process shall be used to determine winning bidders, amounts won, and a single auction settlement price:

(1) Each bid will consist of a price and the quantity of allowances, in multiples of 1,000 CA GHG Allowances, desired at that price.

(2) Each bidder may submit multiple bids.

(3) Beginning with the highest bid price, bids from each bidder will be considered in declining order by price, and the auction operator shall reject a bid for a bundle of 1,000 allowances:

(A) If acceptance of the bid would result in violation of the purchase limit pursuant to sections 95911(d) and 95914;

(B) If acceptance of the bid would result in violation of the holding limit pursuant to section~~s~~ ~~95914 and~~ 95920(b); or

(C) If acceptance of the bid would result in a total value of accepted bids for an auction participant greater than the value of the bid guarantee submitted by the auction participant pursuant to section 95912(~~i~~j).

(4) Bids from all bidders will be ranked from highest to lowest by price. Beginning with the highest bid and proceeding to successively lower bids, entities submitting bids at each price will be sold allowances until:

(A) The next lower bid price is less than the auction reserve price, in which case the current price becomes the auction settlement price; or

(B) The total quantity of allowances contained in the bids at the next lower bid price is greater than or equal to the number of allowances yet to be sold, in which instance, the next lower bid price becomes the auction settlement price and the procedure for resolution of tie bids in section 95911(e)(5) shall apply.

(5) Resolution of tie bids. If the quantity of allowances contained in the bids placed at the auction settlement price is greater than the quantity of allowances available to be sold at that price, then:

(A) The auction administrator will calculate the share of the remaining allowances to be distributed to each entity bidding at the auction settlement price by dividing the quantity bid by that entity and accepted by the auction administrator by the total quantity of bids at the settlement price which were accepted by the auction administrator;

(B) The auction administrator will calculate the number of allowances distributed to each bidding entity by multiplying the bidding entity's share calculated in section 95911(e)(5)(A) above by the number of allowances remaining, rounding the number down to the nearest whole number; and

(C) To distribute any remaining allowances, the auction administrator will assign a random number to each entity bidding at the auction settlement price. Beginning with the lowest random number, the auction administrator will assign one allowance to the last bundle purchased by each entity until the remaining allowances have been assigned.

(f) If the quantity of bids accepted by the Auction Administrator is less than the number of allowances offered for sale then some allowances will remain unsold.

(1) If allowances remain unsold at auction, the Auction Administrator will fulfill winning bids with allowances from consignment sources in the following order:

(A) Allowances consigned to auction pursuant to section 95910(d)(2);

(B) Allowances consigned from limited use holding accounts pursuant to section 95910(d)(1);

(C) Allowances redesignated to the auction pursuant to section 95911(f)(3); and

(D) Allowances designated by ARB for auction pursuant to section 95910(c)(1)(B) and (c)(2)(B) and (C).

(2) When there are insufficient winning bids to exhaust the allowances from a consignment source in section 95911(f)(1), the auction operator will sell an equal proportion of allowances from each consigning entity in that source.

(3) Disposition of Allowances Designated by ARB for Auction Which Remain Unsold.

(A) Allowances designated by ARB pursuant to section 95910(c)(1)(B) and (c)(2)(B) and (c)(2)(C) for an auction which remain unsold shall be kept in the Auction Holding Account for later auction.

(B) Allowances designated by ARB for auction which remain unsold will be re-designated for auction after two consecutive auctions have resulted in an auction settlement price above the Auction Reserve Price. If future vintage allowances remain unsold at the end of the calendar year for which they were designated for sale at Advance Auction, they will remain in the Auction Holding Account until their vintage year. They will then be designated for the Current Auction.

(C) The number of allowances re-designated to a subsequent current or Advance Auction will not exceed 25 percent of allowances already designated by ARB for that auction. Allowances which remain unsold above that level will be held in the Auction Account for later auction.

(D) Allowances designated for Advance Auction which remain unsold until their vintage year equals the current calendar year will be designated for Current Auction pursuant to section 95910(c)(1)(B).

(4) Disposition of Consigned Allowances Remaining Unsold at Auction.

(A) Allowances consigned to auction from limited use holding accounts that remain unsold at auction will be held in the Auction Holding Account until the next auction.

(B) Allowances consigned to auction pursuant to section 95921(g)(3) that remain unsold at auction will be held in the Auction Holding Account until the next auction.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95912. Auction Administration and Participant Application.

(a) Administration of the Auctions.

(1) The Executive Officer may serve as auction administrator or designate an entity to serve as auction administrator.

(2) The Executive Officer may serve as financial services administrator or may designate a qualified financial services administrator to conduct all financial transactions required by this article.

(b) The Executive Officer may direct that the California GHG allowances designated for auction be offered through an auction conducted jointly with other jurisdictions to which California links pursuant to subarticle 12, provided the joint auction conforms ~~with~~to this article.

(c) Auction Notification. At least 60 days prior to each auction, the auction administrator shall publish the following information:

(1) The date and time of the auction;

(2) Auction application requirements and instructions;

(3) The form and manner for submitting bids;

(4) The procedures for conducting the auction;

(5) The administrative requirements for participation; and

(6) The number of allowances from California that will be available at the auction.

(7) For the announcement of the first quarter auction, the number of allowances to be available for sale during the calendar year and the Auction Reserve Price in effect for the calendar year pursuant to section 95911(c).

(8) If California has linked to a jurisdiction operating an External GHG ETS pursuant to subarticle 12, the number of allowances in section 95912(c)(6) will also include the allowances made available by the linked jurisdiction.

(d) Auction Participation Application Requirements.

(1) The Executive Officer must approve an entity's auction participant application before that entity may participate in an auction.

(2) An entity applying for approval as an auction participant must be registered into the Cap-and-Trade Program as provided in section 95830.

(3) An entity whose holding account has been revoked or is currently suspended pursuant to section 96011 cannot participate in an auction. An individual associated pursuant to section 95830, 95832, and 95833 with an entity whose holding account has been revoked or is currently suspended pursuant to section 96011 cannot participate in an auction.

(4) An entity will be required to complete an~~d~~ auction participant application at least 30 days prior to an auction in which it intends to participate. This application must be completed by 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect). The entity must provide information and documentation including:

(A) Information and documentation regarding the corporate identity, ownership, and capital structure of the applicant;

(B) The existence of any direct or indirect corporate associations pursuant to sections 95833 and 95914(d);

(C) An allocation of the purchase limit among associated entities as defined in section 95833, or change in the existing allocation of the purchase limit among associated entities, if applicable;

(D) An allocation of the holding limit among associated entities as defined in section 95833, or a change in the existing allocation of the holding limit among associated entities, if applicable;

(E)~~(C)~~ The identification of any previous or ongoing ~~pending~~ investigation with respect to any alleged violation of any rule, regulation, or law associated with any commodity, securities, or financial market, including a change in the status of an ongoing investigation; and

(F)~~(D)~~ The applicant's holding account number.

(5) An entity with any changes to the auction application information listed in subsection 95912(d)(4) 30 days prior to an auction, or an entity

whose auction application information will change 15 days after an auction, will be denied participation in the auction.

(6)~~(5)~~ Prior to participating in an auction, any primary or alternate account representative that will be submitting bids on behalf of entities eligible to participate in an auction ~~Reserve sales~~ must have already:

(A) Complied with the Know-Your-Customer requirements of section 95834; and

(B) Submitted the additional information required by the financial services administrator contained in Appendix A of this subarticle.

(e) Maintenance and Modification of Auction Participation Approval.

(1) Once the Executive Officer has approved an entity's auction participant application, the entity need not complete another application for subsequent auctions unless there is a material change to the information contained in the approved application, there is a material change in the entity's Cap-and-Trade Program registration pursuant to section 95830, or the Executive Officer has made a determination restricting an entity's auction participation pursuant to section 95914.

(2) An entity approved for auction participation must inform the Auction Administrator at least 30 days prior to an auction when reporting a change to the information disclosed, otherwise the entity may not participate in that auction. The change should be reported by 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect) on the 30th day before an auction.

(f) Auction Intent to Bid Notification Requirements. An entity that intends to participate in an auction must inform the Auction Administrator at least 30 days prior to an auction of its intent to bid in an auction, otherwise the entity may not participate in that auction.

(~~f~~g) An entity approved for auction participation may not communicate information on auction participation with any other entity that is not part of

an association disclosed pursuant to section 95914, except as requested by the Auction Administrator to remediate an auction application.

(~~g~~h) Protection of Confidential Information. To the extent permitted by state law, the Executive Officer, the Auction Administrator, and the financial services administrator will treat the information contained in the auction application and not listed for release pursuant to section 95912(~~j~~k)(5) as confidential business information.

(~~h~~i) All bids will be considered binding offers for the purchase of allowances under the rules of the auction.

(~~i~~j) Auction participants must provide a bid guarantee to the financial services administrator at least 12 days prior to the auction. This bid guarantee must be submitted by 5 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect) on the 12th day before an auction.

(1) The bid guarantee must be in one or a combination of the following forms:

(A) Cash in the form of a wire transfer~~ or certified funds, such as a bank check or cashier's check~~; or

(B) An irrevocable letter of credit issued by a financial institution with a United States banking license; or

(C) A bond issued by a financial institution with a United States banking license~~.~~; or

(D) A Surety Bond issued by an institution named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

(2)~~(D)~~ The bid guarantee submitted by any entity registered with California will be in U.S. dollars.

(3) A bid guarantee submitted in any form other than cash must be payable within one business day of payment request.

(4)~~(E)~~ The bid guarantee will be in the currency used by the jurisdiction with which the entity has registered.

(~~2~~5) The amount of the bid guarantee must be greater than or equal to the maximum value of the bids to be submitted.

(A) The value of a set of bids equals the cumulative quantity of bids submitted at or above a price times that price. The value of the set of bids is calculated at each price at which the bidder will submit a bid.

(B) The maximum value of a set of bids is the highest value of a set of bids calculated at each price at which the bidder will submit a bid.

(~~3~~6) The bid guarantee will be made payable to the financial services administrator.

(~~4~~7) The bid guarantee will expire no sooner than 21 days after the auction date.

(~~5~~8) The financial services administrator will evaluate the bid guarantee and inform the auction administrator of the value of the bid guarantee once it is found to conform to this section and is accepted by the Executive Officer.

(~~6~~9) If an entity has submitted more than one form of bid guarantee then the financial services administrator will apply the instruments to the unpaid balance in the order the instruments are listed in section 95912(~~i~~j)(1).

(~~7~~10) If the auction participant submits a single bid guarantee instrument to cover bids in both the Current and Advance Auctions, the auction administrator will apply the value of the bid guarantee to the Current Auction first when accepting bids pursuant to section 95911(e)(3). The remaining value of the bid guarantee will be used to determine acceptance of bids into the Advance Auction.

(~~j~~k) After the auction administrator has notified the Executive Officer of the results of the auction the Executive Officer will:

(1) Review the conduct of the a~~c~~uction by the auction administrator, then certify whether the auction met the requirements of this article;

(2) After certification, direct the financial services administrator to:

(A) Notify each winning bidder of the auction settlement price, the number of allowances purchased, the total purchase cost, and the deadline and method for submitting payment;

(B) Collect cash payments from winning bidders within seven days of notifying them of the auction results;

(C) Use the bid guarantee to cover payment for allowance purchases by any entity that fails to make cash payment within seven days after bidders are notified of results and place the proceeds into the Greenhouse Gas Reduction Fund created pursuant to Government Code section 16428.8 ~~Air Pollution Control Fund~~;

(D) Deposit auction proceeds from sales of ARB allowances sold at auction into the Greenhouse Gas Reduction Fund created pursuant to Government Code section 16428.8 ~~Air Pollution Control Fund~~;

(E) Distribute auction proceeds to entities that consigned allowances for auction pursuant to section 95910(d); and

(F) Return any unused bid guarantee.

(3) Upon determining that the payment for allowances has been deposited into the Air Pollution Control Fund or transferred to entities that consigned allowances, transfer the ~~serial numbers of the~~ allowances purchased into each winning bidder's Holding Account, or to its Compliance Account if needed to comply with the holding limit;

(4) Inform each approved external GHG emissions trading system and the associated tracking system of the serial numbers of allowances purchased at auction; and

(5) Following the auction, the Executive Officer will publish at www.arb.ca.gov the following information:

(A) The names of the bidders;

(B) Auction settlement price; and

(C) Aggregated or distributional information on purchases with the names of the entities withheld.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code~~.~~ and Section 16428.8, Government Code.

§ 95913. Sale of Allowances from the Allowance Price Containment Reserve.

(a) The Executive Officer may serve as reserve sale administrator to conduct sales from the Allowance Price Containment Reserve (Reserve) or designate an entity to serve as reserve sale administrator. The financial services administrator designated by the Executive Officer pursuant to section 95912(a) will conduct the financial transactions required to operate sales from the Reserve.

(b) Entities registered in an External GHG ETS to which California has linked pursuant to subarticle 12 are not eligible to purchase from the California Reserve~~If California links to an external greenhouse gas emissions trading system (GHG ETS) pursuant to subarticle 12, the linkage agreement will specify whether covered entities in the linked GHG ETS will be eligible to purchase from a jointly operated Reserve, or whether each GHG ETS will operate separate Reserves~~.

(c) Only entities registered into the California GHG Cap-and-Trade Program as provided in sections 95811 or 95813 shall be eligible to purchase allowances from the Reserve. Prior to participating in a Reserve sale, any primary or alternate account representative that will be submitting bids on behalf of entities eligible to participate in Reserve sales must have already:

(1) Complied with the Know-Your-Customer requirements of section 95834; and

(2) Submitted the additional information required by the financial services administrator contained in Appendix A of this subarticle.

(d) Timing of Reserve Sales.

(1) The first Reserve sale will be conducted on March 8, 2013.

(2) Subsequent Reserve sales through 2014 shall be conducted on the first business day six weeks after each quarterly allowance auction scheduled pursuant to section 95910.

(3) Beginning in 2015, Reserve sales shall be conducted according to the schedule in Appendix C.

(~~3~~4) The Reserve sale administrator shall provide all eligible participants with notice of the number of allowances available for sale and the terms of the sale at least ~~four weeks~~ 30 days prior to the sale.

(~~4~~5) The subsequent Reserve sales in section 95913~~(~~(d)(2), shall be conducted on the first day six weeks after each quarterly allowances auction scheduled pursuant to section 95910 that is also a business day in California and any linked jurisdiction operating an External GHG ETS to which Cal~~i~~ifornia has linked pursuant to subarticle 12.

(6) Section 95913(d)(5) will not apply after January 1, 2015.

(e) Reserve Sale Intent to Bid Notification Requirements

(1) An entity must inform the reserve sale administrator at least 20 days prior to a reserve sale of its intent to bid in a reserve sale, otherwise the entity may not participate in that reserve sale.

(2) An entity with any auction application information listed in subsection 95912(d)(4) above that changes 30 days prior to a reserve sale, or 15 days after a reserve sale, cannot participate in a reserve sale.

(~~e~~f) Reserve Tiers.

(1) Creation of Reserve Tiers. Prior to the first Reserve sale, the Executive Officer shall divide allowances allocated to the Reserve from section 95870(a) into three equal-sized tiers.

(2) The Reserve sale administrator shall offer all of the allowances in the Reserve at each Reserve sale.

(3) Reserve Tier Prices. Sales of Reserve allowances in calendar year 2013 shall be conducted at the following prices:

(A) Allowances from the first tier shall be offered for $40 per allowance;

(B) Allowances from the second tier shall be offered for $45 per allowance; and

(C) Allowances from the third tier shall be offered for $50 per allowance.

(4) Increase in Reserve Tier Prices. In calendar years subsequent to 2013, allowances from each tier shall be offered at prices equal to the tier prices from the previous calendar year increased by five percent plus the rate of inflation as measured by the most recently available twelve month value of the Consumer Price Index for All Urban Consumers.

(5) This provision only applies to the Reserve sale immediately preceding the compliance obligation instrument surrender on November 1. Pursuant to section 95870(f)(1), allowances in the Auction Holding Account will be made available at the highest price tier of the Allowance Price Containment Reserve if the amount of accepted bids at the highest price tier exceeds the number of allowances in that tier.

(A) The allowances will be made available no sooner than the Reserve sale immediately preceding the compliance obligation instrument surrender on November 1, 2015.

(B) If the quantity of allowances from section 95870(a) allocated to the highest price tier plus the allowances defined in section 95870(f)(1) is equal to or greater than the quantity of accepted bids in the highest price tier then all accepted bids for the highest price tier will be filled.

(C) If the quantity of accepted bids at the highest price tier exceeds the allowances from section 95870(a) plus the allowances defined in section 95870(f)(1), allowances will be sold through the procedure outlined in section 95913(h)(5).

(D) The accepted bids at the highest price tier will be filled first with allowances from section 95870(a) allocated to the highest price tier if available.

(E) The allowances defined in section 95870(f)(1) will be sold beginning with the latest vintage in the Auction Holding Account and then the preceding vintages, from latest to most recent, until all accepted bids the highest price tier are filled or until all the allowances defined in section 95870(f)(1) have been sold. The allowances defined in section 95870(f)(1) sold pursuant to this section shall first reduce the quantity of allowances defined in section 95870(b) if available and then will reduce the quantity of allowances defined in section 95870(j)(2).

(~~f~~g) At least 12 days before the scheduled sale, by 5 p.m. Pacific Standard Time (or Pacific Daylight Savings Time, when in effect), an entity intending to participate in a Reserve sale must submit to the financial services administrator a bid guarantee, payable to the financial services administrator, in an amount greater than or equal to the sum of the maximum value of the bids to be submitted by the entity.

(1) The maximum value of a set of bids is the quantity bid at each tier times the tier price, summed across the three tiers.

(2) The bid guarantee must be in one or a combination of the following forms:

(A) Cash in the form of a wire transfer~~ or certified funds, such as a bank check or cashier's check~~; or

(B) An irrevocable letter of credit issued by a financial institution with a United States banking license; or

(C) A bond issued by a financial institution with a United States banking license~~.~~; or

(D) A Surety Bond issued by an institution named in the current list of "Surety Companies Acceptable in Federal Bonds" as

published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

(3) A bid guarantee submitted in any form other than cash must be payable within one business day of payment request.

(~~3~~4) The bid guarantee will be made payable to the financial services administrator.

(~~4~~5) The bid guarantee will expire no sooner than twenty-one days after the Reserve sale.

(~~5~~6) The financial services administrator will evaluate the bid guarantee and inform the Reserve sale administrator of the value of the bid guarantee once it is found to conform to this section and is accepted by the Executive Officer.

(7) The intent to bid notification requirements in subsection 95913(e) and bid guarantee submittal requirements in subsection 95913(g) shall be at least four business days before the bid guarantee submittal due dates.

(~~g~~h) Purchase Determinations.

(1) The reserve sale administrator will conduct sales from each tier in succession, beginning with the lowest priced tier and proceeding to the highest priced tier.~~, until either all allowances are sold from the reserve or all the accepted bids are filled.~~

(A) The Reserve sale will continue until either all allowances are sold from the Reserve pursuant to section 95870(a) or all the accepted bids are filled.

(B) Pursuant to section 95913(f), the Reserve sale immediately preceding the compliance obligation instrument surrender on November 1 will continue until all accepted highest price tier bids are filed or the allowances made available pursuant to section 95870(f)(1) are sold pursuant to section 95913(f).

(2) The Reserve sales window will open at 10 a.m. Pacific Standard Time (or Pacific Daylight Time, when in effect) on the day of the sale, and

bids may be submitted until the window closes at 1 p.m. Pacific Standard Time (or Pacific Daylight Time, when in effect).

(A) Each bid will consist of the price, in U.S. dollars, equal to one of the three tiers and a quantit~~i~~y of allowances in multiples of 1,000 allowances.

(B) An entity may submit multiple bids.

(3) The reserve sale administrator will only accept a bid for a bundle of 1,000 allowances:

(A) If acceptance of the bid would not result in violation of the holding limit pursuant to section 95920(b);

(B) If acceptance of the bid would not result in a total value of accepted bids for a covered entity greater than the value of the bid guarantee submitted by the covered entity pursuant to section 95913(~~f~~g); or

(C) If the bid entered by an entity for a tier is for a quantity less than or equal to the number of allowances available for sale in that tier.

(4) If the sum of bids at the tier price which are accepted by the reserve sale administrator is less than or equal to the number of allowances in the tier, then:

(A) The reserve sale administrator will sell to each covered entity the number of allowances for which the entity submitted bids for that tier which were accepted by the reserve sale administrator; and

(B) If allowances remain in the tier after the sales pursuant to section 95913(~~g~~h)(4)(A) are completed, the reserve sale administrator will assign a random number to each bundle of 1,000 allowances for which entities submitted a bid for the tier above the current tier being sold. Beginning with the lowest random number assigned and working in increasing order of the random numbers assigned, the reserve sale administrator shall

sell allowances to the bidder assigned the random number until the remaining allowances in the tier are sold or all accepted bids have been fulfilled. The price for the allowances sold under this procedure will be the price for the tier from which they are sold, not the bid placed.

(5) If the sum of bids accepted by the reserve sale administrator for a tier is greater than the number of allowances in the tier, the reserve sale administrator will determine the total amount to be distributed from the tier to each covered entity using the following procedure:

(A) The reserve sale administrator will calculate the share of the tier to be distributed to each bidding entity by dividing the quantity bid by that entity and accepted by the reserve sale administrator by the total quantity of bids which were accepted by the reserve sale administrator; and

(B) The reserve sale administrator will calculate the number of allowances distributed to each bidding entity from the tier by multiplying the bidding entity's share calculated in section 95913 (~~g~~h)(5)(A) above by the number of allowances in the tier, rounding the number down to the nearest whole number.

(6) After completing the sales for each tier the reserve sale administrator will repeat the processes in sections 95913(~~g~~h)(4) and (~~g~~h)(5) above for the next highest price tier until all bids have been filled or until the Reserve is depleted. At that time the reserve sale administrator will inform the Executive Officer of the sales from the Reserve to each participant.

(~~h~~i) Resolution of Sales.

(1) After reviewing the conduct of the sale by the Reserve sale administrator, the Executive Officer will certify whether the Reserve sale met the requirements of this article.

(2) Upon certification of the sale results, the Executive Officer will authorize the financial services administrator to:

(A) Notify Reserve sale participants of their purchases and total purchase cost;

(B) Process cash payments from participants and deposit proceeds into the Air Pollution Control Fund up to seven days after bidders are notified of results;

(C) Use the bid guarantee to cover payment for allowance purchases by any entity that fails to make cash payment within seven days after bidders are notified of results and place the proceeds into the Air Pollution Control Fund. If an entity has submitted more than one form of bid guarantee then the financial services administrator will apply the instruments to the unpaid balance in the order the instruments are listed in section 95913(~~f~~g)(2); and

(D) Return any unused bid guarantee.

(3) Upon determining that the financial services administrator has deposited the payment for allowances into the Air Pollution Control Fund, the Executive Officer shall transfer the ~~serial numbers of the~~ allowances purchased from the Allowance Price Containment Reserve Account into each winning bidder's compliance account.

(4) The Executive Officer shall inform each approved external GHG emissions trading system and the associated tracking system of the serial numbers of allowances sold; and

(5) The Executive Officer shall publish the sale results at www.arb.ca.gov.

(~~i~~j) Entities registered in an External GHG ETS to which California has linked pursuant to subarticle 12 are not eligible to purchase from the Reserve.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95914. Auction Participation and Limitations.

(a) The Executive Officer may cancel or restrict a previously approved auction participation application or reject a new application if the Executive Officer determines that an entity has:

(1) Provided false or misleading facts;

(2) Withheld material information ~~for~~from its application, with material meaning information that could ~~probably~~ influence a decision by the Executive Officer, the Board, or the Board's staff;

(3) Violated any part of the auction rules pursuant to subarticle 10;

(4) Violated the registration requirements pursuant to subarticle 5; or

(5) Violated the rules governing trading pursuant to subarticle 11.

(b) If the Executive Officer determines an entity has committed any of the violations listed in section 95914(a), then:

(1) The Executive Officer may instruct the auction administrator to cancel a previously approved auction application or to not accept auction applications from the entity;

(2) The Executive Officer may instruct the auction administrator to restrict the auction application approval for any corporate associate of the entity to prevent the purchase of allowances at auction for subsequent transfer to the violator;

(3) Any cancellation or restriction imposed by the Executive Officer may be permanent or for a specified number of auctions; and

(4) The cancellation or restriction imposed by the Executive Officer shall be in addition to any other penalties, fines, and additional remedies available at law.

(c) Non-disclosure of Bidding Information ~~Among Auction Participants~~.

(1) Except as provided in section 95914(c)(2), all entities registered into the Cap-and-Trade program pursuant to section 95830 shall not release any of the following information regarding auction participation: ~~Unless it is to an auction advisor or other members of a direct corporate association not subject to auction participation~~

~~restriction or cancellation pursuant to section 95914(b), an entity approved for auction participation shall not release any confidential information related to its auction participation, including:~~

(A) Intent to participate at auction, auction approval status, maintenance of continued auction approval; ~~Qualification status;~~

(B) Bidding strategy;

(C) Bid price or bid quantity information; and

(D) Information on the bid guarantee it provided to the financial services administrator. ~~; and~~

~~(E) Other information identified as confidential information in the auction application by the auction administrator.~~

(2) Auction participation information listed in section 95914(c)(1) may be released under the following conditions:

(A) When the release is to other members of a direct corporate association not subject to auction participation restriction or cancellation pursuant to section 95914(b),

(B) When the release is to an auction bid advisor whose activity has been disclosed to the Executive Officer pursuant to section 95914(c)(3).

(C) When the release is made by a publicly-owned utility only as required by public accountability rules, statute, or rules governing participation in generation projects operated by a Joint Powers Authority or other publicly-owned utilities.

(D) When the release is by an electric distribution utility of information regarding compliance instrument cost and other disclosures specifically required by the California Public Utilities Commission. In the event of a disclosure pursuant to this section, the electricity distribution utility must provide the specific statutory reference to ARB that requires the disclosure of the information.

(3)~~(2)~~ If an entity participating in an auction has retained the services of an advisor regarding auction bidding strategy, then:

(A) The entity must ensure against the advisor transferring information to other auction participants or coordinating the bidding strategy among participants;

(B) The entity will inform the advisor of the prohibition of sharing information to other auction participants and ensure the advisor has read and acknowledged the prohibition under penalty of perjury; ~~and~~

(C) Any entity that has retained the services of an advisor must inform ARB of the advisor's retention~~.~~ and identify the advisor, the advisor's employer, the advisor's contact information, and provide an attestation by the Primary Account Representative of the entity retaining the advisor of the completeness of the disclosure; and

(D) The advisor must provide to the Executive Officer in writing at least 15 days prior to an auction, the following information:

1. Names of the entities participating in the Cap-and-Trade Program that are being advised;
2. Description of advisory services being performed; and
3. Assurance under penalty of perjury that advisor is not transferring to or otherwise sharing information with other auction participants.

(d) Application of the Corporate Association to the Auction Purchase Limit.

(1) The total number of compliance instruments which may be purchased in a single auction by a group of entities with a direct corporate association is limited pursuant to section 95911(d).

(2) Entities that are part of a direct corporate association may allocate shares of the purchase limit amongst themselves. Each entity will then have a specified percentage share of the association's purchase limit. The sum of the shares allocated among the entities must sum to one.

Each associated entity's allocated purchase limit share times the auction purchase limit assigned to the association becomes the purchase limit for that entity.

(3) If a corporate association consists of entities with a compliance obligation and voluntaril~~t~~y associated entities, then the following additional restrictions apply:

(A) The total purchase limit for the association is 15 percent, unless some of the included covered entities are electrical distribution utilities, in which case the purchase limit is 40 percent.

(B) The total purchase limit assigned to voluntarily associated entities within the corporate association must be less than or equal to 4 percent.

(C) The purchase limit to be divided among the covered or opt-in entities is the purchase limit assigned to the corporate association less the value assigned to the voluntarily associated entities within the corporate association.

~~(4) The group of associated entities must inform the Executive Officer when submitting the auction participant application of an allocation of the purchase limit among the associated entities, if applicable.~~

~~(5) The purchase limit allocation will be in effect for the auction for which the associated entities submitted the application.~~

~~(6) If entities with a direct corporate association do not allocate shares of the purchase limit among themselves, then the auction administrator will apply the purchase limit to the entities as follows:~~

~~(A) The administrator will order the associated entities' bids from highest to lowest bid price;~~

~~(B) Working from the highest to the lowest bid, the auction administrator will accept bids until the purchase limit for the associated entities is met;~~

~~(C) The auction operator will conduct this procedure before conducting the auction pursuant to section 95911.~~

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 11: Trading and Banking

§ 95920. Trading.

(a) The holding limit is the maximum number of California GHG allowances that may be held by an entity or jointly held by a group of entities with a direct corporate association, as defined in section 95833 at any point in time.

(b) Application of the Holding Limit.

(1) The holding limit will apply to each entity registered as a covered, opt-in covered, or voluntarily associated entity pursuant to section 95830.

(2) The holding limit calculation will not include allowances contained in limited use holding accounts created pursuant to section 95831.

(3) Application of the Holding Limit to Exchange Clearing Holding Accounts. Compliance instruments transferred out of an exchange clearing holding account will count against the holding limit of the destination account listed in the transfer request submitted by an exchange clearing holding account at the time the transfer request is confirmed.

(4) If the Executive Officer determines that a reported transfer request not yet recorded into the tracking system would result in an entity's holdings exceeding the applicable holding limit, then the Executive Officer shall not approve the transfer request pursuant to section 95921(a)(1).

(5) If the violation is not discovered until after a transfer request is recorded, or the holding limit is exceeded at the beginning of a compliance year when allowances purchased at Advance Auction now fall under the current vintage holding limit pursuant to section 95920(c)(1)(C), then:

(A) The accounts administrator will inform the violator; and

(B) The violator will have five business days to bring its account balances within the holding limit. After that, the Executive Officer may transfer allowances in excess of the holding limit to the Auction Holding Account for consignment to auction pursuant to section 95910(d).

(C) Allowances transferred to the Auction Holding Account for consignment will be drawn first from the entity's Holding Account and, if necessary, from the entity's Compliance Account.

(6) Penalties may be applied whenever the holding limit is exceeded or transfer requests are filed with the accounts administrator that would violate the holding limit.

(c) The holding limit will be separately calculated to holdings of:

(1) Allowances including:

(A) Allowances with a vintage year corresponding to the current or previous calendar years;

(B) Allowances from any vintage purchased from the Allowance Price Containment Reserve pursuant to section 95913; and

(C) Allowances originally purchased at the Advance Auction but of a vintage year equal or prior to the current calendar year; and

(2) Allowances that were purchased at the Advance Auction and still have a vintage year greater than the current calendar year.

(d) The holding limit will be calculated for allowances qualifying pursuant to section 95920(c)(1) as the sum of:

(1) The number given by the following formula:

Holding Limit = 0.1*Base + 0.025*(Annual Allowance Budget – Base)

In which:

"Base" equals 25 million metric tons of CO_2e.

"Annual Allowance Budget" is the number of allowances issued for the current budget year.

(2) Limited Exemption from the Holding Limit. ~~A Limited Exemption from the Holding Limit is calculated as:~~

(A) The limited exemption from the holding limit (limited exemption) is the number of allowances which are exempt from the holding limit calculated pursuant to section 95920(c)(1). To qualify for inclusion within the limited exemption, allowances must be placed in the entity's Compliance Account. ~~calculation after they are transferred by a covered entity or an opt-in covered entity to its compliance account.~~

(B) On June 1, 2012 the limited exemption will be calculated as ~~equal~~ the annual emissions determined from the most recent emissions data report that has received a positive or qualified positive emissions data verification statement.

(C) Beginning in 2015,~~3~~ prior to the last quarter auction~~on October 1~~ of each year, the limited exemption will be increased by the amount of emissions contained in the most recent emissions data report that has received a positive or qualified positive emissions data verified statement during that year.

(D) If, ~~for any year~~ ARB has assigned emissions to an entity, for any year, in the absence of a positive or qualified positive emissions data verification statement, the calculation of the limited exemption will ~~use~~be calculated using the assigned emissions.

(E) For the first compliance period all reported emissions or assigned emissions used to calculate the limited exemption will include only the emissions associated with the scope for the program during the first compliance period.

(F) Beginning in 2015, all reported emissions or assigned emissions used to calculate the limited exemption will include the

emissions associated with the change in scope taking place in 2015.

(G) On January 1, 2015 the limited exemption will be increased by the amount of emissions included in the emissions data report received during 2014 but not yet included in the limited exemption pursuant to section 95920(d)(2)(E).

(H) On December 31 of the calendar year following the end of a compliance period, the limited exemption will be reduced by the sum of the entity's compliance obligation over that compliance period.

(I) For opt-in covered entities with only emissions specified in section 95851(b), the limited exemption will be zero throughout the first compliance period.

(J) Allowances allocated pursuant to section 95870(d) and (e), which are transferred to the receiving entity's accounts in a year preceding their vintage year, will not count against the Holding Limit or limited exemption until January 1 of their vintage year.

(3) Petition to Adjust the Limited Exemption.

(A) Prior to October 1 of any year, a covered entity may submit to the Executive Officer evidence demonstrating an increase in emissions for that year over the previous year and request a temporary increase in the limited exemption until verified data for that year are available.

(B) The amount of the increase must be at least 250,000 metric tons CO_2e on an annualized basis.

(C) The Executive Officer will review the evidence and determine whether an adjustment is needed.

(D) If an adjustment is granted, then the limited exemption for that covered entity will be increased immediately by the amount determined by the Executive officer.

(E) When the verified emissions data are received for the year for which an adjustment was granted, the Executive Officer will use the verified emissions value when calculating the limited exemption.

(e) The holding limit will be calculated separately for each vintage year for allowances qualifying pursuant to section 95920(c)(2) as the number given by the following formula:

Holding Limit = 0.1*Base + 0.025*(Annual Allowance Budget – Base)

In which:

"Base" equals 25 million metric tons of CO_2e.

"Annual Allowance Budget" is the number of California GHG allowances issued for a budget year.

(f) Application of the Corporate Association Disclosure to the Holding Limit.

(1) The total number of allowances held by a group of entities with a direct corporate association pursuant to section 95833 must sum to less than or equal to the holding limits pursuant to sections 95920(d) and (e).

(2) The limited exemption for each entity which is part of a direct corporate association is the same as defined in section 95920(d).

(3) Entities that are part of a direct corporate association that choose to opt out of account consolidation pursuant to section 95833(f)(3) must allocate shares of the holding limit among themselves. This holding limit allocation results in each entity having a specified percentage share of the group's holding limit. The sum of the shares allocated among the entities must sum to one.

(A) The primary account representatives or alternate account representatives of each of the associated entities must inform the accounts administrator of the allocation of the holding limit when registering pursuant to section 95833.

(B) The holding limit allocation will remain in effect until the primary account representatives or alternate account representatives of each of the associated entities informs the accounts administrator of subsequent changes to the allocation of the holding limit.

(g) The holding limit in section 95920(a) shall include holdings of any allowances issued by a jurisdiction operating an External GHG ETS to which California has linked pursuant to ~~subartcle~~ subarticle 12.

(h) The "Annual Allowance Budget" in section 95920(d) is calculated as the sum for the current budget year of the annual compliance budgets of California and all External GHG ETS programs to which California has linked pursuant to subarticle 12. The "Annual Allowance Budget" in section 95920(e) is calculated as the sum for a budget year of the annual compliance budgets of California and all External GHG ETS programs to which California has linked pursuant to subarticle 12.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95921. Conduct of Trade.

(a) Transfers of Compliance Instruments Between Accounts.

(1) Except when a transfer is undertaken by the Executive Officer, the accounts administrator will not register a transfer of compliance instruments between accounts into the tracking system until the administrator receives a transfer request that the Executive Officer has determined meets the requirements of this article.

(A) To initiate the process, the primary account representative or an alternate account representative of the source account for the transfer must submit a transfer request to the accounts administrator.

(B) The primary account representative or another alternate account representative for the same entity must confirm the transfer request to the accounts admini~~n~~strator within two days of the initial submission of the transfer request.

(C) The primary account representative or an alternate account representative for the destination account must confirm the transfer request to the accounts administrator within the time remaining in the three days following the initial submission of the transfer request in section 95921(a)(1)(A).

(D) The Executive Officer must determine whether the transfer request and the transaction for which the transfer request was submitted meet the requirements of this article based on the information available at the time of approval.

(E) The completed transfer request must be received by the accounts administrator no more than three days following the day of settlement of the transaction agreement for which the transfer request is submitted.

(2) The following transfers do not require confirmation by an account representative of the destination account pursuant to section 95921(a)(1)(C).

(A) Transfers initiated by the Executive Officer.

(B) Transfers between a single entity's holding and compliance accounts.

(3) The parties to a transfer will be in violation and penalties may apply if the above process is completed:

(A) More than three days after the initial submission of the transfer request; or

(B) More than three days after the settlement day of the transaction for which the transfer request is submitted.

(4) An entity may not submit a transfer request to another registered entity without an existing transaction agreement with that party authorizing a transfer.

(b) Information Requirements for Transfer Requests. Parties to the transfer request agree to provide documentation about the transaction agreement for which the transfer request was submitted upon the request of the Executive Officer. The following information must be reported to the accounts administrator as part of a transfer request before any transfer of allowances can be recorded on the tracking system:

(1) The following information must be entered into the tracking system for all transfer requests:

(A) Holding account number of the source account and identification of two individuals who are the primary account representative and/or alternate account representatives initiating the transfer request.

(B) Account number of destination account and identification of a primary account representative or alternate account representative for the destination account confirming the transfer request, if confirmation of the transfer request is required.

(C) Type, quantity, and vintage of compliance instrument.

(2) The transfer request must identify the type of transaction agreement for which the transfer request is being submitted, selecting one of the following three types:

(A) Over-the-counter agreement for the sale of compliance instruments for which delivery will take place no more than three days from the date the parties enter into the transaction agreement.

(B) Over-the counter agreement for the sale of compliance instruments for which delivery is to take place more than three days from the date the parties enter into the transaction

agreement or that involve multiple transfers of allowances over time for the bundled sale of allowances with other products.

(C) Exchange-based agreements for the sale of compliance instruments through any contract arranged through an exchange or Board of Trade.

(3) A transfer request submitted for an over-the-counter agreement for the sale of compliance instruments for which delivery will take place no more than three days from the date the parties enter into the transaction agreement must provide the following information:

(A) Date the entity entered into the transaction agreement.

(B) Date of settlement. If completion of the transfer request process is the last step of the agreement, the date the transfer request is submitted should be entered as the settlement date. If there are financial or other terms to be settled after the transfer request is approved, the date those terms are to be settled should be entered as the settlement date.

(C) Price of the compliance instrument in U.S. dollars or Canadian dollars.

(4) A transfer request submitted for an over-the-counter agreement for the sale of compliance instruments for which delivery is to take place more than three days from the date the parties enter into the transaction agreement or that involves multiple transfers of allowances over time or the bundled sale of allowances with other products must provide the following information:

(A) Date the entity entered into the transaction agreement.

(B) Date the transaction agreement terminates.

(C) If the transaction agreement provides for further compliance instrument transfers after the current transfer request is approved, specify the scheduled frequency as monthly, quarterly, annual, or unspecified.

(D) If the transaction agreement provides for transfers of other products, identify the products specified in the agreement.

(E) If the transaction agreement specifies a fixed price for the compliance instruments, provide the price in U.S. dollars or Canadian dollars.

(F) If the transaction agreement sets the price as a cost base plus a margin, then provide the cost base and the margin.

(G) If the transaction agreement does not specify the price using one of the above formats, provide a brief description of the pricing method.

(5) A transfer request submitted for an Exchange-Based Agreement must provide the following information:

(A) Identify the exchange where the transaction is conducted.

(B) Identify the exchange code for the contract.

(C) Identify the contract as spot or futures.

(D) Date of close of trading for the contract.

(E) Price at close of trading for the contract.

(6) If the transaction agreements do not contain a price for compliance instruments, entities may enter a price of zero into the transfer request if the transfer request is submitted to fulfill one of the following transaction agreement types and the entity discloses the agreement type in the transfer request.

(A) The proposed transfer is between entities with a direct corporate association.

(B) The proposed transfer is from an entity's holding account to its compliance account.

(C) The proposed transfer is from a publicly-owned utility to an entity or a Joint Powers Authority operating a generation facility as a joint venture with the utility.

(D) The proposed transfer is from a public utility to a federal power authority to cover emissions associated with imported power.

(E) The proposed transfer is from an electric distribution utility to an entity operating a generation facility under a tolling agreement or other long-term power purchase agreement that does not specify a price or cost basis for the sale of the compliance instruments alone.

(F) The proposed transfer results from a transaction agreement that bundles compliance instruments with other products and does not specify a price or cost basis for the sale of the compliance instruments alone.

~~(1) Holding account number of the source account and identification of two individuals who are the primary account representative and/or alternate account representatives initiating the transfer request;~~

~~(2) Holding account number of destination account and identification of a primary account representative or alternate account representative for the destination account confirming the transfer request;~~

~~(3) Serial numbers of the compliance instruments;~~

~~(4) Date of the transaction agreement for which the transfer request is submitted;~~

~~(5) Actual or expected settlement date, if not the same as date of the transaction agreement;~~

~~(6) Price of the compliance instrument in U.S. dollars. Disclosure of price is not required for transfers between entities with a direct corporate association or from an entity's holding account to its compliance account.~~

~~(7) If California links to Canadian jurisdictions pursuant to subarticle 12, the price of the compliance instrument may be reported in Canadian dollars in section 95921(b)(6).~~

(c) Transfer Request Deficiencies

(1) If the accounts administrator detects a deficiency in a transfer request before it is recorded into the tracking system:

(A) The accounts administrator will inform the entities submitting the request that the transfer request is deficient and inform the Executive Officer of the deficiency;

(B) The accounts administrator will inform the entity responsible for the deficiency of the specific problem to be remedied.

(C)~~(B)~~ The entities submitting the transfer request may resubmit the request with the deficiency corrected within the time limit set pursuant to sections 95921(a)(1)(C) and (E); and

(D)~~(C)~~ If the entities fail to submit an acceptable transfer request within the time limit, then they must either withdraw the transfer request or submit a new transfer request. Penalties may still apply pursuant to section 95921(a)(3).

(2) If the accounts administrator detects a deficiency in a transfer request after it is recorded into the tracking system:

(A) The accounts administrator will inform the entities submitting the request that the transfer request is deficient and inform the Executive Officer of the deficiency; ~~and~~

(B) If the deficiency is based on the information submitted by the representative of the source account, the Executive Officer will inform the submitting representative of the specific deficiency;

(C) If the deficiency is a violation of the holding limit, the Executive Officer will inform the primary account representative for the account listed on the transfer request as the destination account of the deficiency; and

(D)~~(B)~~ If the entities that submitted the transfer request cannot correct the deficiency within five business days after notification by the accounts administrator, the Executive Officer may instruct the accounts administrator to reverse the transfer.

(d) Transfers Involving Exchange Clearing Holding Accounts.

(1) A request to transfer compliance instru~~e~~ments to an exchange clearing holding account will list the exchange clearing holding account as the destination account.

(2) All of the compliance instruments received by an exchange clearing holding account must be transferred to one or more destination accounts within five days of receiving them.

(3) A request to transfer compliance instruments to or from an exchange clearing holding account does not require confirmation by an account representative of the destination account pursuant to section 95921(a)(1)(C).

(4) A request to transfer compliance instruments from an exchange clearing holding account does not require confirmation by a second account.

(e) Protection of Confidential Information. The Executive Officer will protect confidential information to the extent permitted by law by ensuring that the accounts administrator:

(1) Releases information on the transfer price and quantity of compliance instruments in a manner that is timely and maintains the confidentiality of the parties to a transfer;

(2) Except as needed for market oversight and investigation by the Executive Officer, protects as confidential all other information obtained through transfer requests;

(3) Protects as confidential the quantity and serial numbers of compliance instruments contained in holding accounts; and

(4) Releases information on the quantity ~~and serial numbers~~ of compliance instruments contained in compliance accounts in a timely manner.

(f) General Prohibitions on Trading.

(1) An entity cannot acquire allowances and hold them in its own holding account on behalf of another entity~~.~~ Including the following restrictions:

(A) An entity may not hold allowances in which a second entity has any ownership or financial interest.

(B) An entity may not hold allowances pursuant to an agreement that gives a second entity control over the holding or planned disposition of allowances while the instruments reside in the first entity's accounts, or control over the acquisition of allowances by the first entity. These prohibitions do not apply to agreements that only specify a date to deliver a specified quantity of allowances and that include no terms applying to allowances residing in another entity's account.

(C) An entity may purchase and hold allowances for later transfer to members of a direct corporate association.

(2) A trade involving, related to, or associated with any of the following are prohibited:

(A) Any manipulative or deceptive device in violation of this article;

(B) A corner or an attempt to corner the market for a compliance instrument;

(C) Fraud, or an attempt to defraud any other entity;

(D) A false, misleading or inaccurate report concerning information or conditions that affects or tends to affect the price of a compliance instrument;

(E) An application, report, statement, or document required to be filed pursuant to this article which is false or misleading with respect to a material fact, or which omits to state a material fact necessary to make the contents therein not misleading; or

(F) Any trick, scheme, or artifice to falsify or conceal a material fact, including use of any false statements or representations, written or oral, or documents made by or provided to an entity on or through which transactions in compliance instruments occur, are settled, or are cleared.

(G) A fact is material if it could probably influence a decision by the Executive Officer, the Board, or the Board's staff.

(g) Restrictions on Registered Entities. If an entity registered pursuant to section 95830 violates any provision specified in this article the Executive Officer may:

(1) Reduce the number of compliance instruments a covered entity or opt-in covered entity may have in its holding account below the amount allowed by the holding limit pursuant to section 95920;

(2) Increase the annual surrender obligation for a covered entity or an opt-in covered entity to a percentage of its reported and verified or assigned emissions above the 30% obligation pursuant to section 95855;

(3) Suspend or revoke the registration of opt-in covered entities, voluntarily associated entities, and other entities registered pursuant to section 95830;

(A) If registration is revoked or suspended the entity must sell or voluntarily retire all compliance instruments in its holding account within 30 days of revocation; and

(B) If registration is revoked or suspended and the entity fails to sell or voluntarily retire all compliance instruments in its holding account within 30 days of revocation, the accounts administrator will transfer the remaining instruments into the Auction Holding Account for sale at auction on behalf of the entity pursuant to section 95910(d);

(4) Limit or prohibit transfers in or out of the holding account; or

(5) All of the above.

(h) Information Reporting By Holders of Exchange Clearing Holding Accounts.

(1) Holders of exchange clearing holding accounts must make the transaction records available to ARB within 10 calendar days of a request from the Executive Officer.

(2) Holders of exchange clearing holding accounts must retain transaction records containing the information listed in 95921(b) for 10 years.

(3) Holders of exchange clearing holding accounts are not required to include the information listed in 95921(b)(4), (5), (6), and (7) in transfer requests to the accounts administrator.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95922. Banking, Expiration, and Voluntary Retirement.

(a) Allowances Issued for a Current or Previous Compliance Period. A CA GHG allowance or an allowance issued by an approved GHG ETS pursuant to subarticle 12 may be held ("banked") by an entity registered pursuant to section 95830.

(b) Allowances Issued for a Future Compliance Period. A CA GHG Allowance or an allowance approved pursuant to subarticle 12 issued from an allowance budget year within a future compliance period may be held by an entity registered pursuant to section 95830.

(c) Expiration of Compliance Instruments. A California compliance instrument does not expire and is not retired in the tracking system until:

(1) It is surrendered by a covered entity or opt-in covered entity and retired by the Executive Officer;

(2) An entity voluntarily submits the instrument to the Executive Officer for retirement; or

(3) The instrument is retired by an approved external GHG emissions trading system to which the Cap-and-Trade Program is linked pursuant to subarticle 12.

(d) Voluntary Retirement of Compliance Instruments.

(1) An entity registered pursuant to section 95830 may voluntarily submit any compliance instrument for retirement.

(2) To voluntarily retire a compliance instrument, the registered entity submits a transaction report to the accounts administrator listing its

account number, the ~~serial~~ number~~s~~ of ~~the~~ instruments to be retired, and the ARB Retirement Account as the destination account.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95923. Disclosure of Cap-and-Trade Contractors.

(a) Criteria for Determining Cap-and-Trade Contractors.

(1) A "Cap-and-Trade Contractor" is a contractor employed by an entity registered in the cap-and-trade program to work on cap-and-trade compliance if the contractor:

(A) Verifies the entity's emissions as part of ARB's Mandatory Reporting Regulation;

(B) Advises or consults with the entity regarding compliance with the Cap-and-Trade Program, and receives information from another registered Cap-and-Trade participant;

(b) An entity employing Cap-and-Trade Contractors defined per 95923(a) must disclose the following information for each Cap-and-Trade Contractor, unless already disclosed pursuant to section 95914(c)(3):

(1) Information to identify the Contractor, including:

(A) Name;

(B) Contact information;

(C) Physical work address of the Contractor;

(2) A brief description of the work performed by the Contractor, to include information sufficient to explain the entity's evaluation of the measures contained in section 95923(a) used to determine the Contractor relationship.

(c) The entity must disclose the information pursuant to section 95923(d) to the Executive Officer:

(1) When registering pursuant to section 95830;

(2) At any time after registering when a Contractual agreement pursuant to section 95923(a) is created;

(3) Within 30 days of a change to the information disclosed on Contractors.

Subarticle 12: Linkage to External Greenhouse Gas Emissions Trading Systems

§ 95940. General Requirements.

A compliance instrument issued by an external greenhouse gas emissions trading system (GHG ETS) may be used to meet the requirements of this Article if the external GHG ETS and the compliance instrument have been approved pursuant to this section and section 95941.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95941. Procedures for Approval of External GHG ETS.

The Board may approve a linkage with an external GHG ETS after public notice and opportunity for public comment in accordance with the Administrative Procedure Act (Government Code sections 11340 et seq.). Provisions set forth in this Article shall specify which compliance instruments issued by a linked GHG ETS may be used to meet a compliance obligation under this Article.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95942. Interchange of Compliance Instruments with Linked External Greenhouse Gas Emissions Trading Systems.

(a) Once a linkage is approved, a compliance instrument issued by the approved external GHG ETS, as specified in this section, may be used to meet a compliance obligation under this Article.

(b) An allowance issued by an approved external GHG ETS and specified in this section is not subject to the quantitative usage limit specified in section 95854.

(c) An offset credit or sector-based credit issued by an external GHG ETS is subject to the quantitative usage limit specified in section 95854, when used to meet a compliance obligation under this Article.

(d) Once a linkage is approved, a compliance instrument issued by California may be used to meet a compliance obligation within the approved External GHG ETS.

(e) Once a linkage is approved, a compliance instrument issued by the linked jurisdiction may be used to meet a compliance obligation in California.

(f) The administrator of the approved External GHG ETS must agree to inform the Executive Officer of any <u>of the serial numbers of</u> California compliance instruments that the External GHG ETS accepts for compliance.

(g) The Executive Officer will agree to inform the appropriate official in the approved External GHG ETS of any <u>of the serial numbers of</u> compliance instrument<u>s</u> accepted by California for compliance.

(h) The Executive Officer will register into the Retirement Account compliance instruments issued by California that are used for compliance within the approved External GHG ETS, along with information identifying the External GHG ETS actually retiring the compliance instruments.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95943. Linked External GHG ETS.

Covered or opt-in entities may use compliance instruments issued by the following programs to meet their compliance obligation under this article:

(a) Government of Quebec (effective January 1, 2014)**.**

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.

Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 13: ARB Offset Credits and Registry Offset Credits

§ 95970. General Requirements for ARB Offset Credits.

An Offset Project Operator or Authorized Project Designee must ensure the requirements for ARB offset credits and registry offset credits are met as follows:

(a) A registry offset credit must:

(1) Represent a GHG emission reduction or GHG removal enhancement that is real, additional, quantifiable, permanent, verifiable, and enforceable;

(2) Result from the use of a Compliance Offset Protocol that meets the requirements of section 95972 and is adopted by the Board pursuant to section 95971;

(3) Result from an offset project that meets the requirements specified in section 95973;

(4) Result from an offset project that is listed pursuant to section 95975;

(5) Result from an offset project that follows the monitoring, reporting and record retention requirements pursuant to section 95976;

(6) Result from an offset project that is verified pursuant to sections 95977 through 95978; and

(7) Be issued pursuant to section 95980.1 by an Offset Project Registry approved pursuant to section 95986.

(b) An ARB offset credit must meet the requirements in sections 95970(a)(1) through (a)(6) and:

(1) Be issued pursuant to section 95981.1;

(2) Be registered pursuant to section 95982; and

(3) When used for compliance under this article, be subject to the quantitative usage limit pursuant to section 95854.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95971. Procedures for Approval of Compliance Offset Protocols.

(a) The Board shall provide public notice of and opportunity for public comment prior to approving any Compliance Offset Protocols, including updates or modifications to existing Compliance Offset Protocols.

(b) All Compliance Offset Protocols shall be reviewed and periodically revised, if needed, in compliance with the California Administrative Procedure Act, if applicable.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95972. Requirements for Compliance Offset Protocols.

(a) To be approved by the Board, a Compliance Offset Protocol must:

(1) Accurately determine the extent to which GHG emission reductions and GHG removal enhancements are achieved by the offset project type;

(2) Establish data collection and monitoring procedures relevant to the type of GHG emissions sources, GHG sinks, and GHG reservoirs for that offset project type;

(3) Establish a project baseline that reflects a conservative estimate of business-as-usual performance or practices for the offset project type;

(4) Account for activity-shifting leakage and market-shifting leakage for the offset project type, unless the Compliance Offset Protocol stipulates eligibility conditions for use of the Compliance Offset Protocol that eliminate the risk of activity-shifting and/or market-shifting leakage;

(5) Account for any uncertainty in quantification factors for the offset project type;

(6) Ensure GHG emission reductions and GHG removal enhancements are permanent;

(7) Include a mechanism to ensure permanence of GHG removal enhancements for sequestration offset project types;

(8) Establish the length of the crediting period pursuant to section 95972(b) for the relevant offset project type; and

(9) Establish the eligibility and additionality of projects using standard criteria, and quantify GHG reductions and GHG removal enhancements using standardized baseline assumptions, emission factors, and monitoring methods.

(b) Crediting Periods. The crediting period for a non-sequestration offset project must be no less than 7 years and no greater than 10 years, unless specified otherwise in a Compliance Offset Protocol. The crediting period for a sequestration offset project must be no less than 10 years and no greater than 30 years.

(c) Geographic Applicability. A Compliance Offset Protocol must specify where the protocol is applicable. The geographic boundary must be within the United States ~~or its~~, United States Territories, Canada, or Mexico.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95973. Requirements for Offset Projects Using ARB Compliance Offset Protocols.

(a) General Requirements for Offset Projects. To qualify under the provisions set forth in this article, an Offset Project Operator or Authorized Project Designee must ensure that an offset project:

(1) Meets all of the requirements in a Compliance Offset Protocol approved by the Board pursuant to section 95971;

(2) Meets the following additionality requirements, as well as any additionality requirements in the applicable Compliance Offset Protocol, as of the date of Offset Project Commencement:

(A) The activities that result in GHG reductions and GHG removal enhancements are not required by law, regulation, or any legally

binding mandate applicable in the offset project's jurisdiction, and would not otherwise occur in a conservative business-as-usual scenario;

(B) The Offset Project Commencement date occurs after December 31, 2006, unless otherwise specified in the applicable Compliance Offset Protocol, except as provided in section 95973(c); and

(C) The GHG reductions and GHG removal enhancements resulting from the offset project exceed the project baseline calculated by the Compliance Offset Protocol for that offset project type as set forth in the following:

1. Compliance Offset Protocol Ozone Depleting Substances Projects, incorporated by reference October 20, 2011;
2. Compliance Offset Protocol Livestock Projects, incorporated by reference October 20, 2011;
3. Compliance Offset Protocol Urban Forest Projects, incorporated by reference October 20, 2011; ~~and~~
4. Compliance Offset Protocol U.S. Forest Projects, incorporated by reference October 20, 2011~~.~~;
5. Compliance Offset Protocol Mine Methane Capture Projects, incorporated by reference October XX, 2013; and
6. Compliance Offset Protocol Rice Cultivation Projects, incorporated by reference October XX, 2013.

(3) Is located in the United States ~~or its~~, United States Territories, Canada, or Mexico.

(b) Local, Regional, and National Regulatory and Environmental Impact Assessment Requirements. An Offset Project Operator or Authorized Project Designee must fulfill all local, regional, and national requirements on environmental impact assessments that apply based on the offset project location. In addition, offset projects must also fulfill all local, regional, and national environmental and health and safety regulatory

requirements that apply based on the offset project location and that directly apply to the offset project, including as specified in a Compliance Offset Protocol. Offset projects are not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements if the offset project is not in compliance with regulatory requirements directly applicable to the offset project.

(c) Early Action Offset Project Commencement Date. Offset projects that transition to Compliance Offset Protocols pursuant to section 95990(k) may have an Offset Project Commencement date before December 31, 2006.

(d) Any Offset Project Operator or Authorized Project Designee seeking to list an offset project situated on any of the following categories of land must demonstrate the existence of a limited waiver of sovereign immunity between ARB and the governing body of the Tribe entered into pursuant to section 95975(l):

(1) Land that is owned by, or subject to, an ownership or possessory interest of the Tribe;

(2) Land that is "Indian lands" of the Tribe, as defined by 25 U.S.C, §81(a)(1); or

(3) Land that is owned by any person, entity, or tribe, within the external borders of such Indian lands.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95974. Authorized Project Designee.

(a) General Requirements for Designation of Authorized Project Designee. An Offset Project Operator may designate an entity as an Authorized Project Designee at the time of offset project listing or any time after offset project listing as long as it meets the requirements of section 95974(b). ~~The Offset Project Operator must identify to ARB or an Offset~~

~~Project Registry the rights and responsibilities they are assigning or delegating to an Authorized Project Designee.~~

(1) The Offset Project Operator may assign ownership rights of ARB offset credits or registry offset credits to the following entities at the time of registry offset credit or ARB offset credit issuance pursuant to sections 95980.1 and 95981, respectively:

(A) Authorized Project Designee; or

(B) Any other third party not otherwise prohibited by this article.

(2) The Offset Project Operator may delegate responsibility to the Authorized Project Designee for performing or meeting all the requirements of sections 95975, 95976, 95977, 95977.1, 95977.2, 95980, 95980.1, 95981, 95981.1, 95983, and, where specifically identified, sections 95985, and 95990~~, where specifically identified~~on behalf of the Offset Project Operator.

(A) If an Authorized Project Designee is designated, the Authorized Project Designee will be responsible for performing all activities to meet the requirements in the section 95974(a)(2) and will be the main point of contact with regard to the offset project for the Offset Project Registry and ARB. The Offset Project Operator, however, is ultimately responsible for ensuring compliance with the requirements of this article and the applicable Compliance Offset Protocol.

(B) If an Authorized Project Designee is designated, the Offset Project Operator must designate an individual of the Authorized Project Designee as a Primary Account Representative or Alternate Account Representative on the Offset Project Operator's tracking system account before the Authorized Project Designee may act on behalf of the Offset Project Operator or submit any documentation to the Offset Project Registry and ARB. Only an individual authorized on the Offset Project Operator's tracking system account may sign any

documents or attestations to ARB on behalf of the Offset Project Operator for an offset project.

(b) Modifications to Authorized Project Designee and Activities. An Offset Project Operator may modify or change an Authorized Project Designee, or any other third party authorized pursuant to section 95974(a)(1) for a listed offset project once within each calendar year after the offset project has been listed by ARB or an Offset Project Registry by submitting a request, in writing, to ARB or an Offset Project Registry.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95975. Listing of Offset Projects Using ARB Compliance Offset Protocols.

(a) General Requirements for Offset Project Operators or Authorized Project Designees Who Are Submitting an Offset Project for Listing. Before an offset project can be listed by ARB or an Offset Project Registry the Offset Project Operator~~,~~ and its Authorized Project Designee ~~and~~, if applicable, ~~another third party as provided in section 95974(a)(1)~~ must:

(1) Register with ARB pursuant to section 95830; and

(2) Not be subject to any Holding Account restrictions imposed pursuant to section 96011.

(b) If the offset project is not listed by ARB, it must be listed by an Offset Project Registry approved pursuant to section 95986.

(c) General Requirements for Offset Project Listing. For offset projects being listed by ARB or an Offset Project Registry in an initial or renewed crediting period, the Offset Project Operator and any Authorized Project Designees approved pursuant to section 95974 must:

(1) Attest, in writing, to ARB as follows:

"I certify under penalty of perjury under the laws of the State of California the GHG reductions and/or GHG removal enhancements for

[project] from [date] to [date] will be measured in accordance with the [appropriate ARB Compliance Offset Protocol] and all information required to be submitted to ARB is true, accurate, and complete~~;~~.";

(2) Attest, in writing, to ARB as follows:

"I understand I am voluntarily participating in the California Greenhouse Gas Cap-and-Trade Program under title 17, article 5, and by doing so, I am now subject to all regulatory requirements and enforcement mechanisms of this program and subject myself to the jurisdiction of California as the exclusive venue to resolve any and all disputes arising from the enforcement of provisions in this article.";

(3) Attest in writing to ARB as follows:

"I understand that the offset project activity and implementation of the offset project must be in accordance with all applicable local, regional, and national environmental and health and safety laws and regulations that apply to the offset project location. I understand that offset projects are not eligible to receive ARB or registry offset credits for GHG reductions and GHG removal enhancements that are not in compliance with the requirements of the cap-and-trade program.";

(4) Provide all documentation required pursuant to section 95975(e) to ARB or an Offset Project Registry; and

(5) Disclose GHG reductions and GHG removal enhancements issued credit by any voluntary or mandatory programs for the same offset project being listed or any GHG reductions and GHG removal enhancements used for any GHG mitigation requirement.

(d) The attestations in section 95975(c)(1), 95975(c)(2), and 95975(c)(3) ~~may~~ must be provided to an Offset Project Registry with the listing information, if being listed with an Offset Project Registry, or to ARB if being listed with ARB ~~but must be provided to ARB when the requirements in section 95981(b) apply~~.

(e) Offset Project Listing Information Requirements. Before an offset project is publicly listed for an initial or renewed crediting period the Offset Project

Operator or Authorized Project Designee must provide the listing information in a Compliance Offset Protocol for that offset project type as set forth in:

(1) Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011;

(2) Compliance Offset Protocol Livestock Projects, October 20, 2011;

(3) Compliance Offset Protocol Urban Forest Projects, October 20, 2011; ~~and~~

(4) Compliance Offset Protocol U.S. Forest Projects, October 20, 2011~~.~~;

(5) Compliance Offset Protocol Mine Methane Capture Projects, incorporated by reference October XX, 2013; and

(6) Compliance Offset Protocol Rice Cultivation Projects, incorporated by reference October XX, 2013.

(f) Review of Offset Project Listing Information. ARB or the Offset Project Registry will review the offset project listing information submitted pursuant to section 95975(e) for completeness within 15 calendar days of receiving the listing information from the Offset Project Operator or Authorized Project Designee.

(~~f~~g) Notice of Completeness for Offset Project Listing Information. The Offset Project Operator or Authorized Project Designee will be notified after review by ARB or the Offset Project Registry, if the information submitted pursuant to section 95975(e) is complete and may be listed. If ~~it is~~ARB or the Offset Project Registry determine~~d~~ that the information submitted pursuant to section 95975(e) is incomplete or that a denial of the listing information is required, ARB or the Offset Project Registry will notify the Offset Project Operator or Authorized Project Designee of this determination~~will be notified~~ within 30 calendar days ~~by ARB or an Offset Project Registry~~of receiving the listing information from the Offset Project Operator or Authorized Project Designee.

(~~g~~h) Timing for Offset Project Listing in an Initial Crediting Period. The Offset Project Operator or Authorized Project Designee must submit the

information in section 95975(e) to ARB or an Offset Project Registry no later than the date at which the Offset Project Operator or Authorized Project Designee submits its required Offset Project Data Report for its initial Reporting Period under a Compliance Offset Protocol to ARB or an Offset Project Registry pursuant to section 95976. For offset projects with an Offset Project Commencement date on or after January 1, 2015, the Offset Project Operator or Authorized Project Designee must list the offset project with ARB or an Offset Project Registry within one year of Offset Project Commencement. If, after January 1, 2015, the Offset Project Operator or Authorized Project Designee does not list the offset project within one year of Offset Project Commencement, it will be ineligible to be listed under a Compliance Offset Protocol and will not be issued registry offset credits and ARB offset credits pursuant to sections 95980 and 95981.

(~~h~~i) Listing Status of Offset Projects in an Initial Crediting Period. After the Offset Project Operator or Authorized Project Designee submits the offset project for listing in an initial crediting period and the required documentation pursuant to section 95975(e), and ARB or the Offset Project Registry has reviewed the offset project listing information for completeness~~against the additionality requirements in section 95973(a)(2)~~, the offset project listing status will be "Proposed Project." If the offset project is not accepted for listing by an Offset Project Registry, the Offset Project Operator or Authorized Project Designee may request ARB to make a final determination if the offset project meets the requirements in section 95975 to be listed for an initial crediting period by the Offset Project Registry. In making this determination, ARB may consult with the Offset Project Registry before making the final determination.

(~~i~~j) Timing for Offset Project Listing in a Renewed Crediting Period. The Offset Project Operator or Authorized Project Designee must submit the information in section 95975(e) for a renewed crediting period to ARB or

an Offset Project Registry no earlier than 18 months and no later than 9 months before conclusion of the initial crediting period or a previous renewed crediting period.

(~~j~~k) Listing Status of Offset Projects in a Renewed Crediting Period. After the Offset Project Operator or Authorized Project Designee submits the offset project for listing in a renewed crediting period and the required documentation pursuant to section 95975(e), and ARB or the Offset Project Registry has reviewed the offset project listing information for completeness~~against the additionality requirements in section 95973(a)(2)(A) and 95973(a)(2)(C) as of the date of the commencement of the renewed crediting period~~, the offset project listing status will be "Proposed Renewal." If the offset project is not accepted for listing by an Offset Project Registry, the Offset Project Operator or Authorized Project Designee may request ARB to make a final determination if the project meets the requirements in section 95975 to be listed for a renewed crediting period by the Offset Project Registry. In making this determination, ARB may consult with the Offset Project Registry before making the final determination.

(l) Additional Offset Project Listing Requirements for Tribes. In addition to meeting the listing requirements in sections 95975(c)(1) through (5), Tribes must meet the following requirements before offset projects located on the categories of land specified in section 95973(d) can be listed with ARB or an Offset Project Registry pursuant to this section. The requirements of this article apply regardless of the category of land on which the offset project is located.

(1) The governing body of the Tribe must enter into a limited waiver of sovereign immunity with ARB related to its participation in the requirements of the Cap-and-Trade Program for the duration required by the applicable Compliance Offset Protocol(s). This waiver must include a consent to suit by the State of California, Air Resources Board, in the courts of the State of California, with respect to any

action in law or equity commenced by the State of California, Air Resources Board to enforce the obligations of the Tribe with respect to its participation in the Cap-and-Trade Program, irrespective of the form of relief sought, whether monetary or otherwise, except for purposes of relief under this limited waiver, Tribes shall be treated in the same manner as a California public entity under California Government Code sections 818 and 818.8.

(2) The Tribe must provide ARB with documentation demonstrating that the limited waiver of sovereign immunity entered into pursuant to section 95975(l)(1) has been properly adopted in accordance with the Tribe's Constitution or other organic law, by-laws and ordinances, and applicable federal laws.

(3) For offset projects located on Indian lands, as defined in 25 U.S.C. §81(a)(1), the Tribe must also provide ARB with proof of federal approval of the Tribe's participation in the requirements of the Cap-and-Trade Program, or documentation from the U.S. Department of the Interior, Bureau of Indian Affairs that federal approval is not required.

(m) Once ARB or an Offset Project Registry approves an offset project for listing, the listing information is considered final, and cannot be changed.

(~~k~~n) Limitations for Crediting Period Renewals. A crediting period may be renewed if the offset project meets the requirements for additionality pursuant to section ~~95975(j)~~95973(a)(2) and in the applicable Compliance Offset Protocol.

(1) The crediting period for non-sequestration offset projects may be renewed twice for the length of time identified by the Compliance Offset Protocol.

(2) Sequestration offset projects are not subject to any renewal limits.

(o) Transferring an Offset Project to Another Offset Project Registry. If the Offset Project Operator or Authorized Project Designee transfers an offset project listed with an Offset Project Registry to another Offset Project Registry:

(1) The Offset Project Registry that originally listed the offset project must change the offset project listing status on its registry system to "Delisted ARB Project."

(A) If the only actions taken by the Offset Project Operator or the Authorized Project Designee were to submit the listing documentation for the offset project, the original Offset Project Registry must retain the information related to the offset project on its website for the duration of one year before it is removed from the registry system.

(B) If a verification body submitted an Offset Verification Statement, or Registry Offset Credits or ARB offset credits were issued to the offset project, the original Offset Project Registry must retain the information related to the offset project on its website for the duration of the offset project life.

(C) The new Offset Project Registry must retain the listing date and all listing information as approved by the original Offset Project Registry. If the offset project has not undergone initial verification, the Offset Project Commencement date may change as a result of verification activities.

(2) The Offset Project Operator or Authorized Project Designee must submit the original listing documentation reviewed and accepted by the original Offset Project Registry pursuant to this section to the new Offset Project Registry. The Offset Project Operator or Authorized Project Designee may not make changes to the listing documentation pursuant to section 95975(l).

(3) The Offset Project Operator or Authorized Project Designee may not transfer an offset project to another Offset Project Registry during the course of offset verification services, or once a Notice of Offset Verification Services has been submitted pursuant to section 95977.1(b)(1). Once a Notice of Offset Verification Services has been submitted, the offset verification services must be completed for the

applicable Reporting Period before the Offset Project Operator or Authorized Project Designee may transfer the offset project to another Offset Project Registry.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

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

(a) General Requirements for Monitoring Equipment for Offset Projects. The Offset Project Operator or Authorized Project Designee must employ the procedures in the Compliance Offset Protocol for monitoring measurements and project performance for offset projects. All required monitoring equipment must be maintained and calibrated in a manner and at a frequency required by the equipment manufacturer, unless otherwise specified in the applicable Compliance Offset Protocol. All modeling, monitoring, sampling, or testing procedures must be conducted in a manner consistent with the applicable procedure.

(b) The Offset Project Operator or Authorized Project Designee must use the missing data methods as provided in a Compliance Offset Protocol for that offset project type, if provided and applicable.

(c) An Offset Project Operator or Authorized Project Designee must put in place all monitoring equipment or mechanisms required by a Compliance Offset Protocol for that offset project type as set forth in:

(1) Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011;

(2) Compliance Offset Protocol Livestock Projects, October 20, 2011;

(3) Compliance Offset Protocol Urban Forest Projects, October 20, 2011; ~~and~~

(4) Compliance Offset Protocol U.S. Forest Projects, October 20, 2011~~.~~;

(5) Compliance Offset Protocol Mine Methane Capture Projects, incorporated by reference October XX, 2013; and

(6) Compliance Offset Protocol Rice Cultivation Projects, incorporated by reference October XX, 2013.

(d) Offset Project Reporting Requirements. An Offset Project Operator or Authorized Project Designee shall submit an Offset Project Data Report to ARB or an Offset Project Registry ~~annually~~ for each Reporting Period as defined in section 95802. Each Offset Project Data Report must cover a single Reporting Period. Reporting Periods must be contiguous; there must be no gaps in reporting once the first Reporting Period has commenced. For projects developed under the Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011 there may be one Offset Project Data Report submitted for each offset project and the Offset Project Data Report may cover up to a maximum of 12 months of data. The Offset Project Operator or Authorized Project Designee must submit an Offset Project Data Report to ARB or an Offset Project Registry within 24 months of listing their offset project pursuant to section 95975. The Offset Project Data Report shall contain the information required by a Compliance Offset Protocol for that offset project type as set forth in:

(1) Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011;

(2) Compliance Offset Protocol Livestock Projects, October 20, 2011;

(3) Compliance Offset Protocol Urban Forest Projects, October 20, 2011; ~~and~~

(4) Compliance Offset Protocol U.S. Forest Projects, October 20, 2011~~.~~;

(5) Compliance Offset Protocol Mine Methane Capture Projects, incorporated by reference October XX, 2013; and

(6) Compliance Offset Protocol Rice Cultivation Projects, incorporated by reference October XX, 2013.

(~~5~~7) The Offset Project Operator or Authorized Project Designee must attest, in writing, to ARB as follows:

"I certify under penalty of perjury under the laws of the State of California the GHG reductions and/or GHG removal enhancements for [project] from [date] to [date] are measured in accordance with the [appropriate ARB Compliance Offset~~approved p~~Protocol] and all information required to be submitted to ARB in the Offset Project Data Report is true, accurate, and complete."

This attestation ~~may~~must be provided to an Offset Project Registry with the Offset Project Data Report if the offset project is listed with an Offset Project Registry, or to ARB if the offset project is listed with ARB ~~but must be provided to ARB when the requirements in section 95981(b) apply~~.

(~~6~~8) All Offset Project Data Reports must be submitted within four months after the conclusion of each Reporting Period.

(~~7~~9) If an Offset Project Data Report is not submitted to ARB or an Offset Project Registry by the applicable reporting deadline, the GHG reductions and GHG removal enhancements quantified and reported in the Offset Project Data Report are not eligible to be issued ARB offset credits pursuant to section 95981.

(e) Requirements for Record Retention for Offset Projects. An Offset Project Operator or Authorized Project Designee must meet the following requirements:

(1) The Offset Project Operator or Authorized Project Designee must retain the following documents:

(A) All information submitted as part of the Offset Project Data Report;

(B) Documentation of the offset project boundary, including a list of all GHG emissions sources, GHG sinks, and GHG reservoirs included in the offset project boundary and the project baseline, and the calculation of the project baseline, project emissions, GHG emission reductions, and GHG removal enhancements;

(C) Fuel use and any other underlying measured or sampled data used to calculate project baseline emissions, GHG emission reductions, and GHG removal enhancements for each source, categorized by process and fuel, or material type;

(D) Documentation of the process for collecting fuel use or any other underlying measured or sampled data for the offset project and its GHG emissions sources, GHG sinks, and GHG reservoirs for quantifying project baseline emissions, project emissions, GHG emission reductions, and GHG removal enhancements;

(E) Documentation of all project baseline emissions, project emissions, GHG emission reductions, and GHG removal enhancements;

(F) All point of origin and chain of custody documents required by a Compliance Offset Protocol, if applicable;

(G) All chemical analyses, results, and testing-related documentation for material and sources used for inputs to project baseline emissions, project emissions, GHG emission reductions, and GHG removal enhancements;

(H) All model inputs or assumptions used for quantifying project baseline emissions, project emissions, GHG emission reductions, and GHG removal enhancements;

(I) Any data used to assess the accuracy of project baseline emissions, GHG emission reductions, and GHG removal enhancements from each offset project GHG emissions source, GHG sink, and GHG reservoir, categorized by process;

(J) Quality assurance and quality control information including information regarding any measurement gaps, missing data substitution, calibrations or maintenance records for monitoring equipment, or models providing data for calculating project

baseline emissions, project emissions, GHG emission reductions, and GHG removal enhancements;

(K) A detailed technical description of any offset project continuous measurement/monitoring system, including documentation of any findings and approvals by federal, state, and local agencies;

(L) Raw and aggregated data from any measurement system;

(M) Documentation of any changes over time and the log book on tests, down-times, calibrations, servicing, and maintenance for any measurement/monitoring equipment providing data for project baseline calculations, project emissions, GHG emission reductions, and GHG removal enhancements;

(N) For sequestration offset projects, documentation of inventory methodologies and sampling procedures including all calculation methodologies and equations used, and any data related to plot sampling; and

(O) Any other documentation or data required to be retained by a Compliance Offset Protocol, if applicable.

(2) Documents listed in section 95976(e)(1) associated with the preparation of an Offset Project Data Report shall be retained in paper, electronic, or other usable format for a minimum of 15 years following the issuance of ARB offset credits related to that Offset Project Data Report. All other documents shall be retained in paper, electronic, or other usable format for a minimum of 15 years.

(3) The documents retained pursuant to this section must be sufficient to allow for the verification of each Offset Project Data Report.

(4) Upon request by ARB or an Offset Project Registry, the Offset Project Operator or Authorized Project Designee must provide to ARB or an Offset Project Registry all documents pursuant to this section, including data used to develop an Offset Project Data Report within 10 calendar days of the request.

(f) General Procedure for Interim Gas or Fuel Analytical and Monitoring Equipment Data Collection. This section only applies if a Compliance Offset Protocol does not already include methods for collecting or accounting for data in the event of missing data due to an unforeseen breakdown of gas or fuel analytical monitoring data equipment.

(1) In the event of an unforeseen breakdown of offset project data monitoring equipment and gas or fuel flow monitoring devices required for the GHG emission reductions and GHG removal enhancement estimation, ARB may authorize an Offset Project Operator or Authorized Project Designee to use an interim data collection procedure if ARB determines that the Offset Project Operator or Authorized Project Designee has satisfactorily demonstrated that:

(A) The breakdown may result in a loss of more than 20 percent of the source's gas or fuel data for the year covered by an Offset Project Data Report;

(B) The gas or fuel analytical data monitoring equipment cannot be promptly repaired or replaced without shutting down a process unit significantly affecting the offset project operations, or that the monitoring equipment must be replaced and replacement equipment is not immediately available;

(C) The interim procedure will not remain in effect longer than is reasonably necessary for repair or replacement of the malfunctioning data monitoring equipment; and

(D) The request was submitted within 30 calendar days of the breakdown of the gas or fuel analytical data monitoring equipment.

(2) An Offset Project Operator or Authorized Project Designee seeking approval of an interim data collection procedure must, within 30 calendar days of the monitoring equipment breakdown, submit a written request to ARB that includes all of the following:

(A) The proposed start date and end date of the interim procedure;

(B) A detailed description of what data are affected by the breakdown;

(C) A discussion of the accuracy of data collected during the interim procedure compared with the data collected under the Offset Project Operator's or Authorized Project Designee's usual equipment-based method; and

(D) A demonstration that no feasible alternative procedure exists that would provide more accurate emissions data.

(3) ARB may limit the duration of the interim data collection procedure or include other conditions for approval.

(4) Data collected pursuant to an approved interim data collection procedure shall be considered captured data for purposes of compliance with a Compliance Offset Protocol. When approving an interim data collection procedure, ARB shall determine whether the accuracy of data collected under the procedure is reasonably equivalent to data collected from properly functioning monitoring equipment, and if it is not, the relative accuracy to assign for purposes of assessing possible offset material misstatement under section 95977.1(b)(3)(Q) of this article.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95977. Verification of GHG Emission Reductions and GHG Removal Enhancements from Offset Projects.

(a) General Requirements. An Offset Project Operator or Authorized Project Designee must obtain the services of an ARB-accredited verification body for the purposes of verifying Offset Project Data Reports submitted under this article.

(b) Schedule for Verification of Non-Sequestration Offset Projects. The verification of GHG emission reductions for non-sequestration offset projects <u>that produce greater than or equal to 25,000 metric tons of GHG</u>

reductions must be performed ~~annually~~ on a 12-month rolling basis and cover the Reporting Period for which the most recent Offset Project Data Report was submitted. For Reporting Periods in which an Offset Project Data Report for a non-sequestration offset project shows that the offset project produced fewer than 25,000 metric tons of GHG reductions, the Offset Project Operator or Authorized Project Designee may choose to perform verification that covers two consecutive Reporting Periods, even if for the subsequent Reporting Period the offset project produced greater than or equal to 25,000 metric tons of GHG reductions. If an Offset Project Data Report results in zero GHG emission reductions, the Offset Project Operator or Authorized Project Designee may defer verification until the offset project produces an Offset Project Data Report that no longer results in zero GHG emission reductions.

(c) Schedule for Verification of Sequestration Offset Projects. ~~The~~An initial verification of GHG emission reductions and GHG removal enhancements for sequestration offset projects must be performed following the first Reporting Period and cover one Reporting Period. After the first Reporting Period, verification must be conducted at least once every six years and may cover up to six Reporting Periods for which Offset Project Data Reports were submitted. After an initial verification with a Positive Offset Verification Statement, reforestation offset projects and urban forest offset projects that meet the requirements of the applicable Compliance Offset Protocol may defer the second verification for twelve years, but verification of Offset Project Data Reports must be performed at least once every six years thereafter.

(d) Timing for Submittal of Offset Verification Statements to ARB or an Offset Project Registry. Any Offset Verification Statement must be received by ARB or an Offset Project Registry within ~~nine~~eleven months after the conclusion of the Reporting Period for which offset verification services were performed. If the Offset Verification Statement is not submitted to ARB or an Offset Project Registry by the verification deadline, the GHG

reductions and GHG removal enhancements quantified and reported in the Offset Project Data Report are not eligible to be issued ARB offset credits or registry offset credits. The verification body must issue one Offset Verification Statement for each Offset Project Data Report that it verifies for the Offset Project Operator or Authorized Project Designee.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95977.1. Requirements for Offset Verification Services.

(a) Rotation of Verification Bodies. An offset project shall not have more than six consecutive ~~years of offset project data~~Reporting Periods verified by the same verification body or verifier(s), unless otherwise specified in section 95977.1(a)(1) or (a)(2). An Offset Project Operator or Authorized Project Designee may contract with a previous verification body or verifier(s) only if at least three ~~years of the offset project data~~consecutive Reporting Periods have been verified by a different verification body or verifier(s) before the previous verification body is selected again, unless otherwise specified in section 95977.1(a)(1) or (a)(2). The ~~six year~~ rotation requirements in this section are~~is~~ applied between the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and the verification body ~~or~~and verifier(s) on an offset project basis.

(1) For offset projects developed under the Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011, the following shall apply: An Offset Project Operator or Authorized Project Designee shall not have more than six offset projects verified by the same verification body and verifier(s). An Offset Project Operator or Authorized Project Designee may contract with a previous verification body and verifier(s) only if at least three consecutive offset projects have been verified by a different verification body or verifier(s) before the previous verification body is selected again.

(2) For reforestation offset projects developed under, and meeting the requirements of, the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, and urban forest offset projects developed under, and meeting the requirements of, the Compliance Offset Protocol Urban Forest Projects, October 20, 2011, the following shall apply: An Offset Project Operator or Authorized Project Designee that has deferred the second verification for 12 years may have up to 13 Offset Project Data Reports verified by the same verification body and verifier(s). If an Offset Project Operator or Authorized Project Designee has not deferred the second verification to 12 years, the requirements in section 95977.1(a) for rotation of verification bodies and verifier(s) shall apply. An Offset Project Operator or Authorized Project Designee may contract with a previous verification body and verifier(s) only if at least three consecutive Offset Project Data Reports have been verified by a different verification body or verifier(s) before the previous verification body is selected again.

(b) Offset Verification Services. Offset Verification Services shall be subject to the following requirements.

(1) Notice of Offset Verification Services for Offset Projects. Before offset verification services, as defined in section 95977.1(b)(3), may begin, the verification body must submit a Notice of Offset Verification Services to ARB and an Offset Project Registry, if applicable. The verification body may begin offset verification services for the Offset Project Operator or Authorized Project Designee ~~10 working~~30 calendar days after the Notice for Offset Verification Services is received by ARB ~~or~~and the Offset Project Registry, or earlier, if approved by ARB in writing. The Notice ~~for~~of Offset Verification Services must include the following information:

(A) The name of the offset project type, including the length of the offset project crediting period, and title of the Compliance Offset Protocol used to implement the offset project;

(B) A list of staff who will be designated to provide offset verification services as part of an offset verification team, including the names of each designated staff member, the lead verifier, independent reviewer, all subcontractors, and a description of the roles and responsibilities each team member will have during the offset verification process;

(C) Documentation that the offset verification team has the skills required to provide offset verification services for the Offset Project Operator or Authorized Project Designee. At least one offset verification team member must be accredited by ARB as an offset project specific verifier for an offset project of that type; and

(D) General information on the Offset Project Operator or Authorized Project Designee, including:

1. The name of the Offset Project Operator or Authorized Project Designee, including contact information, address, telephone number, and email address;
2. The locations that will be subject to offset verification services;
3. The date(s) of on-site visits, with address and contact information; and
4. A brief description of expected offset verification services to be performed, including expected completion date.

(2) If any information submitted pursuant to sections 95977.1(b)(1)(B) and 95977.1(b)(1)(D) changes after the Notice for Offset Verification Services is submitted to ARB and the Offset Project Registry, if applicable, the verification body must notify ARB and the Offset Project Registry by submitting an updated ~~conflict of interest self-evaluation form~~Notice of Offset Verification Services as soon as the change is made, but, at least five days prior to the start of offset verification services. If any information submitted pursuant to sections

95977.1(b)(1)(B) and 95977.1(b)(1)(D) changes during offset verification services, the verification body must notify ARB and the Offset Project Registry, if applicable. In either instance, the ~~conflict of interest~~Notice of Offset Verification Services must be resubmitted to ARB and~~or~~ the Offset Project Registry, as applicable.

(3) Offset verification services must include the following:

(A) Offset Verification Plan. The Offset Project Operator or Authorized Project Designee must submit the following information necessary to develop an Offset Verification Plan to the offset verification team:

1. Information to allow the offset verification team to develop a general understanding of offset project boundaries, operations, project baseline emissions, and annual GHG reductions and GHG removal enhancements;
2. Information regarding the training or qualifications of personnel involved in developing the Offset Project Data Report;
3. The name and date of the Compliance Offset Protocol used to quantify and report project baselines, GHG reductions, GHG removal enhancements, and other required data as applicable in the Compliance Offset Protocol; and
4. Information about any data management system, offset project monitoring system, and models used to track project baselines, GHG reductions, GHG removal enhancements, and other required data as applicable in the Compliance Offset Protocol.

~~(B)~~5. Timing of Offset Verification Services. The Offset Verification Plan~~Such information~~ shall also include the following information:

~~1~~a. Dates of proposed meetings and interviews with personnel related to the offset project;

~~2~~b. Dates of proposed site visits;

~~3~~c. Types of proposed document and data reviews; and

~~4~~d. Expected date for completing offset verification services.

(~~C~~B) Planning Meetings with the Offset Project Operator or Authorized Project Designee. The offset verification team must discuss with the Offset Project Operator or Authorized Project Designee the scope of the offset verification services and request any information and documents needed for initial offset verification services. The offset verification team must review the documents submitted and plan and conduct a review of original documents and supporting data for the Offset Project Data Report. Any discussions or meetings to secure an offset verification services contract or collect preliminary project documents to bid the offset verification services may occur prior to submitting the Notice of Offset Verification Services pursuant to section 95977.1(b)(1).

(~~D~~C) Site Visits for Offset Projects. For a non-sequestration offset project, at least one accredited offset verifier in the offset verification team, including the offset project specific verifier, must make at least one site visit ~~every year to~~ for each ~~offset project location for which an~~ Reporting Period that an Offset Project Data Report is submitted, except for those non-sequestration offset projects that qualify for a two-year offset verification period pursuant to section 95977(b). In this case, at least one offset verifier in the offset verification team, including the offset project specific verifier, must make a site visit ~~to each offset project location in the year that~~for the Reporting Period for which offset verification services are performed. For a forest or urban forest offset project, at least one accredited offset verifier in the offset verification team, including the offset project

specific verifier, must make a site visit every year that offset verification services are provided, except for those offset projects approved for less intensive verification, for which a site visit must be performed at least once every six years. A site visit is also required after the first ~~full calendar year of operations~~Reporting Period of an offset project under a Compliance Offset Protocol and after the first Reporting Period for each renewed crediting period under a Compliance Offset Protocol. The site visit required under this section must be performed after the Offset Project Operator or Authorized Project Designee submits its Offset Project Data Report to ARB or an Offset Project Registry. During the required site visit, the offset verification team member(s) must conduct the following:

1. During the initial site visit conducted following the first Reporting Period of the crediting period the offset verification team members must:
    a. Assess offset project eligibility and that the offset project meets the requirements for additionality according to section 95973 and the applicable Compliance Offset Protocol;
    b. Review the information submitted for listing pursuant to section 95975;
    c. Confirm that the offset project boundary is appropriately defined;
    d. Review project baseline calculations and modeling;
    e. Assess the operations, functionality, data control systems, and review GHG measurement and monitoring techniques; and
    f. Confirm that all applicable eligibility criteria to design, measure, establish the chain of custody, and monitor

the offset project conforms to the requirements of the applicable Compliance Offset Protocol.

g. All criteria pertaining to the eligibility of the offset project must be assessed during the first site visit in the initial Reporting Period. All eligibility criteria must be met and are not subject to sampling. If any of the eligibility criteria are not met, the project would be ineligible for crediting and receive an Adverse Offset Verification Statement.

2. During the initial site visit conducted following the first Reporting Period of the crediting period and each subsequent site visit the offset verification team must:

a. Check that all offset project boundaries, GHG emissions sources, GHG sinks, and GHG reservoirs in the applicable Compliance Offset Protocol are identified appropriately;

b. Review and understand the data management systems used by the Offset Project Operator or Authorized Project Designee to track, quantify, and report GHG reductions, GHG removal enhancements, or other data required as applicable in the Compliance Offset Protocol. This includes reviewing data collection processes and procedures, sampling techniques and metering accuracy, quality assurance/quality control processes and procedures, and missing data procedures. The offset verification team member(s) must evaluate the uncertainty and effectiveness of these systems;

c. Interview key personnel involved in collecting offset project data and preparing the Offset Project Data Report;

d. Make direct observations of equipment for data sources and equipment supplying data for GHG emission sources in the sampling plan determined to be high risk;

e. Collect and review other information that, in the professional judgment of the team, is needed in the offset verification process;

f. Confirm the offset project conforms with all local, state, or federal environmental regulatory requirements pursuant to section 95973(b), including health and safety regulations; and

g. Review all chain of custody documents as required in the Compliance Offset Protocol, if applicable.

h. If the offset project is found by the offset verification team to not meet the requirements of section 95977.1(b)(3)(D)(2.)(f.), the offset project is ineligible to receive ARB offset credits or registry offset credits for GHG reductions and GHG removal enhancements quantified and reported in the Offset Project Data Report.

i. The activities performed pursuant to sections 95977.1(b)(3)(D)(2.)(f.) through (b)(3)(D)(2.)(h.) may be included in a site visit or, alternatively, may be conducted as part of a desk review.

(E) The offset verification team must review offset project operations to identify applicable GHG emissions sources, project emissions, GHG sinks, and GHG reservoirs required to be included and quantified in the Offset Project Data Report as required by the applicable Compliance Offset Protocol. This must include a review of each type of GHG emissions source, GHG sink, and GHG reservoir to ensure that all GHG emissions

sources, GHG sinks, and GHG reservoirs required to be reported for the offset project are properly included in the Offset Project Data Report.

(F) An Offset Project Operator or Authorized Project Designee must make available to the offset verification team all information and documentation used to calculate and report project baseline and ~~annual~~project GHG emissions, GHG reductions, and GHG removal enhancements and other information required by the applicable Compliance Offset Protocol.

(G) Sampling Plan for Offset Project Data Reports. As part of confirming the Offset Project Data Report, the offset verification team must develop a sampling plan that meets the following requirements:

1. The offset verification team must develop a sampling plan based on a strategic analysis developed from document reviews and interviews to assess the likely nature, scale, and complexity of the offset verification services for an Offset Project Operator or Authorized Project Designee. The analysis must review the inputs for the development of the submitted Offset Project Data Report, the rigor and appropriateness of the GHG data management systems, and the coordination within an Offset Project Operator's or Authorized Project Designee's organization to manage the operation and maintenance of equipment and systems used to develop the Offset Project Data Reports;
2. The offset verification team must include a ranking of GHG emissions sources, GHG sinks, and GHG reservoirs within the offset project boundary by amount of contribution to total CO_2e emissions, GHG reductions, and GHG removal enhancements, and a ranking of GHG emissions sources,

GHG sinks, or GHG reservoirs with the largest calculation uncertainty; and

3. The offset verification team must include a qualitative narrative of uncertainty risk assessment in the following areas as applicable to the Compliance Offset Protocol:
   a. Data acquisition equipment;
   b. Data sampling and frequency;
   c. Data processing and tracking;
   d. Project baseline and ~~annual~~project GHG emissions, GHG reductions, and GHG removal enhancement calculations;
   e. Data reporting; and
   ~~f. Chain of custody requirements; and~~
   ~~g~~f. Management policies or practices in developing Offset Project Data Reports.

(H) After completing the analysis in section 95977.1(b)(3)(G), the offset verification team must include in the sampling plan a list which includes the following:

1. GHG emissions sources, GHG sinks, and GHG reservoirs that will be targeted for document reviews to ensure conformance with the Compliance Offset Protocol and data checks as specified in section 95977.1(b)(3)(L) and an explanation of why they were chosen;
2. Methods used to conduct data checks for each GHG emissions source, GHG sink, and GHG reservoir; and
3. A summary of the information analyzed in the data checks and document reviews conducted for each GHG emissions source, GHG sink, and GHG reservoir.

(I) The sampling plan list, prepared pursuant to section 95977.1(b)(3)(H), must be updated and finalized prior to the completion of offset verification services. The final sampling

plan must describe in detail how the GHG emissions sources, GHG sinks, and GHG reservoirs with identified risk, subject to data checks, were reviewed for accuracy.

(J) The offset verification team must revise the sampling plan to describe tasks completed or needed to be completed by the offset verification team as relevant information becomes available and potential issues emerge of offset material misstatement or nonconformance with the requirements of the Compliance Offset Protocol and this article.

(K) The verification body must retain the sampling plan in paper, electronic, or other format for a period of not less than 15 years following the submission of each Offset Verification Statement. The sampling plan must be made available to ARB or the Offset Project Registry within 10 calendar days upon request. The verification body must also retain all material received, reviewed, or generated to render an Offset Verification Statement for an Offset Project Operator or Authorized Project Designee for 15 years following the submittal of each Offset Verification Statement. The documentation must allow for a transparent review of how a verification body reached its conclusion in the detailed verification report and Offset Verification Statement.

(L) Data Checks for Offset Project Data Reports. To determine the reliability of the submitted Offset Project Data Report, the offset verification team must use data checks. Such data checks must focus first on the largest and most uncertain estimates of project baseline GHG emissions, project emissions, GHG reductions, and GHG removal enhancements, and the offset verification team must:

1. Use data checks to ensure that the appropriate methodologies and GHG emission factors have been applied

in calculating the project baseline and annual GHG emissions, project emissions, GHG reductions, and GHG removal enhancements calculations in the Compliance Offset Protocol;

2. Choose GHG emissions sources, project emissions, GHG sinks, and GHG reservoirs for data checks based on their relative sizes and risks of offset material misstatement or nonconformance as indicated in the sampling plan;
3. Use professional judgment in the number of data checks required for the offset verification team to conclude with reasonable assurance whether the Offset Project Operator's or Authorized Project Designee's total reported GHG reductions and GHG removal enhancements are free of offset material misstatement and the Offset Project Data Report otherwise conforms to the requirements of the Compliance Offset Protocol and this article. At a minimum a data check must include the following:
    a. Tracing data in the Offset Project Data Report to its origin;
    b. Looking at the process for data compilation and collection;
    c. Reviewing all GHG inventory designs for GHG sources, GHG sinks, and GHG reservoirs, and sampling procedures, if applicable;
    d. Recalculating GHG emissions, project emissions, GHG reductions, and GHG removal enhancements estimates to check original calculations;
    e. Reviewing calculation methodologies used by the Offset Project Operator or Authorized Project Designee for conformance with the Compliance Offset Protocol and this article;

f. Reviewing meter and fuel analytical instrumentation calibration, if applicable; and

g. Reviewing the quantification from models approved for use in the Compliance Offset Protocol, if applicable; and

4. Compare its own calculated results for the data checks conducted with the reported offset project data in order to confirm the extent and impact of any omissions and errors. Any discrepancies must be identified. The comparison of data checks must also include a narrative to indicate which GHG emissions sources, GHG sinks, and GHG reservoirs were checked, the types and quantity of data that were evaluated for each GHG emissions source, GHG sink, and GHG reservoir, how the data checks were calculated including calculations, and any discrepancies that were identified.

(M) Offset Project Data Report Modifications. As a result of review by the offset verification team and prior to completion of an Offset Verification Statement, the Offset Project Operator or Authorized Project Designee must make any possible improvements or corrections to the submitted Offset Project Data Report, and a revised Offset Project Data Report must be submitted to ARB or the Offset Project Registry. If the Offset Project Operator or Authorized Project Designee does not make all possible improvements or corrections to the Offset Project Data Report, the verification body must issue an Adverse Offset Verification Statement. Documentation for all Offset Project Data Report submittals must be retained by the Offset Project Operator or Authorized Project Designee for the length of time specified in section 95976(e)(2).

(N) To verify that the Offset Project Data Report is free of offset material misstatement, the offset verification team must make its own determination of GHG reductions or GHG removal enhancements relative to the project baseline using the data check conducted pursuant to section 95977.1(b)(3)(L), and must determine whether there is reasonable assurance that the Offset Project Data Report does not contain an offset material misstatement for the Offset Project Operator or Authorized Project Designee, on a CO_2e basis. To assess conformance with this article and the Compliance Offset Protocol the offset verification team must review the methods and factors used to develop the Offset Project Data Report for adherence to the requirements of this article and the Compliance Offset Protocol and ensure that other requirements of this article are met.

(O) Issues Log. The offset verification team must keep a log of any issues identified in the course of offset verification services that may affect determinations of offset material misstatement and nonconformance. The issues log must identify the section of this article or Compliance Offset Protocol related to the nonconformance, if applicable, and indicate that the issues were corrected by the Offset Project Operator or Authorized Project Designee prior to completing the offset verification services. Any other concerns that the offset verification team has with the preparation of the Offset Project Data Report must be documented in the issues log. The issues log must indicate whether the issues could have any bearing on offset material misstatement or conformance.

(P) An assessment of offset material misstatement is conducted for ~~annual~~ net GHG reductions and GHG removal enhancements achieved in a given Reporting Period relative to

the project baseline in that Reporting Period in metric tons of CO_2e.

(Q) The offset verification team must determine whether the GHG reductions and GHG removal enhancements quantified and reported in the Offset Project Data Report contain an offset material misstatement using the following equation:

$$Percent\ error = \frac{\sum[Discrepancies + Omissions + Misreporting]\ x\ 100\%}{Total\ Reported\ Emission\ Reductions}$$

$$\cancel{Percent\ error\ = \sum \frac{[Discrepancies + Omissions + Misreporting]\ \times 100\%}{Total\ reported\ emissions}}$$

Where:

"Discrepancies" means any differences between the reported GHG value for sources, sinks, and reservoirs for the project baseline ~~emissions,~~ or project and the verifier calculated GHG value ~~GHG emissions, GHG reductions, and GHG removal enhancements and GHG emissions, project emissions, GHG reductions, and GHG removal enhancements~~ for a data source subject to data checks in 95977.1(b)(3)(L) calculated by the offset verification team. Any discrepancies identified must include the positive or negative impact of the GHG source, sink, or reservoir on the total reported GHG emission reductions or removal enhancements when input into the offset material misstatement equation.

"Omissions" means any GHG emissions or removals associated with required sources, sinks, and reservoirs for the project baseline ~~emissions,~~ or project ~~GHG reductions, project emissions, and GHG removal enhancements~~ that the offset verification team concludes must be part of the Offset Project Data Report, but were not included by the Offset Project

Operator or Authorized Project Designee in the Offset Project Data Report. Any omissions found by the offset verification team must include the positive or negative impact of the omission on the total reported GHG emission reductions or removal enhancements when input into the offset material misstatement equation.

"Misreporting" means duplicative, incomplete, or other GHG emissions or removals for required sources, sinks, and reservoirs in the project baseline or project ~~emissions, project emissions, GHG reductions, and GHG removal enhancements~~ the offset verification team concludes should, or should not, be part of the Offset Project Data Report. Any misreporting found by the offset verification team must include the positive or negative impact of the m misreporting on the total reported GHG emission reductions or removal enhancements when input into the offset material misstatement equation.

"Total reported emission reductions" means ~~annual reported~~ net GHG reductions and GHG removal enhancements reported by the Offset Project Operator or Authorized Project Designee for an Offset Project Data Report relative to the project baseline for that Offset Project Data Report in metric tons CO_2e.

(R) Completion of offset verification services must include:

1. Offset Verification Statement. Upon completion of the offset verification services pursuant to section 95977.1(b), the verification body must complete an Offset Verification Statement for each Offset Project Data Report for which offset verification services were conducted and provide it to the Offset Project Operator or Authorized Project Designee

and ARB or the Offset Project Registry by the verification deadline pursuant to section 95977(d). Before the Offset Verification Statement is completed, the verification body must have the offset verification services and findings of the offset verification team independently reviewed within the verification body by an independent reviewer not involved in offset verification services for that offset project.

2. The independent reviewer shall serve as the final check of the offset verification team's work to identify any significant concerns, including:
   a. Errors in planning;
   b. Errors in data sampling; and
   c. Errors in judgment by the offset verification team that are related to the draft offset verification statement.
3. The independent reviewer must maintain independence from the offset verification services by not making specific recommendations about how the offset verification services should be conducted. The independent reviewer will review documents applicable to the offset verification services provided and identify any failure to comply with the requirements of this article or with the verification body's internal policies and procedures for providing offset verification services. The independent reviewer must concur with the offset verification findings before the Offset Verification Statement can be issued.
4. When the offset verification team completes its findings:
   a. The verification body must provide to the Offset Project Operator or Authorized Project Designee a detailed verification report <u>for each Offset Project Data Report for which offset verification services were conducted</u>. The detailed verification report must at a

minimum include the Offset Verification Plan, the detailed comparison of the data checks conducted during offset verification services pursuant to section 95977.1(b)(3)(L), including the required narrative, the issues log identified in the course of offset verification activities and the issue resolutions, and any qualifying comments on findings during offset verification services. The detailed verification report must also include the calculations performed in 95977.1(b)(3)(Q) with enough detail to understand the relationships between the data checks and the offset material misstatement evaluation, and be made available to ARB within 10 calendar days upon request. If the Offset Verification Statement is being submitted to an Offset Project Registry, then the verification body must submit the detailed verification report to the Offset Project Registry with the Offset Verification Statement. The detailed verification report must be submitted to the Offset Project Operator or Authorized Project Designee at the same time or before the Offset Verification Statement is submitted to ARB or the Offset Project Registry.

b. The verification body must provide the Offset Verification Statement to the Offset Project Operator or Authorized Project Designee and ARB or the Offset Project Registry, attesting to ARB whether the verification body has found the submitted Offset Project Data Report to be free of offset material misstatement, and whether the Offset Project Data Report is in conformance with the requirements of this article and the Compliance Offset Protocol.

c. A Compliance Offset Protocol may restrict the use of a Qualified Positive Offset Verification Statement for certain project types, in which case the verification body must submit either a Positive Offset Verification Statement or an Adverse Offset Verification Statement. In the case of a Qualified Positive Offset Verification Statement, when not restricted by a Compliance Offset Protocol, the verification body will qualify the Offset Verification Statement to indicate any non-conformances allowed for a qualified Positive Offset Verification Statement as defined in section 95802 contained within the Offset Project Data Report and that these non-conformances do not result in an offset material misstatement.

d. The offset verification team must have a final discussion with the Offset Project Operator or Authorized Project Designee explaining their findings and notifying the Offset Project Operator or Authorized Project Designee of any unresolved issues noted in the issues log before the Offset Verification Statement is finalized and submitted to the Offset Project Registry or ARB.

e. The lead verifier in the offset verification team must attest to ARB in the Offset Verification Statement that the offset verification team has carried out all offset verification services as required by this article, and the lead verifier who has conducted the independent review of offset verification services and findings must attest to his or her independent review on behalf of the verification body and his or her concurrence with the offset verification findings.

f. The lead verifier must attest in the Offset Verification Statement, in writing, to ARB as follows:
"I certify under penalty of perjury under the laws of the State of California that the offset verification team has carried out all offset verification services as required by sections 95977.1, ~~and~~ 95977.2, and the applicable Compliance Offset Protocol and the findings are true, accurate, and complete and have been independently reviewed by an independent reviewer as required under sections 95977.1(b)(3)(R)(1.) through 95977.1(b)(3)(R)(3.)."

5. Prior to the verification body providing an Adverse Offset Verification Statement to ARB or the Offset Project Registry, the Offset Project Operator or Authorized Project Designee must be provided at least 10 working days to modify the Offset Project Data Report to correct any offset material misstatement or nonconformance found by the offset verification team. The modified Offset Project Data Report and Offset Verification Statement must be submitted to ARB or the Offset Project Registry by the applicable verification deadline, unless the Offset Project Operator or Authorized Project Designee makes a request to ARB pursuant to section 95977.1(b)(3)(R)(6.).

6. If the Offset Project Operator or Authorized Project Designee and the verification body cannot reach agreement on modifications to the Offset Project Data Report that result in a Positive Offset or Qualified Positive Offset Verification Statement due to a disagreement on the requirements of this article or Compliance Offset Protocol, the Offset Project Operator or Authorized Project Designee may petition ARB

to make a decision as to the verifiability of the submitted Offset Project Data Report.

7. If ARB determines that the Offset Project Data Report does not meet the standards and requirements specified in this article, the Offset Project Operator or Authorized Project Designee must provide any additional information within 30 calendar days of the ARB determination. ARB will review the new information and notify the Offset Project Operator or Authorized Project Designee and verification body of its final decision. In re-verifying a revised Offset Project Data Report, the verification body and offset verification team shall be subject to the requirements in sections 95977.1(b)(3)(R)(1.) through 95977.1(b)(3)(R)(4.) and must submit the revised Offset Verification Statement to ARB or the Offset Project Registry within 15 calendar days.

(S) Upon submission of the Offset Verification Statement to ARB or the Offset Project Registry, the Offset Project Data Report must be considered final and no further changes may be made. All offset verification requirements of this article shall be considered complete.

(T) If the Executive Officer finds a high level of conflict of interest existed between a verification body and an Offset Project Operator or Authorized Project Designee pursuant to section 95979(b)(3) and section 95979(b)(4), or an Offset Project Data Report that received a Positive Offset or Qualified Positive Offset Verification Statement fails an ARB audit, the Executive Officer may set aside the Positive Offset or Qualified Positive Offset Verification Statement submitted by the verification body and require the Offset Project Operator or Authorized Project designee to have the Offset Project Data Report re-verified by a different verification body within 90 calendar days of this finding.

(U) Upon request by ARB or the Offset Project Registry, the Offset Project Operator or Authorized Project Designee must provide the data used to generate an Offset Project Data Report, including all data available to the offset verification team in the conduct of offset verification services, within 10 working days of the request.

(V) Upon request by ARB or the Offset Project Registry the verification body must provide ARB or the Offset Project Registry the detailed verification report given to the Offset Project Operator or Authorized Project Designee, as well as the sampling plan, contracts for offset verification services, and any other supporting documentation. All documentation must be provided by the verification body to ARB or the Offset Project Registry within 10 working days of the request.

(W) Upon written notification by ARB the verification body and its staff must be available for an offset verification services audit when providing offset verification services for an offset project listed with ARB or an Offset Project Registry using a Compliance Offset Protocol.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95977.2. Additional Project Specific Requirements for Offset Verification Services.

In addition to meeting the offset verification requirements in sections 95977 and 95977.1, Offset Project Operators or Authorized Project Designees must ensure the GHG emission reductions and GHG removal enhancements resulting from an offset project meet any additional verification requirements in the Compliance Offset Protocol, if applicable, for an offset project of that type.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95978. Offset Verifier and Verification Body Accreditation.

(a) An offset verifier or verification body must meet the accreditation requirements in section 95132 of MRR to provide offset verification services to verify GHG emission reductions and GHG removal enhancements for offset projects listed pursuant to this article. Accreditation of verification bodies and offset verifiers for verifying Offset Project Data Reports under this article must be achieved separately from accreditation for verifying reports submitted under the MRR.

(b) For purposes of this article, the subcontractor requirements in section 95132(e) of the MRR must be applied to the Offset Project Operator and/or Authorized Project Designee and not a reporting entity.

(c) An ARB accredited verification body must make itself and its personnel available for an ARB audit.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95979. Conflict of Interest Requirements for Verification Bodies and Offset Verifiers for Verification of Offset Project Data Reports.

(a) The conflict of interest provisions of this section shall apply to verification bodies, lead verifiers, and offset verifiers accredited by ARB to perform offset verification services for Offset Project Operators ~~or~~, and Authorized Project Designees, if applicable, as well as any subcontractors utilized by the verification body for the offset verification services.

(b) The potential for a conflict of interest must be deemed to be high where:

(1) The verification body and Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, share any senior management staff or board of directors membership, or any of the senior management staff of the Offset Project Operator ~~or~~, and Authorized Project Designee, if

applicable, have been employed by the verification body, or vice versa, within the previous three years; or

(2) Within the previous five years, any staff member of the verification body or any related entity has provided to the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, any of the following non-offset verification services:

(A) Designing, developing, implementing, reviewing, or maintaining an inventory or offset project information or data management system for air emissions, unless the review was part of providing GHG offset verification services;

(B) Developing GHG emission factors or other GHG-related engineering analysis, including developing or reviewing a California Environmental Quality Act (CEQA) GHG analysis that includes offset project specific information;

(C) Designing energy efficiency, renewable power, or other projects which explicitly identify GHG reductions and GHG removal enhancements as a benefit;

(D) Designing, developing, implementing, internally auditing, consulting, or maintaining an offset project resulting in GHG emission reductions and GHG removal enhancements;

(E) Owning, buying, selling, trading, or retiring shares, stocks, or ARB offset credits or registry offset credits from the offset project;

(F) Dealing in or being a promoter of ARB offset credits or registry offset credits on behalf of an Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable;

(G) Preparing or producing GHG-related manuals, handbooks, or procedures specifically for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable;

(H) Appraisal services of carbon or GHG liabilities or assets;

(I) Brokering in, advising on, or assisting in any way in carbon or GHG-related markets;

(J) Directly managing any health, environment or safety functions for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable;

(K) Bookkeeping or other services related to the accounting records or financial statements;

(L) Any service related to information systems, including International Organization for Standardization 14001 ~~c~~Certification for Environmental Management (ISO 14001 Certification), unless those systems will not be reviewed as part of the offset verification process;

(M) Appraisal and valuation services, both tangible and intangible;

(N) Fairness opinions and contribution-in-kind reports in which the verification body has provided its opinion on the adequacy of consideration in a transaction, unless the information reviewed in formulating the Offset Verification Statement will not be reviewed as part of the offset verification services;

(O) Any actuarially oriented advisory service involving the determination of amounts recorded in financial statements and related accounts;

(P) Any internal audit service that has been outsourced by the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, that relates to the Offset Project Operator's ~~or~~, and Authorized Project Designee's, if applicable, internal accounting controls, financial systems, or financial statements, unless the systems and data reviewed during those services, as well as the result of those services will not be part of the offset verification process;

(Q) Acting as a broker-dealer (registered or unregistered), promoter, or underwriter on behalf of the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable;

(R) Any legal services; ~~and~~

(S) Expert services to the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, or a legal representative for the purpose of advocating the Offset Project Operator's ~~or~~, and Authorized Project Designee's, if applicable, interests in litigation or in a regulatory or administrative proceeding or investigation, unless providing factual testimony ~~.~~; and

(T) Third-party certification of a facility to meet TEAP requirements.

"Member" for the purposes of this section means any employee or subcontractor of the verification body or related entities of the verification body. "Member" also includes any individual with majority equity share in the verification body or its related entities.

"Related entity" for the purposes of this section means any direct parent company, direct subsidiary, or sister company.

(3) The potential for conflict of interest will be deemed to be high when any member of the verification body provides any type of incentive to an Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, to secure an offset verification services contract.

(4) The potential for a conflict of interest will also be deemed to be high where any member of the verification body has provided offset verification services for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, except within the time periods in which the Offset Project Operator ~~or~~, and Authorized Project Designee, if

applicable, is allowed to use the same verification body as specified in section 95977.1(a).

(c) The potential for a conflict of interest must be deemed to be low where no potential for a conflict of interest is found under section 95979(b) and any non-offset verification services provided by any member of the verification body to the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, within the last five years are valued at less than 20 percent of the fee for the proposed offset verification, except where medium conflict of interest related to personal or family relationships is identified pursuant to section 95979(d).

(d) The potential for a conflict of interest must be deemed to be medium where the potential for a conflict of interest is not deemed to be either high or low as specified in sections 95979(b) and 95979(c), or where there are any instances of personal or familial relationships between the verification body and management or employees of the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and when a conflict of interest self-evaluation is submitted pursuant to section 95979(g). If a verification body identifies a medium potential for conflict of interest and intends to provide offset verification services for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, for an offset project listed with ARB or an Offset Project Registry, the verification body must submit, in addition to the submittal requirements specified in section 95979(e), a plan to avoid, neutralize, or mitigate the potential conflict of interest situation. At a minimum, the conflict of interest mitigation plan must include:

(1) A demonstration that any members with potential conflicts have been removed and insulated from the project;

(2) An explanation of any changes to the organizational structure or verification body to remove the potential conflict of interest. A demonstration that any unit with potential conflicts has been divested

or moved into an independent entity or any subcontractor with potential conflicts has been removed; and

(3) Any other circumstance that specifically addresses other sources for potential conflict of interest.

(e) Conflict of Interest Submittal Requirements for Accredited Verification Bodies. Before providing any offset verification services, the verification body must submit to the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, ~~and~~ ARB ~~or~~and the Offset Project Registry, a self-evaluation of the potential for any conflict of interest that the verification body, its staff, its related entities, or any subcontractors performing offset verification services may have with the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, for which it will perform offset verification services. Offset verification services shall not commence prior to approval of the conflict of interest self-evaluation by ARB or the Offset Project Registry. The submittal must include the following:

(1) Identification of whether the potential for conflict of interest is high, low, or medium based on factors specified in sections 95979(b), (c), and (d);

(2) Identification of whether any member of the offset verification team has previously provided offset verification services for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and, if so, the years in which such offset verification services were provided; and

(3) Identification of whether any member of the offset verification team or related entity has engaged in any non-offset verification services of any nature with the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, either within or outside California during the previous ~~three~~five years. If non-offset verification services have previously been provided, the following information must also be submitted:

(A) Identification of the nature and location of the work performed for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and whether the work is similar to the type of work to be performed during offset verification;

(B) The nature of past, present, or future relationships with the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, including:

1. Instances when any member of the offset verification team has performed or intends to perform work for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable;
2. Identification of whether work is currently being performed for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and if so, the nature of the work;
3. How much work was performed for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, in the last ~~three~~five years, in dollars;
4. Whether any member of the offset verification team has any contracts or other arrangements to perform work for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, or a related entity; and
5. How much work related to GHG reductions and GHG removal enhancements the offset verification team has performed for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, or related entities in the last ~~three~~five years, in dollars;

(C) Explanation of how the amount and nature of work previously performed is such that any member of the offset verification team's credibility and lack of bias should not be under question;

(D) A list of names of the staff that would perform offset verification services for the Offset Project Operator ~~or~~, and Authorized

Project Designee, if applicable, and a description of any instances of personal or family relationships with management or employees of the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, that potentially represent a conflict of interest;

(E) Identification of any other circumstances known to the verification body, or Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, that could result in a conflict of interest; and

(F) Attest, in writing, to ARB as follows:

"I certify under penalty of perjury of the laws of the State of California the information provided in the Conflict of Interest submittal is true, accurate, and complete."

(f) Approval of Conflict of Interest Submittals. Once the conflict of interest self-evaluation information has been submitted pursuant to section 95979(e), ARB or the Offset Project Registry has 30 calendar days to make a determination whether to accept or deny the conflict of interest and notify the verification body whether it may proceed with the offset verification services for the Offset Project Operator and Authorized Project Designee, if applicable. Within this 30 calendar days, ARB or the Offset Project Registry must also review, and approve or deny, the mitigation plan submitted by the verification body pursuant to section 95979(d) where a medium conflict of interest is determined. If the offset project was listed with an Offset Project Registry, the conflict of interest self-evaluation acceptance or denial notification will be given by the Offset Project Registry.

(g~~f~~) Monitoring Conflict of Interest Situations.

(1) After commencement of offset verification services, the verification body must monitor and immediately make full disclosure, in writing, to ARB ~~or~~and the Offset Project Registry regarding any potential for a conflict of interest situation that arises for an offset project using a

Compliance Offset Protocol. This disclosure must include a description of actions that the verification body has taken or proposes to take to avoid, neutralize, or mitigate the potential for a conflict of interest.

(2) The verification body must continue to monitor arrangements or relationships that may be present for a period of one year after the completion of offset verification services for an offset project using a Compliance Offset Protocol. During that period, within 30 days of the verification body or any verification team member entering into any contract with the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, for which the verification body has provided offset verification services, the verification body must notify ARB ~~or~~and the Offset Project Registry of the contract and the nature of the work to be performed. ARB or the Offset Project Registry, within 30 working days, will determine the level of~~r~~ conflict using the criteria in sections 95979(a) through (d), if the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, must re-verify their Offset Project Data Report, and if accreditation revocation is warranted by ARB.

(3) The verification body must notify ARB ~~or~~and the Offset Project Registry within 30 calendar days, of any emerging conflicts of interest during the time offset verification services are being provided for an offset project using a Compliance Offset Protocol.

(A) If ARB or the Offset Project Registry determines that an emerging potential conflict disclosed by the verification body is medium risk, and this risk can be mitigated, then the verification body meets the conflict of interest requirements to continue to provide offset verification services for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and will not be subject to suspension or revocation of accreditation as specified in section 95132(d) of MRR.

(B) If ARB or the Offset Project Registry determines that an emerging potential conflict disclosed by the verification body is medium or high risk, and this risk cannot be mitigated, then the verification body will not be able to continue to provide offset verification services for the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, and may be subject to the suspension or revocation of accreditation by ARB under section 95132(d) of MRR.

(4) The verification body must report to ARB and the Offset Project Registry, if applicable, any changes in its organizational structure, including mergers, acquisitions, or divestitures, for one year after completion of offset verification services.

(5) ARB may void a Positive Offset or Qualified Positive Offset Verification Statement received in section 95981 if it discovers a potential conflict of interest has arisen for any member of the offset verification team. In such a case, the Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, shall be provided 90 calendar days to complete re-verification.

(6) If the verification body or its subcontractor(s) are found to have violated the conflict of interest requirements of this article, the Executive Officer may rescind accreditation of the body, its verifier staff, or its subcontractor(s) for any appropriate period of time as provided in section 95132(d) of MRR.

(h~~g~~) Specific Requirements for Air Quality Management Districts and Air Pollution Control Districts.

(1) If an air district has provided or is providing any services listed in section 95979(b)(2) as part of its regulatory duties, those services do not constitute non-verification services or a potential for high conflict of interest for purposes of this article;

(2) Before providing offset verification services, an air district must submit a conflict of interest self-evaluation pursuant to 95979(e) for each

Offset Project Operator ~~or~~, and Authorized Project Designee, if applicable, for which it intends to provide offset verification services. As part of its conflict of interest self-evaluation submittal under section 95979(e), the air district shall certify that it will prevent conflicts of interests and resolve potential conflict of interest situations pursuant to its policies and mechanisms submitted under section 95132(b)(1)(G) of MRR;

(3) If an air district hires a subcontractor who is not an air district employee to provide offset verification services, the air district shall be subject to all of the requirements of section 95979.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

95979.1 Additional Requirements for Air Quality Management and Air Pollution Control Districts.

(a) The following requirements will apply to air districts that meet the requirements under section 95978 to become accredited as an offset verification body and/or the requirements under section 95986 to meet the requirements as an approved Offset Project Registry:

(1) The air district may:

(A) Register with ARB pursuant to section 95830; and

(B) Hold compliance instruments as a voluntarily associated entity pursuant to section 95814.

(2) The air district may not:

(A) Be an Offset Project Operator or Authorized Project Designee for any offset project for which it provides offset verification services pursuant to sections 95977, 95977.1, and 95977.2, and for which the air district will subsequently request the issuance of ARB offset credits pursuant to section 95981;

(B) Be an Offset Project Operator or Authorized Project Designee for any offset project for which it provides registry services

pursuant to section 95987, and for which the air district will subsequently request the issuance of ARB offset credits pursuant to section 95981; and

(C) Be an offset verification body for any offset project developed using a Compliance Offset Protocol for which it would provide registry services pursuant to section 95987.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95980. Issuance of Registry Offset Credits.

(a) One registry offset credit, which represents one metric ton of CO_2e for a direct GHG emission reduction or direct GHG removal enhancement, will be issued pursuant to section 95980.1 only if:

(1) An Offset Project Registry has listed the offset project pursuant to section 95975;

(2) The GHG emission reductions or GHG removal enhancements were issued a Positive Offset or Qualified Positive Offset Verification Statement pursuant to section 95977.1 and 95977.2; and

(3) An Offset Project Registry has received a Positive Offset or Qualified Positive Offset Verification Statement issued and attested to by an ARB-accredited verification body for the Offset Project Data Report for which registry offset credits would be issued.

(b) An Offset Project Registry will determine whether the GHG emission reductions and GHG removal enhancements meet the requirements of section 95980(a), the information submitted pursuant to section 95980(a) is complete, and the Positive Offset or Qualified Positive Offset Verification Statement meets the requirements of sections 95977, 95977.1, and 95977.2 within 45 calendar days of receiving it.

(c) Determination for Timing and Duration of Initial Crediting Periods for Offset Projects Submitted Through an Offset Project Registry. The initial crediting period will begin with the date that the first verified GHG emission

reductions and GHG removal enhancements occur, according to the first Positive Offset or Qualified Positive Offset Verification Statement that is received by an Offset Project Registry, unless otherwise specified in a Compliance Offset Protocol. An early action offset project that transitions pursuant to section 95990(k) will begin its initial crediting period pursuant to section 95990(k)(2).

(d) Determination for Timing and Duration of Renewed Crediting for Offset Projects Submitted through an Offset Project Registry. A renewed crediting period will begin the day after the conclusion of the prior crediting period.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95980.1 Process for Issuance of Registry Offset Credits.

(a) An Offset Project Registry may issue a registry offset credit that meets the requirements of sections 95980(a) and (b) to an Offset Project Operator, Authorized Project Designee, or any other third party authorized by the Offset Project Operator ~~pursuant to section 95974(a)(1)~~ to receive registry offset credits, no later than 15 calendar days after an Offset Project Registry makes a determination pursuant to section 95980(b).

(b) Change of Listing Status at the Offset Project Registry. When an Offset Project Registry issues a registry offset credit for an offset project, the listing status for that offset project will be changed to either “Active Registry Project” or “Active Registry Renewal” at the Offset Project Registry and ARB.

(c) Notice of Determination of Issuance of Registry Offset Credits. Not later than 15 calendar days after an Offset Project Registry issues a registry offset credit, an Offset Project Registry will notify the Offset Project Operator, Authorized Project Designee, or any other third party authorized

by the Offset Project Operator ~~pursuant to section 95974(a)(1)~~ of the issuance.

(d) Requests for Additional Information. An Offset Project Registry may request additional information for offset projects seeking issuance of registry offset credits from the Offset Project Operator, Authorized Project Designee or verification body.

(1) An Offset Project Registry will notify the Offset Project Operator or Authorized Project Designee, if applicable, within 15 calendar days of its determination pursuant to section 95980(c) if the information in section 95980(a) and (b) is incomplete and request additional specific information.

(2) An Offset Project Registry may request any additional information from the Offset Project Operator, Authorized Project Designee, if applicable, or the verification body before issuing registry offset credits for an offset project that meets the requirements of sections 95980(a) and (b). The Offset Project Operator, Authorized Project Designee, if applicable, or verification body must submit the information to the Offset Project Registry within 10 calendar days of a request.

(3) If an Offset Project Registry determines the information submitted in sections 95980(a), 95980(b), and 95980.1(d)(2) does not meet the requirements for issuance of registry offset credits, then an Offset Project Registry may deny issuance of registry offset credits. The Offset Project Operator or Authorized Project Designee may petition an Offset Project Registry within 10 days of denial for a review of the information submitted pursuant to sections 95980(a), 95980(b), and 95980.1(d)(2) and respond to any issues that prevent the issuance of registry offset credits.

(4) An Offset Project Registry must make a final determination within 30 calendar days of receiving the Offset Project Operator's or Authorized Project Designee's request in section 95980.1(d)(3) and may request

additional information from the Offset Project Operator, Authorized Project Designee, if applicable, or verification body.

(5) If an Offset Project Registry determines not to issue registry offset credits, the Offset Project Registry must submit a detailed report to ARB that describes why they came to a negative determination.

(6) If an Offset Project Registry determines not to issue registry offset credits, the Offset Project Operator or Authorized Project Designee may request that ARB make a final determination on whether the GHG reductions or removal enhancements achieved by the offset project meet the requirements for registry offset credit issuance. In making this determination, ARB may consult with the Offset Project Operator, Authorized Project Designee, if applicable, verification body, and Offset Project Registry before making the final determination.

(7) If after reviewing all of the information, ARB determines that the GHG reductions or removal enhancements meet the requirements for registry offset credit issuance, the Offset Project Registry will issue registry offset credits in the amount of GHG reductions or removal enhancements verified to have been achieved by the offset project for the applicable Reporting Period(s).

(e~~d~~) At the time of issuance or after notifying the Offset Project Operator, Authorized Project Designee, or any other third party authorized by the Offset Project Operator ~~pursuant to section 95974(a)(1)~~ to receive registry offset credits, of the issuance, the Offset Project Registry will create a unique serial number for each registry offset credit.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95981. Issuance of ARB Offset Credits.

(a) One ARB offset credit, which represents one metric ton of CO_2e for a direct GHG emission reduction or direct GHG removal enhancement, will be issued only if:

(1) ARB or an Offset Project Registry has listed the offset project pursuant to section 95975;

(2) The GHG emission reductions and GHG removal enhancements were issued a Positive Offset or Qualified Positive Offset Verification Statement pursuant to sections 95977.1 and 95977.2; and

(3) ARB or an Offset Project Registry has received a Positive Offset or Qualified Positive Offset Verification Statement issued and attested to by an ARB-accredited verification body for the Offset Project Data Report for which registry offset credits were issued pursuant to section 95980.1, if the offset project was submitted for listing with an Offset Project Registry, or for which ARB offset credits would be issued pursuant to section 95981.1.

(b) Requirements for Offset Projects Submitted Through an Offset Project Registry Seeking Issuance of ARB Offset Credits. If an Offset Project Operator or Authorized Project Designee provides information for listing pursuant to section 95975, monitors and reports pursuant to section 95976, and has their offset project verified pursuant to sections 95977, 95977.1, and 95977.2 through an Offset Project Registry, the Offset Project Operator or Authorized Project Designee must provide the following information to ARB for issuance of ARB offset credits pursuant to section 95981.1:

(1) The attestations required in sections 95975(c)(1), 95975(c)(2), 95975(c)(3), 95976(d)(5), 95977.1(b)(3)(R)(4.)(b.), 95977.1(b)(3)(R)(4.)(e.), and 95977.1(b)(3)(R)(4.)(f.) and any in the applicable Compliance Offset Protocol;

(2) Offset project listing information submitted to an Offset Project Registry pursuant to sections 95975(c) and (e);

(3) The original and final Offset Project Data Reports submitted to an Offset Project Registry pursuant to sections 95976(d), 95977.1(b)(3)(M), and 95977.1(b)(3)(R)5.; and

(4) Offset Verification Statements submitted pursuant to section 95977.1(b)(3)(R)(4.)(b.).

(5) The Offset Project Operator, or Authorized Project Designee, if applicable, must submit a request for issuance of ARB offset credits to ARB for each Offset Project Data Report for which they are seeking issuance of ARB offset credits.

(A) If the ARB offset credits are only being issued into the Holding Account that belongs to the Offset Project Operator, the Authorized Project Designee may submit the request for issuance of ARB offset credits to ARB. If the ARB offset credits will be issued into any other Holding Account(s) other than the Holding Account that belongs to the Offset Project Operator, only the Offset Project Operator may submit the request for issuance of ARB offset credits to ARB.

(B) The request for issuance of ARB offset credits must identify which Holding Accounts the ARB offset credits should be placed into and how many ARB offset credits will be placed into each Holding Account. Consistent with section 95974, the Offset Project Operator may request that ARB offset credits are placed into the Holding Account of the Authorized Project Designee, or another third party not prohibited to hold compliance instruments under this Article. Any party receiving ARB offset credits at the time of ARB offset credit issuance must have a tracking system account with ARB.

(C) The request for issuance of ARB offset credits may be provided to ARB when the Offset Project Operator or Authorized Project Designee, if applicable, submits the information in sections 95981(b)(1) through (4) but must be provided to ARB before it will issue ARB offset credits pursuant to section 95981.1. If the offset project was listed by an Offset Project Registry, the request for issuance of ARB offset credits may not be provided

to ARB until the Offset Project Registry has issued registry offset credits for the applicable Offset Project Data Report(s).

(c) ARB will determine whether the GHG emission reductions and GHG removal enhancements meet the requirements of section 95981(a), the information submitted in sections 95981(b) and (c) is complete, and the Positive Offset or Qualified Positive Offset Verification Statement meets the requirements of sections 95977, 95977.1, and 95977.2 within 45 calendar days of receiving it.

(d) Before ARB issues an ARB offset credit pursuant to section 95981.1 for GHG reductions and GHG removal enhancements achieved by an offset project in a Reporting Period,~~an Offset Verification Statement~~ the Offset Project Operator or Authorized Project Designee must provide the following attestations, in writing, to ARB:

(1) "I certify under penalty of perjury under the laws of the State of California the GHG reductions or GHG removal enhancements for [project] from [date] to [date] have been measured in accordance with the [appropriate ARB Compliance Offset Protocol] and all information required to be submitted to ARB is true, accurate, and complete.";

(2) "I understand I am voluntarily participating in the California Greenhouse Gas Cap-and-Trade Program under title 17, article 5, and by doing so, I am now subject to all regulatory requirements and enforcement mechanisms of this program and subject myself to the jurisdiction of California as the exclusive venue to resolve any and all disputes arising from the enforcement of provisions in this article.";

(3) "I understand that the offset project activity and implementation of the offset project must be in accordance with all applicable local, regional, and national environmental and health and safety regulations that apply based on the offset project location. I understand that offset projects are not eligible to receive ARB or registry offset credits for GHG reductions and GHG removal enhancements that are not in compliance with the requirements of this Article.";

(4) "I certify under penalty of perjury under the laws of the State of California all information provided to ARB for issuance of ARB offset credits is true, accurate, and complete."; and

(5) "I certify under penalty of perjury under the laws of the State of California that the GHG reductions and GHG removal enhancements for which I am seeking ARB Offset Credits have not been issued any offset credits or been used for any GHG mitigation requirements in any other voluntary or mandatory program, except, if applicable, an Offset Project Registry pursuant to section 95980.1."

(e) Determination for Timing and Duration of Initial Crediting Periods for Offset Projects Submitted Through ARB. The initial crediting period will begin with the date that the first verified GHG emission reductions and GHG removal enhancements occur, according to the first Positive Offset or Qualified Positive Offset Verification Statement that is received by ARB, unless otherwise specified in a Compliance Offset Protocol. An early action offset project that transitions pursuant to section 95990(k) will begin its initial crediting period pursuant to section 95990(k)(2).

(f) Determination for Timing and Duration of Renewed Crediting for Offset Projects Submitted Through ARB. A renewed crediting period will begin the day after the conclusion of the prior crediting period.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95981.1 Process for Issuance of ARB Offset Credits.

(a) ARB will issue an ARB offset credit for an offset project that meets the requirements of sections 95981(a) and (b) to an Offset Project Operator, Authorized Project Designee, or any other third party authorized by the Offset Project Operator pursuant to section 95981(b)~~95974(a)(1)~~, no later than 15 calendar days after ARB makes a determination pursuant to section 95981(c), as long as all attestations required in section 95981(d) have been received by ARB prior to its determination.

(b) Change of Listing Status at ARB. When ARB issues an ARB offset credit for an offset project, the listing status for that offset project will be changed from “Active Registry Project” to “Active ARB Project” or “Active Registry Renewal” to “Active ARB Renewal” at the Offset Project Registry and ARB.

(c) Notice of Determination of Issuance of ARB Offset Credits. Not later than 15 calendar days after ARB determines to issue~~s~~ an ARB offset credit, ARB will notify the Offset Project Operator, Authorized Project Designee, or any other third party authorized by the Offset Project Operator pursuant to section 95981(b)~~95974(a)(1)~~ of ~~the issuance~~its intent to issue ARB offset credits.

(d) Requests for Additional Information. ARB may request additional information for offset projects submitted through an Offset Project Registry seeking issuance of ARB offset credits.

(1) ARB will notify the Offset Project Operator, Authorized Project Designee, or other third party identified in section 95981(b)~~95974(a)(1)~~ within 15 calendar days of its determination pursuant to section 95981(c) if the information in section 95981(b), ~~and~~ (c), and (d) is incomplete and request additional specific information.

(2) ARB may request any additional information from the Offset Project Operator, Authorized Project Designee, Offset Project Registry, or verification body before issuing ARB offset credits for an offset project that meets the requirements of section 95981. The Offset Project Operator, Authorized Project Designee, Offset Project Registry, or verification body must submit the requested information to ARB within 10 calendar days of ARB’s request.

(3) If ARB determines the information submitted in sections 95981(b), 95981(c), and 95981.1(d)(2) does not meet the requirements for issuance of ARB offset credits, then ARB may deny issuance of ARB offset credits. The Offset Project Operator or Authorized Project Designee may petition ARB within 10 days of denial for a review of

submitted information in sections 95981(b), 95981(c), and 95981.1(d)(2) and respond to any issues that prevent the issuance of ARB offset credits.

(4) ARB must make a final determination within 30 calendar days of receiving the request in section 95981.1(d)(3) and may request additional information from the Offset Project Operator or Authorized Project Designee, verification body, or Offset Project Registry. This determination made by the Executive Officer is final.

(e) A registry offset credit issued pursuant to section 95980.1(a) must be removed or cancelled by the Offset Project Registry within 10 calendar days of ARB notification, such that the registry offset credit is no longer available for transaction on the Offset Project Registry system. Registry offset credits must be removed or cancelled by the Offset Project Registry before ARB issues an ARB offset credit pursuant to this section. The Offset Project Registry must provide proof to ARB that the registry offset credits have been permanently removed or cancelled from the registry system.

(f) Receipt of ARB Offset Credits. ARB will transfer ARB offset credits into the Holding Account of the Offset Project Operator, Authorized Project Designee, or any other third party authorized by the Offset Project Operator pursuant to section 95981(b)~~95974(a)(1)~~ to receive ARB offset credits, within 15 working days of the notice of determination pursuant to sections 95981.1(c) and (d)(4).

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95982. Registration of ARB Offset Credits.

An ARB offset credit will be registered by:

(a) Creating a unique ARB serial number; and

(b) Transferring ~~this serial number~~the ARB offset credits to the Holding Account of the listed Offset Project Operator, Authorized Project

Designee, or another third party as provided in section 95981(b)~~95974(a)(1)~~ by the Offset Project Operator to receive ARB offset credits, unless otherwise required by section 95983.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95983. Forestry Offset Reversals.

(a) For forest sequestration projects, a portion of ARB offset credits issued to the forest offset project will be placed by ARB into the Forest Buffer Account.

(1) The amount of ARB offset credits that must be placed in the Forest Buffer Account shall be determined as set forth in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

(2) ARB offset credits will be transferred to the Forest Buffer Account by ARB at the time of ARB offset credit registration pursuant to section 95982.

(3) If a forest offset project is originally submitted through an Offset Project Registry an equal number of registry offset credits must be removed or cancelled by the Offset Project Registry, such that the registry offset credit is no longer available for transaction on the Offset Project Registry system, and issued by ARB for placement in the Forest Buffer Account.

(4) The ARB offset credits placed into the Forest Buffer Account must correspond to the Offset Project Data Report year for which the ARB offset credits are issued.

(b) Unintentional Reversals. If there has been an unintentional reversal, the Offset Project Operator or Authorized Project Designee must notify ARB and the Offset Project Registry, in writing, of the reversal and provide an explanation for the nature of the unintentional reversal within 30 calendar days of its discovery.

(1) In the case of an unintentional reversal the Offset Project Operator or Authorized Project Designee shall provide in writing to ARB and an Offset Project Registry, if applicable, a verified estimate of current carbon stocks within the offset project boundary within one year of the discovery of the unintentional reversal.

(2) If ARB determines that there has been an unintentional reversal, and ARB offset credits have been issued to the offset project, ARB will retire a quantity of ARB offset credits ~~in the amount of metric tons of CO_2e reversed~~ from the Forest Buffer Account according to section 95983(b)(3)(A) or (B), as applicable.

(A) If the forest project came into the program directly under a Compliance Offset Protocol and did not transition from an Early Action Offset Program, ARB will retire ARB offset credits in the amount of metric tons CO_2e reversed for each Offset Project Data Report year.

(B) If the forest project transitioned into the program originally from an Early Action Offset Program, ARB will retire ARB offset credits from the Forest Buffer Account according to the following equation, calculated for each Offset Project Data Report year, rounded up to the nearest whole metric ton CO_2e:

$$ARB_{Retire} = \frac{ARB_{Credits}}{ARB_{Credits} + EAOP_{Credits}} \times Reversal$$

Where:

"ARB_{Retire}" is the number of ARB offset credits that must be retired from the ARB Forest Buffer Account to compensate for the unintentional reversal for the Offset Project Data Report year;

"$ARB_{Credits}$" is the total number of ARB offset credits issued to the forest project for the Offset Project Data Report year, including any ARB offset credits that were issued for early action and any that were placed into the Forest Buffer Account for the Offset Project Data Report year;

"$EAOP_{Credits}$" is the total number of early action offset credits issued to the forest project by the Early Action Offset Program for the Offset Project Data Report year, including any voluntary offset credits placed into the Early Action Offset Program's buffer account for forest projects that were not transferred to ARB's Forest Buffer Account, but excluding any early action offset credits that were issued ARB offset credits; and

"Reversal" is the total metric tons of CO_2e reversed for the Offset Project Data Report year.

(c) Intentional Reversals. Requirements for intentional reversals are as follows:

(1) If an intentional reversal occurs, the Offset Project Operator or Authorized Project Designee shall, within 30 calendar days of the intentional reversal:

(A) Give notice, in writing, to ARB and the Offset Project Registry, if applicable, of the intentional reversal; and

(B) Provide a written description and explanation of the intentional reversal to ARB and the Offset Project Registry, if applicable.

(2) Within one year of the occurrence of an intentional reversal, the Offset Project Operator or Authorized Project Designee shall submit to ARB and the Offset Project Registry, if applicable, a verified estimate of current carbon stocks within the offset project boundary. This verified estimate may be submitted as a separate offset verification services, or incorporated into a chapter of the detailed verification report submitted

pursuant to section 95977.1 when offset verification services are conducted.

(3) If an intentional reversal occurs from a forest offset project, and ARB offset credits have been issued to the offset project, the forest owner must submit to ARB for placement in the Retirement Account a quantity of valid ARB offset credits or other approved compliance instruments pursuant to subarticle 4~~, in the amount of metric tons of CO_2e reversed~~ within six months of notification by ARB in the amount determined pursuant to sections 95983(c)(3)(A) or (B), as applicable:~~.~~

(A) If the forest project came into the program directly under a Compliance Offset Protocol and did not transition from an Early Action Offset Program, the forest owner must turn in valid compliance instruments in the amount of metric tons CO_2e reversed for each Offset Project Data Report year.

(B) If the forest project transitioned into the program originally from an Early Action Offset Program, the forest owner must turn in valid compliance instruments according to the following equation, calculated for each Offset Project Data Report year, rounded up to the nearest metric ton CO_2e:

$$FO_{Replace} = \frac{ARB_{Credits}}{ARB_{Credits} + EAOP_{Credits}} \times Reversal$$

Where:

"$FO_{Replace}$" is the number of valid compliance instruments that the forest owner must turn in to compensate for the intentional reversal for the Offset Project Data Report year;

"$ARB_{Credits}$" is the total number of ARB offset credits issued to the forest project for the Offset Project Data Report year, including any ARB offset credits that were issued for early

action and any that were placed into the Forest Buffer Account for the Offset Project Data Report year;

"$EAOP_{Credits}$" is the total number of early action offset credits issued to the forest project by the Early Action Offset Program for the Offset Project Data Report year, including any voluntary offset credits placed into the Early Action Offset Program's buffer account for forest projects that were not transferred to ARB's Forest Buffer Account, but excluding any early action offset credits that were issued ARB offset credits; and

"Reversal" is the total metric tons of CO_2e reversed for the Offset Project Data Report year.

(~~A~~C) Notification by ARB will occur after the verified estimate of carbon stocks referred to in section 95983(c)(2) has been submitted to ARB, or after one year has elapsed since the occurrence of the reversal if the Offset Project Operator or Authorized Project Designee fails to submit the verified estimate of carbon stocks.

(~~B~~D) If the forest owner does not submit valid ARB offset credits or other approved compliance instruments in the amount required pursuant to sections 95983(c)(3)(A) or (B) to ARB within six months of notification by ARB, ARB will retire a quantity of ARB offset credits equal to the difference between the number of metric tons of CO_2e determined pursuant to sections 95983(c)(3)(A) or (B) and the number of retired approved compliance instruments ~~in the amount of metric tons of CO_2e reversed~~ from the Forest Buffer Account and the forest owner will be subject to enforcement action and each ARB offset credit

retired from the Forest Buffer Account will constitute a separate violation pursuant to section 96014.

(4) Early Project Terminations. ~~In the event of an early forest offset project termination ARB will retire from the Forest Buffer Account a quantity of ARB offset credits in the amount calculated pursuant to project termination provisions in Compliance Offset Protocol, U.S. Forest Projects, October 20, 2011. This provision only applies to ARB offset credits that have been issued to the offset project.~~If an early project termination occurs from a forest offset project, and ARB offset credits have been issued to the offset project, the forest owner must submit to ARB for placement in the Retirement Account a quantity of valid ARB offset credits or other approved compliance instruments pursuant to subarticle 4 in the amount determined pursuant to sections 95983(c)(4)(A), (B), or (C), whichever applies, for each Offset Project Data Report year:

(A) If the forest project came into the program directly under a Compliance Offset Protocol and did not transition from an Early Action Offset Program, the forest owner must turn in valid compliance instruments to cover the number of ARB offset credits issued to the offset project for each Offset Project Data Report year, except for improved forest management projects. If the project is an improved forest management project, the amount of metric tons CO_2e reversed must be multiplied by the compensation rate in the Compliance Offset Protocol, U.S. Forest Projects, October 20, 2011.

(B) If the forest project transitioned into the program originally from an Early Action Offset Program, the forest owner must turn in valid compliance instruments according to the following equation, calculated for each Offset Project Data Report year, except for improved forest management projects:

$$FO_{Replace} = \frac{ARB_{Credits}}{ARB_{Credits} + EAOP_{Credits}} \times Reversal$$

Where:

"$FO_{Replace}$" is the number of valid compliance instruments that the forest owner must turn in to compensate for the early project termination for each Offset Project Data Report year;

"$ARB_{Credits}$" is the total number of ARB offset credits issued to the forest project for the Offset Project Data Report year, including any ARB offset credits that were issued for early action and any that were placed into the Forest Buffer Account for the Offset Project Data Report year;

"$EAOP_{Credits}$" is the total number of early action offset credits issued to the forest project by the Early Action Offset Program for the Offset Project Data Report year, including any voluntary offset credits placed into the Early Action Offset Program's buffer account for forest projects that were not transferred to ARB's Forest Buffer Account, but excluding any early action offset credits that were issued ARB offset credits; and

"Reversal" is the total metric tons of CO_2e reversed for the Offset Project Data Report year.

(C) For an improved forest management project that transitioned into the program originally from an Early Action Offset Program, the forest owner must replace ARB offset credits in the amount calculated pursuant to section 95983(c)(4)(B) multiplied by the compensation rate in the Compliance Offset Protocol, U.S. Forest Projects, October 20, 2011.

(~~A~~D) ARB will notify the forest owner of how many ARB offset credits must be replaced with valid compliance instruments.~~ARB will notify the forest owner of retirement within 10 calendar days.~~

(~~B~~E) The forest owner must submit to ARB for placement in the Retirement Account a valid ARB offset credit or another approved compliance instrument pursuant to subarticle 4 for each ARB offset credit required to be replaced~~retired by ARB from the Forest Buffer Account~~ within six months of ARB's retirement.

(~~C~~F) If the forest owner does not submit valid ARB offset credits or other approved compliance instruments to ARB in the amount required pursuant to sections 95983(c)(4)(A) or (B) within six months of ARB's retirement, ARB will retire a quantity of ARB offset credits equal to the difference between the number of metric tons of CO_2e determined pursuant to sections 95983(c)(4)(A) or (B) and the number of retired approved compliance instruments from the Forest Buffer Account and they will be subject to enforcement action and each ARB offset credit retired from the Forest Buffer Account will constitute a separate violation pursuant to section 96014.

(d) Disposition of Forest Sequestration Projects After a Reversal. If a reversal lowers the forest offset project's actual standing live carbon stocks below its project baseline standing live carbon stocks, the forest offset project will be terminated by ARB or an Offset Project Registry.

(1) If the forest offset project is terminated due to an unintentional reversal, ARB will retire from the Forest Buffer Account a quantity of ARB offset credits equal to the total number of ARB offset credits issued pursuant to section 95981, and where applicable, all ~~early action~~ARB offset credits issued to the offset project pursuant to section 95990(i) for early action, over the preceding 100 years.

(2) If the forest offset project is terminated due to an unintentional reversal, another offset project may be initiated and submitted to ARB or an Offset Project Registry for listing within the same offset project boundary.

(3) If the forest offset project has experienced an unintentional reversal and its actual standing live carbon stocks are still above the approved baseline levels, it may continue without termination as long as the unintentional reversal has been compensated by the Forest Buffer Account. The Offset Project Operator or Authorized Project Designee must continue contributing to the Forest Buffer Account in future years as quantified in section 95983(a)(1).

(4) If the forest offset project is terminated due to any reason except an unintentional reversal, new offset projects may not be initiated within the same offset project boundary, unless otherwise specified in a Compliance Offset Protocol.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95984. Ownership and Transferability of ARB Offset Credits.

(a) Initial ownership of an ARB offset credit will be with the registered Offset Project Operator, Authorized Project Designee, or another third party as provided in section 95981(b)~~95974(a)(1)~~ by the Offset Project Operator to receive ARB offset credits, unless otherwise required by section 95983. An ARB offset credit may be sold, traded, or transferred, unless:

(1) It has been retired, surrendered for compliance, or used to meet any GHG mitigation requirements in any voluntary or regulatory program;

(2) It resides in the Forest Buffer Account pursuant to section 95983; or

(3) It has been invalidated pursuant to section 95985.

(b) An ARB offset credit may only be used:

(1) To meet a compliance obligation under this article, except if used by a covered entity in a program approved for linkage pursuant to subarticle 12; or

(2) By a Voluntarily Associated Entity for purposes of voluntary retirement.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95985. Invalidation of ARB Offset Credits.

(a) An ARB offset credit issued under this article will remain valid unless invalidated pursuant to this section.

(b) Timeframe for Invalidation. ARB may invalidate an ARB offset credit pursuant to this section within the following timeframe if a determination is made pursuant to section 95985(f):

(1) Within eight years of issuance of an ARB offset credit, if the ARB offset credit is issued for early action pursuant to section 95990(h), or within eight years of the date that corresponds to the end of the Reporting Period for which the ARB offset credit is issued, if the ARB offset credit is issued pursuant to section 95981.1, unless one of the following requirements is met;

(A) The Offset Project Operator or Authorized Project Designee for aAn offset project developed under Compliance Offset Protocol Ozone Depleting Substances Projects, October 20, 2011, may only be subject to invalidation within three years of issuance of an ARB offset credit if the Offset Project Data Report is re-verified pursuant to sections 95977 through 95978 by a different offset verification body within those three yearsor an early action quantification methodology approved pursuant to section 95990(c)(5) for the same project type, does the following:

1. Has a different verification body that meets the requirements for conflict of interest conduct a second regulatory

verification pursuant to sections 95977 through 95978 for the same Offset Project Data Report; and

2. The second regulatory verification must occur within three years of the issuance of the ARB offset credits, and the Offset Project Operator or Authorized Project Designee must receive a Positive or Qualified Positive Offset Verification Statement from the new verification body for the same Offset Project Data Report.

   a. If the offset project is listed with an Offset Project Registry, the detailed verification report and Offset Verification Statement for the second regulatory verification must be submitted to the Offset Project Registry.

   b. The Offset Project Registry must review the offset verification documents pursuant to section 95987(e)(1)(E) and submit a report to ARB that includes the details and findings of the Offset Project Registry's review.

   c. The Offset Project Registry has 45 calendar days to review the offset verification information once it is received from the verification body.

   d. The Offset Project Registry has an additional 15 working days to submit its report to ARB.

3. If the requirements in sections 95985(b)(1)(A)(1.) and (2.) are met, the ARB offset credits issued under the Offset Project Data Report may only be subject to invalidation according to the following timeframes:

   a. Within three years of the date that corresponds to the end of the Reporting Period for which the ARB offset credits are issued, if the ARB offset credits are issued pursuant to section 95981; and

b. Within three years of the date for which ARB offset credits are issued, if the ARB offset credits are issued pursuant to section 95990(h); or

(B) The Offset Project Operator or Authorized Project Designee for a~~A~~n offset project developed under one of the protocols listed ~~below~~in section 95985(b)(1)(B)(5.) does the following:~~, may only be subject to invalidation within three Reporting Periods if a subsequent Offset Project Data Report for that offset project is verified pursuant to sections 95977 through 95978 by a different offset verification body and issued a Positive Offset or Qualified Positive Offset Verification Statement within three years of issuance of the ARB Offset Credit.~~

1. Has a subsequent Offset Project Data Report verified pursuant to sections 95977 through 95978 by a different verification body than the one which conducted the most recent verification, and that meets the requirements for conflict of interest; and

2. The verification conducted by a different verification body for the subsequent Offset Project Data Report must be completed within, at a maximum, three years from the date that corresponds to the last time ARB offset credits were issued to the offset project. The verification of the subsequent Offset Project Data Report must result in a Positive or Qualified Positive Offset Verification Statement from the new verification body.

3. If the requirements in sections 95985(b)(1)(B)(1.) and (2.) are met, the ARB offset credits issued for no more than three Reporting Periods prior to the Reporting Period for which the subsequent Offset Project Data Report was verified by a

different verification body, may only be subject to invalidation according to the following timeframes:

a. Within three years of the date that corresponds to the end of the Reporting Period for which the ARB offset credits are issued, if the ARB offset credits are issued pursuant to section 95981; and

b. Within three years of the date for which ARB offset credits are issued, if the ARB offset credits are issued pursuant to section 95990(h).

4. If an offset project developed under one of the Compliance Offset Protocols listed in section 95985(b)(1)(B)(5.) is in the last year of a crediting period, and will not have a renewed crediting period, the statute of limitations may be reduced from eight years to three years if the following requirements are met for the last Offset Project Data Report of the crediting period:

a. The Offset Project Operator or Authorized Project Designee has a different verification body that meets the requirements for conflict of interest conduct a second regulatory verification pursuant to sections 95977 through 95978 for the last Offset Project Data Report;

b. The second regulatory verification must occur within three years of the issuance of the ARB offset credits and the last Offset Project Operator or Authorized Project Designee must receive a Positive or Qualified Positive Offset Verification Statement from the new verification body for the same last Offset Project Data Report.

i. If the offset project is listed with an Offset Project Registry, the detailed verification report

and Offset Verification Statement for the second regulatory verification must be submitted to the Offset Project Registry.

ii. The Offset Project Registry must review the offset verification documents pursuant to section 95987(e)(1)(E) and submit a report to ARB that includes the details and findings of the Offset Project Registry's review.

iii. The Offset Project Registry has 45 calendar days to review the offset verification information once it is received from the verification body.

iv. The Offset Project Registry has an additional 15 working days to submit its report to ARB.

5. ~~This provision applies~~The provisions in section 95985(b)(1)(B)(1.) through (4.) apply if an offset project is developed under one of the following Compliance Offset Protocols, or any early action quantification methodologies approved pursuant to section 95990(c)(5) for the same project types;

a~~1~~. Compliance Offset Protocol Livestock Projects, October 20, 2011;

b~~2~~. Compliance Offset Protocol Urban Forest Projects, October 20, 2011; and

c~~3~~. Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

(c) Grounds for Initial Determination of Invalidation. ARB may determine that an ARB offset credit is invalid for the following reasons:

(1) The Offset Project Data Report contains errors that overstate the amount of GHG reductions or GHG removal enhancements by more than ~~five~~5.00 percent;

(A) If ARB finds that there has been an overstatement by more than ~~five~~5.00 percent, ARB shall determine how many GHG reductions and GHG removal enhancements were achieved by the offset project for the applicable Reporting Period. Within 10 calendar days of this determination, ARB will notify the verification body that performed the offset verification and the Offset Project Operator or Authorized Project Designee. Within 25 calendar days of receiving the written notification by ARB, the verification body shall provide any available offset verification services information or correspondence related to the Offset Project Data Report. Within 25 calendar days of receiving the written notification by ARB, the Offset Project Operator or Authorized Project Designee shall provide data that is required to calculate GHG reductions and GHG removal enhancements for the offset project according to the requirements of this article, the detailed offset verification report prepared by the verification body, and other information requested by ARB. The Offset Project Operator or Authorized Project Designee shall also make available personnel who can assist ARB's determination of how many GHG reductions and GHG removal enhancements were achieved by the offset project for the applicable Reporting Period.

1. ARB will determine the actual GHG reductions and GHG removal enhancements achieved by the offset project for the applicable Reporting Period based on, at a minimum, the following information:

   a. The GHG sources, GHG sinks, and GHG reservoirs within the offset project boundary for that Reporting Period; and

   b. Any previous Offset Project Data Reports submitted by the Offset Project Operator or Authorized Project

Designee, and the Offset Verification Statements rendered for those reports.

2. In determining how many GHG reductions and GHG removal enhancements were achieved by the offset project for the applicable Reporting Period, ARB may use the following methods, as applicable:
   a. The applicable Compliance Offset Protocol;
   b. In the event of missing data, ARB will rely on the missing data provisions pursuant to section 95976, and, if applicable, the Compliance Offset Protocol; and
   c. Any information reported under this article for this Reporting Period and past Reporting Periods.
3. ARB shall determine how many GHG reductions and GHG removal enhancements were achieved by the offset project for the applicable Reporting Period using the best information available, including the information in section 95985(c)(1)(A)(1.) and methods in section 95985(c)(1)(A)(2.), as applicable.

(B) If ARB determines that an overstatement has occurred pursuant to section 95985(c)(1), ARB shall determine the amount of ARB offset credits that correspond to the overstatement using the following equation, rounded to the nearest whole ton:

$$If: I_{ARBOC} > R_{OPDR} \times 1.05$$

$$Then: O_R = I_{ARBOC} - R_{OPDR}$$

Where:

"O_R" is the amount of overstated GHG reductions and GHG removal enhancements for the applicable Offset Project Data Report, rounded to the nearest whole ton;

"I_{ARBOC}" is the number of ARB offset credits issued under the applicable Offset Project Data Report pursuant to section 95981.1 or 95990(i);

"R_{OPDR}" is the number of GHG reductions and GHG removal enhancements determined by ARB pursuant to section 95985(c)(1) for the applicable Offset Project Data Report;

(2) The offset project activity and implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB offset credit was issued; or

(3) ARB determines that offset credits have been issued in any other voluntary or mandatory program within the same offset project boundary and for the same Reporting Period in which ARB offset credits were issued for GHG reductions and GHG removal enhancements.

(4) The following shall not be grounds for invalidation:

(A) An update to a Compliance Offset Protocol will not result in an invalidation of ARB offset credits issued under a previous version of the Compliance Offset Protocol; or

(B) A reversal that occurs under a forest offset project. If such a reversal occurs the provisions in section 95983 apply.

(d) Suspension of Transfers. When ARB makes an initial determination pursuant to section 95985(c) it will immediately block any transfers of ARB offset credits for the applicable Offset Project Data Report. Once ARB

makes a final determination pursuant to section 95985(f) the block on transfers for any valid ARB offset credits will be cancelled.

(e) Identification of Affected Parties. If ARB makes an initial determination that one of the circumstances listed in section 95985(c) has occurred, ARB will identify the following parties:

(1) The current holders that hold any ARB offset credits in their Holding and/or Compliance Accounts from the applicable Offset Project Data Report;

(2) The ~~entiies~~entities for which ARB transferred any ARB offset credits from the applicable Offset Project Data Report into the Retirement Account; and

(3) The Offset Project Operator and Authorized Project Designee, and, for forest offset projects the Forest Owner(s).

(f) Final Determination and Process of Invalidation. ARB will notify the parties identified in section 95985(e) of its initial determination pursuant to section 95985(c), and provide each party an opportunity to submit additional information to ARB prior to making its final determination, as follows:

(1) ARB will include the reason for its initial determination in its notification to the parties identified in section 95985(e).

(2) After notification the parties identified in section 95985(e) will have 25 calendar days to provide any additional information to ARB.

(3) ARB may request any information as needed in addition to the information provided under this section.

(4) The Executive Officer will have 30 calendar days after all information is submitted under this section to make a final determination that one or more conditions listed pursuant to section 95985(c) has occurred and whether to invalidate ARB offset credits.

(A) The parties identified pursuant to section 95985(e) will be notified of ARB's final determination of invalidation pursuant to this section.

(B) Any approved program for linkage pursuant to subarticle 12 will be notified of the invalidation at the time of ARB's final determination pursuant to this section.

(g) Removal of Invalidated ARB Offset Credits from Holding and/or Compliance Accounts. If the Executive Officer makes a final determination pursuant to section 95985(f) that an ARB offset credit is invalid, then:

(1) ARB offset credits will be removed from any Holding or Compliance Account, as follows;

(A) If an ARB offset credit is determined to be invalid due to the circumstance listed in section 95985(c)(1), then:

1. ARB will determine which ARB offset credits will be removed from the Compliance and/or Holding Accounts of each party identified in section 95985(e)(1) according to the following equation, rounded to the nearest whole ton:

$$H_{ARBOC} = \left| \frac{TOT_{Holding}}{I_{ARBOC}} \right| O_R$$

Where:

"O_R" is the amount of overstated GHG reductions and GHG removal enhancements for the applicable Offset Project Data Report calculated pursuant to section 95985(c)(1);

"I_{ARBOC}" is the number of ARB offset credits issued under the applicable Offset Project Data Report pursuant to section 95981.1 or 95990(i);

"$TOT_{Holding}$" is the total number of ARB offset credits currently being held in a Compliance and/or Holding Account by each party

identified in section 95985(e)(1) for the applicable Offset Project Data Report;

"H_{ARBOC}" is the total number of ARB offset credits, rounded to the nearest whole ton, that will be removed from the Holding and/or Compliance Account of each party identified in section 95985(e)(1).

2. ARB will determine the ~~lowest serial numbers assigned to~~ quantity of ARB offset credits issued under the applicable Offset Project Data Report in the amount calculated pursuant to section 95985(g)(1)(A) and remove a quantity of ARB offset credits~~them~~ from any Holding and/or Compliance Account of the parties identified in section 95985(e)(1).

(B) If an ARB offset credit is determined to be invalid due to the circumstances listed in sections 95985(c)(2) or (c)(3), ARB will remove all ARB offset credits issued under the applicable Offset Project Data Report from any Holding and/or Compliance Account of the parties identified in section 95985(e)(1).

(2) The parties identified pursuant to section 95985(e) will be notified of which serial numbers were removed from any Compliance and/or Holding Accounts.

(3) Any approved program for linkage pursuant to subarticle 12 will be notified of which serial numbers were removed from any Compliance and/or Holding Accounts.

(h) Requirements for Replacement of ARB Offset Credits ~~for Non-Sequestration Offset Projects~~.

(1) If an ARB offset credit in the Retirement Account ~~from a non-sequestration offset project~~ is determined to be invalid pursuant to section 95985(f) for only the circumstance listed in section 95985(c)(1); then:

(A) Each party identified in section 95985(e)(2) must replace ARB offset credits in the amount calculated for the individual party according to the following equation, rounded to the nearest whole ton:

$$R_{ARBOC} = \left|\frac{TOT_{Retired}}{I_{ARBOC}}\right| O_R$$

Where:

"R_{ARBOC}" is the calculated total number of retired ARB offset credits for the applicable Offset Project Data Report, rounded to the nearest whole ton, that must be replaced by each individual party identified in section 95985(e)(2);

"$TOT_{Retired}$" is the total number of ARB offset credits for which ARB transferred the ARB offset credits from the applicable Offset Project Data Report into the Retirement Account for the individual party specified in section 95985(e)(2);

"I_{ARBOC}" is the number of ARB offset credits issued under the applicable Offset Project Data Report pursuant to section 95981.1 or 95990(i);

"O_R" is the amount of overstated GHG reductions and GHG removal enhancements calculated pursuant to section 95985(c)(1) for the applicable Offset Project Data Report.

(B) Each party identified in section 95985(e)(2) must replace ARB offset credits in the amount calculated pursuant to section 95985(h)(1)(A) with valid ARB offset credits or other approved compliance instruments pursuant to subarticle 4, within six months of notification by ARB pursuant to section 95985(g)(2).

(C) If each party identified in section 95985(e)(2) does not replace each invalid ARB offset credit in the amount calculated pursuant to section 95985(h)(1)(A) within six months of notice of invalidation pursuant to section 95985(g)(2), each unreplaced invalidated ARB offset credit will constitute a violation for that party pursuant to section 96014.

1. If the party identified in section 95985(e)(2) is no longer in business pursuant to section 95101(h)(2) of MRR, ARB will require the Offset Project Operator to replace each invalidated ARB offset credit and will notify the Offset Project Operator that they must replace them.
2. If t~~T~~he Offset Project Operator is required to replace the ARB offset credits pursuant to section 95985(h)(1)(C)(1.), the Offset Project Operator must replace each ARB offset credit with a valid ARB offset credit or another approved compliance instrument pursuant to subarticle 4, within six months of notification by ARB pursuant to section 95985(h)(1)(C)(1.).
3. If the Offset Project Operator is required to replace the ARB offset credits pursuant to section 95985(h)(1)(C)(1.), and the Offset Project Operator does not replace each invalid ARB offset credit within six months of notification by ARB pursuant to section 95985(h)(1)(C)(1.), each unreplaced invalidated ARB offset credit will constitute a violation for that Offset Project Operator pursuant to section 96014.

(D) ARB will determine the ~~lowest serial numbers assigned to~~ quantity of ARB offset credits issued under the applicable Offset Project Data Report in the amount calculated pursuant to section 95985(h)(1)(A) and invalidate that quantity of ARB offset credits~~those serial numbers~~.

(E) The parties identified pursuant to section 95985(e) will be notified of the quantity of ARB offset credits that~~which serial numbers~~ were invalidated.

(F) Any approved program for linkage pursuant to subarticle 12 will be notified of which serial numbers were invalidated.

(2) If an ARB offset credit in the Retirement Account~~ from a non-sequestration offset project~~ is determined to be invalid pursuant to section 95985(f) for any circumstance listed in sections 95985(c)(2) and (c)(3); then:

(A) The party identified in section 95985(e)(2) must replace each ARB offset credit it requested ARB to transfer into the Retirement Account for the applicable Offset Project Data Report with a valid ARB offset credit or another approved compliance instrument pursuant to subarticle 4, within six months of notification by ARB pursuant to section 95985(g)(2).

(B) If the party identified in section 95985(e)(2) does not replace each invalid ARB offset credit within six months of the notice of invalidation pursuant to section 95985(g)(2), each unreplaced invalidated ARB offset credit will constitute a violation for that party pursuant to section 96014.

1. If the party identified in section 95985(e)(2) is no longer in business pursuant to section 95101(h)(2) of MRR ARB will require the Offset Project Operator to replace each invalidated ARB offset credit and will notify the Offset Project Operator that they must replace them.

2. If t~~T~~he Offset Project Operator is required to replace the ARB offset credits pursuant to section 95985(h)(2)(B)(1.), the Offset Project Operator must replace each ARB offset credit with a valid ARB offset credit or another approved compliance instrument pursuant to subarticle 4, within six

months of notification by ARB pursuant to section 95985(h)(2)(B)1.

3. If the Offset Project Operator <u>is required to replace the ARB offset credits pursuant to section 95985(h)(2)(B)(1.), and the Offset Project Operator</u> does not replace each invalid ARB offset credit within six months of notification by ARB pursuant to section 95985(h)(2)(B)(1.), each unreplaced invalidated ARB offset credit will constitute a violation for that Offset Project Operator pursuant to section 96014.

(C) The parties identified pursuant to section 95985(e) will be notified of which serial numbers were invalidated.

(D) Any approved program for linkage pursuant to subarticle 12 will be notified of which serial numbers were invalidated.

~~(i) Requirements for Replacement of ARB Offset Credits for Forest Offset Projects.~~

~~(1) If an ARB offset credit in the Retirement Account from a forest offset project is determined to be invalid pursuant to section 95985(f) for only the circumstance listed in section 95985(c)(1):~~

~~(A) The Forest Owner identified in section 95985(e)(3) must replace ARB offset credits in the amount calculated according to the following equation, rounded to the nearest whole ton:~~

$$\cancel{RF_{ARBOC}} = \cancel{\left|\frac{TF_{Retired}}{IF_{ARBOC}}\right| OF_{R}}$$

~~Where:~~

~~"RF_{ARBOC}" is the total number of retired ARB offset credits for the applicable forest offset project's Offset Project Data Report, rounded to the nearest whole ton, that must be replaced by the Forest Owner;~~

~~"$TF_{Retired}$" is the total number of ARB offset credits issued for the applicable forest offset project's Offset Project Data Report for which~~

~~ARB transferred any ARB offset credits from into the Retirement Account;~~

~~"IF_{ARBOC}" is the number of ARB offset credits issued under the applicable Offset Project Data Report for the forest offset project pursuant to section 95981.1 or 95990(i);~~

~~"OF_R" is the amount of overstated GHG reductions and GHG removal enhancements calculated pursuant to section 95985(c)(1) for the forest offset project for the applicable Offset Project Data Report.~~

~~(B) The Forest Owner identified in section 95985(e)(3) must replace ARB offset credits in the amount calculated pursuant to section 95985(i)(1)(A) with valid ARB offset credits or other approved compliance instruments pursuant to subarticle 4, within six months of notification by ARB pursuant to section 95985(g)(2).~~

~~(C) If the Forest Owner identified in section 95985(e)(3) does not replace each invalid ARB offset credit in the amount calculated pursuant to section 95985(i)(1)(A) within six months of notice of invalidation pursuant to section 95985(g)(2), each unreplaced invalidated ARB offset credit will constitute a violation for that Forest Owner pursuant to section 96014.~~

~~(D) ARB will determine the lowest serial numbers assigned to ARB offset credits issued under the applicable Offset Project Data Report in the amount calculated pursuant to section 95985(i)(1)(A) and invalidate those serial numbers.~~

~~(E) The Forest Owner identified pursuant to section 95985(e)(3) will be notified of which serial numbers were invalidated.~~

~~(F) Any approved program for linkage pursuant to subarticle 12 will be notified of which serial numbers were invalidated.~~

~~(2) If an ARB offset credit in the Retirement Account from a forest offset project is determined to be invalid pursuant to section 95985(f) for any circumstance listed in sections 95985(c)(2) and (c)(3):~~

~~(A) The Forest Owner must replace each ARB offset credit transferred by ARB into the Retirement Account for the applicable Offset Project Data Report with a valid ARB offset credit or another approved compliance instrument pursuant to subarticle 4, within six months of notification by ARB pursuant to section 95985(g)(2).~~

~~(B) If the Forest Owner does not replace each invalid ARB offset credit within six months of the notice of invalidation pursuant to section 95985(g)(2), each unreplaced invalidated ARB offset credit will constitute a violation for that Forest Owner pursuant to section 96014.~~

~~(C) The parties identified pursuant to section 95985(e) will be notified of which serial numbers were invalidated.~~

~~(D) Any approved program for linkage pursuant to subarticle 12 will be notified of which serial numbers were invalidated.~~

(~~j~~i) Nothing in this section shall limit the authority of the State of California from pursuing enforcement action against any parties in violation of this article.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95986. Executive Officer Approval Requirements for Offset Project Registries.

(a) The approval requirements specified in this subarticle apply to all Offset Project Registries that will operate to provide registry services under this article.

(b) The Executive Officer may approve Offset Project Registries that meet <u>and maintain</u> the requirements specified in this section.

~~(c) The Offset Project Registry must be registered with ARB pursuant to section 95830.~~

(1) Offset Project Registry Approval Application. To apply for approval as an Offset Project Registry, the applicant shall submit the following information to the Executive Officer:

(A) Name of applicant;

(B) Name of president or chief executive officer;

(C) List of all board members, if applicable;

(D) Addresses of offices located in the United States;

(E) Documentation that the applicant carries at least five million U.S. dollars of professional liability insurance; and

(F) List of any judicial proceedings and administrative actions filed against the applicant within the previous five years, with a detailed explanation as to the nature of the proceedings.

(2) The applicant must submit, in writing, the procedures to screen and address internal conflicts of interest. The applicant must provide the following information to the Executive Officer:

(A) A staff, management, and board member conflict of interest policy where there are clear criteria for what constitutes a conflict of interest. The policy must:

1. Identify specific activities and limits on monetary and non-monetary gifts staff, management, or board members must not conduct or accept to meet the Offset Project Registry's internal policies of conflict of interest policy, or alternatively provide a comprehensive policy on the applicant's requirements for the reporting of any and all conflicts based on internal policies that guard against conflict of interest; and

2. Include a requirement for annual disclosure by each staff, management, or board member of any items or instances that are covered by the applicant's conflict of interest policy on an ongoing basis or for the previous calendar year.

3. The applicant must have appropriate conflict of interest and confidentiality requirements in place for any of its contractors;

(B) List of all service types provided by the applicant;

(C) The industrial sectors the applicant serves;

(D) Locations where services are provided; and

(E) A detailed organizational chart that includes the applicant and any parent, subsidiary, and affiliate companies.

(F) If the applicant under section 95986 is going to designate a subdivision of its organization to provide registry services, then the prohibition in section 95986(d)(1) on serving as an offset project consultant shall apply at the subdivision level and the applicant must provide the following general information for its self:

1. General types of services; and
2. General locations where services are provided.

(3) The applicant has the following capabilities for registration and tracking of registry offset credits issued under this article:

(A) A comprehensive registration requirement for all registry participants;

(B) Tracking ownership and transactions of all registry offset credits it issues at all times; and

(C) Possesses a permanent repository of ownership information on all transactions involving all registry offset credits it issues under this article from the time they are issued to the time they are retired or cancelled.

(d) The applicant's primary business must be operating an Offset Project Registry for voluntary or regulatory purposes and meet the following business requirements:

(1) The applicant may not act as an Offset Project Operator, Authorized Project Designee, or offset project consultant for offset projects

registered or listed on its own Offset Project Registry and developed using a Compliance Offset Protocol once approved as an Offset Project Registry. The applicant must annually disclose to ARB any non-offset project related consulting services it provides to an Offset Project Operator or Authorized Project Designee who lists a project using a Compliance Offset Project with the applicant as part of the information included in the annual report required in section 95987(j);

(2) The applicant may not act as a verification body or provide offset verification services pursuant to sections 95977.1 and 95977.2 once approved as an Offset Project Registry;

(3) If the applicant designates a subdivision of its organization to provide registry services, the applicant may not be an Offset Project Operator or Authorized Project Designee for offset projects listed at the subdivision's registry, act as a verification body, or be a covered entity or opt-in covered entity;

(4) The applicant must demonstrate experience in the continuous operation of a registry serving an environmentally-focused market for a minimum of two years in a regulatory and/or voluntary market. <u>For the purposes of this section, an "environmentally-focused market" means a market that includes the trading of carbon-emissions based commodities. In the context of Air Quality Management or Air Quality Control Districts, "Environmentally-focused Market" includes a market for air emission reduction credits</u>; and

(5) The applicant's primary incorporation or other business formation and primary place of business, or the primary place of business of the designated subdivision, if the applicant designates a subdivision to provide registry services pursuant to this section, must be in the United States of America.

(e) The Offset Project Registry must continue to maintain the professional liability insurance required in section 95986(c) while it provides registry

services to Offset Project Operators or Authorized Project Designees who are implementing offset projects using Compliance Offset Protocols.

(f) If any information submitted pursuant to sections 95986(c) through (e) changes after the approval of an Offset Project Registry, the Offset Project Registry must notify the Executive Officer within 30 calendar days and provide updated information consistent with that required in sections 95986(c) through (e).

(g) The Offset Project Registry must attest, in writing, to ARB as follows:

(1) "As the authorized representative for this Offset Project Registry, I understand that the Offset Project Registry is voluntarily participating in the California Cap-and-Trade Program under title 17, article 5, and the Offset Project Registry is now subject to all regulatory requirements and enforcement mechanisms of this program.";

(2) "All information generated and submitted to ARB by the Offset Project Registry related to an offset project that uses a Compliance Offset Protocol will be true, accurate, and complete.";

(3) "All information provided to ARB as part of an ARB audit of the Offset Project Registry will be true, accurate, and complete.";

(4) "All registry services provided will be in accordance with the requirements of section 95987.";

(5) "The Offset Project Registry is committed to participating in all ARB training related to ARB's compliance offset program or Compliance Offset Protocols."; and

(6) The authorized representative of the Offset Project Registry must attest in writing, to ARB: "I certify under penalty of perjury under the laws of the State of California I have authority to represent the Offset Project Registry and all information provided as part of this application is true, accurate, and complete.".

(h) At least two of the management staff at the Offset Project Registry must take ARB provided training on ARB's compliance offset program and pass an examination upon completion of training.

(i) The Offset Project Registry must have staff members who have collectively completed ARB training and passed an examination upon completion of training in all Compliance Offset Protocols.

(j) The Offset Project Registry must have at least two years of demonstrated experience in, and requirements for, direct staff oversight ~~of the~~and review of offset projects ~~review~~, project listing, offset verification, and registry offset credit issuance ~~process~~.

(k) ARB Approval.

(1) Within 60 calendar days of receiving an application for approval as an Offset Project Registry and completion by all management staff of the training required in section 95986(h), the Executive Officer will inform the applicant in writing either that the application is complete or that additional specific information is required to make the application complete.

(2) The applicant may be allowed to submit additional supporting documentation before a decision is made by the Executive Officer.

(3) Within 60 calendar days following completion of the application process, the Executive Officer shall approve an Offset Project Registry if evidence of qualification submitted by the applicant has been found to meet the requirements of section 95986 and issue an Executive Order to that effect.

(4) The Executive Officer and the applicant may mutually agree, in writing, to longer time periods than those specified in subsections 95986(k)(1) and 95986(k)(3).

(5) The Executive Officer approval for an Offset Project Registry is valid for a period of 10 years, whereupon the applicant may re-apply. At the time of re-application, the Offset Project Registry must:

(A) Demonstrate it consistently met all of the requirements in section 95986;

(B) Pass a performance review, which, at a minimum shows the Offset Project Registry consistently:

1. Demonstrates knowledge of the ARB compliance offset program and Compliance Offset Protocols;
2. Meets all regulatory deadlines; and
3. Provides registry services in accordance with the requirements of this article; and

(C) Not have been subject to enforcement action under this article.

(l) Modification, Suspension, and Revocation of an Executive Order Approving an Offset Project Registry. The Executive Officer may review, and, for good cause, modify, suspend, or revoke an Executive Order providing approval to an Offset Project Registry.

(1) During revocation proceedings, the Offset Project Registry may not continue to provide registry services for ARB.

(2) Within five working days of suspension or revocation of approval, an Offset Project Registry must notify all Offset Project Operators or Authorized Project Designees for whom it is providing registry services, or has provided registry services within the past 12 months, of its suspension or revocation of approval.

(3) An Offset Project Operator or Authorized Project Designee who has been notified by an Offset Project Registry of a suspended or revoked approval must re-submit its offset project information with a new Offset Project Registry or ARB. An offset project listed at ARB or a new Offset Project Registry will continue to operate under its originally approved crediting period, provided that ARB may extend the crediting period or the relevant deadline in section 95977(d) for one year if ARB determines that such ~~extention~~extension is necessary to provide time for re-submission of information to the new Offset Project Registry or ARB.

(m) If the applicant under section 95986 is going to designate a subdivision of its organization to provide registry services, all the requirements of section 95986 will be applied at the designated subdivision level.

(n) An approved Offset Project Registry must make itself and its personnel available for an ARB audit.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95987. Offset Project Registry Requirements.

(a) The Offset Project Registry shall use Compliance Offset Protocols approved pursuant to section 95971 to determine whether an offset project may be listed with the Offset Project Registry for issuance of registry offset credits. The Offset Project Registry may list projects under non-Compliance Offset Protocols, but must make it clear any GHG emission reductions and GHG removal enhancements achieved under those protocols are not eligible to be issued registry offset credits or ARB offset credits.

(b) The Offset Project Registry must make the following information publicly available for each offset project developed under a Compliance Offset Protocol:

(1) Within 10 working days of the offset project listing requirements being deemed complete in section 95975(f):

(A) Offset project name;

(B) Offset project location;

(C) Offset Project Operator and, if applicable, the Authorized Project Designee;

(D) Type of offset project;

(E) Name and date of the Compliance Offset Protocol used by the offset project;

(F) Date of offset project listing submittal and Offset Project Commencement date; and

(G) Identification if the offset project is in an initial or renewed crediting period;

(2) Within 10 working days of the ~~Offset Project Data Report being issued an Offset Verification Statement~~ Offset Project Registry making a determination of registry offset credit issuance pursuant to section 95980(b):

(A) Annual verified project baseline emissions;

(B) Annual verified GHG reductions and GHG removal enhancements achieved by the offset project;

(C) The unique serial numbers of registry offset credits issued to the offset project for the applicable Offset Project Data Report;

(D) Total verified GHG reductions and GHG removal enhancements for the offset project by Reporting Period for when an Offset Project Data Report was submitted;

(E) The final Offset Project Data Report for each Reporting Period; and

(~~E~~F) Offset Verification Statement for each year the Offset Project Data Report was verified; and

(3) Clear identification of which offset projects are listed and submitting Offset Project Data Reports using Compliance Offset Protocols.

(c) Conflict of Interest Review by Offset Project Registries. The Offset Project Registry must apply the conflict of interest requirements in section 95979 when making a conflict of interest determination for a verification body proposing to conduct offset verification services under sections 95977.1 and 95977.2. The Offset Project Registry must review and make sure the conflict of interest submittal in section 95979(e) is complete. When an Offset Project Operator or Authorized Project Designee submits its information pursuant to section 95981(b) to ARB, the Offset Project Registry must provide ARB with the information and attestation identified in section 95979(e) within 15 calendar days.

(d) The Offset Project Registry may provide guidance to Offset Project Operators, Authorized Project Designees, or offset verifiers for offset projects using a Compliance Offset Protocol, if there is no clear

requirement for the topic in a Compliance Offset Protocol, this article, or an ARB guidance document, after consulting and coordinating with ARB.

(1) An Offset Project Registry must maintain all correspondence and records of communication with an Offset Project Operator, Authorized Project Designee, or offset verifier when providing clarifications or guidance for an offset project using a Compliance Offset Protocol.

(2) Before providing such guidance, the Offset Project Registry may request ARB to provide clarification on the topic.

(3) Any Offset Project Operator or Authorized Project Designee requests for clarifications or guidance must be documented and the Offset Project Registry response must be submitted on an ongoing monthly basis to ARB beginning with the date of approval as an Offset Project Registry.

(e) The Offset Project Registry must audit at least 10 percent of the annual full offset verifications developed for offset projects using a Compliance Offset Protocol.

(1) The audit must include the following checks:

(A) Attendance with the offset verification team on the offset project site visit;

(B) In-person or conference call attendance for the first offset verification team and Offset Project Operator or Authorized Project Designee meeting;

(C) In-person or conference call attendance to the last meeting or discussion between the offset verification team and Offset Project Operator or Authorized Project Designee;

(D) Documentation of any findings during the audit that cause the Offset Project Registry to provide guidance to, or require corrective action with, the offset verification team, including a list of issues noted during the audit and how those were resolved;

(E) A review of the detailed verification report and sampling plan to ensure that it meets the minimum requirements in sections

95977.1 and 95977.2 and documentation of any discrepancies found during the review; and

(F) An investigative review of the conflict of interest assessment provided by the verification body, which includes the following:

1. Discussions with both the lead verifier who submitted the conflict of interest assessment form and the Offset Project Operator or Authorized Project Designee to confirm the information on the conflict of interest assessment form is true, accurate, and complete;
2. An internet-based search to ascertain the existence of any previous relationship between the verification body and the Offset Project Operator or Authorized Project Designee, and if so the nature and extent; and
3. Any other follow up by the Offset Project Registry to have reasonable assurance that the information provided on the conflict of interest assessment form is true, accurate, and complete.

(2) All information related to audits of offset projects developed using a Compliance Offset Protocol must be provided to ARB within 10 calendar days of an ARB request.

(3) The audits must be selected to provide a representative sampling of geographic locations of all offset projects, representative sampling of verification bodies, representative sampling of lead verifiers, representative sampling of offset project types, and representative sampling of offset projects by size.

(4) The Offset Project Registry must provide an annual report to ARB by January 31 for its previous year's audit program of offset projects developed using Compliance Offset Protocols that includes:

(A) A list of all offset projects audited;

(B) Locations of all offset projects audited;

(C) Verification bodies associated with each offset project and names of offset verification team members;

(D) Dates of site visits;

(E) Offset Project Registry staff that conducted the audit; and

(F) Audit findings as required in section 95987(e)(1)(D) through (F).

(f) The Offset Project Registry must review each detailed verification report provided in section 95977.1(b)(3)(R)(4.)(a.) for completeness and accuracy and to ensure it meets the requirements of section 95977.1(b)(3)(R)(4.)(a.) before accepting the associated Offset Verification Statement for the Offset Project Data Report and issuing registry offset credits.

(g) The Offset Project Registry must provide all information in its possession, custody, or control related to a listed offset project under a Compliance Offset Protocol within 10 calendar days of request by ARB.

(h) The Offset Project Registry must make its staff and all information related to listed offset projects under Compliance Offset Protocols by the Offset Project Registry available to ARB during any audits or oversight activities initiated by ARB to ensure the requirements in section 95987 are being carried out as required by this article.

(i) The Offset Project Registry must remove or cancel any registry offset credits issued for an offset project using a Compliance Offset Protocol, such that the registry offset credits are no longer available for transaction on the Offset Project Registry system, once notified by ARB that the offset project is eligible to be issued ARB offset credits.

(j) The Offset Project Registry must provide an annual report by January 31 of the previous year's offset projects that are listed using a Compliance Offset Protocol. The report must contain the name of the offset project, type of offset project and applicable Compliance Offset Protocol, name of Offset Project Operator or Authorized Project Designee, location of offset project, status of offset project, associated verification body, crediting period, amount of any registry offset credits issued to date, amount of any

registry offset credits retired or cancelled for the offset project by the Offset Project Registry to date.

(k) The Offset Project Registry may choose to offer insurance or other products to cover the risk of invalidation of ARB offset credits, but purchase or use of the insurance or other invalidation risk mechanisms will be optional for all entities involved with registry offset credits and ARB offset credit transactions.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95988. Record Retention Requirements for Offset Project Registries.

All information submitted, and correspondence related to, listed offset projects under Compliance Offset Protocols by the Offset Project Registry must be maintained by the Offset Project Registry for a minimum of 15 years.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 14: Recognition of Compliance Instruments from Other Programs

§ 95990. Recognition of Early Action Offset Credits.

(a) Approval of Early Action Offset Programs. To qualify as an Early Action Offset Program, either the Executive Officer shall issue an Executive Order pursuant to section 95986(k) or the program must demonstrate to ARB that it meets the following requirements:

(1) The program must provide documentation that it carries at least one million U.S. dollars of professional liability insurance.

(2) The program must have the following capabilities for registration and tracking of offset credits:

(A) A registration requirement for all registry participants;

(B) A system for tracking ownership and transactions of all early action offset credits it issues under the quantification methodologies listed pursuant to section 95990(c)(5) at all times; and

(C) A permanent repository of ownership information on all transactions involving all early action offset credits that have been or will be issued for any early action offset project until they are retired or cancelled.

(3) The program's primary business (or that of the designated subdivision, if the Early Action Offset Program applicant designates a subdivision to provide services as an Early Action Offset Program pursuant to this section) is operating a registry for issuing offset credits for voluntary or regulatory purposes and must meet the following business requirements:

(A) The Early Action Offset Program may not act as an Offset Project Operator, Authorized Project Designee, or offset project consultant for early action offset projects registered on its own registry system and developed under protocols approved pursuant 95990(c)(5). The Early Action Offset Program applicant may act as an offset project consultant for early action offset projects as long as these are registered with an Early Action Offset Program or an Offset Project Registry unaffiliated with the applicant;

(B) The applicant may not act as a verification body and provide offset verification services pursuant to section 95990(f);

(C) If the applicant designates a subdivision of its organization to provide registry services, the applicant may not be an Offset Project Operator or Authorized Project Designee for offset projects listed at the subdivision's registry, act as a verification body, or be a covered entity or opt-in covered entity; and

(D) The applicant's primary incorporation or other business information and primary place of business, or the primary place of business of the designated subdivision, if the applicant designates a subdivision to be an Early Action Offset Program pursuant to this section, must be in the United States of America.

(4) The program must agree to submit to ARB the original documentation submitted by an Offset Project Operator or Authorized Project Designee or third-party verifier regarding the early action offset project, including registration documentation, sampling plans, and Early Action Verification Reports.

(5) The program must agree to retire, and not allow for further use, any early action offset credits it issues when retired or used in any voluntary or regulatory program, including when ARB requests retirement for ARB offset credit issuance pursuant to section 95990(i).

(6) An authorized representative of the Early Action Offset Program must attest in writing, to ARB, as follows:

"I certify under penalty of perjury under the laws of the State of California the information provided in demonstrating this program meets the requirements in section 95990(a) and is true, accurate, and complete."

(b) ARB shall accept early action offset credits from early action offset projects registered with Early Action Offset Programs approved pursuant to section 95990(a), if the early action offset credits meet the criteria set forth in this section.

(c) Criteria for Approval of Early Action Offset Credits Issued by Early Action Offset Programs. An early action offset credit may be issued an ARB offset credit pursuant to section 95990(i) if the early action offset credit results from a GHG reduction or GHG removal enhancement which:

(1) Occurred between January 1, 2005 and December 31, 2014;

(2) Is verified pursuant to section 95990(f);

(3) Results from an early action offset project that is listed or registered with an Early Action Offset Program prior to ~~January 1, 2014;~~the following:

(A) Early action offset projects developed under any of the offset quantification methodologies in sections 95990(c)(5)(A) through (D) must be listed prior to January 1, 2014;

(B) Early action offset projects developed under any of the offset quantification methodologies in section 95990(c)(5)(E) must be listed prior to January 1, 2015.

(4) Results from an early action offset project located in the United States; and

(5) Results from the use of one of the following offset quantification methodologies and relied on the most recent version thereof at the time of offset project submittal:

(A) Climate Action Reserve U.S. Livestock Project Protocol versions 1.0 through 3.0;

(B) Climate Action Reserve Urban Forest Project Protocol versions 1.0 through 1.1;

(C) Climate Action Reserve U.S. Ozone Depleting Substances Project Protocol version 1.0; and

(D) Climate Action Reserve Forest Project Protocol versions 2.1 and 3.0 through 3.2, if the early action offset project contributes early action offset credits into a buffer account based on its reversal risk calculated according to the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

(E) Placeholder for potential new early action quantification methodologies to be determined (Rice Cultivation or Mine Methane Capture Projects).

(d) The following parties must register with ARB pursuant to section 95830 before ARB offset credits may be issued pursuant to section 95990(i):

(1) The Offset Project Operator or Authorized Project Designee for a forest or urban forest early action offset project that does not transition to a Compliance Offset Protocol pursuant to section 95990(k); and

(2) The Offset Project Operator or Authorized Project Designee for the following early action offset projects, except as provided in section 95990(d)(3):

(A) A forest or urban forest early action offset project that transitions to a Compliance Offset Protocol pursuant to section 95990(k);

(B) An early action offset project developed under one of the protocols identified in section 95990(c)(5)(A) and (C).

(3) If the Offset Project Operator or Authorized Project Designees identified in section 95990(d)(2) do not register with ARB or list the early action offset project pursuant to section 95990(e), the holder of early action offset credits may register with ARB and seek issuance of ARB offset credits pursuant to section 95990(i), as long as the holder lists the early action offset project pursuant to section 95990(e) and provides ARB with the attestations required pursuant to section 95990(h)(6).

(e) Listing of Early Action Offset Projects. Before ARB can <u>evaluate conflict of interest and any verification related information submitted pursuant to section 95990(f), and</u> issue ARB offset credits pursuant to section 95990(i):

(1) The following parties must submit the information listed in section 95990(e)(2) to ARB:

(A) The Offset Project Operator or Authorized Project Designee for a forest or urban forest early action offset project that does not transition to a Compliance Offset Protocol pursuant to section 95990(k); and

(B) The Offset Project Operator or Authorized Project Designee for the following early action offset projects, except as provided in section 95990(e)(1)(C);

1. A forest or urban forest early action offset project that transitions to a Compliance Offset Protocol pursuant to section 95990(k);
2. An early action offset project developed under one of the protocols identified in section 95990(c)(5)(A) and (C).

(C) If the Offset Project Operator or Authorized Project Designees identified in section 95990(e)(1)(B) do not register with ARB pursuant to section 95990(d) or list the early action offset project, the holder of early action offset credits may list the early action offset credit by submitting the information listed in section 95990(e)(2) and seek issuance of ARB offset credits pursuant to section 95990(i), as long as the following conditions are met:

1. The holder registers with ARB pursuant to section 95990(d) and provides ARB with the attestations required pursuant to section 95990(h)(6); and
2. The holder has made at least one written request to the Offset Project Operator or Authorized Project Designee confirming that the Offset Project Operator or Authorized Project Designee will not list the applicable early action reporting periods for the early action offset project, and has provided proof of this request, and response, or at least 30 days has passed since the request to ARB.

(2) The parties identified in section 95990(e)(1) must submit the following information to ARB:

(A) Early action offset project name;

(B) Early action offset project location;

(C) Offset Project Operator, or if applicable, the Authorized Project Designee;

(D) Name and date of protocol used by the early action offset project, including, if applicable, a version number;

(E) Date of early action offset project listing or registration date and Offset Project Commencement Date; and

(F) The name of any verification bodies associated with the early action offset project under the Early Action Offset Program.

(G) For early action offset projects developed under the Climate Action Reserve U.S. Ozone Depleting Substances Project Protocol version 1.0, each Reporting Period, and/or destruction event may be considered an independent project.

(3) The parties identified in section 95990(e)(1) may submit one or more early action reporting period(s) for the early action offset project for listing. The parties are not required to list all early action reporting periods associated with the early action offset project.

(4~~3~~) The Early Action Offset Program must make the following information available on a publicly available website and clearly indicate which early action offset projects and ~~Offset Project Data Report years~~early action reporting periods qualify for early action under this article:

(A) Early action offset project name;

(B) Early action offset project location;

(C) Offset Project Operator, or if applicable, the Authorized Project Designee;

(D) Name and date of protocol used by the early action offset project, including, if applicable, a version number;

(E) Date of early action offset project listing or registration date and Offset Project Commencement Date; and

(F) The name of any verification bodies associated with the early action offset project.

(f) Regulatory Verification of Early Action Offset Credits. Any early action offset credit issued by an Early Action Offset Program must be verified under the following requirements before being issued an ARB offset credit pursuant to section 95990(i):

(1) The project must be verified by an ARB-accredited verification body that meets the accreditation requirements in section 95978. The verification body performing regulatory verification pursuant to this section must be different than any~~the~~ verification body that conducted offset verification services for the early action offset project under the Early Action Offset Program. The offset verification team must include an offset project specific verifier for the applicable offset project type.

(2) Conflict of interest must be assessed against parties identified pursuant to section 95990(g) and the conflict of interest assessment must meet the requirements of section 95979.

(3) A verification body must conduct a desk review for each ~~Offset Project Data Report year~~early action reporting period eligible and applicable pursuant to section 95990(c)(1) for each early action offset project that generates early action offset credits under the quantification methodologies listed in section 95990(c)(5), unless the Offset Project Operator or Authorized Project Designee follows the provisions in section 95990(f)(3)(G). The desk review of all early action reporting periods~~Offset Project Data Reports for years~~ eligible and applicable pursuant to section 95990(c)(1) for each early action offset project may be applied as one single desk review. A desk review pursuant to section 95990(f)(3) may only be conducted once for each early action reporting period. The desk review must include the following:

(A) Review of the early action offset project original documentation, including the Early Action Verification Reports and Offset Verification Statements submitted to the Early Action Offset Program, to ensure that the previously provided offset verification services were sufficient to render a reasonable assurance to support the issuance of early action offset credits by the Early Action Offset Program;

(B) Review and recalculation of the data checks conducted by the original~~offset~~ verification body for the Early Action Offset Program to ensure they were calculated correctly;

(C) If the verification body concludes with reasonable assurance that they concur that a positive verification statement should have been issued based on the Early Action Verification Report and the Offset Verification Statement submitted to the Early Action Offset Program for the applicable ~~Offset Project Data Report year~~early action reporting period, the verification body must submit the attestation in section 95990(f)(3)(D) to ARB, and provide ARB with a report detailing the findings of the desk review. The Offset Project Operator, Authorized Project Designee, or holder(s) if applicable, must submit the related early action reporting periods for the early action offset project for listing pursuant to section 95990(e) prior to the verification body submitting the attestation or any findings pursuant to section 95990(k).

(D) The verification body must attest, in writing, to ARB as follows: "I certify under penalty of perjury under the laws of the State of California that I have conducted a desk review in accordance with the requirements of section 95990(f)(3) and concur with the issuance of a positive verification statement based on the Early Action Verification Report and Offset Verification Statement that was submitted to the Early Action Offset Program for the applicable ~~Offset Project Data Report year~~early action reporting period."

(E) For each early action offset project the Offset Project Operator or Authorized Project Designee or the Early Action Offset Program must provide the Early Action Verification Report(s) for all ~~years~~early action reporting periods eligible and applicable

pursuant to section 95990(c)(1) to the offset verification team to assist in offset verification services and desk review.

(F) ARB will review the desk review findings submitted by the desk review verification body and determine whether to accept or reject the findings. ARB will notify the verification body of its determination. If ARB does not agree with a positive desk review finding, ARB will request that the reporting information provided by the Offset Project Operator or Authorized Project Designee to the original verification body be subject to full offset verification services pursuant to section 95990(f)(6).

(G) If the desk review verification body is unable to obtain the original verification body's data checks calculations or information used by the original verification body required to be reviewed pursuant to section 95990(f)(3)(A) or (B), the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, may opt out of the desk review and conduct full offset verification services pursuant to section 95990(f)(6).

(4) If during the desk review performed pursuant to section 95990(f)(3) the verification body cannot conclude with reasonable assurance that a positive verification statement should have been issued based on the Early Action Verification Report and the Offset Verification Statement submitted to the Early Action Offset Program for the applicable ~~Offset Project Data Report year~~early action reporting period then the verification body must prepare a report for ARB and explain the reasons for this conclusion.

(5) ARB will review the information submitted by the verification body pursuant to section 95990(f)(4) and may request additional information from, and consult with, the Early Action Offset Program or the verification body as necessary.

(6) If ARB finds that the ~~Offset Project Data Report~~GHG reductions or removal enhancements reported to the Early Action Offset Program for

a given early action reporting period should not have been issued a positive verification statement after reviewing the information submitted ~~in section 95990(f)(5)~~by the desk review verification body, the ~~Offset Project Data Report~~reporting information provided by the Offset Project Operator or Authorized Project Designee to the original verification body must be verified and full offset verification services pursuant to sections 95977.1 and any additional verification requirements in the applicable protocol identified in section 95990(c) must be conducted. The Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, may determine to not move forward with the full offset verification services and the early action offset credits would no longer be eligible to transition to ARB offset credits. If the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, determine to move forward with the full offset verification services, t~~T~~he ~~O~~offset verification services for each ~~Offset Project Data Report year~~early action reporting period may be done by the same verification body that performed the desk review and may be applied as one single offset verification service and meet the following requirements:

(A) If the early action offset project is still in operation, the verification body must conduct a site visit as required in section 95977.1(b)(3)(D).

(B) If the early action offset project is no longer in operation, the verification body must conduct a desk review of the original documentation to confirm any previous verification findings related to the types of offset verification services required in section 95977.1(b)(3)(D).

(C) The sampling plan in section 95977.1(b)(3)(G) must cover all serialized early action offset credits issued to the early action offset project for all years eligible and applicable pursuant to section 95990(c)(1);

(D) The data checks in section 95977.1(b)(3)(L) must include checks across the sources identified in the sampling plan, covering all serialized early action offset credits issued to the early action offset project for all years eligible and applicable pursuant to section 95990(c)(1); and

(E) The verification body must submit an Offset Verification Statement pursuant to section 95977.1(b)(3)(R) to ARB covering all serialized early action offset credits issued to the early action offset project for all ~~years~~early action reporting periods eligible and applicable pursuant to section 95990(c)(1). For non-forestry offset projects, the verification body may submit a Positive, Qualified Positive, or Adverse Offset Verification Statement. Forestry Offset projects may only receive a Positive or Adverse Offset Verification Statement.

(7) Once ARB offset credits have been issued for ~~an Offset Project Data Report~~an early action reporting period pursuant to section 95990(i) subsequent offset verification services provided for additional ~~Offset Project Data Reports~~early action reporting periods for the same early action offset project will not trigger a desk review of those ~~Offset Project Data Reports~~early action reporting periods for which ARB offset credits have already been issued pursuant to section 95990(i).

(g) Conflict of Interest Requirements for Early Action. For each ~~Early Action Verification Report~~early action reporting period for which ~~that~~ a verification body ~~reviews~~provides regulatory verification pursuant to section 95990(f), the verification body must assess conflict of interest according to the following requirements against each party identified in section 95990(g)(2). The conflict of interest assessment for each ~~Early Action Verification Report~~early action reporting period must be submitted to ARB before ARB issues an ARB offset credit pursuant to section 95990(i). Conflict of interest self-evaluations for multiple early action reporting periods for one early action offset project may be combined into one

evaluation. The Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, must submit the related early action reporting periods for the early action offset project for listing pursuant to section 95990(e), and the listing must be approved, prior to the verification body submitting the conflict of interest assessment pursuant to this section.

(1) The verification body is subject to the conflict of interest requirements in section 95979.

(2) The conflict of interest requirements in section 95979 must be assessed against the following parties at the time that offset verification services are conducted pursuant to section 95990(f):

(A) The Offset Project Operator ~~or~~and Authorized Project Designee or holder(s), if applicable, for the project; and

(B) Any party that holds greater than 30 percent of the early action offset credits issued to an early action offset project for each individual ~~Early Action Verification Report~~early action reporting period reviewed as part of offset verification services conducted pursuant to section 95990(f).

(h) Issuance of ARB Offset Credits for Early Action. ARB will issue ARB offset credits pursuant to section 95990(i) for early action if the following requirements are met:

(1) The early action offset credits meet the requirements of section 95990(c);

(2) The GHG reduction or GHG removal enhancement occurred by December 31, 2014;

(3) The GHG reduction or GHG removal enhancement was determined to meet the requirements for regulatory verification pursuant to section 95990(f) and verification under the Early Action Offset Program was completed with the submittal of an Offset Verification Statement to an Early Action Offset Program by September 30, 2015 for GHG reductions or removal enhancements eligible to be issued ARB offset credits;

(4) The early action offset project has been listed pursuant to section 95990(e); and

(5) The following parties must submit the attestations listed in section 95990(h)(6) to ARB:

(A) The Offset Project Operator or Authorized Project Designee for a forest or urban forest early action offset project that does not transition to a Compliance Offset Protocol pursuant to section 95990(k); and

(B) The Offset Project Operator or Authorized Project Designee for the following early action offset projects, except as provided in section 95990(h)(5)(C):

1. A forest or urban forest early action offset project that transitions to a Compliance Offset Protocol pursuant to section 95990(k);

2. An early action offset project developed under one of the protocols identified in section 95990(c)(5)(A) and (C).

(C) If the Offset Project Operator or Authorized Project Designees identified in section 95990(h)(5)(B) do not register with ARB pursuant to section 95990(d) and list the early action offset project pursuant to section 95990(e), the holder of early action offset credits may seek issuance of ARB offset credits pursuant to section 95990(i), as long as the holder provides ARB the attestations required pursuant to section 95990(h)(6).

(6) The parties identified in section 95990(h)(5) must submit the following information to ARB:

(A) Attest, in writing, to ARB as follows:

"I certify under penalty of perjury under the laws of the State of California the GHG reductions and GHG removal enhancements for [project] from [date] to [date] have been measured in accordance with the [appropriate Early Action

Offset Program offset protocol] and all information required to be submitted to ARB is true, accurate, and complete~~;~~.”;

(B) Attest, in writing, to ARB as follows:

“I understand I am voluntarily participating in the California Greenhouse Gas Cap-and-Trade Program under title 17, article 5, and by doing so, I am now subject to all regulatory requirements and enforcement mechanisms of this program and subject myself to the jurisdiction of California as the exclusive venue to resolve any and all disputes~~;~~.”; and

(C) Attest in writing to ARB as follows:

“I understand that the offset project activity and the implementation of the offset project must be in accordance with all applicable local, regional, and national environmental and health and safety regulations that apply based on the offset project location. I understand that offset projects are not eligible to receive ARB offset credits for GHG reductions or GHG removal enhancements that are not in compliance with the requirements of this Article.”

(7) An ARB offset credit may not be issued for an early action offset credit that has been retired, canceled, used to meet a surrender obligation, used to meet a voluntary commitment, or used to meet any GHG mitigation requirements in any voluntary or regulatory system.

(i) Process for Issuance of ARB Offset Credits for Purposes of Early Action. ARB will issue an ARB offset credit that meets the requirements of section 95990(h) in the amount calculated pursuant to section 95990(i)(1) :

(1) ARB offset credits will be issued according to the following schedule:

(A) One ARB offset credit will be issued for one early action offset credit generated under Climate Action Reserve Urban Forest Project Protocol versions 1.0 through 1.1;

(B) One ARB offset credit will be issued for one early action offset credit generated under Climate Action Reserve U.S. Ozone Depleting Substances Project Protocol version 1.0;

(C) One ARB offset credit will be issued for one early action offset credit generated under Climate Action Reserve U.S. Livestock Project Protocol versions 1.0 through 3.0; and

(D) ARB offset credits will be issued for early action offset credits generated under Climate Action Reserve Forest Project Protocol version 2.1 and versions 3.0 through 3.2, pursuant to the following:

1. If any ARB offset credits are being issued to an early action forest offset project pursuant to this section, ARB will notify the Early Action Offset Program of the quantity of early action offset credits that must be removed or canceled~~transfer all of the early action offset credits in~~ from its buffer account for forest projects for that project ~~to ARB by removing the early action offset credits,~~ such that they are no longer available on the Early Action Offset Program's system.

   ~~a. For vintages 2001-2004 early action offset credits in the Early Action Offset Program buffer account for forest projects transferred for the early action forest offset project, ARB will create a series of unique serial numbers that identify them as being from these vintage years.~~

   a. The early action offset credits being removed or canceled from the Early Action Offset Program's buffer account for forest projects must meet the criteria of this section. Early action offset credits that do not meet the criteria of this section may not be used to meet these buffer account requirements.

b. If ARB offset credits, that were placed in the ARB Forest Buffer Account as a result of any early action offset credits which were removed or canceled from the Early Action Offset Program's buffer account for forest projects, for purposes of transitioning early action offset credits to ARB offset credits for the following reasons, the ARB offset credits will be removed or canceled from the ARB Forest Buffer Account so that they may be transferred permanently to the Early Action Offset Program's buffer account for forest offset projects:

i. The early action offset credits did not meet the criteria in section 95990(c); and

ii. The early action offset credits removed from the Early Action Offset Program's buffer account for forest projects were removed in excess of the amount of early action offset credits required by this section; and

~~b. Vintage 2001-2004 serial numbers may only reside in the Forest Buffer Account and will only be retired by ARB in the event of a project termination pursuant to section 95983(d). These vintages will not be able to count towards the contribution to ARB's Forest Buffer Account pursuant to this section.~~

2. A specified number of the issued ARB offset credits must be placed in the Forest Buffer Account ~~in the amount determined by the project-specific risk rating calculation in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011~~ for each ~~Offset Project Data Report year~~early action reporting period eligible and applicable pursuant to section 95990(c)(1) using the following equation:~~.~~

$$ARB_{Buffer} = ARB_{Issue} \times Max[RR_{EAOP}, RR_{COP}]$$

Where:

"ARB_{Buffer}" is the number of ARB offset credits issued for the early action reporting period to be placed in the ARB Forest Buffer Account;

"ARB_{Issue}" is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s) for an early action reporting period as calculated in sections 95990(i)(1)(D)(3.)(a), (b.) or (c.) below, as applicable;

"Max" is the larger of the two values [RR_{EAOP}, RR_{COP}];

"RR_{EAOP}" is the reversal risk rating percentage applied by the Early Action Offset Program to calculate the number of early action offset credits placed in the Early Action Offset Program's buffer account for forest projects at the time of early action offset credit issuance by the Early Action Offset Program for an early action reporting period; and

"RR_{COP}" is the reversal risk rating percentage that must be applied to an early action forest offset project pursuant to the project-specific reversal risk rating calculation in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 for an early action reporting period.

a. ARB will calculate the reversal risk rating percentage for RR_{COP} for the early action reporting period for the early action offset project according to the requirements in the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

b. When calculating the reversal risk rating percentage using the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, ARB will use the maximum value for each risk category unless the original early action verification included a review of the criteria and verification of the requirements for calculating the risk category.

c. Qualified Conservation Easements cannot be retroactively applied to the reversal risk rating percentage calculations for the purposes of early action only.

3. ~~If the Offset Project Operator or Authorized Project Designee registers and lists the early action offset project pursuant to sections 95990(d) and (e) and is seeking issuance of ARB offset credits for an Offset Project Data Report year~~ ARB will determine the number of ARB offset credits that ~~will~~may be issued to the Offset Project Operator, ~~or~~ Authorized Project Designee, or holder(s), if applicable, for each early action reporting period for which ARB offset credits are issued as follows:

a. If the following condition applies, and no early action offset credits have yet been canceled or retired from the Early Action Offset Program's buffer account for forest projects for the early action reporting period, then ARB will issue one ARB offset credit for each

early action offset credit that meets the requirements of this section for which the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, are seeking issuance of ARB offset credits, plus an amount of ARB offset credits equal to the associated credits transferring over from the Early Action Offset Program's buffer account for forest projects, for an early action reporting period:

$$If:\ RR_{EAOP} \geq RR_{COP}$$

$$Then:\ ARB_{Issue} = \frac{ARB_{Request}}{(1 - RR_{EAOP})}$$

$$\cancel{EAOP_{Buffer} \geq EAOC_{Issue} \times RR_{COP}}$$

Where:

"ARB_{Issue} is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s) for an early action reporting period, based on the amount of ARB offset credits for which the party is seeking issuance;

"$ARB_{Request}$" is the number of early action offset credits that meet the requirements of this section for which the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, are seeking issuance of ARB offset credits for an early action reporting period;

"RR_{EAOP}" is the risk-reversal rating percentage applied by the Early Action Offset Program to calculate the number of early action offset credits that were placed into the Early Action's buffer account for forest projects at the time of early action offset credit issuance by the Early Action Offset Program for each early action reporting period; and

~~"$EAOP_{Buffer}$" is the total number of early action offset credits in the Early Action Offset Program's buffer account for forest projects that meet the requirements of section 95990(h) and are being transferred to ARB for the applicable Offset Project Data Report;~~

~~"$EAOC_{Issue}$" is the total number of early action offset credits that meet the requirements of section 95990(h) for which the Offset Project Operator or Authorized Project Designee is seeking issuance of ARB offset credits pursuant to this section for the applicable Offset Project Data Report;~~

"RR_{COP}" is the reversal risk rating percentage that must be applied ~~for~~to the early action forest offset project pursuant to the project-specific reversal risk rating calculation in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 for an early action reporting period.~~;~~

i. The Early Action Offset Program must retire or cancel early action offset credits from its buffer account for forest projects for the early action reporting period equal to the following:

$$EAOP_{BufferRetire} = ARB_{Issue} \times RR_{EAOP}$$

Where:

"$EAOP_{BufferRetire}$" is the number of early action offset credits the Early Action Offset Program will retire from its buffer account for forest projects for the early action reporting period;

"ARB_{Issue}" is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s) for an early action reporting period as calculated in section 95990(i)(1)(D)3.a. above; and

"RR_{EAOP}" is the risk-reversal rating percentage applied by the Early Action Offset Program to calculate the number of early action offset credits that were placed into the Early Action's buffer account for forest projects at the time of early action offset credit issuance by the Early Action Offset Program for each early action reporting period.

ii. ARB will place ARB offset credits into the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s), if

applicable, according to the following for each early action reporting period:

$$ARB_{Holding} = ARB_{Issue} - ARB_{Buffer}$$

Where:

"$ARB_{Holding}$" is the number of ARB offset credits to be placed into the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s) if applicable, seeking issuance of ARB offset credits for an early action reporting period;

"ARB_{Issue} is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s) for an early action reporting period as calculated in section 95990(i)(1)(D)3.a. above; and

"ARB_{Buffer}" is the number of ARB Offset Credits issued for the early action reporting period to be placed in the ARB Forest Buffer Account as calculated in 95990(i)(1)(D)2. above.

b. If the ~~amount of early action offset credits being transferred to ARB from the~~ Early Action Offset Program's ~~buffer account for forest projects~~reversal risk rating percentage is less than the reversal risk

rating calculated using the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, and no early action offset credits have yet been canceled or retired from the Early Action Offset Program's buffer account for forest projects for the early action reporting period, the following equation will determine~~does not cover~~ the number of ARB offset credits to be ~~placed in the Forest Buffer Account~~ issued for each early action reporting period~~, the following applies~~:

$$\cancel{If: EAOP_{Buffer} < EAOC_{Issue} \times RR_{COP}}$$

$$\cancel{Then: ARB_{Issue} = EAOC_{Issue} - \left|(EAOC_{Issue} \times RR_{COP}) - EAOP_{Buffer}\right|}$$

$$\underline{If:\ RR_{EAOP} < RR_{COP}}$$

$$\underline{Then:\ ARB_{Issue} = \frac{ARB_{Request}}{(1 - RR_{EAOP})}}$$

Where:

"ARB_{Issue}" is the total number of ARB offset credits ~~that will be~~ issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by ~~to~~ the Offset Project Operator, ~~or~~ Authorized Project Designee, or holder(s) for ~~the applicable Offset Project Data Report~~an early action reporting period, based on the amount of ARB offset credits for which the party is seeking issuance;

"$ARB_{Request}$" is the number of early action offset credits that meet the requirements of this section for

which the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, are seeking issuance of ARB offset credits for an early action reporting period;

~~"$EAOC_{Issue}$" is the total number of early action offset credits that meet the requirements of section 95990(h) for which the Offset Project Operator or Authorized Project Designee is seeking issuance of ARB offset credits pursuant to this section for the applicable Offset Project Data Report;~~

"RR_{EAOP}" is the risk-reversal rating percentage applied by the Early Action Offset Program to calculate the number of early action offset credits that were placed into the Early Action Offset Program's buffer account for forest projects at the time of early action offset credit issuance by the Early Action Offset Program for each early action reporting period; and

"RR_{COP}" is the reversal risk rating percentage that must be applied ~~for~~to the early action forest offset project pursuant to the project-specific reversal risk rating calculation in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 for an early action reporting period.~~;~~

~~"$EAOP_{Buffer}$" is the total number of early action offset credits in the Early Action Offset Program's buffer account for forest projects that meet the requirements of section 95990(h) and are being transferred to ARB for the applicable Offset Project Data Report;~~

i. The Early Action Offset Program must retire or cancel early action offset credits from its buffer account for forest projects for the early action reporting period equal to the following:

$$EAOP_{BufferRetire} = ARB_{Issue} \times RR_{EAOP}$$

Where:

"$EAOP_{BufferRetire}$" is the number of early action offset credits the Early Action Offset Program will retire from its buffer account for forest projects for an early action reporting period;

"ARB_{Issue}" is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s) for an early action reporting period as calculated in section 95990(i)(1)(D)3.b. above; and

"RR_{EAOP}" is the risk-reversal rating percentage applied by the Early Action Offset Program to calculate the number of early action offset credits that were placed into the Early Action's buffer account for forest projects at the time of early action offset credit issuance by the Early Action Offset Program for an early action reporting period.

ii. ARB will place ARB offset credits into the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, according to the following, for each early action reporting period:

$$ARB_{Holding} = ARB_{Issue} - ARB_{Buffer}$$

Where:

"$ARB_{Holding}$" is the number of ARB offset credits to be placed into the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s) if applicable, seeking issuance of ARB offset credits for an early action reporting period;

"ARB_{Issue} is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s) for an early action reporting period as calculated in section 95990(i)(1)(D)3.b. above; and

"ARB_{Buffer}" is the number of ARB Offset Credits issued for the early action reporting period to be placed in the ARB Forest Buffer Account as calculated in 95990(i)(1)(D)2. above.

c. If early action offset credits have already been canceled or removed from the Early Action Offset Program's buffer account for forest projects for an early action reporting period due to a reversal or retirement prior to issuance of ARB offset credits, the following will apply for any early action reporting period regardless of ARB's or the Early Action Offset Program's reversal risk rating calculation:

i The number of early action offset credits the Early Action Offset Program must cancel from its buffer account for forest projects for the early action reporting period is as follows:

$$EAOP_{BufferRetire} = \frac{\frac{ARB_{Request}}{(1 - RR_{EAOP})}}{EAOP_{Issue}} \times EAOP_{BufferActive}$$

Where:

"$EAOP_{BufferRetire}$" is the number of early action offset credits the Early Action Offset Program will retire from its buffer account for forest projects for an early action reporting period;

"$EAOP_{Issue}$" is the total number of early action offset credits that were issued, for the early action reporting period by the Early Action Offset Program including early action offset credits placed in the buffer account for forest projects;

"$ARB_{Request}$" is the number of early action offset credits that meet the requirements of this

section for which the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, are seeking issuance of ARB offset credits for the early action reporting period;

"RR_{EAOP}" is the risk-reversal rating percentage applied by the Early Action Offset Program to calculate the number of early action offset credits that were placed into the Early Action's buffer account for forest projects at the time of early action offset credit issuance by the Early Action Offset Program for an early action reporting period; and

"$EAOP_{BufferActive}$" is the number of active early action offset credits remaining in the Early Action Offset Program buffer account for forest projects for the early action reporting period after the reversal or retirement.

ii The number of early action offset credits ARB will issue is as follows:

$$ARB_{Issue} = ARB_{Request} + EAOP_{BufferRetire}$$

Where:

"ARB_{Issue}" is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator,

Authorized Project Designee, or holder(s) for an early action reporting period;

"$ARB_{Request}$" is the number of early action offset credits that meet the requirements of this section for which the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, are seeking issuance of ARB offset credits for each early action reporting period; and

"$EAOP_{BufferRetire}$" is the number of early action offset credits the Early Action Offset Program will retire from its buffer account for forest projects for an early action reporting period, as calculated pursuant to section 95990(i)(1)(D)3.c.i. above;

iii ARB will place ARB offset credits into the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s), if applicable, according to the following for each early action reporting period:

$$ARB_{Holding} = ARB_{Issue} - ARB_{Buffer}$$

Where:

"$ARB_{Holding}$" is the number of ARB offset credits to be placed in the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s) if applicable, seeking

issuance of ARB offset credits for an early action reporting period;

"ARB_{Issue} is the total number of ARB offset credits issued by ARB into the Issuance Account, including the ARB offset credits to be placed into the Forest Buffer Account, for transitioning the early action offset credits requested by the Offset Project Operator, Authorized Project Designee, or holder(s), for an early action reporting period as calculated in section 95990(i)(1)(D)3.c.ii. above; and

"ARB_{Buffer}" is the number of ARB Offset Credits issued for the early action reporting period to be placed in the ARB Forest Buffer Account as calculated in 95990(i)(1)(D)2. above.

d. Following an ARB request seeking the retirement or cancellation of early action offset credits from an Early Action Offset Program's buffer account for forest projects, ARB may request proof from an Early Action Offset Program that it has retired early action offset credits from its buffer account for forest offset projects. The Early Action Program must provide proof to ARB of its retirement of these early action offset credits from its buffer account for forest projects within 10 calendar days of a request by ARB.

~~4. If the holder of early action offset credits registers and lists the early action offset project pursuant to sections 95990(d) and (e), provides the attestations listed in section~~

~~95990(h)(6) to ARB, and is seeking issuance of ARB offset credits pursuant to this section for an Offset Project Data Report year, ARB will determine the number of ARB offset credits that will be issued to each holder of the original early action offset credits as follows:~~

~~a. If the following condition applies, then ARB will issue one ARB offset credit for each early action offset credit for which the holder is seeking issuance of ARB offset credits:~~

$$\cancel{EAOP_{Buffer} \geq EAOC_{Issue} \times RR_{COP}}$$

~~Where:~~

~~"$EAOP_{Buffer}$" is the total number of early action offset credits in the Early Action Offset Program's buffer account for forest projects that meet the requirements of section 95990(h) and are being transferred to ARB for the applicable Offset Project Data Report;~~

~~"$EAOC_{PIssue}$" is the total number of early action offset credits that meet the requirements of section 95990(h) that would qualify to be issued ARB offset credits pursuant to this section for the applicable Offset Project Data Report;~~

~~"RR_{COP}" is the percentage that must be applied for the early action forest offset project pursuant to the project-specific risk rating calculation in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011;~~

~~b. If the amount of early action offset credits being transferred to ARB from the Early Action Offset Program's buffer account for forest projects does not~~

~~cover the number of ARB offset credits to be placed in the Forest Buffer Account, the following applies:~~

$$\cancel{If: EAOP_{Buffer} < EAOC_{PIssue} \times RR_{COP}}$$

$$\cancel{Then: ARB_{HIssue} = EAOC_{HIssue} - |(EAOC_{HIssue} \times RR_{COP}) - (EAOC_{HIssue} \times RR_{EAP})|}$$

~~Where:~~

~~"$EAOP_{Buffer}$" is the total number of early action offset credits in the Early Action Offset Program's buffer account for forest projects that meet the requirements of section 95990(h) and are being transferred to ARB for the applicable Offset Project Data Report;~~

~~"$EAOC_{PIssue}$" is the total number of early action offset credits that meet the requirements of section 95990(h) that would qualify to be issued ARB offset credits pursuant to this section for the applicable Offset Project Data Report;~~

~~"ARB_{HIssue}" is the total number of ARB offset credits that will be issued to the holder of early action offset credits seeking issuance of ARB offset credits pursuant to this section for the applicable Offset Project Data Report;~~

~~"$EAOC_{HIssue}$" is the total number of early action offset credits that meet the requirements of section 95990(h) for which the holder of early action offset credits is seeking issuance of ARB offset credits pursuant to this section for the applicable Offset Project Data Report;~~

~~"RR_{COP}" is the percentage that must be applied for the early action forest offset project pursuant to the project-specific risk rating calculation in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011;~~

~~"RR_{EAP}" is the percentage that was calculated and applied for the early action forest offset project pursuant to the project-specific risk rating calculation in the applicable early action protocol;~~

~~5~~4. If there is an unintentional reversal for any early action forest offset project, even after it transitions to ARB's Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, the provisions in section 95983(b) and (d) apply.

~~6~~5. If there is an intentional reversal for any early action forest offset project, even after it transitions to ARB's Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, the provisions in section 95983(c) and (d) apply.

(E) If an early action offset project is issued ARB offset credits pursuant to section 95990(i)(1)(D) and transitions from Climate Action Reserve Forest Project Protocol version 2.1 to Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 pursuant to section 95990(k) the early action offset project may calculate its project baseline pursuant to section 95990(k)(1)(D) and use the following method to determine if it could qualify for additional early action offset credits:

1. Based on the project baseline calculated in section 95990(k)(1)(D), the early action offset project must calculate and sum the net GHG emission reductions and GHG removal enhancements it achieves following all the provisions of the Compliance Offset Protocol U.S. Forest

Projects, October 20, 2011 and the requirements in this article, from the date of offset project commencement under the Early Action Offset Program through the date the early action offset project applies for transition pursuant to section 95990(k).

2. The early action offset project must subtract the number of early action offset credits issued by the Early Action Offset Program for the period from the date of offset project commencement through the time the early action offset project applies for transition pursuant to section 95990(k) from the number of sum determined pursuant to section 95990(i)(E)(1.):

   a. If the difference is positive, ARB will issue ARB offset credits equivalent to the difference at the time of offset project transition pursuant to section 95990(k) for the timeframe specified in section 95990(i)(1)(E)(1.) <u>to the Offset Project Operator or Authorized Project Designee.</u>

   b. If the difference is negative, ARB will only issue ARB offset credits pursuant to section 95990(i)(D)(1.) for the timeframe specified in section 95990(i)(1)(E)(1.)

<u>3.</u> <u>Section 95990(i)(1)(E) does not apply to holders of early action offset credits.</u>

(2) ARB will notify the Early Action Offset Program within 10 calendar days of ARB's determination of issuance of ARB offset credits pursuant to this section.

(3) Early action offset credits must be <u>permanently</u> removed <u>or canceled</u> by the Early Action Offset Program within 10 calendar days of ARB notification, such that the early action offset credits are no longer available for transaction on the Early Action Offset Program registry system.

(4) Not later than 15 calendar days after ARB issues an ARB offset credit for purposes of early action, ARB will notify the Offset Project Operator, Authorized Project Designee, and holder(s) of the original early action offset credits, if applicable, of the issuance.

(j) Registration and Transfer of ARB Offset Credits for Purposes of Early Action. An ARB offset credit issued pursuant to section 95990(i) will be registered by creating a unique ARB serial number. ARB will transfer the serial numbers into Holding Accounts as follows within 15 working days of the notice of issuance pursuant to section 95990(i)(4), unless otherwise required in section 95990(i)(1)(D):

(1) If the Offset Project Operator or Authorized Project Designee ~~registered the early action offset project pursuant to section 95990(d), lists the early action offset project pursuant to section 95990(e), provides ARB the attestations pursuant to section 95990(h)(6), and is issued ARB offset credits pursuant to section 95990(i),~~ was issued additional ARB offset credits pursuant to section 95990(i)(1)(E)(2.)(a.) ARB will transfer the ARB offset credit into the Holding Account of the Offset Project Operator or Authorized Project Designee.

(2) ~~If the holder registered the early action offset project pursuant to section 95990(d), lists the early action offset project pursuant to section 95990(e), provides ARB the attestations pursuant to section 95990(h)(6), and is issued ARB offset credits pursuant to section 95990(i),~~ For an ARB offset credit issued pursuant to section 95990(i)(1)(A) through (D) ARB will transfer the ARB offset credits into the Holding Account of the Offset Project Operator, Authorized Project Designee, or holder(s) of the early action offset credits.

(A) The Offset Project Operator, Authorized Project Designee, or holder(s) must prove ownership of the original early action offset credits, including the original serial numbers issued by the Early Action Offset Program, and submit a request for issuance to

ARB for the issuance of ARB offset credits, before ARB will transfer the ARB offset credits into the Holding Account. Offset Project Operators, Authorized Project Designees, and Forest Owners may also be considered holders if they can prove ownership of the original early action offset credits.

(B) Before any party is issued ARB offset credits into a Holding Account, the party must be registered with ARB pursuant to section 95830 and be approved for a Holding Account.

(C) ARB will make publicly available on its webpage which early action offset credits qualify to be issued ARB offset credits based on the early action reporting period in which the early action offset credits were issued.

(k) Transition of Early Action Offset Projects to the Compliance Program.

(1) Early Action Offset Project Transition to ARB Compliance Offset Protocols. Early action offset projects must transition to ARB Compliance Offset Protocols no later than February 28, 2015, by submitting listing information required pursuant to section 95975 to ARB or an Offset Project Registry and having that listing approved:

(A) Early action offset projects using Climate Action Reserve U.S. Livestock Project Protocol versions 1.0 through 3.0 must use and meet all the requirements in Compliance Offset Protocol Livestock Projects, October 20, 2011;

(B) Early action offset projects using Climate Action Reserve Urban Forest Project Protocol versions 1.0 through 1.1 must use and meet all the requirements in Compliance Offset Protocol Urban Forest Projects, October 20, 2011;

(C) Early action offset projects using Climate Action Reserve U.S. Ozone Depleting Substances Project Protocol version 1.0 must use and meet all the requirements in Compliance Offset Protocol Ozone Depleting Substances, October 20, 2011;

(D) Early action offset projects using Climate Action Reserve Forest Project Protocol version 2.1 must use and meet all the requirements in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011. At the time of transition the early action offset project must calculate its project baseline according to all the provisions in Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 and the requirements in this article over the period of time from the date of offset project commencement under the Early Action Offset Program to the date the early action offset project applies for transition pursuant to section 95990(k), plus one-hundred years. This project baseline will remain valid for the duration of the offset project life. Registry offset credits and ARB offset credits issued for the first Reporting Period after the early action offset project is listed pursuant to section 95975 using the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, will only be for the increased carbon stocks beyond what was already issued early action offset credits in the last year before the early action offset project transitioned to a Compliance Offset Protocol pursuant to this section.

(E) Early action offset projects using Climate Action Reserve Forest Project Protocol versions 3.0 through 3.2 must use Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 and subtract from the project baseline any carbon stocks from any optional pools that are excluded in the Compliance Offset Protocol beginning with the last reporting period under the Early Action Offset Program. Decreases will not constitute a reversal.

(2) Crediting Periods for Early Action Offset Projects. When an early action offset project transitions to a Compliance Offset Protocol pursuant to section 95990(k)(1), it will begin an initial crediting period. The initial crediting period will begin with the date that the first verified

GHG emission reductions or GHG removal enhancements occur using a Compliance Offset Protocol approved pursuant to section 95971.

(3) Listing Requirements for Transition of Early Action Offset Projects. At the time an early action offset project transitions to a Compliance Offset Protocol pursuant to section 95990(k)(1), the Offset Project Operator or Authorized Project Designee must:

(A) Meet the requirements for offset projects pursuant to section 95973; and

(B) List the offset project pursuant to section 95975.

(C) To transition an early action offset project to the ARB compliance offset program, the offset project must be listed with ARB or an Offset Project Registry by February 28, 2015, but has until September 30, 2015 to complete the verification of GHG reductions and GHG removal enhancements ~~pursuant to section 95990(f)~~ under the Early Action Offset Program that were achieved in 2014. These GHG reductions and GHG removal enhancements are eligible for early action offset credits.

(4) After an early action offset project lists with ARB pursuant to section 95990(k)(3), it must meet the following requirements:

(A) Monitoring, reporting, and record retention requirements pursuant to section 95976;

(B) GHG reduction and GHG removal enhancement verification requirements pursuant to sections 95977 through 95978;

(C) Be issued a registry offset credit pursuant to section 95980.1 or an ARB offset credit pursuant to section 95981.1 for any GHG reductions or GHG removal enhancements it achieves.

(5) ARB will not issue ARB offset credits after August 31, 2016 for any GHG reductions or removal enhancements achieved through 2014 and issued early action offset credits by an Early Action Offset Program.

(l) An ARB offset credit issued pursuant to section 95990(i) may be invalidated pursuant to sections 95985(a) through (i) as follows:

~~(1) ARB Offset Credits from Non-Sequestration Offset Projects. An ARB offset credit from a non-sequestration project may be invalidated pursuant to sections 95985(a) through (h) and section 95985(j):~~

(~~A~~1) If an Offset Project Operator or Authorized Project Designee registers and lists the early action offset project pursuant to sections 95990(d) and (e), and submits the attestations to ARB pursuant to section 95990(h)(6)~~, and was issued offset credits pursuant to section 95990(i)~~ and the party identified in section 95985(e)(2) is no longer in business pursuant to section 95101(h)(2), the provisions in sections 95985(h)(1)(C)(1.) through (3.) and sections 95985(h)(2)(B)(1.) through (3.) still apply to the Offset Project Operator; or

(~~B~~2) If the holder of early action offset credits registers and lists the early action offset project pursuant to sections 95990(d) and (e), and submits the attestations to ARB pursuant to section 95990(h)(6), and was issued ARB offset credits pursuant to section 95990(i) and the party identified in section 95985(e)(2) is no longer in business pursuant to section 95101(h)(2), the provisions in sections 95985(h)(1)(C)(1.) through (3.) and sections 95985(h)(2)(B)(1.) through (3.) apply to the holder that was issued ARB offset credits pursuant to section 95990(i) and not the Offset Project Operator.

(3) For an early action offset project developed under one of the quantification methodologies in sections 95990(c)(5)(A), (B), or (D), the statute of limitations will remain at eight years, unless one of the following applies and are met to reduce the statute of limitations to three years:

(A) If an Offset Project Operator or Authorized Project Designee transitions an early action offset project to a Compliance Offset Protocol pursuant to section 95990(k):

1. An ARB-accredited verification body must verify a subsequent Offset Project Data Report generated under a Compliance Offset Protocol;
2. The ARB-accredited verification body must be a different verification body than the one that conducted any regulatory verification services of the early action offset project pursuant to section 95990(f) or that verified the early action offset program under the Early Action Offset Program; and
3. The new ARB-accredited verification body must verify the subsequent Offset Project Data Report within three years of the date of ARB offset credit issuance; or

(B) If an Offset Project Operator or Authorized Project Designee does not transition an early action offset project to a Compliance Offset Protocol pursuant to section 95990(k), or the Offset Project Operator or Authorized Project Designee chooses to reduce the statute of limitations prior to the verification of a subsequent Offset Project Data Report being verified pursuant to section 95990(l)(3)(A)(1.) above:

1. An ARB-accredited verification body must conduct full offset verification services based on the original data reports and/or reporting information submitted to the Early Action Offset Program for the original offset verification conducted under the Early Action Offset Program. The full offset verification services must be in addition to any regulatory verification services conducted for the early action offset project pursuant to section 95990(f);
2. The ARB-accredited verification body must be a different verification body than the one that conducted any regulatory verification services of the early action offset project pursuant to section 95990(f) or that verified the early action offset program under the Early Action Offset Program; and

3. The new ARB-accredited verification body must complete the full offset verification services, by submitting an Offset Verification Statement, within three years following the issuance of ARB offset credits as a result of the regulatory verification services performed pursuant to section 95990(f). The full offset verification services must include a site visit to the offset project location. The site visit must only be performed once for all qualifying early action reporting periods.

(4) For an early action offset project developed under the quantification methodology in sections 95990(c)(5)(C), the statute of limitations will remain at eight years, unless the following criteria are met to reduce the statute of limitations to three years:

(A) An ARB-accredited verification body must conduct full offset verification services based on the original data reports and/or reporting information submitted to the Early Action Offset Program for the original offset verification conducted under the Early Action Offset Program. The full offset verification services must be in addition to any regulatory verification services conducted for the early action offset project pursuant to section 95990(f);

(B) The ARB-accredited verification body must be a different verification body than the one that conducted any regulatory verification services of the early action offset project pursuant to section 95990(f) or that verified the early action offset program under the Early Action Offset Program; and

(C) The new ARB-accredited verification body must complete the full offset verification services, by submitting an Offset Verification Statement, within three years of the conclusion of the regulatory verification services performed pursuant to section 95990(f) and the full offset verification services must include a site visit to the offset

project location. The site visit must only be performed once for all qualifying early action reporting periods.

(5) For all ARB offset credits issued for early action, the timeframe for the statute of limitations will always begin with the date the ARB offset credits are issued by ARB.

~~(2) ARB Offset Credits from Forest Offset Projects. An ARB offset credit from a forest offset project may be invalidated pursuant to sections 95985(a) through (g) and sections 95985(i) and (j).~~

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95991. Sector-Based Offset Credits.

Sector-based offset credits may be generated through reduced or avoided GHG emissions from within, or carbon removed and sequestered from the atmosphere by, a specific sector in a particular jurisdiction. The Board may consider for acceptance compliance instruments issued from sector-based offset crediting programs that meet the requirements set forth in section 95994 and originate from developing countries or from subnational jurisdictions within those developing countries, except as specified in subarticle 13.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95992. Procedures for Approval of Sector-Based Crediting Programs.

The Board may approve a sector-based crediting program in an eligible jurisdiction after public notice and opportunity for public comment in accordance with the Administrative Procedure Act (Government Code section 11340 et seq.). Provisions set forth in this article shall specify which compliance instruments issued by an approved sector-based crediting program may be used to meet a compliance obligation under this Article.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.

Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95993. Sources for Sector-Based Offset Credits.

Sector-based credits may be generated from:

(a) Reducing Emissions from Deforestation and Forest Degradation (REDD) Plans.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95994. Requirements for Sector-Based Offset Crediting Programs.

(a) General Requirements for Sector-Based Crediting Programs. The Board may consider for approval a sector-based crediting program which may include the following sectoral requirements:

(1) Sector Plan. The host jurisdiction has established a plan for reducing emissions from the sector.

(2) Monitoring, Reporting, Verification, and Enforcement. The program includes a transparent system that regularly monitors, inventories, reports, verifies, and maintains accounting for emission reductions across the program's entire sector, as well as maintains enforcement capability over its reference activity producing credits.

(3) Offset Criteria. The program has requirements to ensure that offset credits generated by the program are real, additional, quantifiable, permanent, verifiable and enforceable.

(4) Sectoral Level Performance. The program includes a transparent system for determining and reporting when it meets or exceeds its crediting baseline(s), and evaluating the performance of the program's sector during each program's crediting period relative to the business as usual or other emissions reference level.

(5) Public Participation and Participatory Management Mechanism. The program has established a means for public participation and consultation in the program design process.

(6) Nested Approach. If applicable, the program includes:

(A) Offset project-specific requirements that establish methods to inventory, quantify, monitor, verify, enforce, and account for all project-level activities

(B) A system for reconciling offset project-based GHG reductions in sector-level accounting from the host jurisdiction.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 95995. Quantitative Usage Limit.

Sector-based offset credits approved by ARB for compliance pursuant to section 95821(d) are subject to the quantitative usage limit specified in section 95854.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 15: Enforcement and Penalties

§ 96010. Jurisdiction.

Any of the following actions shall conclusively establish a person's consent to be subject to the jurisdiction of the State of California, including the administrative authority of ARB and the jurisdiction of the Superior Courts of the State of California:

(a) Registration with ARB pursuant to subarticle 5;

(b) The purchase or holding of a compliance instrument issued by ARB, unless the entity holding the compliance instrument is registered in an approved External GHG ETS pursuant to subarticle 12;

(c) Receipt of compensation of any kind, including sales proceeds and commissions, from any transfers of allowances or offset credits issued by ARB pursuant to subarticle 13 or recognized by ARB pursuant to subarticle 14; or

(d) Verification of an offset credit to be issued by ARB.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 96011. Authority to Suspend, Revoke, or Modify.

(a) The Executive Officer may suspend, revoke, or place restrictions on the Holding Account of a voluntarily associated entity determined to be in violation of any provision of this article.

(b) The Executive Officer may place restrictions on a Holding Account of a covered entity or an opt-in covered entity determined to be in violation of any provision of this article or of article 2 of this subchapter.

(c) The Executive Officer may suspend, revoke, or modify any Executive Order issued under this article or under article 2 of this subchapter, including an order accrediting a verifier, for a violation of any provision of this article.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 96012. Injunctions.

Any violation of this article may be enjoined pursuant to Health and Safety Code section 41513.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 96013. Penalties.

Penalties may be assessed pursuant to Health and Safety Code section 38580 for any violation of this article as specified in section 96014. In determining any penalty amount, ARB shall consider all relevant circumstances, including the criteria in Health and Safety Code section 42403(b).

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 96014. Violations.

(a) If an entity fails to surrender a sufficient number of compliance instruments to meet its compliance obligation as specified in sections 95856 or 95857, and the procedures in 95857(c) have been exhausted, there is a separate violation of this article for each required compliance instrument that has not been surrendered, or otherwise obtained by the Executive Officer under 95857(c).

(b) A separate violation accrues every 45 days after the end of the Untimely Surrender Period pursuant to section 95857 for each required compliance instrument that has not been surrendered.

(c) It is a violation to submit any record, information or report required by this article that:

(1) Falsifies, conceals, or covers up by any trick, scheme or device a material fact;

(2) Makes any false, fictitious or fraudulent statement or representation;

(3) Makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry; or

(4) Omits material facts from a submittal or record.

(5) A fact is material if it could probably influence a decision by the Executive Officer, the Board, or the Board's staff.

(d) The violations stated in section 96014(c) are additional to violations of any obligations of any entity subject to this regulation under other provisions of this article requiring submissions to ARB to be true, accurate and complete.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Subarticle 16: Other Provisions

§ 96020. Severability, Effect of Judicial Order.

Each provision of this article shall be deemed severable, and in the event that any provision of this article is held to be invalid, the remainder of this article shall continue in full force and effect.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 96021. Confidentiality.

(a) Emissions data submitted to ARB under this article is public information and shall not be designated as confidential.

(b) Any entity submitting information to the Executive Officer pursuant to this subarticle may claim such information as "confidential" by clearly identifying such information as "confidential." Any claim of confidentiality

by an entity submitting information must be based on the entity's belief that the information marked as confidential is either trade secret or otherwise exempt from public disclosure under the California Public Record Act (Government Code, section 6250 et seq.). All such requests for confidentiality shall be handled in accordance with the procedures specified in California Code of Regulations, title 17, sections 91000 to 91022.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

§ 96022. Jurisdiction of California.

(a) Any party that participates in the Cap-and-Trade Program is subject to the jurisdiction of the State of California unless the party is subject to the jurisdiction of an External GHG ETS to which California has linked its Cap-and-Trade Program pursuant to section 95830(h) and subarticle 12.

(b) Notwithstanding section 96010, subsection 96022(a) or any other jurisdictional provision in this article, this article shall not be construed to abridge the rights and protections afforded foreign sovereigns, including the right of removal to federal court, pursuant to the Foreign Sovereign Immunities Act, Public Law 94-583, as amended and codified at 28 U.S.C. sections 1330, 1332, 1391(f), 1441(d), and 1602-1611.

(c) A party that has rights and protections under the Foreign Sovereign Immunities Act consents to civil enforcement of the laws, rules and regulations pertaining to this article in California's courts, subject to the rights and protections afforded to entities subject to the Foreign Sovereign Immunities Act, including removal to federal court.

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code.
Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

Appendix A

Entity Information
Legal Name
Operating Name
U.S. Federal Tax Employer Identification Number
Value Added Tax Identification Number
Data Universal Numbering System Number
Date of incorporation
Place of Incorporation
Country of Incorporation
Business Number (Assigned by California Agency)
Physical Address (City, State, postal Code)
Mailing Address (City, State, postal Code)
Country
Contact Information (Name, address, phone, email)
Website Address
Type of Organization

Individual Information
First Name
Middle Name
Last Name
Personal Residence Address
Phone number
Email
Social Security Number
Date of Birth
Citizenship
Employer Name
Employer Address
Copy of a valid identity card issued by a state or province with an expiration date
Copy of a government-issued identity document
Copy of a Passport
Documentation of an open bank account
Documentation of any felony convictions during the previous five years

Appendix B

CITSS User Terms and Conditions

ACCESS AGREEMENT AND TERMS OF USE FOR THE CITSS
SIGN THE BOTTOM OF THE PAGE TO INDICATE YOUR ACCEPTANCE OF THIS AGREEMENT.

Access to the Compliance Instrument Tracking System Service (CITSS) is subject to the terms and conditions set forth in this Access Agreement and Terms of Use (Agreement). You must accept this Agreement in order to access the CITSS application. Violation of this agreement may result in loss of access to CITSS and, if warranted, civil or criminal prosecution under state, provincial, or federal law.

This Agreement is between the State of California, Air Resources Board (ARB) and each registered California user of Compliance Instrument Tracking System Service (User). The Agreement sets forth the terms of use of CITSS. ARB provides User with access to the CITSS software application, for registering entities and holding compliance instrument. User understands and agrees that CITSS is provided "AS IS" and without any warranty, as set forth below in greater detail.

1. CITSS Use

1.1 ARB and WCI, Inc. hereby grant to User, and User hereby accepts, subject to the terms and conditions set forth in this Agreement, a non-exclusive and non-transferable right to access CITSS via the world-wide-web or the internet at times when the software and servers are available and operating.

1.2 User further acknowledges that it is not authorized to and may not possess or distribute any or all parts of the CITSS software, including its source codes and program components. User is not authorized to install, run or operate CITSS on User's or third-party computers or servers.

1.3 User is solely responsible for ensuring that all information, data, text, or other materials that User provides to ARB or WCI, Inc. through use of CITSS (Content) are true, accurate, and complete and comply with ARB's requirements for the compliance with the cap-and-trade program under the California Cap on Greenhouse Gas Emission and Market-Based Compliance Mechanisms (Regulation) (Title 17, California Code of Regulations (CCR), Sections 98000 et sq.).

1.4 User understands that ARB will retain and use the Content consistent with the applicable Regulation(s) and may disclose Content to the public to the extent the disclosure is required by California law or legal process, or to the extent that disclosure is not prohibited by California law.

1.5 ARB has included (as part of CITSS) security features including password protection to prevent a person other than the User from obtaining access through CITSS to User's Content. User understands that these security features depend on User protecting its password from disclosure to unauthorized persons. User also understands and acknowledges that despite security measures to prohibit unauthorized access to the Content through CITSS, unauthorized access could occur and in the event it does, ARB or WCI, Inc. may not be held liable for the unauthorized release of information, data, text or other materials that have been submitted to ARB using CITSS.

1.6 ARB does not endorse or provide support for software or web-based interfaces offered by third parties for purposes of submitting data to ARB. Use of a third-party interface or software product in order to access CITSS does not relieve the user of the need to ensure that information required by the applicable Regulation has been properly submitted to ARB and received by the applicable deadline and that all certifications required for use of CITSS have been submitted.

1.7 User is responsible for maintaining a copy of all data submitted to CITSS. The loss of electronic information, data, text, or other materials during use of CITSS or the unavailability of the CITSS system does not excuse User from the requirements in the applicable Regulation.

2. CITSS User Agreement
The permission granted in Section 1 above is expressly made subject to and limited by the following restrictions, in addition to the limitations and restrictions set forth in other sections of the Agreement:

2.1 User agrees not to access CITSS by any means other than using internet browsers.

2.2 User further agrees that it shall NOT:
a. Deliberately attempt to access any data, documents, email correspondence, or programs contained on systems for which User does not have authorization;
b. Engage in activity that may harass, threaten or abuse others, or intentionally access, create, store or transmit material which may be deemed offensive, indecent or obscene, or that is illegal according to local, state, provincial, or federal law;
c. Engage in activity that may degrade the performance of CITSS;
d. Deprive an authorized user access to CITSS;
e. Obtain extra resources or login privileges beyond those authorized;
f. Circumvent CITSS security measures;
g. Violate copyright law of copyrighted material;
h. Attempt to disassemble, decompile or reverse engineer CITSS;
i. Attempt to create derivative works based on CITSS;
j. Attempt to copy, reproduce, distribute or transfer CITSS;

k. Provide access to CITSS to any third parties for any improper purpose;
l. Obtain for personal benefit, or engage in political activity, unsolicited advertising, unauthorized fund raising, or solicit performance of any activity that is prohibited by any local, state, or federal law.

2.3 User's right to access CITSS automatically terminates upon User's violation of any provisions of this Agreement.

2.4 User further agrees that it will immediately inform ARB or the CITSS administrator by emailing help@wci-citss.org or calling at 1-866-682-7561 if any of the following occurs:
a. User observes any unauthorized access or misuse of CITSS;
b. User has any reason to believe that the security of their User ID, password, or security question(s) has been compromised;
c. User has any reason to believe that weaknesses in computer security, including unexpected software or system behavior, may result in unintentional disclosure of information or exposure to security threats.

2.5 User further agrees that:
a. User will maintain the security of their CITSS User ID, password, and security questions for use of the CITSS;
b. User will not disclose their CITSS User ID, password, and security questions information to anyone;
c. User will maintain an active email account listed in the CITSS at which User can receive important notifications of changes related to User's personal information or transfers involving any general account or compliance account that User represents as a Primary Account Representative, Alternate Account Representative, Account Viewing Agent, or other CITSS User;
d. Any submission User makes using the CITSS has and will have the same legal effect as if it were made in hardcopy form certified by User's handwritten signature.

2.6 If, at any time, User determines it is no longer able or willing to abide by the terms of this Agreement, User shall immediately cease all use of the CITSS and promptly notify ARB or the CITSS administrator in writing of its determination so that ARB or the CITSS administrator may formally suspend or revoke the User's access to the CITSS.

3. Disclaimer of Warranties
EXCEPT AS REQUIRED BY APPLICABLE LAW, THIS SERVICE IS MADE AVAILABLE ON AN "AS IS" BASIS, WITHOUT WARRANTIES OF ANY KIND. ARB SPECIFICALLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SOFTWARE, OR ANY WARRANTIES REGARDING THE CONTENTS OR ACCURACY OF THE SOFTWARE.

4. Limitation on Liability

4.1 Except to the extent required by applicable law, in no event is ARB or WCI, Inc. liable to User on any legal theory for damages of any kind arising from the use of or the inability to use the CITSS, even if ARB or WCI, Inc. has been advised of the possibility of such damages. The unavailability of, or problems with the use of CITSS, does not excuse User from the reporting and compliance deadlines in the applicable Regulation.

5. Copyright and Proprietary Information

5.1 User shall not permit any person who is not registered as a User to access the CITSS and shall not copy, reproduce or distribute, or allow any other person to copy, reproduce or distribute, the CITSS, in whole or in part, without ARB's prior written consent.

6. Term

This Agreement commences upon User's acceptance of this Agreement and access to the CITSS for the first time. The Agreement shall terminate upon User's written notification to ARB under Section 2.5 of this Agreement or upon other termination or discontinuation of User's access to the CITSS, except that Sections 3, 4 and 5 survive any termination of this Agreement. ARB reserves the right to terminate this Agreement at any time, subject to the exception that Sections 3, 4 and 5 survive any termination of this Agreement.

7. Governing Law and General Provisions

This Agreement shall be governed by and construed in accordance with the laws of the State of California. The failure of ARB to exercise or enforce any right or provision of this Agreement shall not constitute a waiver of such right or provision. If any provision of this Agreement is found by a court of competent jurisdiction to be invalid, the parties agree that the court should endeavor to give effect to the parties' intentions as reflected in the provisions, and the other provisions of the Agreement remain in full force and effect.

This Agreement is not intended to modify and cannot modify any provision in the applicable Regulation, including the California Cap on Greenhouse Gas Emission and Market-Based Compliance Mechanisms. If any part of this Agreement is found to conflict with any provision(s) in the applicable Regulation(s), the applicable Regulation(s) shall control.

This Agreement constitutes the entire agreement between User and ARB with respect to use of the CITSS. There are no understandings, agreements or representations with respect to the software program that are not specified in this Agreement.

This Agreement may only be modified in a writing signed by User and the Executive Officer of the ARB.

Appendix C: Quarterly Auction and Reserve Sale Dates

	2015	**2016**	**2017**	**2018**	**2019**	**2020**
Q1 Auction	Wednesday, February 18	Wednesday, February 17	Wednesday, February 22	Wednesday, February 21	Wednesday, February 20	Wednesday, February 19
Q1 Reserve Sale	Wednesday, April 1	Tuesday, March 29	Tuesday, April 4	Tuesday, April 3	Tuesday, April 2	Wednesday, April 1
Q2 Auction	Tuesday, May 19	Tuesday, May 17	Tuesday, May 16	Tuesday, May 15	Tuesday, May 14	Tuesday, May 19
Q2 Reserve Sale	Tuesday, June 30	Tuesday, June 28	Tuesday, June 27	Tuesday, June 26	Tuesday, June 25	Tuesday, June 30
Q3 Auction	Tuesday, August 18	Tuesday, August 16	Tuesday, August 15	Tuesday, August 14	Tuesday, August 20	Tuesday, August 18
Q3 Reserve Sale	Tuesday, September 22	Tuesday, September 20	Tuesday, September 19	Tuesday, September 18	Tuesday, September 24	Tuesday, September 22
Q4 Auction	Tuesday, November 17	Tuesday, November 15	Tuesday, November 14	Wednesday, November 14	Tuesday, November 19	Tuesday, November 17
Q4 Reserve Sale	Tuesday, December 29	Friday, December 30	Friday, December 29	Friday, December 28	Tuesday, December 31	Tuesday, December 29

JULY 18, 2013 – PUBLIC WORKSHOP ON PROPOSED AMENDMENTS TO THE CALIFORNIA CAP-AND-TRADE PROGRAM

PROPOSED CHANGES TO THE CALIFORNIA GREENHOUSE GAS CAP-AND-TRADE REGULATIONS

California Air Resources Board
July 18, 2013

California Air Resources Board

Webcast Information

- Slides posted:
  http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm
- Submit Comments
  http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm
- Email questions:
  auditorium@calepa.ca.gov

California Air Resources Board 2

Agenda

- Background
- Environmental Analysis
- Offset Implementation
- Market Implementation and Oversight
  - CITSS 3.0 Release
- Cost Containment
- New Sectors, Allocation, and Electricity
- Next Steps

California Air Resources Board 3

Purpose of This Workshop

- Provide opportunity for stakeholder questions and discussion prior to release of formal "45-day" regulatory language
- Overview of major changes
- Questions, clarification, and discussion
  - Comment Form: http://www.arb.ca.gov/cc/capandtrade/meetings/071813/commentform.docx

California Air Resources Board 4

Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance January 1, 2013
- Amendments for Linkage approved by ARB Board April 2013 (regulation effective October 1, 2013)
- Additional Amendments and Offset Protocols
  - Discussion Draft (July 15) and Workshop (July 18)
  - Anticipated Board consideration October 2013
- California and Québec linked program January 2014

California Air Resources Board 5

Environmental Analysis

California Air Resources Board 6

California Environmental Quality Act

Overview of Requirements

- Framework for Environmental Analysis
- Scope of Environmental Impact
- Planned analyses

California Air Resources Board 7

California Environmental Quality Act

Framework for Environmental Analysis

- Based on Project Description (proposed amendments)
- Utilize the 2010 CEQA Environmental Checklist
- Environmental Analysis to Include
  - Direct and Indirect Impacts
  - Alternatives

California Air Resources Board 8

California Environmental Quality Act

Environmental Impact Analysis

- Will focus on compliance responses
- Existing conditions used as baseline
- Comparison of existing conditions with modeled projections of emissions and other resources with project and without project

California Air Resources Board 9

Offsets

California Air Resources Board 10

Overview of Proposed Offset Changes

- Proposed two new offset protocols
- Clarify process for early action credit holders to bring in their offset credits directly to ARB
- Streamline offset project review process
- New provisions to allow air districts multiple roles
- Strengthen and clarify conflict of interest requirements
- Harmonize invalidation requirements across all project types

California Air Resources Board 11

New Potential Offset Protocols

- Changes are proposed to various sections of the regulation to include placeholders for potential new Compliance Offset Protocols
- Two new offset protocols will be considered by the Board later this year for the following project types:
  - Mine Methane Capture Projects
  - Rice Cultivation Projects
- Placeholder for potential early action quantification methodologies in section 95990
  - Voluntary protocols that are substantially similar to the adopted Compliance Offset Protocol

California Air Resources Board 12

Requirements for Operators and Designees (95974)

- If an Offset Project Operator (OPO) designates an Authorized Project Designee (APD) the APD will be the main point of contact for ARB and the Offset Project Registry (OPR)
- OPOs may not choose which functions the APD may perform; APD performs all functions, except in limited cases related to issuance
  - OPO still responsible for ensuring project compliance
- An individual employed by the APD must be designated as a Primary or Alternate Account Representative (PAR or AAR) on the OPO's CITSS account

Project Listing Requirements (95975)

- Attestations for listing must be submitted to OPR with listing information
- Timing and process for OPR review of listing information is clarified
- Projects with a commencement date after 1/1/15 must be listed within one year, or the project is ineligible
- Listing information cannot change once approved
- Rules are proposed for transferring an offset project between OPRs

Project Reporting Requirements (95976)

- Attestations for reporting must be submitted to OPR with the Offset Project Data Report
- Clarify how the reporting requirements apply to ODS projects

Verification Requirements (95977, 95977.1)

- Timing and frequency requirements for verification of Offset Project Data Reports
  - Maximum time for completing offset verification services proposed to be changed from 9 to 11 months
  - Zero emissions reporting
- Rotation of verification bodies and offset verifiers
  - Clarify rules for ODS, reforestation, and urban forest projects
- Notice of Offset Verification Services (NOVS) must be submitted 30 calendar days prior to start of verification
  - Clarify what is covered under offset verification services, and what can be done prior to submitting the NOVS

California Air Resources Board 16

Verification Requirements (95977, 95977.1) (cont)

- Site visits
  - Timing for site visits
  - Initial site visit requirements (validation step)
- Data checks and detailed verification report
  - Include calculations and qualitative narrative
- Corrections to Offset Project Data Report
  - Streamline with MRR requirements
- Calculating offset material misstatement
  - Clarify that equation includes all errors from data checks, including baseline and project emissions

California Air Resources Board 17

Verifier and Verification Body Accreditation(95978)

- ARB-accreditation for verification bodies (VBs) and offset verifiers for the compliance offset program must be achieved separately from accreditation under the MRR program
  - MRR verifiers are not automatically ARB offset verifiers
  - Additional training and experience is needed
- Availability of VB, staff, and records during an ARB audit

California Air Resources Board 18

Conflict of Interest Requirements (95979)

- Conflict of interest (COI) must be applied against both OPOs and APDs, if applicable
  - COI must also be assessed for any sub-contractors
- High conflict of interest if VB has also verified a facility for meeting TEAP requirements (only applies to ODS)
- COI self-evaluations must be approved prior to commencing verification services
  - Process for OPR review and approval of COI self-evaluations added

New Provisions for Air Districts

- Air Districts are regulatory agencies
- May hold compliance instruments
- May have multiple roles
  - Offset Project Operator
  - Offset Verification Body
  - Offset Project Registry
- May only play one role for a specific offset project
  - Maintains multiple levels of independent review of an offset project
  - Independent project review consistent with international standards and existing regulatory offset programs

Registry Offset Credit Issuance (95980, 95980.1)

- Process to allow OPR to request additional information when determining whether to issue registry offset credits
- If OPR determines not to issue registry offset credits, OPO or APD may request that ARB make a final determination as to issuance

ARB Offset Credit Issuance (95981, 95981.1)

- Clarify process for requesting issuance of ARB offset credits
  - Which parties are allowed to submit an issuance request
  - Transfer of ARB offset credits to holding accounts other than the OPOs
- OPRs must submit proof to ARB that they retired registry offset credits

Forest Offset Reversals (95983)

- Clarify how many ARB offset credits will be retired from the Forest Buffer Account in the case of an unintentional reversal
- Clarify how many ARB offset credits the forest owner must replace in the event of an intentional reversal, including early project terminations

Invalidation (95985)

- Clarify the requirements that must be met to shorten the statute of limitations from 8 years to 3 years
- Align replacement requirements for all types of offset projects
  - Invalidated ARB offset credits from a forest offset project will be replaced by the party that retired the offset credit
    - Invalidation does not include project reversal or termination

Offset Project Registry Requirements (95986, 95987)

- OPR Approval Requirements
  - Make more explicit that OPRs must show demonstrated experience in performing registry services before they may become an approved OPR
  - Availability of OPR, staff, and records during an ARB audit
- Registry Services Requirements
  - Types of information made publicly available for offset projects, and timing requirements
  - Guidance on the compliance offset program given after consultation with ARB

Early Action (95990)

- Placeholder for potential early action quantification methodologies related to rice cultivation and mine methane capture
  - Update listing date for any potential projects coming in under new protocols
- Clarify timing for submitting listing, COI evaluations, and desk review information
- Clarify requirements for desk reviews and full offset verification for early action offset projects

Early Action (95990) (cont)

- Clarify requirements related to Forest Buffer Account contributions for early action forest projects
- Clarify how ARB offset credits are issued for early action
- Clarify the timeframe for calculating the baseline for projects transitioning under forest protocol 2.1
- Streamline invalidation requirements for ARB offset credits issued for early action
  - Include additional scenarios for shortening the statute of limitations as described in ARB's Instructional Guidance Document (December 2012)

Questions

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CITSS 3.0

California Air Resources Board 29

CITSS 3.0 Release

- Release date week of July 22, 2013
- List serve reminder sent prior to release
  - Primary and Alternate Account Representatives
- New Functionality
  - Facility information
  - Corporate association management
  - Limited exemption and holding limit management
    - Nightly automated holding limited checks
  - Enhanced reporting features

California Air Resources Board 30

CITSS 3.0 Release, cont.

- PARs/AARs will receive automated emails from the CITSS as data is updated.
  - Changes to account information (facilities added, etc.)
  - Potential holding limit violations until limited exemption data are entered
- Post Release Guidance
  - PARs/AARs should review new information for accuracy
  - ARB will work with PARs/AARs to correct any mistakes in a timely manner
  - Do not make changes to entity registration or facility data until after August 2, 2013
- Within 30 days of August 16th auction
  - During this time, changes to entity registration information and holding and purchase limit allocation data cannot be made if the entity intends to participate in the auction

Draft Market Implementation and Oversight Amendments

Draft Definitions (95802)

- Staff has included new definitions of trading terms.
- These new definitions should provide clarity to market participants in how they enter information into CITSS.

Draft Changes to Registration Requirements (95814)

- Conflict of Interest Provisions
  - Require letter from employers demonstrating no conflict of interest for employees who are also individual voluntarily associated entitles (VAEs)
  - Individual VAEs already registered in CITSS have six months to provide such a letter
  - Staff also proposing that employees with insider knowledge about an entity's cap-and-trade position not qualify for registration as individual VAE

Proposed Changes to Registration with ARB (95830)

- Registration is in the tracking system
- All direct and indirect corporate associations with other entities must be disclosed – not just those with entities in tracking system
- Limited Liability Corporations included as type of direct and indirect corporate association
- Includes process for change of ownership of a facility subject to MRR

Draft Changes to Account Closure (95831)

- Allowance withdrawal
  - If an account is closed, the entity's compliance obligation is satisfied by withdrawal of allowances from the entity's Compliance Account and then, if necessary, from the entity's Holding Account.

Draft Changes to Surrender of Compliance Instruments (95856)

- Clarified CA and linked jurisdiction's allowances are eligible compliance instruments
- Limited use of "future" vintage allowances
  - Limited use of "future" allowances provided for allocation true-up for compliance obligation surrender

Draft Order for Surrender of Compliance Instruments (95856)

- Instrument retirement order from Compliance Account
  1. Offset credits, with oldest credits retired first
     - No 8% limit for annual compliance obligation
  2. Allowances, with earlier vintages retired first
  3. "Future" vintage allowances up to the true-up allowance amount, subject to entity eligibility
  4. Allowances purchased from the Allowance Price Containment Reserve

Draft Changes to Auction Administration and Participant Application (95912)

- Addition: Auction Application Changes
  - Changes to an auction application within 30 days of an auction – or knowledge that such information might change within 15 days after an auction – may result in denial of auction participation.
- Clarification: Bid Guarantees
  - Surety bonds used as a bid guarantee must be issued by certain institutions.
  - Bid Guarantees must be payable within one day of payment request.

Draft Changes to Auction Participation Application Requirements (95912)

- Auction Application Changes
  - Updates to purchase limit and holding limit among entities is now covered in the auction application
- Auction Application Attestation
  - Entities must report a change in the status of an ongoing investigation alleging misdeeds in the commodities, securities or financial markets

Draft Changes to Sale of Allowances from the Allowances Price Containment Reserve (95913)

- Addition: Reserve Sale
  - Entities must inform the reserve sale administrator of an intent to bid in the reserve sale 20 days prior to the sale.
  - Entities with auction application information that changes within 30 days of a reserve sale may not participate.
  - Executive Officer may revise the timing of reserve sale intent to bid notifications.
- Clarification: Bid guarantee types
  - Certified funds, such as a bank check or cashier's check, are no longer accepted as a type of bid guarantee.
  - Bid guarantees other than cash must be payable within 1 day of payment request

Draft Changes to Auction Advisor Information Disclosure (95914)

- Addition: Additional information disclosure from advisors
- Information details to be provided by advisor at least 15 days prior to auction
  - Names of entities being advised
  - Description of advisory services
  - Assurance that no information is shared

Draft Changes to Purchase Limit Allocations and Auction Bidding Information (95914)

- Cannot disclose other auction bidding information
  - Intent to participate at an auction
  - ARB approval of auction application
- Specific conditions under which information may be released
  - To members of a direct corporate association
  - To an auction bid advisor disclosed to ARB
  - POUs as required by public accountability rules or participation in joint ventures with POUs or JPAs
  - IOUs when specifically required by CPUC

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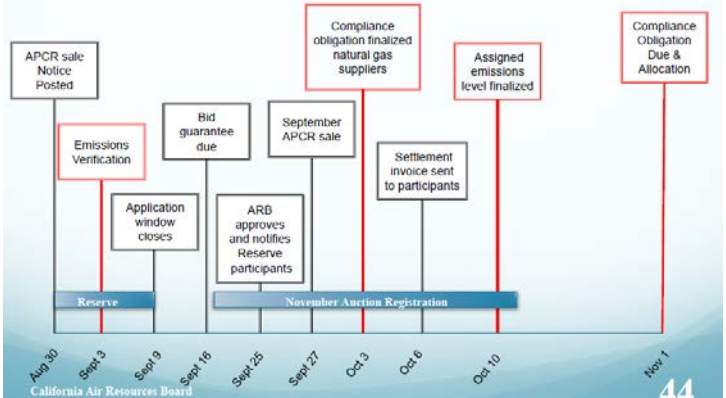
Existing Compliance Timeline



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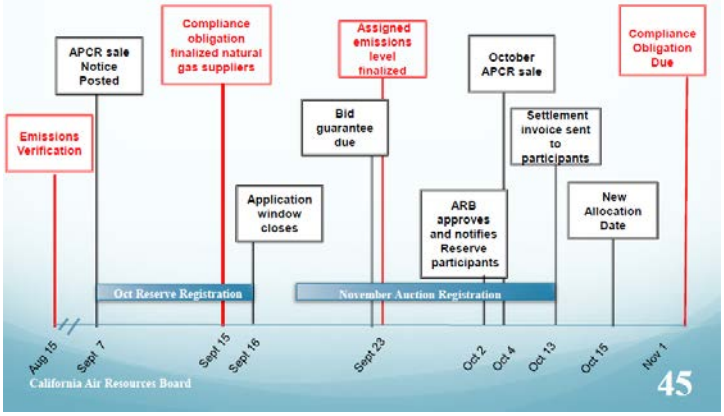
Proposed Compliance Timeline



California Air Resources Board 45

Draft Changes to the Holding Limits (95920)

- Zero Limited Exemption
  - Set the limited exemption to zero in the first compliance period for opt-in covered entities with no "limited scope" emissions
- Directly allocated allowances
  - Direct allocation will not count against the holding limit or limited exemption until January 1 of the vintage year
  - Allocated and "true-up" allowances may be placed into entity accounts prior to their vintage year
  - Will not count towards limits until they become "current vintage" allowances
- Order of allowance withdrawal
  - If the Executive Officer needs to withdraw allowances from an entity's account, the allowances would come in the following order: 1) Holding Account; 2)Compliance Account.

Draft Changes Concerning Deficient Transfer Requests (95921)

- Deficient transfer process
  - Both entities informed transfer request is deficient
  - Only entity responsible will be informed of reason
- Transfer request process
  - An entity may not submit a transfer request to another entity without an existing transaction agreement
  - Prevents efforts to discover account balances

Draft Changes to Time Limit on Completing Transfer Request (95921)

- Requirement to complete transfer request within three days of:
  - Execution date or termination date of the agreement
  - The "transfer of consideration" from purchaser to seller under the agreement
  - The execution of the underlying trade on an exchange or other trading platform

Draft Changes to Transfer Request Information (95921)

- Tracking system information
  - Delete serial numbers from transfer request requirements
  - Add requirement to specify vintage and type of instrument
- Replace the following generic fields with fields specific to type of agreement:
  - Date of transaction agreement
  - Settlement date
  - Price
- Two-step process for providing transfer request information in CITSS:
  - Identify the type of transaction agreement for which transfer request is submitted
  - Enter information specific to that type of agreement

California Air Resources Board 49

Draft Changes to Identify Type of Transaction Agreement (95921)

- Entities select one of three transaction agreement types:
  - Over-the-Counter with delivery no longer than 3 days from signing until delivery
  - Over-the-Counter with delivery no less than 4 days from signing, or additional terms executed after transfer
  - Exchange-Traded Contracts – spot and futures

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Draft Changes to Information Specific to Over-the-Counter Agreements

(Delivery within three days)
(95921)

- Require the following information in tracking system:
  - Date entered into transaction agreement
  - Settlement Date
    - If transfer is final term to be settled: date transfer request submitted.
    - If other terms to be settled after transfer: date other terms scheduled to be settled.
  - Price

California Air Resources Board 51

Draft Changes to Information Specific to Over-the-Counter Agreements
(Complex or Delivery in more than 4 days)
(95921)

- Require the following information in tracking system:
  - Date entered into transaction agreement
  - Date the agreement terminates
  - If the contract contains provisions for further compliance instrument transfers, enter the transfer frequency (e.g. quarterly)
  - If the contract is a "bundled" purchase of instruments and other products, identify products (e.g. natural gas)
  - Price
    - Fixed price
    - Base plus margin

Information Specific to Exchange-Traded Contracts (95921b)(5))

- Name of Exchange
- Exchange code for contract
- Type of contract (Spot, Future)
- Date of close of trading for the contract
- Price at close of trading

Draft Changes to Check Boxes for Zero Price (95921)

- Modification: Allow entities to specify a zero price for transfers in some cases:
  - Between direct corporate associates
  - Between an entity's holding and compliance account
  - From a POU to a JPA or other POU as part of joint venture generation project
  - From a POU to a federal power authority to cover emissions from imported power
  - From a utility to generator under a tolling agreement or other contract for power not specifying instrument price
  - Under "bundled" agreement that does not specify price

Draft Changes to Prohibitions (95921)

- Clarification: Prohibition of "holding on behalf of"
  - One entity holding instruments in which second entity has an ownership or financial interest
  - One entity holding instruments under agreement giving second entity control of the holding and dispositions of the instruments or acquisition of additional instruments
- Clarification: Prohibition does not apply to holding instruments for settlement of forward or futures contracts

New Section: Disclosure of Cap-and-Trade Contractors (95923)

- Addition: Address contractors working on cap-and-trade
  - Covered entities must disclose contractors' identities and nature of their work.

Compliance Timelines

- Many deadlines to consider between August and November
  - Late September includes Reserve Sale prior to the Nov 1 surrender deadline
  - In some cases, compliance obligation not known until after the registration period ends for the Reserve Sale
  - Potential "true-up" allowances allocated on same day as compliance surrender due date
- Proposal:
  - Allocation on October 15
  - Last Reserve sale moved later by one week
  - MRR verification deadline August 15

New Appendices: B & C

- Addition: Appendix B incorporates the tracking system user terms into the regulation
- This codifies the user terms into the regulation
- Addition: Appendix C specifies the dates for auctions and reserve sales from 2015-2020
- Provides certainty of when allowances will be sold through ARB

California Air Resources Board 58

Cost Containment

California Air Resources Board 59

Additional Mechanisms for Cost Containment

- Board Resolution 12-51 directs ARB to develop a proposal for incorporating additional cost containment mechanisms into the program
  - Ensure the allowance price does not exceed the highest price tier of the Reserve
  - Maintain the environmental objective of the program
  - Effective over a reasonable range of plausible conditions
- June 25 workshop
  - ARB outlined potential policy approaches
  - Expert presentations
  - Public comment

California Air Resources Board 60

Draft Changes to Disposition of Allowances (95870)

- Makes an additional source of allowances available for the Reserve
- Starting in 2015, 10% of future vintage allowances will be made available to the Reserve if needed to satisfy demand

California Air Resources Board 61

Draft Changes to Sale of Allowances from Allowance Price Containment Reserve (95913)

- Additional allowances available at the Reserve sale immediately preceding the November 1 compliance date
- The additional allowances will be drawn upon as needed to fill accepted bids for the highest price tier of the Reserve
- Allowances will first be drawn from the latest vintage(s) (furthest in the future) available in the Auction Holding Account
  - If available, allowances designated for an Advance Auction are used first

California Air Resources Board 62

Additional Cost Containment Mechanism Draft Change Justification

- Allows qualified bids to be filled at the highest price tier of the Reserve if the bids exceed the allowances in that tier
- Allows covered entities to purchase additional allowances prior to the November 1 compliance date
- Ensures the allowance price will not exceed the highest price tier of the Reserve over a reasonable range of plausible conditions
- Maintains the environmental objective of the program

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Questions

California Air Resources Board 64

Allocation

California Air Resources Board 65

Draft Changes to Covered Entities

- Added
  - Lead production
  - CNG/LNG fuel suppliers
- Military Exemption

California Air Resources Board 66

Draft Changes to Industrial Allocation for New Entrants

- Provide allocation to new entrants with similar NAICS codes to Table 8-1
- Energy-Based Allocation to new entrants using a three part approach based on data availability from MRR
- Deleted text on allowance allocation multiplier
- Affected Sections: 95853(e), 95891(a), 95891(c)(3)

California Air Resources Board 67

Draft Changes to Opt-in Covered Entities

- Designated the date of March 1 to opt into the Cap-and-Trade Program for the following calendar year.
  - Must comply with mandatory reporting
  - Option to rescind opt-in application by October 1
- Opt-in covered entities must register with CITSS within 30 days of MRR deadline
- Affected Sections: 95813, 95830

California Air Resources Board 68

Draft Changes to Industrial Assistance

- Industry assistance factors shifted one compliance period
- New assistance factors
  - Hardware Manufacturing
  - Ethyl Alcohol Manufacturing
  - Rare Earth Metal Mining
  - Nonferrous Metal Forging
  - Guided Missile and Space Vehicle Manufacturing
  - Asphalt Paving Mixture and Block Manufacturing
- Reclassified sector
  - Mineral Wool Manufacturing
- Affected sections: Table 8-1

California Air Resources Board 69

Draft Changes to Product Benchmarks

- New sectors considered for product-based benchmark
  - Food processing, Breweries, Wineries
  - Diatomatious earth
  - Iron foundry
  - Aluminum billets
  - Metal forging
  - Lead acid battery recycling
- Existing sectors considered for modification
  - Flat glass manufacturing
  - Container glass manufacturing
  - Tissue manufacturing
  - Steel cold rolling
  - Oil and Gas
  - Cement manufacturing
  - Petroleum refineries
  - Hydrogen production
  - Coke calcining
- Affected Sections: Table 9-1

Draft Changes to Refinery Allocation

- Potential change from carbon weighted tonne to other approach such as complexity weighted barrel
  - ARB will hold a later discussion or workshop focusing on this topic (Tentatively August 13)
- Changes to Treatment of Calcining and Hydrogen
  - Will be coordinated with any changes to refinery benchmarking
- Revisions to Allocation True-Up
  - Making true-up calculation consistent with initial allocation
  - Creating true-up for refineries without EII values
- Affected Sections: 95870(e)(2)(B), Table 9-1, 95891(d), 95891(e)

New Sections: University and Public Service Facility Allocation

- Board directed staff to develop a methodology to provide transition assistance to Universities
- Draft proposal is consistent with ARB's allocation approach for industrial sectors
- Universities that receive allowances are encouraged to further reduce emissions
- The same treatment has also been extended to publicly-owned facilities that provide thermal energy to municipally-owned buildings.
- Affected Sections: 95870(f), 95891(e)

New Section: Natural Gas Suppliers

- Natural gas suppliers will receive allocations based on their 2013 compliance obligations and cap decline factor
- Public utility gas corporations required to consign an increasing proportion of these allowances
  - Non-consigned allowances will constitute transition assistance

Year	2013	2014	2015	2016	2017	2018	2019	2020
Percent Consigned	0%	0%	25%	30%	35%	40%	45%	50%

- Affected sections: 95870(j), 95893

California Air Resources Board 73

Draft Changes to Legacy Contracts

- Added section to include provisions for eligibility requirements for allowances allocation to operators of legacy contract generators
- Sections include equations for the calculation of allowance allocation
- Allocate 2015 allowances for 2013 and 2014 only, based on emissions reported and verified for 2012 emissions year
- Adjust 2015 allocation to legacy contract counterparties based on the emissions of energy purchases
- Affected Sections: 95856(h), 95891(f), 95894

California Air Resources Board 74

Draft Changes to True-up Allowances

- True-up allowance amount defined for
  - Product-based Allocation
    - Accounts for changes in allocation methodology, benchmark, assistance factor, and cap adjustment factor
  - Refinery Allocation – 1st compliance period
  - New entrants under energy-based Allocation
  - Universities
  - Legacy Contracts
- Affected Sections: 95856 , 95891(b) , 95891(c)(3), 95891(d), 95891(e), 95893

California Air Resources Board 75

Requesting Comment on Industrial Allocation for Facility Closure

- Provisions Related to Return of Direct Allowance Allocation not Used for Compliance in the Event of a Facility Shut Down
  - Section: 95812(f)

California Air Resources Board 76

Electricity

California Air Resources Board 77

Draft Changes to Imported Electricity

- Removed requirement to submit attestations stating no engagement in resource shuffling
- Added language to clarify what is considered to be resource shuffling
- Clarified the reporting requirements for renewable energy credits from a specified source
- Clarified requirements to use the RPS adjustment
- Affected Sections: 95802(b), 95852(b)(3), 95852(b)(4)

California Air Resources Board 78

Draft Changes to Waste-to-Energy

- Included eligibility requirements for exemption from a compliance obligation for Waste-to-Energy facilities
- Applies to the conversion of municipal solid waste to electricity placed on the California grid
- Exemption applies to the first compliance period
- Affected Sections: 95852

Draft Changes for "But For" CHP and District Heating Facilities

- "But For" CHP facility
  - Self-generation of steam and electricity
  - Excess electricity may be sold to grid
  - Covered entity with direct GHG costs
- District Heating Facilities
  - Provide steam, hot water, chilled water to buildings
  - Emissions associated with each building are below threshold
- Propose to exempt thermal energy emissions for "but for" CHP facilities during first compliance period
- With exemption of steam emissions, "but for" facilities fall below the threshold and are not covered entities
- ARB retires equivalent allowances
- Affected Sections: 95851(c), 95852(j)

Clarifications

- VRE REC retirement requirements
- Minor changes to names and classification of three electrical distribution utilities (EDU) in Table 9-3
- Changes in the Table 9-3 allocation to two EDUs that are electricity coops based on additional information regarding the cost burden component of their EDU allocations.
- Affected Sections: 95841.1, 95891

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June 25, 2013 - Public Workshop on Compliance Retirement, Market-Related Reporting, and Cost Containment

Cap-and-Trade Workshop

Compliance & Information Requirements

California Air Resources Board
June 25, 2013

California Air Resources Board

Webcast Information

- Slides posted:

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

- Email questions and comments:

  auditorium@calepa.ca.gov

California Air Resources Board 2

Agenda

- Status Update & Background
- Morning Session 09:30 – noon
  - Compliance Instruments Retirement and Deadlines
  - Information Sharing & Reporting
- Lunch noon – 01:00PM
- Afternoon Session 01:00PM – 04:00PM
  - Cost Containment Panel Discussion

California Air Resources Board 3

Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance January 1, 2013
- Amendments for Linkage approved by ARB Board April 2013
- Additional Amendments and Offset Protocols
  - Anticipated Board consideration Fall 2013
- California and Québec linked program January 2014

Background

- Compliance Periods

Compliance Period	Year of Covered Emissions	Date of Compliance Obligation	Annual / Triennial
First	2013	11/01/2014	Annual
	2014	11/01/2015	Triennial
Second	2015	11/01/2016	Annual
	2016	11/01/2017	Annual
	2017	11/01/2018	Triennial
Third	2018	11/01/2019	Annual
	2019	11/01/2020	Annual
	2020	11/01/2021	Triennial

Background (cont.)

- Compliance instruments valid for surrender (Subarticle 4)
  - CA GHG Allowance
  - Offset credits issued by ARB
  - Allowances from Allowance Price Containment Reserve
- Once linked to Québec (January 2014)
  - Québec allowances
  - Offset credits issued by Québec

Background (cont.)

- Offset usage limit
  - 8% limit on use of offset credits during a compliance period (§ 95854)
    - Note: Compliance period refers to three-year timeframes (two-year timeframe in first period)
  - No offset usage limit on annual surrender

Background (cont.)

- Quantity and vintage of compliance instruments to surrender (§ 95855, § 95856)

Year of Covered Emissions	Date of Compliance Obligation	Annual / Triennial	Compliance Obligation	Eligible Vintages
2013	11/01/2014	Annual	30% of 2013 emissions	2013
2014	11/01/2015	Triennial	70% of 2013 emissions 100% of 2014 emissions	2013, 2014
2015	11/01/2016	Annual	30% of 2015 emissions	2013 – 2015
2016	11/01/2017	Annual	30% of 2016 emissions	2013 – 2016
2017	11/01/2018	Triennial	70% of 2015-2016 100% of 2017 emissions	2013 – 2017

Surrender Example

- Emissions with compliance obligation: 100,000 $mtCO_2e$ for each of 2013 and 2014
- Surrender of allowances only

Year of Covered Emissions	Date of Compliance Obligation	Available Compliance Instruments in CITSS Accounts
2013	November 1, 2014	2013 allowances: 80,000

Reconciliation

- 2014: annual compliance obligation = 30,000 $mtCO_2e$
  - 2013 vintage allowances surrendered in 2014 = 30,000

Surrender Example (cont.)

Year of Covered Emissions	Date of Compliance Obligation	Available Compliance Instruments in CITSS Accounts
2013	November 1, 2014	2013 allowances: 80,000 – 30,000 = 50,000
2014	November 1, 2015	2014 allowances: 200,000

Reconciliation

- 2015: triennial compliance obligation = 200,000 $mtCO_2e$
  - Annual compliance obligation fulfilled with 2013 allowances = 30,000 $mtCO_2e$
  - 2013 vintage allowances surrendered in 2015 = 50,000
  - 2014 vintage allowances surrendered in 2015 = 120,000

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Surrender Example 2

Assumptions

- Emissions with compliance obligation: 100,000 $mtCO_2e$ for each of 2013 and 2014
- Surrender of allowances and offsets

Year of Covered Emissions	Date of Compliance Obligation	Available Compliance Instruments in CITSS Accounts
2013	November 1, 2014	2013 offsets: 60,000 2013 allowances: 20,000

Reconciliation

- 2014: annual compliance obligation = 30,000 $mtCO_2e$
  - 2013 vintage offsets surrendered in 2014 = 30,000

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Surrender Example 2 (cont.)

Year of Covered Emissions	Date of Compliance Obligation	Available Compliance Instruments in CITSS Accounts
2013	November 1, 2014	2013 offsets: 60,000 – 30,000 = 30,000 2013 allowances: 20,000
2014	November 1, 2015	2013 allowances: 60,000 2014 allowances: 100,000

Reconciliation

- 2015: triennial compliance obligation = 200,000 $mtCO_2e$
  - Annual compliance obligation fulfilled with 2013 offsets = 30,000 $mtCO_2e$
    - 8% offset limit of triennial compliance obligation = 16,000 $mtCO_2e$ → 14,000 of 30,000 vintage 2013 surrendered offsets excluded
  - 2013 vintage allowances surrendered in 2015 = 80,000
  - 2014 vintage allowances surrendered in 2015 = 100,000
  - Total triennial surrender = 180,000 allowances + 16,000 offsets
  - Triennial compliance period shortfall: 4,000 $mtCO_2e$

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Potential "True-Up" Allowances

- "Next-Year" vintage allowances allocated to correct historical allocation that was based on estimate of production/emissions
  - Allocation occurs in the calendar year prior to budget year
    - Based on estimates of future production/emissions
- "True-up" accounts for:
  - Difference in estimated production and actual production reported to MRR in that budget year
  - Allocation to new sectors that have not received initial allocation
  - Changes to benchmarks
    - Retroactively applied to previous allocations

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Order of Compliance Instruments Retirement

- Regulation is silent about the order of compliance instrument retirement
- Need to specify retirement order in Regulation
- Québec specifies retirement order in their regulation

California Air Resources Board 14

Order of Compliance Instruments Retirement

Staff Proposal:

- Annual Compliance Obligation
  1. Offset credits: oldest first, not subject to 8% limit
  2. Allowances purchased from the Allowance Price Containment Reserve
  3. Allowances: earlier vintages first
  4. "True-up" allowances up to a predetermined entity limit based on the "true-up" amount

California Air Resources Board 15

Order of Compliance Instruments Retirement

Staff Proposal:

- Triennial Compliance Obligation
  1. Offset credits: oldest first, subject to 8% limit
     a. If 8% limit reached, offsets exceeding 8% limit excluded
  2. Allowances purchased from the Allowance Price Containment Reserve
  3. Allowances: earlier vintages first
  4. "True-up" allowances: up to a predetermined entity limit based on "true-up" amount

Considerations

- 8% offset limit applies to compliance obligation at the end of full compliance period
  - Diligence required when surrendering offsets to meet annual compliance obligation

Year of Covered Emissions	Date of Compliance Obligation	Available Compliance Instruments in CITSS Accounts
2013	November 1, 2014	2013 offsets: 60,000 2013 allowances: 20,000
2014	November 1, 2015	2013 allowances: 60,000 2014 allowances: 100,000

  - Annual compliance obligation fulfilled with 2013 offsets = 30,000 $mtCO_2e$
    - 8% offset limit of triennial compliance obligation = 16,000 $mtCO_2e$ → 14,000 of 30,000 vintage 2013 surrendered offsets excluded
  - 2013 vintage allowances surrendered in 2015 = 80,000
  - 2014 vintage allowances surrendered in 2015 = 100,000
  - Triennial compliance period shortfall: 4,000 $mtCO_2e$

Considerations (cont.)

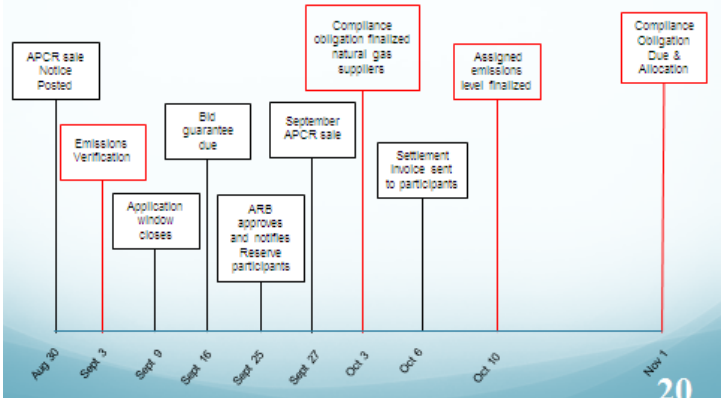
- No holding limit for offsets
  - Holding limit (§ 95920) applies to all "current" vintage allowances, earlier vintage allowances, and APCR allowances that can be used to satisfy the entity's compliance obligation
- Applicability to Québec beginning 01/01/2014
  - 8% offset limit applies
  - Allowance retirement by vintage year without consideration for jurisdiction

Compliance Timelines

- Many deadlines to consider between August and November
  - Late September includes Reserve Sale prior to the Nov 1 surrender deadline
  - In some cases, compliance obligation not known until after the registration period ends for the Reserve Sale
  - Potential "true-up" allowances allocated on same day as compliance surrender due date
- Should dates be adjusted?

California Air Resources Board 19

Compliance Timeline



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Québec's Cap-and-Trade System Compliance Requirements

CARB Cap-and-Trade Workshop
June 25, 2013

Jean-Yves Benoit
Director - Carbon Market Division
Climate Change Office
Government of Québec

Québec

UN QUÉBEC POUR TOUS

Status Update

- Cap & Trade Legislation (2009)
- 2020 Mitigation Goal (2009)
- Initial Cap & Trade Regulation (December 2011)
- Amendment to the C&T Regulation (December 2012)
  - Allow linking with California & other jurisdictions
  - Introduce Offset Regulation
- Québec and California linked Program : January 2014

Québec

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Compliance Requirements

- Compliance obligation
  - … to cover each metric tonne CO2 equivalent of the verified emissions …
- Date of compliance obligation
  - November 1st following the end of each compliance period
- Compliance periods
  - First : 2013-2014
  - Second : 2015-2017
  - Third : 2018-2020

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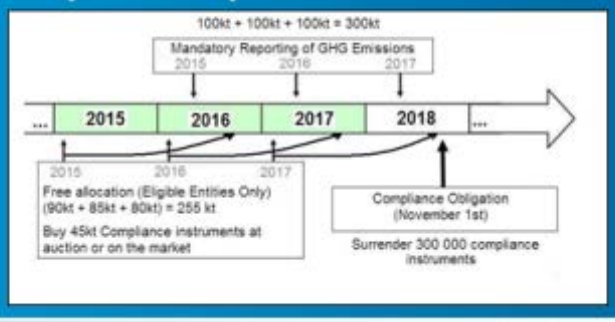
Compliance Requirements



Québec

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Compliance Requirements

- Compliance instruments valid for surrender
  - Québec Allowances, Early Reduction Credits and Offsets Credits
  - California Allowances and Offsets credits (once linked)
- Order of Compliance Instruments Retirement
  1. Offset Credits : earlier vintage first (subject to 8% limit)
  2. Early Reduction Credits
  3. Allowance purchased from the Allowance Price Cost Containment Reserve
  4. Allowances : earlier vintage first

Québec

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Merci!

Québec

Questions

California Air Resources Board

Public Information Sharing & New Reporting Requirements

California Air Resources Board
June 25, 2013

Proposed Calendar of Information Release Dates

Month	Allocation Data	Compliance Obligation Data	CITSS Registrations	Retired Instruments	Compliance Account Balance	Offset Project Data	Auction Data
Jan						1st business Wed	
Feb						1st business Wed	Quarterly Auction Report
Mar			last business day		last business day	1st business Wed	60-day notice for 2nd auction
Apr						1st business Wed	
May						1st business Wed	Quarterly Auction Report
Jun			last business day		last business day	1st business Wed	60-day notice for 3rd auction
Jul						1st business Wed	
Aug						1st business Wed	Quarterly Auction Report
Sep			last business day		last business day	1st business Wed	60-day notice for 4th auction
Oct						1st business Wed	
Nov		1st business day				1st business Wed	Quarterly Auction Report
Dec	(12th or first business day) Industrial or EDU allocation		last business day	middle of the month	last business day	1st business Wed	(12th or first business day) Release Reserve Price and next year's auction budget. 60-day notice for 1st auction

Allocation Data

- Updated annually on December 1
- Direct distribution to covered entities for industrial assistance
  - Link: http://www.arb.ca.gov/cc/capandtrade/allowanceallocation/sector_based_industrial_allocation.pdf
  - Will include entity CITSS ID numbers
- Direct distribution to electrical distribution utilities on behalf of ratepayers
  - Link: http://www.arb.ca.gov/cc/capandtrade/ct_rf_april2013.pdf

Compliance Obligation Data

- Facility compliance obligation emissions
  - http://www.arb.ca.gov/cc/capandtrade/covered_entities_011013_v2.xlsx
- Release Date
  - Annually 12:00 (noon) Pacific Time, November 1, or first business day after
  - Note: Each year would have a separate column and then an aggregate column for the emissions for the compliance periods(s).
  - MRR Inventory Data: Annual release at 12:00 (noon) Pacific Time, November 1, or first business day, with no reference to covered emissions

CITSS Registrant Data

- Registered entities in CITSS
  - CITSS ID with legal name (not account #)
  - Individual VAE name
  - Not currently posted
- Proposed Release Date
  - 12:00 (noon) Pacific Time; Last Business Day of Quarter

Q1: March 29, 2013
Q2: June 28, 2013
Q3: September 31, 2013
Q4: December 31, 2013

CITSS Registrant Data – Example

CITTS Acct Number	Entity Name
CA1385	Cheesy Garlic Bread
CA1386	Chicken & Waffle
CA1387	Sriracha
CA1388	Dill Pickle
CA1389	Root Beer
CA1390	Banana Split
CA1391	Chili & Chocolate
CA1392	Orange Zest

Retired Compliance Instrument Data

- Instruments in ARB's Retirement Account
  - Not currently posted
- Proposed release Date
  - 12:00 (noon) Pacific Time, December 15, or first business day thereafter

Retired Compliance Instrument Data – Example

Entity Name	Compliance Event	Entity Type	2013 Vintage	2014 Vintage	2009 Offset by Type	2010 Offset by Type	2011 Offset by Type	Total
Sriracha	November 1 2014	Covered/Opt-in	1005	1004	1005	1006	1007	5025
Dill Pickle	November 1 2015	VAT	2066	2066	2066	2066	2066	10330
	November 1 2014		1005	1006	1007	1008	1009	5035
	November 1 2015		4074	4076	4078	4080	4082	20390
Banana Split	November 1 2014	Covered/Opt-in	3045	3045	3045	3045	3045	15225
	November 1 2015		5087	5087	5087	5087	5087	25435
Total			16280	16284	16288	16292	16296	81440

Compliance Account Information

- Compliance Account Instruments
  - Staff considering alternatives to individual accounts
  - Could be aggregated across compliance accounts
  - Not currently posted
- Proposed release Date
  - 12:00 (noon) Pacific Time; Last Business Day of Quarter

  Q1: March 29, 2013
  Q2: June 28, 2013
  Q3: September 31, 2013
  Q4: December 31, 2013
- Staff considering adjustments to frequency

Compliance Account Discussion

- When do individual account balances reveal if an entity is going long?
- When do individual account balances reveal if an entity is short?
- Balancing risks to the market
  - Does revealing an individual compliance account balance expose a covered entity to manipulation?
  - Does revealing this information prevent manipulation by someone tightening the market?

Offset Project Data

- Offset Project Level Data
  - Will be published once ARB compliance credits are issued
  - Not currently posted
- Release Date
  - 12:00 (noon) Pacific Time, first business Wednesday of each month

Offset Project Data - Example

Example: List of Early Action Offset Projects

ARB Project Identification #	Offset Project Name	Listing Entity	Type of Project	Offset Project Location	Project Documentation	EAOP Project ID#	Early Action Listing Information
CAODXXXX	Project A	Operator 1	Digester, forestry, etc	Location A	Name of EAOP (i.e. ACR)	ACRXXX	PDF
	Project B	Holder 1		Location 2	Name of EAOP (i.e. CAR)	CARXXX	PDF

Example: Project Level Data

ARB Project ID # by Reporting Period	Reporting Period Dates	Vintage Year	ARB Offset Credits Issued Total number/vintage yr	Date of issuance	Invalidation Status
CAODXXXX-A	1/1/2011 – 12/31/2011	2010	20,000	Nov 24, 2013	8 years
CAODXXXX-B	1/1/2011 – 12/31/2011	2011	30,000	Dec 1 2013	3 years

Questions

California Air Resources Board

Information Reporting in CITSS

California Air Resources Board
June 25, 2013

California Air Resources Board

Current Transfer Request Information Content

- Required fields are the same for all transaction types:
  - Account representatives
  - Account numbers
  - Serial Numbers
  - Date of transaction agreement
  - Settlement date
  - Price

California Air Resources Board 42

Proposed Fields to be Removed

- Serial numbers
- Staff proposes to replace the following generic fields with fields specific to type of agreement:
  - Date of transaction agreement
  - Settlement date
  - Price

California Air Resources Board 43

Proposed Fields to Add

- Staff will propose Regulation amendments to require reporting in CITSS of:
  - Type of Compliance Instrument
  - Vintage of compliance instrument

California Air Resources Board 44

Proposed Process for Reporting

- Identify the type of transaction agreement for which transfer request is submitted
- Enter information specific to that type of agreement

California Air Resources Board 45

Identify Type of Transaction Agreement

- Staff will propose Regulation amendments to require reporting in CITSS of:
  - Spot Bilateral – no longer than 3 days from signing until delivery
  - Customized Bilateral – no less than 4 days from signing until delivery
  - Exchange-Traded Contracts – spot and futures

California Air Resources Board 46

Information Specific to Spot Bilateral Agreements

- Date entered into transaction agreement
- Settlement Date
  - If transfer is final term to be settled: date transfer request submitted.
  - If other terms to be settled after transfer: date other terms scheduled to be settled.
- Price

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Information Specific to Customized Bilateral Agreements

- Date entered into transaction agreement
- Date the agreement terminates
- If the contract contains provisions for further compliance instrument transfers, enter the transfer frequency (e.g. quarterly)
- If the contract is a "bundled" purchase of instruments and other products, identify products (e.g. natural gas)
- Price
  - Fixed price
  - Base plus margin

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Information Specific to Exchange-Traded Contracts

- Name of Exchange
- Exchange code for contract
- Type of contract (Spot, Future)
- Date of close of trading for the contract
- Price at close of trading

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Check Boxes for Zero Price

- The regulation will allow for entities to specify a zero price for transfers:
  - Between direct corporate associates
  - Between an entity's holding and compliance account
  - From a POU to a JPA or other POU as part of joint venture generation project
  - From a POU to a federal power authority to cover emissions from imported power
  - From a utility to generator under a tolling agreement or other contract for power not specifying instrument price
  - Under "bundled" agreement that does not specify price

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Next Steps

- Staff requests comments on today's presentation
- All written comments due by 5 PM PT, July 9, 2013
  http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm

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Additional Information

- Cap-and-Trade Program

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

- Join the cap-and-trade list serve

http://www.arb.ca.gov/listserv/listserv_ind.php?listname=capandtrade

Contacts

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Mr. Sean Donovan, Staff, Cap-and-Trade Program Monitoring
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Dr. Ray Olsson, Staff, Cap-and-Trade Program Monitoring
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Questions

California Cap-and-Trade Cost Containment Workshop

June 25, 2013

Workshop Agenda

- ARB Staff presentation
- Presentation by Jean-Yves Benoit, Government of Quebec
- Expert presentations and discussion
  - Dallas Burtraw, Resources for the Future
  - Jim Bushnell, University of California, Davis
  - Brian Murray, Duke University
- Break (approximately 3:00)
- Continued discussion and public comment
- Wrap up

Logistical Information

- Slides are posted at

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

- Questions during the workshop can be sent to

  auditorium@calepa.ca.gov

- Written comments will be accepted until July 9th at the website below

  http://www.arb.ca.gov/cc/capandtrade/comments.htm

Cap & Trade Program

- AB 32 portfolio
- Declining cap on GHG emissions: 2013-2020
- Trading of emission allowances and offset credits
- Status:
  - First auction held November 2012. Continuing quarterly
  - First allowance allocation in 2012. Continuing annually
  - Compliance obligation started January 1, 2013
  - First compliance deadline is November 2014

Cap and Trade Program Features: Cost Containment

- Allowance banking
- Multi-year compliance periods
- Broad program scope
- Emissions reduction by direct regulation
- Administrative allocation of allowances
- Emissions offsets
- Auction price floor
- Allowance Price Containment Reserve (Reserve)

The Reserve

- Pool of approximately 122 million allowances
- Available for purchase by compliance entities at three pre-established price tiers
- Four Reserve sales each year
- Reduces the likelihood that allowance prices exceed the highest price tier of the Reserve

Board Resolution 12-51

- Directs ARB to develop a proposal for incorporating additional cost containment mechanisms into the program that:
  - Ensure allowance price will not exceed the highest price tier of the Reserve
  - Maintain the environmental objective of the program
  - Are effective in a reasonable range of plausible conditions during the 2013 – 2020 period

Policy Options for Cost Containment in Response to Board Resolution 12-51

California Air Resources Board
June 25, 2013

Presentation Outline

- Circumstances that could lead to higher than expected allowance prices
- Policy approaches for:
  - Price Objective: Ensure that allowance prices will not exceed the highest price tier of the Reserve
  - Environmental Objective: Maintain the environmental objectives of the program

Circumstances Leading to Higher than Expected Allowance Prices

- Higher than expected emissions from existing sources
- Higher than expected emissions from new sources
- Regulatory program less effective than expected
- Offsets less available than expected

Policy Approaches: Price Objective

- Increase the availability of allowances at the highest price tier of the Reserve
- Allow fulfillment of compliance obligation through a fixed price-per-ton payment at the highest price tier of the Reserve
- Delay compliance obligation
- Cancel compliance obligation
- Maintain existing cost containment features

Increase the Availability of Allowances at the Highest Price Tier of the Reserve

- Put additional allowances in the highest price tier of the Reserve
- Potential options:
  - Quantity added
  - Frequency of availability
  - Eligibility to purchase
- Can achieve the Resolution price objective
- Appears feasible within the program regulatory changes planned for 2013

Allow Fulfillment of Compliance Obligation Through Fixed Price-Per-Ton Payment

- Allow compliance entities to fulfill their compliance obligation by paying a fee equal to the highest Reserve price for each metric ton of emissions
- Can achieve the Resolution price objective
- Challenges:
  - Authority
  - New administrative requirements
- May not be feasible within the program regulatory changes planned for 2013

Delay Compliance Obligation

- Delay the date of compliance for a predetermined length of time under specific conditions
- Allow the use of future vintage allowances for current (delayed) compliance
- May achieve the Resolution price objective in response to temporary increases in the demand for allowances
- Challenges:
  - May not achieve Resolution price objective in all cases
  - Requires precise definition of conditions that trigger the delay
  - May add uncertainty

Cancel Compliance Obligation

- Cancel compliance obligation for a predetermined length of time under specific conditions
- Reduce compliance obligation by the amount of emissions reported during the cancellation period
- Challenges:
  - Requires precise definition of conditions that trigger the compliance cancellation
  - The canceled compliance obligation cannot be easily adjusted to balance supply and demand
  - May add uncertainty

Maintain Existing Program Features

- Rely on existing program features, or consider additional features later in the program
- Requires no program regulatory changes
- Challenges:
  - May not achieve the Resolution price objective
  - Fails to provide certainty

Policy Approaches: Environmental Objective

- Resolution requires additional cost containment mechanisms maintain environmental objectives of program
- Policy approaches may enable additional emissions
  - Measurable
- Compensating emissions reduction

Redistribute Existing Allowances Within the 2013 – 2020 Period

- Redistributes the existing pool of allowances if needed for top tier Reserve sales
- Does not increase the cumulative supply of allowances
- Can achieve Resolution environmental objective for temporary demand imbalances early in the program
- Limited by fixed quantity of existing allowances

Commit to Additional Emission Reductions from the Post – 2020 Period

- Allow emissions to be higher than planned in the 2013–2020 period if needed to achieve Resolution price objective
- Commit to additional emissions reduction from anticipated programs designed to meet post – 2020 AB 32 goals
- Can achieve Resolution environmental objective
- Challenges:
  - Post-2020 programs not yet defined
  - Links between current and future programs may limit effectiveness

Additional Emissions Reductions Inside California Prior to 2020

- Mandate increased emissions reduction from California sources not covered by the cap-and-trade program
- Challenges:
  - Cost and availability of additional emission reductions
  - Timing to develop and achieve additional emission reductions by 2020

Additional Emissions Reductions Outside California

- Obtain emissions reduction outside of California
  - Retire international offset credits
  - Retire allowances from non-linked programs
  - Retire offsets from jurisdiction-run sector crediting programs
- Challenges:
  - Resources and authority
  - Future availability and price of instruments are uncertain

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Québec's Cap-and-Trade System
Cost Containment Mechanisms
CARB Cap-and-Trade Workshop
June 25, 2013

Jean-Yves Benoit
Director - Carbon Market Division
Climate Change Office
Government of Québec

Québec

UN QUÉBEC POUR TOUS

Status Update

- Cap & Trade Legislation (2009)
- 2020 Mitigation Goal (2009)
- Initial Cap & Trade Regulation (December 2011)
- Amendment to the C&T Regulation (December 2012)
  - Allow linking with California & other jurisdictions
  - Introduce Offset Regulation
- Québec and California linked Program : January 2014

Québec

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Flexibility and Cost Containment Mechanisms

- Multi-years compliance periods
  - First : 2013-2014
  - Second : 2015-2017
  - Third : 2018-2020
- Free allocation
  - Eligible Trade Exposed Sectors
  - Allocation = (Intensity target) x (Real Output)
- Offsets
  - Usage Limit : 8% of compliance

Québec

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Flexibility and Cost Containment Mechanisms

- Minimum Auction Price
  - CAN$10 in 2012
  - Increase annually by 5% plus inflation
- Reserve Sales (Sales by Mutual Agreement)
  - Restricted to Québec's covered entities
  - General account must not contain any compliance instruments for a current compliance period
  - Categories: A (CAN$40), B (CAN$45) and C (CAN$50) in 2013
  - Prices increase annually by 5% plus inflation
  - Bid guarantee required, lots of 1000 units

Québec

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Merci!

Québec

Joint Utilities Group Cost Containment Proposals

Air Resources Board Cost Containment Workshop
June 25

The Joint Utilities Group includes San Diego Gas and Electric, Pacific Gas and Electric, Los Angeles Department of Water and Power, Sacramento Municipal Utility District, City of Anaheim, The California Municipal Utility Association, The Northern California Power Agency, Southern California Public Power Agency, Southern California Edison, Turlock Irrigation District and PacifiCorp.

Three Key Elements of Cost Containment

- A robust cost containment approach would utilize a combination of approaches to ensure success.
  1. Measures to take effect now to reduce the likelihood of prices rising above the APCR.
  2. Measures that, when triggered, quickly alter compliance instrument market dynamics to constrain upward pressure on prices.
  3. Measures that, when triggered, would keep allowance prices at the third tier of the APCR regardless of current demand.

Measures should be implemented now to reduce the likelihood of prices rising above the APCR.

- Allow compliance entities to carry over unused portion of the 8% offset restriction.
- Exempt California offset projects from the 8% limit.
- Address constraints imposed by the holding limit.
- Redistribute allowances to allow for one additional auction per compliance period.
  - To be held between Sept. 1 and Nov. 1

Measures could be implemented to take effect when a specific trigger event occurs.

- Unused offset proposal:
  - Redistribute 8% offset use opportunity for unused share. (Coordinate with a carryover mechanism)
- Compliance account proposal:
  - Allow entities to transfer CCAs from their compliance account to holding account.
- Limited borrowing proposal:
  - Allow retirement of CCAs with vintage from the current year and following year. (Not applicable post 2020)
- Offset geography and start date proposal:
  - Approve compliance grade offsets throughout North America.
  - Change the offset project commencement date to an earlier date.

Mechanisms must be developed to ensure that regulated parties have access to CCAs at the APCR price.

- Upon depletion of the APCR, the Executive Officer will make additional allowances available through the APCR.
- Funds from this sale would be used to reduce emissions via mechanisms such as:
  - Retirement of high quality offsets not otherwise available to California C&T regulated entities.
  - Retirement of allowances from emission trading programs outside of WCI linked jurisdictions.
  - Invest in emission reductions in sectors not covered by the California C&T.

Nicholas Institute for Environmental Policy Solutions
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Comments on Modified Price Containment Options for California

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California Air Resources Board
June 25, 2013

Nicholas Institute for Environmental Policy Solutions
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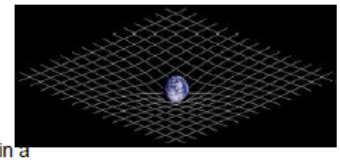
Board Resolution 12-51: Price containment and "environmental integrity"

- Board Resolution 12-51 directs Staff to recommend action to
  - Ensure the price will not exceed the upper tier containment preserve price
  - Maintain the environmental objectives of program
- Environmental objectives = balanced emissions budget.
  - Total emissions budget
  - Time = when they occur
    - 2013-2020
    - Beyond
  - Space = where emissions occur
    - Inside California
    - Outside
- From *GHG* perspective
  - Time matters, but not that much within a decade, e.g.,
  - Space doesn't matter



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Current program allows flexibility in time and space

- Time
  - Multi-year compliance periods
    - Borrowing and banking within compliance periods
  - Banking across compliance periods
  - APCR is stripped from 2013-2020 budgets
- Space
  - Trading among sources
    - Within CA
    - Quebec
  - Offsets

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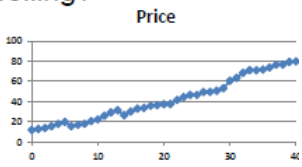
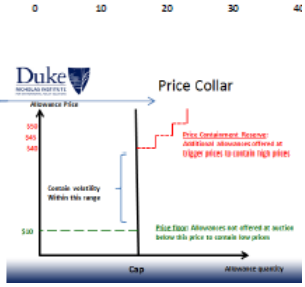
Duke University

Issue: What if current flexibility is not enough to guarantee a price ceiling?

- Concede?
  - Price will exceed target
  - Emissions will exceed target
  - *Runs counter to Resolution 12-51*
- Try more flexibility
  - Increase APCR
    - From current 2013-20 allowance budget
    - From future budget
    - From new sources of reserve allowances





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ARB four basic options: Comments on environmental objectives

Option	Implications for Environmental Objectives
1. Increase availability of allowances at highest reserve price	Satisfies objectives if countered by real reductions either now or in future.
2. Allow compliance obligations to be met by per ton fee = highest tier price	Depends on whether the fee is used to procure additional reductions
3. Delay compliance obligations	Consistent with time flexibility of program – a form of borrowing between periods. Satisfies obj's so long as emissions balance is resolved over time
4. Cancel compliance obligations	Not consistent with environmental objectives

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Duke University

Comments on Potential Sources of Compensating Emissions Reduction

ARB options/Potential sources	Comments
Redistribute allowances within 2013-2020	May be too little room or power unless allowances go unsold at the price floor
Commit to additional emission reductions from post-2020	Works if credible, this will push up prices in pre-2020 period as well, if allowances are bankable between periods.
Mandate additional reductions from CA sources	Raises efficiency questions (induce more expensive reductions). Uncertain outcome and timing.
Obtain additional reductions outside CA	Fairly efficient if reductions are credibly certified and available at a price at or below price ceiling. E.g., CDM, World Bank carbon fund, ... Could impose a trading ratio of more than 1 ton of credit needed to create an allowance Issues on who gets rents from any price differences, and whether other programs will cooperate

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Other Thoughts

- Price ceiling breach not likely a near term (2013-14) issue
  - Market and ARB have time to adjust
  - Post 2020 plans will start to weigh more heavily as the time approaches
    - Market price incorporates future stringency and price expectations
    - Key is whether/how pre-2020 and post-2020 market will be linked
- The allowance reserve approach is intended to fix short to intermediate run problems and should be populated to do so.
  - It cannot, by itself, fix a long-run imbalance between supply and demand
    - If this occurs, need to reexamine price and emissions goals as reserve will ultimately run out

Cost Containment Workshop
California Air Resources Board

Presentation of Dallas Burtraw
Darius Gaskins Senior Fellow
Resources for the Future
June 25, 2013

Cost Containment Workshop
California Air Resources Board
June 25, 2013

Existing Regulatory Framework

- Purpose of cost management
  - Symmetric design for a two edged problem
  - Short run usefulness
  - Long run usefulness
- Several features in place
  - Price floor in auction
  - Trading, banking, offsets, the compliance reserve and others

Cost Containment Workshop
California Air Resources Board
June 25, 2013

Focus today on the possibility that prices may rise to exceed the top tier in the compliance reserve

- Safety valve remedy
  - 2007 MAC recommended against an unlimited supply
- Limited compliance reserve
  - Can capture most of the expected cost savings without the prospect of great increases in emissions
- Program review would be triggered in either case

Bailey et al. solve dynamic stochastic model

- Steep supply curve for additional emissions reductions
- Small but positive probability of price rising above the top tier in the compliance reserve
- In an economic model the solution is achieved instantly and inter-annual behavior is captured in a single outcome… as though investors would purchase the entire reserve in anticipatory behavior
  - May violate holding limits
  - Does not anticipate possible regulatory response, chance of federal action, etc.
  - Puts significant capital at risk

Key feature: the drawdown of the reserve would not be instantaneous

- If reserve was ultimately exhausted, regulators would see signals of the possibility years in advance
- ARB Resolution 12-51 asks us to consider policy responses
- I suggest four courses of action…

1. Planning: Guidelines for Governor's Discretion

- Part 7 of AB 32 provides discretion to adjust applicable deadlines for individual regulations in extraordinary circumstances
- Without usurping discretion, ARB could develop plan of decision criteria
- ARB could develop a blueprint for how measures might be implemented at that time (for example, executing measures identified in the staff document)

2. Remedial action: Expand the compliance reserve drawing on allowances from other programs

- There are strong reasons to prefer emissions reductions from inside the state…
- However, if price reaches ceiling, balancing considerations would be different
- Varying stringency of programs provides an opportunity to enhance emissions outcome by aggregating other allowances
- Implementation might involve an independent institution, as might be supported by the World Bank

3. Possible Design: Overlapping Compliance Periods

- Would be especially useful if a confluence of events led to market disruption at end of compliance period
- Staggering the settlement dates would provide additional buoyancy in the short run
- Enables limited borrowing
- To implement, entities could be given voluntary option to settle account early and restart their three-year compliance clock
- May assist in transitioning beyond 2020

4. Policy: Planning for Beyond 2020

- The determination of plans beyond 2020 provides a signal to regulated entities about future obligations
- Increasing stringency could encourage more banking, which might drive up short-term prices
- More likely, in my view, signals about 2020 encourage innovators and investment that should moderate long-term price path

Defending the Price Containment Reserve: Benefits and Options

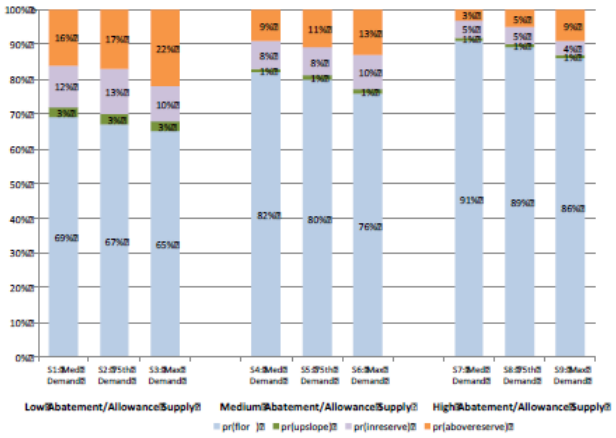
James Bushnell
Emissions Market Assessment Committee
(Severin Borenstein, James Bushnell,
And Frank Wolak)

Benefits of Defending Containment Reserve

- Limits the possible price and economic impacts from volatility in supply or demand
  - Especially if abatement supply is very inelastic
- Avoids possible market disruption if shortage occurs near end of market period (2020)
- Eliminates price increase that incorporates low probability of skyrocketing price
- Eliminates incentive to push price above current reserve levels through market manipulation

2

Allowance Price Probabilities by Scenario



Cost Containment and Allocation

- Allocations through output-based updating dilute the impacts of allowance prices
  - Reduce the responsiveness to allowance prices.
  - Can be acceptable side-effect for trade-exposed industries with options for reducing CO2 intensity.
  - Makes no sense for emissions related to end-use fuel consumption (e.g. gas).
- Diluting incentives provided by allowance prices is not true cost-containment.
  - Can be counter-productive by making high allowance prices more likely and raising the economic costs of abatement.

Principles for Price-Containment

- Should be ex-ante transparent
  - A deterrent only works if market knows it exists
- Should be credible
  - A hard quantity cap is not credible if the prices that result are unsustainable
- Should be timely
  - Measures need to kick in immediately to avert disruption
- Should consider broad environmental benefits instead of narrow ones
  - Environmental integrity of global pollutant involves more than just capped CA (or WCI) emissions

ARB Options

- We believe there is a non-trivial possibility current reserve could be exhausted
  - Would not support the do nothing option
- Delay or cancellation of compliance obligations would be disruptive and harmful to the program
  - Significant equity impacts on differing participants.
- EMAC strongly prefers an option that substantially increases availability of allowances – sufficient to credible contain the maximum price (or allows a fixed payment in lieu of permits).
  - Could borrow from post 2020 period.
  - Proceeds could be applied to offsets, or other sources of GHG emissions.
  - Can provide a greater overall GHG reduction under those circumstances.

Thank you

JUNE 3, 2013 –NATURAL GAS SUPPLIER WORKSHOP

Suppliers of Natural Gas: Background and Options

Stakeholder Workshop
June 3, 2013

California Air Resources Board

Logistical Information

- Slides posted at
  http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm
- Email questions to:
  auditorium@calepa.ca.gov
- Comments will be accepted at the above website until June 17th

2

Outline

- Cap and Trade Update and Program Design
- Background and Process
- Scope and Policy Implications
- Utility Proposal Presentation (by utilities)

3

Cap and Trade Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance began January 1, 2013
- Linkage Amendments approved April 19, 2013
- Investment Plan released May 14, 2013
- Additional Amendments and Offset Protocols
  - Anticipated Board consideration Fall 2013

4

Cap & Trade Program Design

- Flexibility to achieve cost-effective GHG emissions reductions
- Puts a price on GHG emissions to provide incentive for efficiency and technological innovation
- Mix of free allocation and auction to lower compliance costs and prevent leakage
- Wholesale and retail prices of energy should reflect GHG costs
- Mix of direct and indirect compliance for energy use

5

Inclusion of Natural Gas Suppliers: Second Compliance Period

Natural Gas Emissions Responsibility		
Compliance Period	*Facility Operators and Electricity Providers with >25KCO2e*	*Suppliers of Natural Gas*
1st Period (2013-2014)	**Responsible for gas used**	No compliance responsibility
2nd Period (2015-2017) and 3rd Period (2018-2020)	**Responsible for gas used**	**Responsible for gas delivered to in-state end users other than covered entities (i.e. facility operators and electricity providers with > 25KCO$_2$e)**

6

Who Has the Compliance Obligation?

- GHG compliance obligation will go to the final deliverer of natural gas, i.e. the "natural gas supplier"
- Investor-owned utilities in most cases:
  - Pacific Gas and Electric
  - San Diego Gas and Electric
  - Southern California Gas Company
- Other pipeline owners including publicly-owned gas utilities and intrastate pipelines

7

What Does the Compliance Obligation Include?

- The compliance obligation is for every metric ton of CO_2e that would result from full combustion or oxidation of all natural gas delivered to end users MINUS:
  - Natural gas delivered to covered entities (i.e. facility operators and electricity providers with >25KCO2e)
- Thus no gas will be counted twice
- Only gas delivered in California will be included

8

Compliance Obligation Calculation Procedures

- Compliance obligation calculation performed by ARB
- Verified data will be used for final compliance obligation determination for each NG supplier
- For each NG supplier, ARB staff will determine a comprehensive list of *covered* facilities receiving gas from the supplier, and determine the aggregate sum of gas delivered to all covered facilities using both supplier and facility reported data
  - GHG emissions from the gas delivered to covered facilities will be subtracted from the NG supplier's total reported GHG emissions

9

Proposed MRR Revisions for NG Suppliers

- Revisions to facilitate calculation of compliance obligation:
  - Require all Local Distribution Companies (LDCs) to report volume and customer data for all 'redeliveries' to other LDC's and pipelines
  - **Lower threshold for reporting end-user volume and customer data**
    - **from ~ 25k CO2e (460k Mscf) to ~ 10k CO2e (183k Mscf)**
    - Require that ARB ID of end-user facility be reported if available
- Clarify requirements for intrastate pipeline operators
  - Intrastate pipelines only have to report if there are deliveries directly to end-users

10

Treatment of NG Suppliers in Current Regulation

- No allowance allocation to NG suppliers
- NG suppliers will need to acquire allowances along with other covered entities

11

Considerations for Treatment of NG

- Encouraging greenhouse gas **emission reductions**
- **Equity** among participants in the cap and trade system
- **Consistency** with the rest of the cap and trade system
- Consistency with **long-term policy goals** not specific to the cap and trade system
  - Encouraging innovation
  - CHP goals
  - Electric vehicles

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Newly Covered Natural Gas Emissions

Newly Covered Natural Gas (2015 Values)			
Percent of Allowance Cap	GHG Emissions	Natural Gas Supplied	Allowance Value at $15/allowance
13%	53 million MT CO2e	9.8 billion therms	$800 million

Estimates based on allowance cap and ARB emissions forecast

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Newly Covered Natural Gas Emissions

Newly Covered Natural Gas (2015 Values)			
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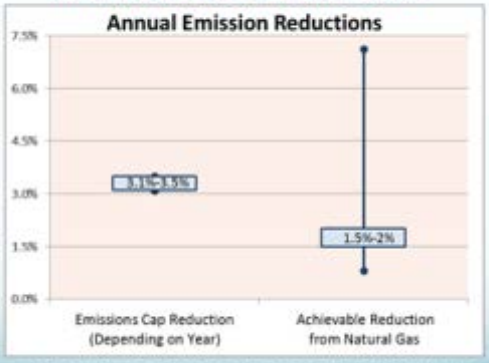
13%	53 million MT CO2e	9.8 billion therms	$800 million

Estimates based on allowance cap and ARB emissions forecast

14

Potential Reductions in NG Usage in Response to Cap and Trade



Based on emissions caps, IEPR, and studies by the American Gas Association and others

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Discussion Questions

- Should ARB retain current approach or provide some allocation to suppliers of NG? If allocate:
  - Should suppliers be required to consign?
  - How should value be returned to rate payers?
- Potential recipients of allowance allocation and revenue:
  - Households?
  - Low-income households?
  - NG-intensive small businesses?
- The CPUC has an open rulemaking, R. 11-03-012, relating to utility revenues resulting from allowance allocation
  - Stakeholders may consider providing feedback to ARB *and* the CPUC

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Next Steps

- Comments due by June 17th at: http://www.arb.ca.gov/cc/capandtrade/comments.htm
- Cap and Trade Amendments Workshop on July 18th
- Board Hearing October 24-25th

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Contacts

- Cap and Trade Regulation – NG Suppliers

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  Elizabeth Scheehle, manager
  escheehl@arb.ca.gov (916) 322-7630

- Mandatory Reporting Regulation – NG Suppliers

  Syd Partridge, lead staff
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  Dave Edwards, manager
  dedwards@arb.ca.gov (916) 323-4887

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Citations

Cap and Trade Regulation, http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm

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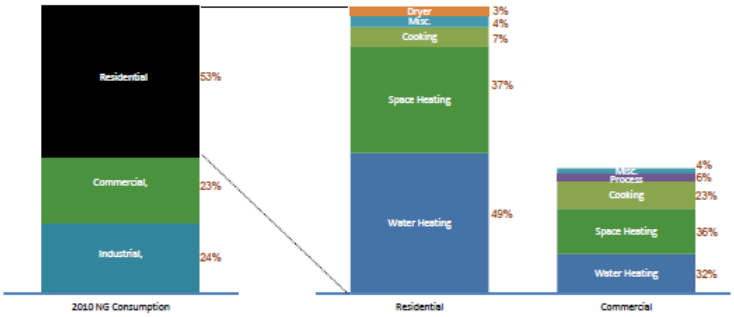
Gas Utility Presentation

ARB Workshop on Gas Allowances Allocation

June 3, 2013

Natural Gas Consumption in IOU Service Territories

- For Residential and Commercial customers, consumption is concentrated in water heating, space heating, and cooking; uses that meet basic needs.



Source: CEC data, 2010 California Residential Appliance Saturation Survey, and 2006 California Commercial End-Use Survey.

- Miscellaneous includes pools, spas, cooling, and other small uses.
- Industrial includes usage for entities for which the IOUs are the point of regulation.

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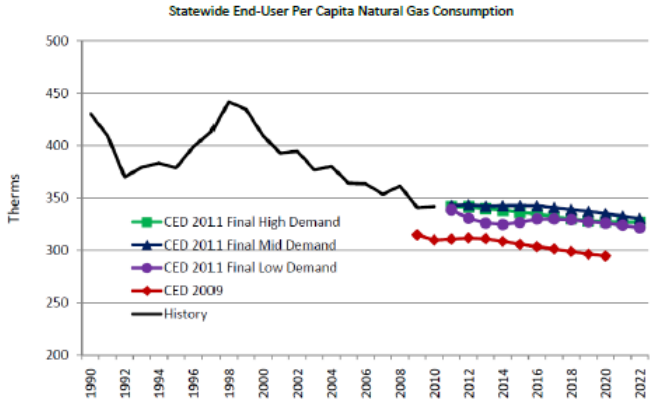
The IOUs have achieved significant natural gas savings

- Cumulative savings and spending from 1990 - 2011

Source: IOU and low income reported annual savings and spending.

3

California per capital NG consumption has been falling



Source: "California Energy Demand 2012-2022 Final Forecast," California Energy Commission, Demand Analysis Office, 2012.

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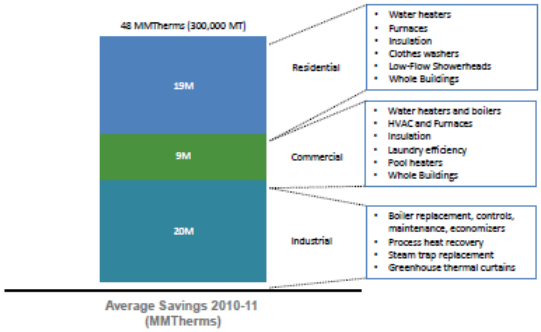
Natural Gas EE Savings (example year)

- NG EE savings of ~48 Million Therms per year, projections show a total of ~450 MMTherms or 2.3 MMTCO2e of savings from 2013 - 2020.



Source: IOU EE savings results for entities for which the IOUs are the point of regulation

5

Joint Utility Approach

- Full Administrative allocation in 2015 at 2011 historical baseline
- Annual reduction in allocation as cap declines
- Gas utilities equitably pass through cost of purchasing allowance shortfall to customers.
- Allows for timely and simple implementation.

Questions

- Mark Krausse
  PG&E

Tanya Peacock
SDG&E/SCG

MAY 1, 2012 – PUBLIC MEETING TO DISCUSS UNIVERSITIES, LEGACY CONTRACTS, AND 'BUT FOR' CHP UNDER THE CAP-AND-TRADE PROGRAM

Agenda

- Cap and Trade Status Update
- Program Design
- Universities
- 'But-for' CHP facilities
- Legacy contracts

Cap and Trade Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance began January 1, 2013
- Linkage Amendments approved April 19, 2013
- Investment plan for auction proceeds heard April 25, 2013
- Additional Amendments and Offset Protocols
  - Anticipated Board consideration Fall 2013

Cap & Trade Program Design

- Flexibility to achieve cost-effective GHG emissions reductions
- Puts a price on GHG emissions to provide incentive for efficiency and technological innovation
- Wholesale and retail prices of energy should reflect GHG costs
- Mix of free allocation and auction for lower cost emission reductions
- Most allowances allocated freely at outset of program

Allowance Allocation

- Allowance allocations
  - To the electric sector for ratepayer benefit
  - To industrial sector for transition assistance and to prevent leakage
- Industrial allocations based on product benchmarks (preferred) or on energy benchmarks when product benchmarks not feasible
- Initial allocations of 2013 vintage allowances to electricity and industrial sectors in late 2012

Universities, 'but for' combined heat and power, and legacy contracts

- Resolution 12-33 directed staff to adjust treatment of universities, 'but for' combined heat and power (CHP) facilities, and legacy contracts
- Transition Assistance to Universities, Legacy Contracts, and Exemption for "But For" CHP will be consistent with other allocations and with Cap-and-Trade program design

Assistance to Universities

- Universities have taken early actions and provided leadership to reduce GHG emissions:
  - Investments in efficiency and renewable energy
  - Research and technology development

Allocation to Universities

- Board directed staff to develop a methodology to provide transition assistance to Universities
- Staff's current thinking is consistent with ARB's allocation approach for industrial sectors
- Universities that receive allowances encouraged to further reduce emissions

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Considerations for Allocation to Universities

- Staff's current thinking is to allocate using a 'grandfathering' approach similar to the energy based allocation methodology
- Allocation declines in proportion to the cap
- Potential issue of expansion, or additional university covered entities
- First allocations would be 2015 vintage allowances

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Modified Energy-Based Allocation Approach

- Energy-based methodology uses an efficient boiler benchmark for steam and fuel benchmark for CHP
- Because University approaches to efficient energy use vary, boiler efficiency benchmarking is infeasible
- Staff's thinking is to use the fuel benchmark for University allocation
- Use average three year historical fuel use baseline to determine annual allocations going forward

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Proposed University Allocation Equation

$A_t = (F_{consumed} * B_{fuel} - e_{sold} * B_{electricity}) * c_t$

Where:

A_t is the quantity of allowances allocated for year t

$F_{consumed}$ is the historical baseline amount of fuel consumed

B_{fuel} is the efficiency benchmark per unit of energy from fuel combustion, 0.05307 Allowances per MMBtu

e_{sold} is the historical average electricity sold

$B_{electricity}$ is the emissions benchmark per unit of electricity sold, 0.431 Allowances/MWh

c_t is the cap decline adjustment factor for year t

University Allocations: Questions and Comments

"But For" Combined Heat and Power (CHP)

- A subset of CHP facilities would not be covered entities in Cap-and-Trade Program "but for" their investment in CHP
- During the first compliance period, they would face higher GHG costs than facilities without CHP
- Board Resolution 12-33 directed staff to develop a methodology to exempt steam emissions for "but for" CHP facilities during first compliance period

Facilities With and Without CHP: 1st Compliance Period

- "But For" CHP facility
  - Self-generation of steam and electricity
  - Excess electricity may be sold to grid
  - Covered entity with direct GHG costs
- If same facility had no CHP
  - Steam provided by boilers
  - Electricity purchased from the grid
  - On-site emissions < 25,000
  - No direct GHG costs

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Facilities With and Without CHP: 2nd Compliance Period

- Natural gas distributors pass through carbon cost in natural gas prices
- "But For CHP" facilities face greenhouse gas costs as a direct compliance obligation
- Facilities below threshold face indirect greenhouse gas cost in natural gas, as well as electricity from grid
- Facilities above and below threshold face similar costs
- Cap-and-Trade improves incentive for efficient CHP
  - Reduced fuel costs and reduced GHG costs

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How are "But For" CHP Facilities Defined?

- Current staff thinking is that "But for" facilities must meet two criteria:
  - Steam emissions alone do not exceed the threshold
  - Electricity emissions alone do not exceed the threshold

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Proposed Treatment of "But For" CHP

- Exempt steam emissions for "but for" CHP facilities during first compliance period ONLY
  - With exemption of steam emissions, "but for" facilities fall below the threshold and are not covered entities
- ARB retires equivalent allowances
- Adjustment would be made if facility was previously awarded an industrial allowance allocation and now seeks "but for" status

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Proposed Methodology for "But For" CHP Exemption

- Current staff thinking is that a facility would need to apply to ARB to be classified as a "But For" facility
  - Provide data on fuel usage, useful thermal output, and electricity production to support application
- Steam emissions = 0.06244 * MMBtu steam output
- Electricity emissions = Total emissions – Steam emissions
- If each result < 25,000, facility would qualify for "But For" exemption

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"But For" CHP Exemption: Questions and Comments

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Legacy Contracts

- A contract entered into before AB 32
- Does not allow the pass through of the cost of GHG compliance down to the purchaser(s), due to provisions in the contract.
- The Initial Statement of Reasons (ISOR) acknowledged staff's intent for parties to renegotiate, and ARB's continuing evaluation of the issue.
- September Board Resolution, 12-33

Background

- ARB staff worked with industry to determine potential legacy contracts
- Some contracts have an Investor Owned Utility (IOU) as the counterparty and were referred to the CPUC process
- Staff has been meeting and discussing this issue with all parties to the contracts to encourage renegotiation
- ARB preferred renegotiation

Staff Proposal

- Continue renegotiation discussions
- For those unable to renegotiate, ARB proposes to allocate allowances ONLY for the portion of emissions where GHG costs cannot reasonably be passed through to the purchaser
  - Vintage year 2015 allowances for 2013 and 2014 legacy contract emissions
- If selling to multiple entities, ARB will only consider the portion of electricity and steam emissions attributable to the legacy contract

Other Considerations

- Cap-and-Trade Program designed to encourage emissions reductions
- Could emissions be captured at the natural gas supplier in the second and third compliance periods?
- Can generators recover costs based on increases in natural gas prices?

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Proposed Eligibility Criteria

- Contract entered into before AB 32
- Contract remains in place and has not been renegotiated
- Eligibility ceases when contract expires, is renegotiated, or the ownership of the facility is transferred or sold
- Submit annual attestation attesting GHG costs under legacy contract not able to be passed down.

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Basic Formula

$A = MTCO_2e_{Elec,legacy} + MTCO_2e_{Steam,legacy}$

Where:

A = Allowances allocated

$MTCO_2e_{Elec,legacy}$ = emissions associated with electricity sold without cost pass through

$MTCO_2e_{Steam,legacy}$ = emissions associated with steam sold without cost pass through

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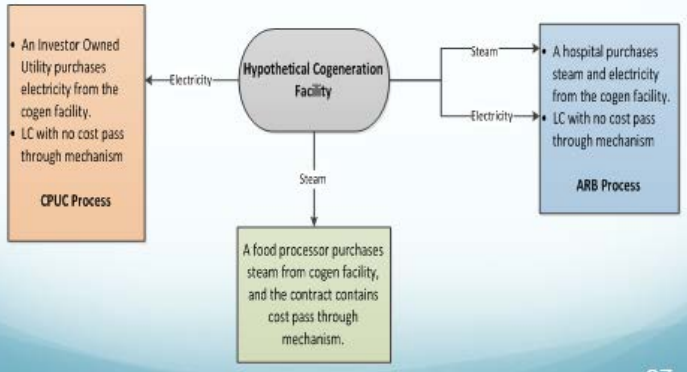
Example



Option One

- Option one thinking is to allocate allowances using steam and electricity efficiency benchmarks applied to the legacy contract related emissions
- Potential issue: Efficiency benchmark factor could result in an over-allocation to the most efficient generators
  - Staff thinking is to limit allocation amount to legacy contract portion of emissions obligation

Proposed Option One Calculation

$$A_t = (O_{\text{steam,legacy}} * B_s + O_{\text{elec,legacy}} * B_e) * c_t$$

"A_t" is the number of allowances allocated to the legacy contract generator from budget year "t"

"$O_{\text{steam, legacy}}$" is the steam output in MMBtu, sold in a legacy contract without the ability to pass through costs

"$O_{\text{elec, legacy}}$" is the electricity output in MWh, sold in a legacy contract without the ability to pass through costs

"c_t" is the cap adjustment factor for budget year "t"

Option One: Factors and Considerations

- Allowances would decline by the cap decline factor (c_t)
- Staff recommend to use current efficiency benchmarks already in regulation:
  - B_s = Steam efficiency benchmark 0.06244 $MTC0_2e$/MMBtu
  - B_e = Electricity efficiency benchmark 0.431 $MTC0_2e$/MWh
- Staff thinking is to limit allocation amount to actual emissions attributable to the legacy contract

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Option Two

- Staff thinking for option two is to allocate allowances using historical baselines for fuel used, and electricity and steam produced
- This method will reward plants that have historically produced more electricity/steam
  - Could have an effect on amount of steam/electricity produced
- Staff thinking is to limit allocation amount to actual emissions attributable to the legacy contract

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Option Two Calculation

$$A_t = ((F_{Consumed} * B_{Fuel}) - (e_{Sold,c} * B_{Elec}) - (S_{Sold,c} * B_{Steam})) * c_t$$

"A_t" is the number of allowances directly allocated from budget year "t."

"$F_{Consumed}$" is the historical baseline energy produced due to fuel combustion at a given facility, measured in MMBtu.

"B_{Fuel}" is the emissions conversion per unit of energy from fuel combustion,

"$e_{Sold,c}$" is the historical baseline of electricity sold or provided for off-site use that includes a carbon cost (is covered/reimbursed)

"$s_{Sold,c}$" is the historical baseline of steam sold or provided for off-site use that includes a carbon cost (is covered/reimbursed)

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Option Two: Factors and Considerations

- Allowances would decline by the cap decline factor (c_t)
- Staff propose to use current efficiency benchmarks already in regulation:
  - B_{fuel} = 0.05307 $MTCO_2e$/MMBtu
  - B_s = Steam efficiency benchmark 0.06244 $MTCO_2e$/MMBtu
  - B_e = Electricity efficiency benchmark 0.431 $MTCO_2e$/MWh
- Current staff thinking is to limit allocation amount to actual emissions attributable to the legacy contract

Option Three: Proportional Attribution of Emissions

- Staff thinking for option three is to allocate steam and electricity emissions in proportion to MWh of electricity or MMBtus of steam
- Example:
  - Facility emits 150,000 $MTCO_2e$
  - 50,000 $MTCO_2e$ from steam calculated using benchmark
  - Remaining emissions due to electricity production
  - 200 MWh of electricity generated: 150 MWh to PG&E, and 50 MWh to food processor under a legacy contract
  - Allowances to be allocated is equal to 25% of the electricity emissions.

Comparison of Allocation Options

- Option One
  - May over allocate to efficient plants,
    - Would be limited if the allowance allocation limited to the portion of emissions attributable to the legacy contract(s)
  - Allows true-up to actual production
- Option Two:
  - Based on actual historical emissions
  - May under-allocate to plants that improve efficiency
  - Could impact future steam/electricity production
  - No true-up

Comparison of Allocation Options (cont.)

- Option Three
  - Simple calculation
  - May not incentivize plant efficiency
  - Closer to facility specific electricity emission factor

Additional Considerations

- Current staff thinking is that entities must apply and submit contracts for ARB to determine if eligible
- If customer of non-reimbursed steam or electricity is receiving an industrial allocation, an adjustment would be made to the customer's allocation during the true-up

Questions

- Are there other considerations (pros/cons) to the options?
- Any comments of preference for the staff proposal or alternate options?
- Are the proposed benchmarks appropriate?
- Should peaker plants be addressed with a different methodology?
- Are there other eligibility criteria that should be considered?
- Should staff consider the allocation of allowances to legacy contracts other than electricity and steam generation (assuming same criteria/provisions)?

Contact Information

- Universities and "But for" CHP

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- Legacy Contracts

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  (916) 322-7492

MARCH 28, 2013 – PUBLIC WORKSHOP ON ADDITION OF NEW OFFSET PROTOCOLS TO THEH CALIFORNIA GREENHOUSE GAS CAP-AND-TRADE PROGRAM

Agenda

- Cap-and-Trade Status Update
- Offset Program Status Update
- Verifiers and Verification Bodies
- New Protocol Development
  - Criteria
  - Timeline
  - Early Action
- Rice Cultivation Protocol
- Coal Mine Methane Protocol

Cap-and-Trade Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance began January 1, 2013
- Proposed Amendments for Linkage
  - Board hearing scheduled for April 19, 2013
- Investment plan for auction proceeds
  - Board meeting scheduled for April 25, 2013
- Additional Amendments and Offset Protocols
  - Anticipated Board consideration Fall 2013

Offset Program Status Update

- Compliance Offset Projects Listed
  - 3 by American Carbon Registry
  - 1 by Climate Action Reserve
  - Verifications are currently underway
  - First ARB offset credits from compliance offset projects likely issued as early as Summer
- Early Action Offset Projects Listed
  - 25 by ARB
  - Listings updated at noon the first Wednesday of each month
  - First regulatory verification received
  - First ARB offset credits from early action projects likely issued this Spring

Verifiers and Verification Training

- Four training sessions were in summer 2012 with attendance of:
  - 78 verifiers
  - 19 Offset Project Registry staffers
  - 6 Offset project operators/consultants
- Scheduled upcoming training:
  - April 22-26, 2013 in Sacramento
  - For more information, see:

http://www.arb.ca.gov/cc/capandtrade/offsets/verification/verification.htm

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Verifiers and Verification Bodies

- 14 Verification Bodies accredited
- 68 Offset Verifiers accredited
  - 59 Lead verifiers
  - 29 Livestock project specialists
  - 26 U.S. Forest project specialists
  - 25 ODS destruction project specialists
  - 19 Urban Forest project specialists
- For more information, see:

http://www.arb.ca.gov/cc/capandtrade/offsets/verification/verification.htm

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New Protocol Development

- New potential protocols
  - Rice Cultivation
  - Coal Mine Methane
- Both potential protocols primarily target methane emission reductions
- Methane (CH_4) facts:
  - 100-year GWP is 21 (AR2)
  - Short-lived gas with a lifetime of 12 years
  - Is the primary component of natural gas

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Offset Criteria

- Real, additional, quantifiable, permanent, verifiable, and enforceable
- Board-adopted Compliance Offset Protocols
- Cannot credit emission reduction activities already covered under the cap
  - No offset credits for fossil fuel or electricity displacement
- Must meet the same accuracy requirements as all other reported GHG emissions
- Although participation in the offset program is voluntary, all participants are subject to regulatory requirements, including oversight and enforcement.

Leakage

- Offset quantification methodologies must account for leakage
- What is leakage?
  - Increased GHG emissions that result from the displacement of activities from inside to outside the project's boundary
  - Directly resulting from offset project activity
  - Indirectly due to the effects of a project on an established market
- Leakage is accounted for in two primary ways
  - Direct measurement of project-specific leakage with appropriate deduction from credits issued
  - Application of a standard deduction based on leakage potential

Early Action for New Protocols

- Occurred between January 1, 2005 and December 31, 2014
  - Registered with ARB prior to January 1, 2014
- Results from the use of an approved quantification methodology
  - Voluntary protocols that are substantially similar to the adopted Compliance Offset Protocol will be considered for early action quantification methodologies
- Is verified pursuant to section 95990(f)

New Compliance Offset Protocol Crediting

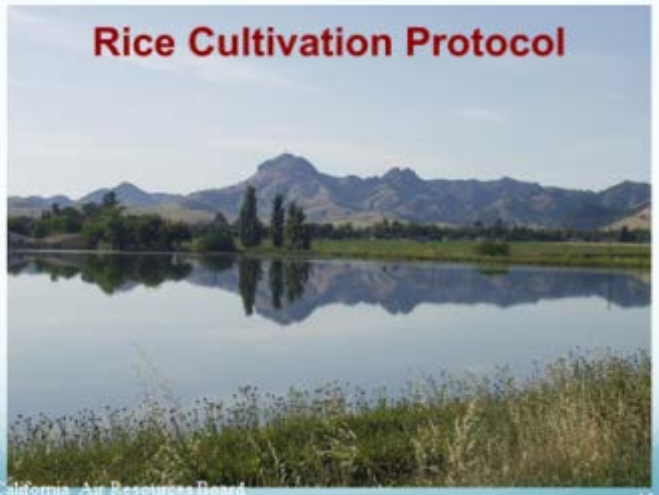
- Project commencement date must be after December 31, 2006
- Project can only be credited for GHG emission reduction up to 28 months prior to listing
  - For example, if a project is listed on June 1, 2014 and the Offset Project Data Report is submitted simultaneously, crediting can begin February 1, 2012

Timeline for New Protocol Development

- Technical working groups: Spring 2013
- Draft protocols for public comment: Summer 2013
- Board consideration: Fall 2013
- Protocol effective date: Spring 2014

Questions?

Rice Cultivation Protocol



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Overview of U.S. Rice Farming Industry

- Rice has been commercially cultivated for over 300 years in the US
- More than 90% of rice consumed in US is grown by US rice farmers
- 6 major rice–producing states: AR, CA, LA, MS, MO, and TX
- Total planting area: 2.6 - 3.5 M acres
- Rice cultivations provides significant economic and ecological value

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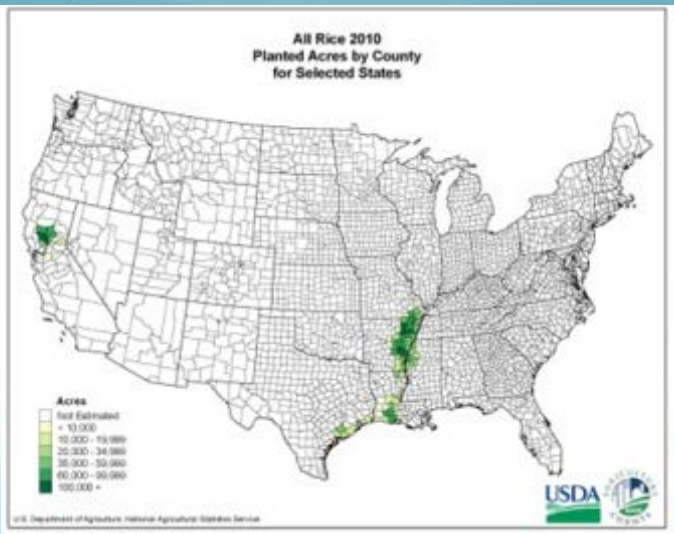
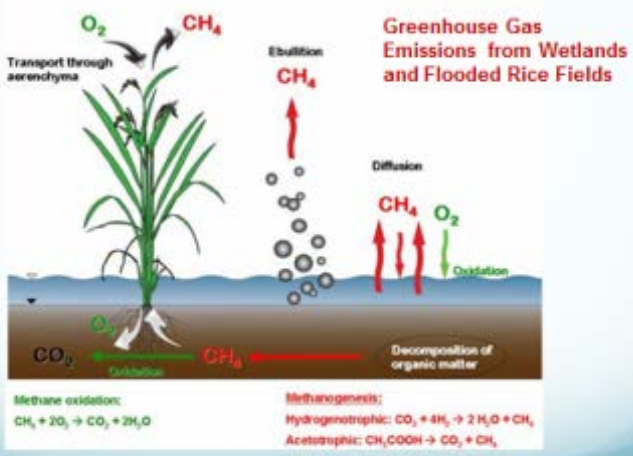


Rice Cultivation Projects Protocol

- First crop-based offset protocol considered by ARB
- Flooded rice paddies serve ecological functions as man-made wetlands; but also a source of GHG emissions
- Protocol quantifies greenhouse gas emissions reductions from rice cultivation practices
- Maintains yield and preserves current associated ecological benefits
- Potential reductions of 0.5 – 3 MMTCO2e thru 2020



Source: http://www.ibp.ethz.ch/research/environmentalmicrobiology/research/Wetlands

Current Rice Cultivation Protocols in Voluntary Market

- ACR: Voluntary Emission Reductions in Rice Management Systems (May 2011)
  - California regional quantification methodology
  - Adding Mid-South Module to quantification methodology
- CAR: Rice Cultivation Project Protocol Version 1.0 (Dec 2011)
  - California region quantification methodology

Project Definition

- The implementation of approved practices that reduce methane emissions from rice cultivation
  - California
    - Straw removal after harvest
    - Switch from wet seeding to dry seeding
    - Early drainage at the end of growing season
  - Mid-South States
    - Straw removal after harvest
    - Early drainage at the end of growing season
    - Intermittent flooding (alternate wet and dry)
    - Staggered winter flooding

Eligibility Criteria

- Project geographic location
  - California
  - Mid-South
- Project commencement
  - First day of cultivation cycle during which a project activity is implemented
- Project reporting period
  - Cultivation cycle – approximately one year
- Crediting period
  - 7 years

Project Boundary of GHG Sources, Sinks, and Reservoirs

- Soil systems – biochemical reactions affecting GHG emissions
- Increased fossil fuel emissions (outside CA only)
  - CA Fossil fuels will be capped in 2015
  - Field preparation
  - Fertilizer/pesticide/herbicide application
  - Straw handling
- Straw residue usage
- Leakage

Emissions Quantification Methodology

- Soil systems emissions quantified using DeNitrification DeComposition (DNDC) model
  - http://www.dndc.sr.unh.edu/
- A computer model that can be used for predicting emissions of GHGs based on field-specific parameters Calibrated with:
  - Crop-type specific data
  - Region specific data
  - Activity specific data
  - Quantify both baseline and project emissions

Emissions Quantification Methodology (cont)

- Fuel usage emissions quantified using default fuel specific emissions factors and fuel volumes
- Straw residue usage emissions quantified using emissions factors specific to end-usage and mass of straw
  - Includes emissions from bailing
- Leakage emissions quantified using normalized annual average yields within the same geographic region and baseline emissions

Baseline Determination

- None of these GHG mitigation practices are widely adopted so none would be considered business as usual
- ARB has not identified any federal, state, or local regulations mandating adoption of any of the identified GHG mitigation practices

Seeking Comments

- Accuracy of DNDC model
- Simplification of DNDC model
  - Use and verification
- Rice specific verification techniques
  - E.g. how to ensure a practice was done
- Project aggregation
  - Methods
  - Risks
- Potential for leakage

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Questions?

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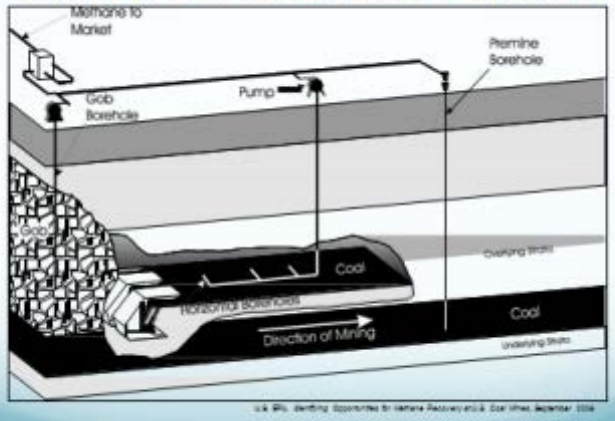
Coal Mine Methane Protocol



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Overview of U.S. Coal Mining Industry

- Commercial coal mining began in Virginia in 1748
- Annual coal production roughly 1.1 billion short tons from both surface and underground mines
- About 1/3 of mines are on federally owned land
  - Mainly in the western U.S.

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U.S Coal Mining Regions

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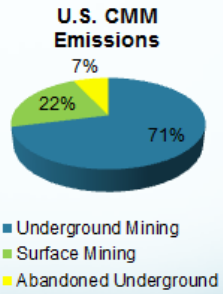
Coal Mine Methane Projects Protocol

- Methane is released before, during and after mining activities
- 11.6% of all U.S. anthropogenic methane emissions result from coal mining
- Three project types
  - Active underground mines
  - Abandoned underground mines
  - Active surface mines



Adapted from data presented in U.S. EPA, *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2011*

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Potential Reduction Estimates

Potential Total Methane Emission Reductions from U.S. Coal Mining through 2020

50-100 MMTCO2e

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Potential Reduction Estimates

Potential Total Methane Emission Reductions from U.S. Coal Mining through 2020

50-100 MMTCO2e

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Coal Mine Methane Protocols in the Voluntary Market

- CAR: Coal Mine Methane Project Protocol (October 2012)
  - Active underground
- VCS: Revisions to CDM consolidated methodology ACM0008 version 6 to Include Pre-drainage of Methane from Active Open Cast Mines (VMR001) (March 2009)
  - Active underground and surface
- VCS: Revisions to CDM consolidated methodology ACM0008 version 6 to Include Methane Capture and Destruction from Abandoned Coal Mines (VMR002) (July 2010)
  - Active and abandoned underground

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Coal Mine Methane Protocols in the Voluntary Market (cont)

- CCX: Coal Mine Methane Collection and Combustion Offset Protocol (August 2009)
  - Active and abandoned underground
  - Excludes Ventilation Air Methane
- ACR: Draft
  - Active and abandoned underground, and surface

Project Definition

- Installation or operation of a device or set of devices associated with the capture and destruction of methane gas that would otherwise be vented into the atmosphere as a result of coal mining activities in:
  - Active underground mines
    - Ventilation Air Methane (VAM)
    - Drainage Systems
      - Pre-Mining Boreholes – surface and horizontal
      - Post-Mining Boreholes

Project Definition (cont)

- Installation or operation of a device or set of devices associated with the capture and destruction of methane gas that would otherwise be vented into the atmosphere as a result of coal mining activities in:
  - Abandoned underground mines
    - Drainage Systems
      - Installation and operation of new wells
      - Continued operation of in-mine boreholes and post-mining (gob) wells drilled during active mining
  - Active surface mines
    - Drainage Systems
      - Pre-Mining Boreholes - vertical

Project Boundary

Project Type	Included Sources
Active Underground Mines	Active Mine Venting Ventilation Air Methane (VAM) Collection VAM Oxidation Collection, Transport, and Processing of Methane Destruction Emissions Onsite Usage Flare Vehicle Operations Offsite usage (pipeline)
Active Surface Mines	Active Mine Venting Collection, Transport, and Processing of Methane Destruction Emissions Onsite Usage Flare Vehicle Operations Offsite Usage (pipeline)
Abandoned Underground Mines	Abandoned Mine venting Collection, Transport, and Processing of Methane Destruction Emissions Onsite Usage Flare Vehicle Operations Offsite Usage (pipeline)

Eligibility Criteria

- Project Location
  - United States
- Project Commencement Date
  - The date at which the device(s) used to capture and destroy coal mine methane becomes operational
- Project Reporting Period
  - 12 calendar months
- Project Crediting Period
  - 10 years

Quantification Methodology

Project Type	Quantification
Active Underground Mines	Metered methane destruction
Active Surface Mines	Metered methane destruction
Abandoned Underground Mines	Lesser of metered methane destruction or decline curve

- Abandoned mine's decline coefficients based on either:
  - Mine specific
    - Computational fluid dynamics flow simulation model
    - Mine specific parameters
  - Basin decline coefficients

Spatial & Temporal Boundary – Underground Mines

- Physical boundaries defined by the mine area as permitted by a federal or state agency
- Conservative temporal boundary
  - Emission reductions issued only when a well is mined through
    - Working face intersects or passes the borehole
  - Baseline methane emissions are accounted for in the periods in which the emissions would have occurred
  - CO_2 emissions that result from the destruction of methane are accounted for in the period during which destruction occurs

Spatial & Temporal Boundary – Surface Mines

- Physical boundary defined as all strata above mined seams and strata not more than 130 feet below the base of the lowest mined coal seam
- Conservative temporal boundary
  - Only methane collected from within a physical boundary known as the zone of influence will be eligible for crediting
  - Wells are considered to be in the zone of influence when:
    - Elevated amounts of atmospheric gases are produced, or
    - It is physically bisected by mining activities

Spatial & Temporal Boundary – Abandoned Mines

- Horizontal extent is defined by final mine map submitted upon closure
- Vertical extent must be within the extents of the final mine map and meet the following criteria:
  - Drilled 130 feet or less below the mine seam
  - Gob area up to 525 feet above the mined seam when wells are cased to at least 525 feet above the mined seam
  - Gas from two vertically separated mines cannot be comingled in a wellbore (to avoid cross flow)
- Mines classified by the Mine Safety and Health Administration (MSHA) as permanently abandoned and temporarily abandoned are eligible

Eligible Activities

Destruction / Use Activity	Proposed
Destruction of methane from pre-mining drainage systems (underground and surface mines)	Yes
Destruction of methane from post-mining drainage systems/gob wells (underground and abandoned mines)	Yes
Destruction of methane from ventilation shafts (underground and abandoned mines)	Yes
Destruction of methane through flaring, power generation, and heat generation	Yes
Destruction of methane through injection into gas pipeline	Yes
Displacement of grid-delivered electricity or fossil fuel use outside the project boundary	No
Destruction of coalbed methane not associated with active coal mining activities (also known as virgin coalbed methane)	No
Destruction of methane from mines that use CO_2 or any other fluid/gas to enhance CMM drainage	No
Destruction of methane from mines that employ mountain top removal mining methods	No

Injection into Gas Pipeline

Under Consideration

- ARB is considering making the injection of CMM into natural gas pipelines an eligible end use
  - Productive utilization of captured CMM is preferred
  - Only 14 of 295 active gassy mines in the United States currently inject into a pipeline
- The protocol will not allow for the issuance of credits for emission reductions associated with the displacement of fossil fuels that may result from natural gas pipeline injection

Leakage Potential

- Coal Mine Methane and Leakage Potential
  - Project activities that increase gas drainage capacity could reduce constraints on mining operations resulting in increased coal production.
- The protocol must account for applicable leakage
- Leakage Discount Factor – to be determined through technical working group process

Quantification of CMM Emission Reductions

- Emissions Reductions = (Baseline Emissions – Project Emissions) x Leakage Discount Factor
- Baseline Emissions
  - Methane Destruction
  - Release into Atmosphere
  - Production of Power, Heat or Pipeline Injection
- Project Emissions
  - Energy Use to Capture and Use Methane
  - Methane Destruction
  - Un-Combusted Methane
- Leakage Discount Factor (if applicable)

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Seeking Comment and Input

- Projects on federal lands – what is the:
  - Permitting process for mines on federal lands?
  - Relationship between mine operators and federal regulators?
- Ownership of methane – who is Offset Project Operator on:
  - Federal Lands?
  - Private Lands?
- Accounting for leakage:
  - Data to inform the setting of an appropriate discount factor for increasing coal production

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Technical Working Group

- ARB is convening a technical working group to provide:
  - Technical expertise
  - Forum for issue discussion
  - Problem resolving
- Kick-off call: April 2013
  - Monthly meetings
  - Identify technical experts
    - Contact program staff if interested
  - Summary of meetings
  - Available to the public

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Staff Proposal for Discussion
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Program Contacts

- Steve Cliff, Chief, Program Evaluation Branch, scliff@arb.ca.gov
- Greg Mayeur, Manager, Program Operations Section, gmayeur@arb.ca.gov
- Jessica Bede, Coal mine methane protocol contact, jbede@arb.ca.gov
- Yachun Chow, Rice cultivation protocol contact, ychow@arb.ca.gov

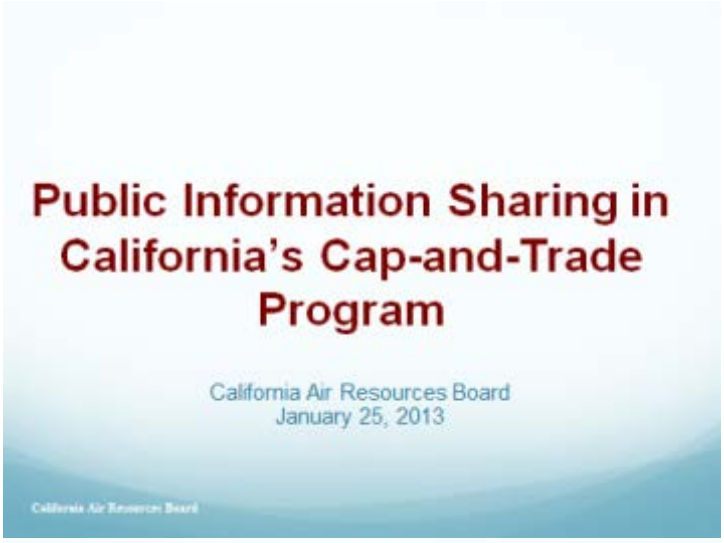
Please submit your comments to:

http://www.arb.ca.gov/cc/capandtrade/comments.htm

by 5:00 pm April 22, 2013

Questions?

JANUARY 25, 2013 – PUBLIC INFORMATION SHARING IN CALIFORNIA'S CAP-AND-TRADE PROGRAM



Webcast Information

- Slides posted:
  http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm
- Email questions:

  auditorium@calepa.ca.gov

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Agenda

- Status Update & Background
- Purpose of Information Sharing
- Information Sharing Data Elements
  - Allocation
  - Compliance Obligation Data
  - CITSS Registrant Data
  - CITSS Account Balances
  - Auction Related Data
  - Market Transaction Transfer Data
  - Retired Compliance Instrument Data
  - Offset Project Data

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Status Update

- Cap-and-Trade Regulation effective January 1, 2012
- Regulatory Amendments effective September 1, 2012
- Emissions Compliance January 1, 2013
- Proposed Amendments for Linkage
  - Anticipated Board consideration February 2013
- Additional Amendments and Offset Protocols
  - Anticipated Board consideration Fall 2013

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Background

- Staff proposals and public discussion on market program data release
- Current regulation and policy reflect multiple years of staff and stakeholder coordination
- September 24th, 2012 EMAC meeting:
  - ARB information sharing plan posted
  - EMAC discussion paper posted

www.arb.ca.gov/cc/capandtrade/emissionsmarketassessment/emissionsmarketassessment.htm

Purpose of Information Sharing

- Transparency increases market efficiency by informing decision making and reducing transaction costs
- Symmetric information makes it more difficult for entities to trade on private information
- Supply and demand information can inform investments in clean technology and offset projects
- Public able to see how market is working and that covered entities and offset developers are complying
- ARB's proposed information sharing is consistent with other regulatory and voluntary programs

Information Sharing Data Elements

Allocation

- Annual Industrial Allocation
  - No individual entity allocation
  - Aggregated total by industrial sector
  - Sectors with fewer than 5 entities are grouped under "other"

  http://www.arb.ca.gov/cc/capandtrade/allowanceallocation/sector_based_industrial_allocation.pdf
- Electrical Distribution Utilities
  - Published on ARB website

  http://www.arb.ca.gov/cc/capandtrade/allowanceallocation/allowanceallocation.htm
- Staff proposal for additional data:
  - Post annual allocation detail for POUs

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Compliance Obligation Data

- ARB publishes reported and verified GHG emissions by facility on the MRR webpage

  http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm
- Staff proposal for additional data:
  - Post annually compliance obligation by CITSS entity on ARB website

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CITSS Registrant Data

- Regulation allows release of CITSS entity information, disallows release of CITSS user information
- Staff proposal:
  - List entity names
  - If Voluntarily Associated Entity is an individual person, then list that person's name
  - Update monthly on ARB website

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Compliance Obligation Data

- ARB publishes reported and verified GHG emissions by facility on the MRR webpage

  http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm

- Staff proposal for additional data:
  - Post annually compliance obligation by CITSS entity on ARB website

CITSS Account Balances

- Compliance Account balance is public by Regulation
  - Discussion: How often should the balances be published?
    - e.g. continuously, monthly, quarterly?
- Limited Use Holding Accounts balances are treated like General Holding Accounts and are not public
- Discussion: Should Holding Accounts balances be public?
- Staff Proposal:
  - Near-term: update compliance account balances monthly on ARB website
  - Once automated in CITSS: update weekly

Auction Related Data

- Some auction related information required to be public by Regulation
- Annual auction budget and auction reserve price, posted on December 1
- 60 days prior to each auction - auction notice
  - Date and time of Auction
  - Auction budget (Current and Advance)
  - Attachment A - auction requirements and instructions
  - Attachment B – example calculations for bid guarantees, holding and purchase limits, and auction settlement

Auction Related Data (cont.)

- Public Auction Summary Data:
  - Total Allowances Available for Sale
  - Total Allowances Sold at Auction
  - Total Submitted and Qualified Bids Divided by Total Allowances for Sale
  - Auction Reserve Price
  - Settlement Price Per Allowance
  - Allowances Purchased by Compliance Entities
  - Herfindahl-Hirschman Index
  - Bid Price Summary Statistics:
    - Maximum Price
    - Minimum Price
    - Weighted Mean
    - Median Price

http://www.arb.ca.gov/cc/capandtrade/auction/november_2012/auction1_summary_statistics_2012q4nov.pdf

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CITSS Transfer Data

- The following transfer information is required by regulation to be recorded in CITSS by participants:

Account Number
Entity Reference Code
Quantity
Price
Currency
Actual or Expected Settlement Date
Agreement Date

- This information is optional:

Transfer to Corporate Associate
Trading Venue (OTC, Exchange, Other)
Type of Contract (Spot, Forward, Future, Other)

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Market Transaction Data Discussion Questions

- Discussion: What transfer information is useful for an efficient and transparent market?
- Options:
  - All individual transactions without account names or numbers
  - All aggregate volume and price information
  - Only information on "spot" trades (volume and price)
  - Value in volumes related to "zero" price
- Discussion: What is the value of self-reported data if the information fields are optional?

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Example Market Transaction Data Report

(example "spot" trades only)

Instrument Type	Vintage	Quantity	# of Transactions	Weighted Average Price	Median Price
Allowances	2013	49,000	5	$12.75	$12.86
	2015	16,000	4	$12.83	$12.90
Offsets (Sequestration Projects)	2007	3,000	3	$8.00	$8.40
	2008	2,000	2	$7.92	$7.95
	2009	1,000	1	$7.79	$7.81
	2010	0	0	-	-
	2011	0	0	-	-
Offsets (Non-Sequestration Projects)	2007	1,000	1	$8.10	$8.45
	2008	2,000	1	$8.03	$8.39
	2009	3,000	3	$7.98	$8.00
	2010	0		-	-
	2011	0		-	-

Retired Compliance Instrument Data

- Retired allowances and offsets required to be public by Regulation
- Staff proposal:
  - Retired compliance instruments (vintage and quantity) will be published annually by entity in the Permanent Retirement Registry on ARB's website after compliance deadlines

Offset Project Data

- Regulation requires an Approved Offset Registry to publish project listing information including:
  - Project location
  - Type of project
  - Project operator
- Staff Proposal:
  - Publish issued offset quantity by project and vintage
  - Updated monthly on ARB's website

Offset Project Data (cont.)

- Regulation requires the Approved Offset Registry to publish:
  - Annual verified baseline emissions for each project
  - Annual verified emissions reductions for each project
  - Final offset project data report providing comprehensive accounting of GHG reductions and project activities
  - A verification statement for each reporting period
- ARB website will link to published offset data reports for listing, reporting, and verification statements once compliance offsets are issued in CITSS

Offset Invalidation Data

- ARB will publish by invalidation risk periods
  - (8 or 3 years) by project and vintage on ARB website
- Staff Proposal:
  - Quantity and vintage, by project, of invalidated offsets will be updated monthly on ARB's website

Next Steps

- Staff requests comments on today's presentation and any other market information release related topics
- All written comments due 5 PM PT, February 8, 2013
  http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm
- Staff will review comments and incorporate suggestions in releases of market related information
- This is a dynamic process and adjustments can be made as program matures

Additional Information

- Cap-and-Trade Program

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

- Join the cap-and-trade list serve

http://www.arb.ca.gov/listserv/listserv_ind.php?listname=capandtrade

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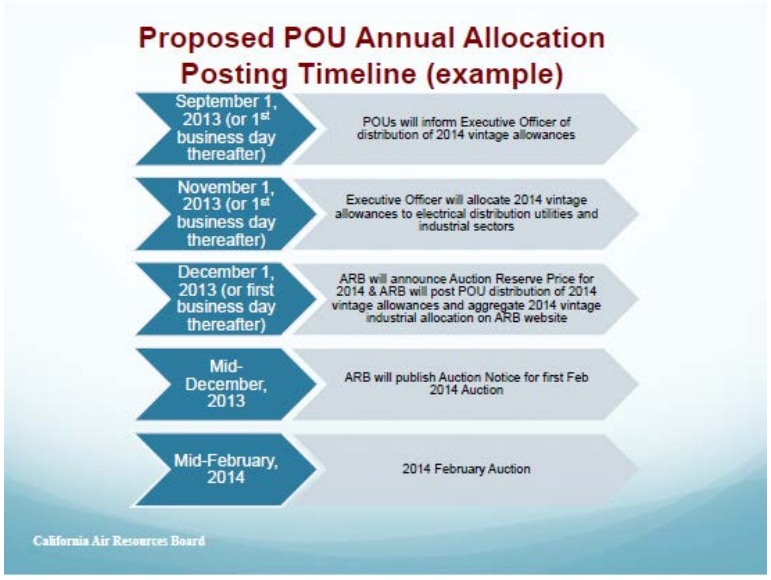
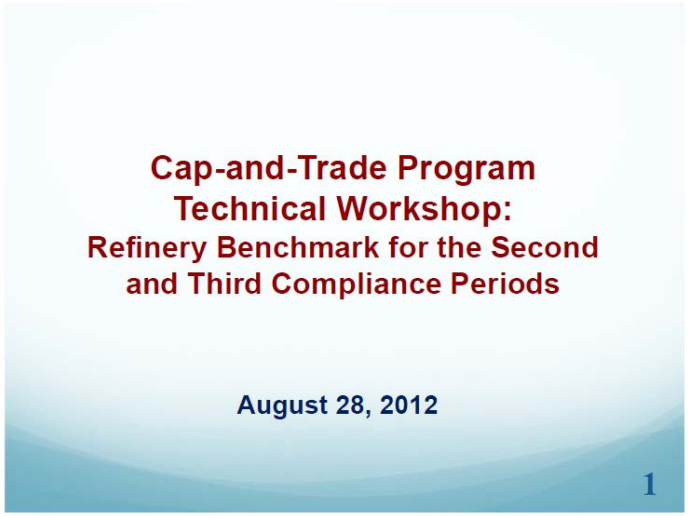
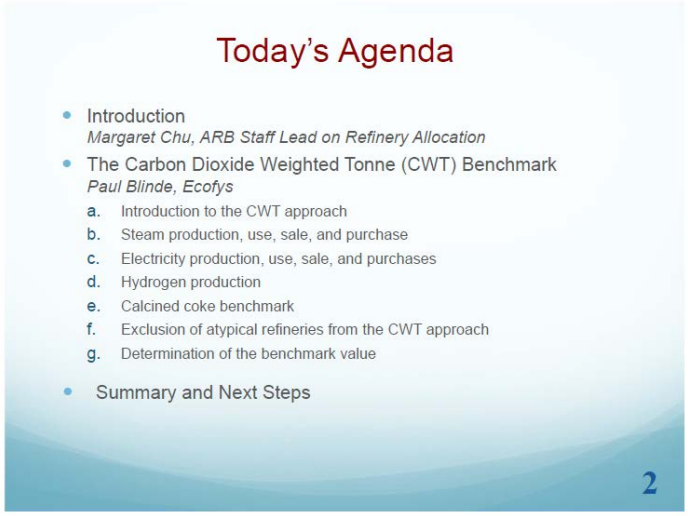
Questions


Proposed POU Annual Allocation Posting Timeline (example)
September 1, 2013 (or 1st business day thereafter)
POUs will inform Executive Officer of distribution of 2014 vintage allowances
November 1, 2013 (or 1st business day thereafter)
Executive Officer will allocate 2014 vintage allowances to electrical distribution utilities and industrial sectors
December 1, 2013 (or first business day thereafter)
ARB will announce Auction Reserve Price for 2014 & ARB will post POU distribution of 2014 vintage allowances and aggregate 2014 vintage industrial allocation on ARB website
Mid-December, 2013
ARB will publish Auction Notice for first Feb 2014 Auction
Mid-February, 2014
2014 February Auction
California Air Resources Board

AUGUST 28, 2012 – CAP-AND-TRADE TECHNICAL WORKSHOP TO DISCUSS REFINERY BENCHMARK IN THE SECOND COMPLIANCE PERIOD





Cap-and-Trade Program and the CWT

- The California Cap-and-Trade Regulation uses the European Union Emission Trading System's (EU ETS) petroleum refining benchmark of 0.0295 allowances per carbon dioxide-weighted tonne (CWT) as the basis for allowance allocation starting in the second compliance period (2015)
- The California Mandatory GHG Reporting Regulation uses the EU ETS CWT factors (process unit emissions factors) as the bases for collecting product data to calculate refinery CWTs
- Additional work needed to further develop the CWT approach

3

CWT Adoption and Ongoing Work

- In Resolution 11-32, the Board directed ARB staff to work with stakeholders to further develop the allowance allocation approach for the petroleum refining sector and associated activities for the second and third compliance periods.
- This includes continuing analysis of the CWT approach, as well as treatment of hydrogen production, coke calcining, and other activities that may operate under a variety of ownership structures.
- ARB contracted with Ecofys, which previously supported the European Commission on benchmarking European refineries, to support ARB in the application of CWT to California's Cap-and-Trade Program, and in the development of other product benchmarks.

4

The Ecofys Preliminary Work Product[1]

- Provides a summary of the development and features of the CWT approach
- Includes a preliminary analysis of applying the CWT approach to California refineries using publicly available data
- Provides a starting point for discussions about the application of CWT in the California Cap-and-Trade Program
- Areas covered: oil refining process and related GHG emissions, California refinery characteristics, approaches for benchmarking emissions efficiency, how the CWT method was developed, how the CWT was adopted in EU ETS, description of the elements used in the CWT approach

[1]Available at http://www.arb.ca.gov/cc/capandtrade/meetings/08282012/refinerydraft.pdf

5

ECOFYS

sustainable energy for everyone

Cap-and-Trade Technical Workshop to Discuss Refinery Benchmark in the Second Compliance Period

August 28, 2012
9:30 am to 3:00 pm

Cal/EPA Headquarters Building, Coastal Hearing Room

Paul Blinde (p.blinde@ecofys.com)

6

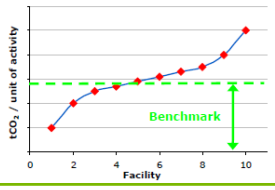
Some notes before we start

- Role of Ecofys and its partner UC Berkeley is to support ARB in the development of product benchmarks. Ecofys is a consultancy in renewable energy, energy & carbon efficiency, energy systems & markets and energy & climate policy. Previously we supported the European Commission with benchmarking European refineries.
- The views and opinions expressed in this presentation do not necessarily state or reflect those of CARB, the State of California, or any agency thereof.
- This presentation as well as the report are intended to support stakeholder interaction, not to prescribe what policy is best for California.
- This presentation refers to benchmarking methodologies owned and developed by Solomon Associates (referred to as Solomon). The information in this presentation and the accompanying report about these methodologies has been obtained through public sources, in particular material related to the development of the EU refinery benchmark. Please refer to Solomon for more detailed information about its products and services.

Ecofys U.S., Inc., a Nevada corporation ("Ecofys US"), its co-author(s), their parent organization(s) or subsidiaries, and their employees (collectively, "Ecofys") has prepared this presentation for the sole use of the California Air Resources Board ("CARB") pursuant to an agreement between Ecofys US and CARB. The views and opinions of authors expressed in the report do not necessarily state or reflect those of CARB, the State of California, or any agency thereof. Ecofys makes no warranty, express or implied as to the conduct of Ecofys or the contents of this presentation, and Ecofys assumes no legal liability or responsibility for the accuracy, completeness, or usefulness of any information in this presentation.

Recap

- Industrial facilities receive an amount of allowances for free since they may not be able to pass on costs due to competition within (and across) industries and with importers, leading to:
  - Transition risk: loss of profitability inhibiting investments in emissions reductions
  - Emissions leakage risk: loss of production market share or new investment to jurisdictions with lesser climate policies increasing emissions elsewhere
- Basing the amount of free allowances on benchmarks, if defined in a sound way, rewards early action



Allocation* (tCO_2/year)
=
Benchmark (tCO_2 / unit of activity)
x
Activity (unit of activity / year)
x
Assistance factor
x
Cap adjustment factor

*Simplified – not considering true up

There are some important considerations to be made when benchmarking refineries

- "Refinery" is a generic name that covers a wide variety of installations
  - having different configurations,
  - producing different products (e.g. LPG, gasolines, kerosine, gasoil/diesel and fuel oils),
  - in different relative quantities,
  - from different feedstock (crudes)
- The same product can be made through a variety of routes
  - Each route has a different CO_2 footprints
  - A single refinery will typically use several routes
- Simple, relatively low energy-intensity refineries can only exist because there are complex ones
- All products are interdependent: a refinery cannot produce only gasoline

Simplified diagram

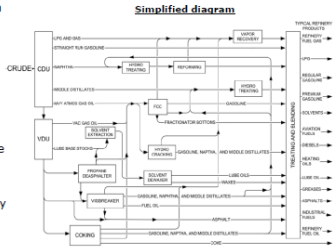
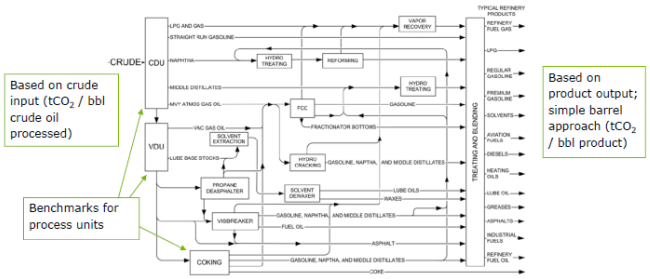


Figure taken from: LBNL, "Energy Efficiency Improvement and Cost Saving Opportunities for Petroleum Refineries - An ENERGY STAR® Guide for Energy and Plant Managers," LBNL-56183, Lawrence Berkeley National Laboratory, February 2005

Overview of approaches to benchmarking



Other
- Approaches that weight the relative impact of different units (Solomon's approaches)
- Hybrid approach: benchmark based on crude input corrected for presence of process units
- A separate benchmark for each refinery based on improvement potential

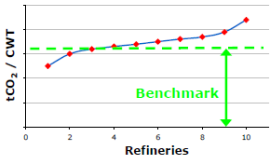
Figure taken from: LBNL, "Energy Efficiency Improvement and Cost Saving Opportunities for Petroleum Refineries - An ENERGY STAR® Guide for Energy and Plant Managers," LBNL-56183, Lawrence Berkeley National Laboratory, February 2005

Solomon's benchmarking methodologies allow comparing refineries with different sizes and configurations

- The methodologies define generic process units
- Each process unit has a weighting factor representative of its emissions at a standard level of performance
- The 'product' of each refinery is defined based on these factors

Process unit	Throughput	Factor	Weighted throughput
Atmospheric crude distillation	a	1	a
Vacuum Distillation	b	0.85	0.85b
...	...	...	...
SUM			a+ 0.85b +..

- A benchmark can now defined in terms of tCO_2 / CWT
- The amount of free allowances can be determined on the basis of this benchmark and the amount of CWT of a refinery



General characteristics

- When using the CWT approach, the single 'product' of the refinery is the CWT
- The CWT approach does not prescribe what process units or process routes should be used
- Refineries using exactly the same type of crude and producing an identical range of products still could theoretically get a different CWT
- The CWT approach indirectly allows input differentiation -> heavier, sourer crude requires more processing and hydrogen increasing the amount of CWT

Solomon's benchmarking approaches

- Based on detailed information provided by companies on refineries' layouts, feedstock characteristics, operating rates and operating conditions
- Approaches are known by all major refineries

Approach	Description
Energy Intensity Index (EII®)	> Detailed approach used for energy benchmarking > Used for the first compliance period of the California Cap-and-Trade Program
Carbon Emissions Index (CEI™)	> Detailed approach for benchmarking greenhouse gas emissions
Complexity Weighted Barrel (CWB), and Carbon Dioxide Weighted Tonne (CWT)	> Simplified approaches that have been developed for regulatory purposes > Used in Europe and will be used in the California Cap-and-Trade Program after the first compliance period > The EU CWT approach has been adapted to typical operations of European refineries > The EU CWT approach is available in public domain, others are not.

The CWT approach was adopted in the EU

Year	
2006/2007	> It became clear that the amount of free emission allowances to industrial facilities in the EU ETS in the period 2013–2020 would be based on benchmarking
2007/2008	> Europia and CONCAWE (the European sector organizations) developed the CWT approach together with Solomon
2009	> European Commission commissioned Ecofys (together with partners) to develop the allocation methodology in Europe > Ecofys recommended the use of the CWT approach and worked with Europia/CONCAWE to refine the approach to make it fully consistent with EU legislation > CONCAWE obtained the right from Solomon to use the CWT methodology in the EU ETS > CONCAWE developed a template to collect data required to calculate the benchmark
2009/2010	> CONCAWE collected data and determined the benchmark
2011	> The CWT approach and benchmark was adopted in EU legislation and entered the public domain.

! The data underlying the calculation of the CWT factors remained the property of Solomon and is not publicly available

Is it appropriate to use the EU CWT approach and benchmark in California or are modifications needed?

Certain changes to the approach require input from Solomon, which requires cooperation with and within industry

Level of detail: definition of process units

Introduction

> The more aggregated, the less the approach takes into account differences between refineries and the less input data are required
  - Solomon has a comprehensive list of over 150 process units
  - For the CWT approach, units have been grouped together resulting in about 50 process units

Should the definition of process units be changed?

> To a certain extent, this is a policy question:
  - How many differences should the approach account for?
  - What amount of data input is acceptable?

> Changing the current grouping or doing an assessment of whether it would be appropriate from a technical perspective to modify the grouping would require involvement of Solomon

Weighting factors or 'CWT factors' are used to weight the contribution of different process units

Introduction

- Each process unit has a weighting factor representative of its emissions at a standard level of performance
- The EU CWT factors have been adapted to typical operations as well as the fuel mix of European refineries
- The EU CWT factors are defined so that throughputs need to be expressed in metric ton instead of barrels

Should the CWT factors be changed?

- California refineries are used to report in barrels
- The 'typical' California refinery is different from the 'typical' European refinery -> more coking
- Changing the CWT factors or doing an assessment of whether it would be appropriate to do so would require involvement of Solomon

Correction for off-sites and non-crude feedstock

Introduction

- Energy is required to operate the non-process assets (off-sites) such as tank farms, blending facilities, terminals as well as ancillary facilities such as effluent treatment.
- Non-crude feedstock may be fed (relatively) cold to units downstream of the crude distiller. Energy is required to be bring them to temperature.
- To account for this, in Europe, a correction is made based on a simplified empirical correlation

$$CWT_{corrected} = 1.0183 \times CWT_{uncorrected} + 0.315 \times \text{Feed to Crude Distillator} + 298$$

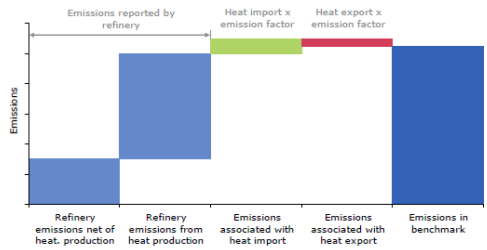
Approach for California?

- Empirical correlation may not reflect California practices
- Current correction and its effect on the allocation is generally modest

The benchmark includes emissions from all heat consumption and excludes emissions related to any heat export

$$\text{Benchmark} = \frac{\text{Emissions}}{\text{CWT}} = \frac{\text{Needs to include emissions related to all heat consumed exclude emissions related to heat exported}}{\text{incl. heat consumption; excl. heat export}}$$

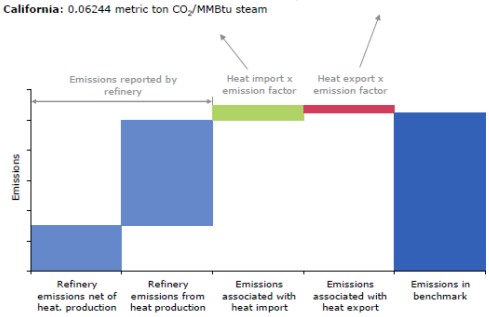
> Methodologically, with respect to heat, the benchmark is in line with the overall allocation methodology



Emissions factors used for heat import and heat export

> **Europe:** est. avg. emissions factor for heat production of all EU refineries (at sector level does not distinguish between heat produced on site and heat import)
> **California:** 0.06244 metric ton CO_2/MMBtu steam

> **Europe:** est. actual emissions factor of heat exporting refinery (representative of actual performance)
> **California:** 0.06244 metric ton CO_2/MMBtu steam

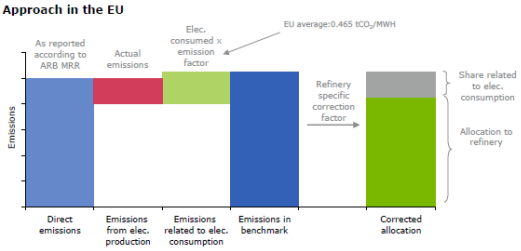


The EU benchmark includes electricity consumption and exclude electricity production

$$\text{Benchmark} = \frac{\text{Emissions}}{\text{CWT}} = \frac{\text{Needs to include emissions related to all elec consumed exclude emissions related to elec. exported}}{\text{incl. elec. consumption; excl. elec. export}}$$

> So, the benchmark includes all net electricity consumption

Approach in the EU



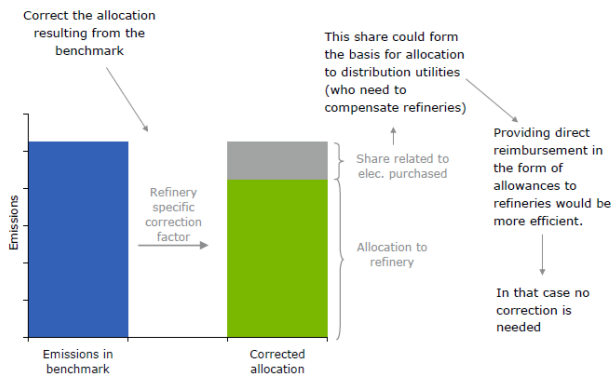
Contrary to in the EU, in California there is compensation for emissions from electricity production

	Energy Self-Generated or Imported?		
Source of Direct or Indirect Carbon Costs		Produced On-site	Imported from Off-site
	Heat Consumed	Direct Allocation*	Direct Allocation*
	Electricity Consumed	Direct Allocation*	Compensation Through Distribution Utility†

Include in emissions efficiency benchmarking exercise and final allocation.
†Consider in benchmarking work but remove from final direct allocation.

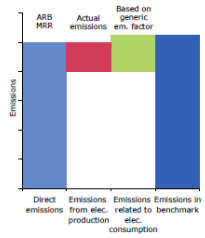
Table taken from: CARB, "Appendix J of the Initial Statement of Reasons of October 2010," October 2010

How to deal with this with the allocation?



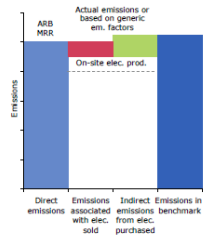
Determination of the benchmark

EU benchmark does not take into account efficiency of on-site electricity production



> Benchmark does not distinguish between electricity generated on site and electricity purchased
> More data requirements

Alternative: only correct for electricity purchases and sales



> Benchmark is dependent on share of electricity produced on site and the efficiency of on-site electricity production in the baseline period

Hydrogen is produced both in refineries and merchant plants

> Allocation should be independent of ownership structure

	Refinery	Merchant plant
1. Current approach	CWT approach	Benchmark based on CWT factor for hydrogen production and (EU) refinery benchmark
2. Alternative	CWT approach (with adapted CWT factor for hydrogen production)	Benchmark based on actual performance
3. Alternative	Benchmark based on actual performance, exclude hydrogen from CWT approach	

> Production of liquid hydrogen involves compressing as an additional production step leading to increased consumption of electricity. Compensation for additional indirect emissions will be given to electricity utilities, which in turn will compensate rate payers such as hydrogen producers

Coke can be calcined in a refinery or independent plant

> Allocation should be independent of ownership structure
> Similar options as for hydrogen

	Refinery	Merchant plant
1. Current approach	CWT approach	Benchmark based on CWT factor for calcining and (EU) refinery benchmark
2. Alternative	CWT approach (with adapted CWT factor for calcining)	Benchmark based on actual performance
3. Alternative	Benchmark based on actual performance, exclude coke calcining from CWT approach	

Exclusion of atypical refineries from the CWT approach

> The CWT approach is not suitable for atypical smaller refineries
> The definition of "atypical" is not a law of nature

EU definition: atypical refineries do not produce a...
"Mix of refinery products with more than 40% light products (motor spirit (gasoline) including aviation spirit, spirit type (gasoline type) jet fuel, other light petroleum oils/ light preparations, kerosene including kerosene type jet fuel, gas oils)"

> In case a smaller refinery is connected with a nearby larger refinery, these refineries could be grouped together to form one mainstream facility for the purpose of applying the CWT methodology (see report)
> Recommend to consider suitability on a case by case basis taking EU definition as starting point
> How to determine allocation to atypical refineries: energy benchmarking, simple barrel approach used in first compliance period, other...?

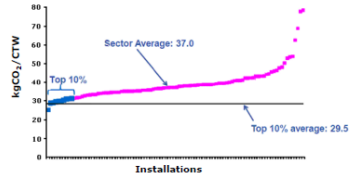
California adopted the EU benchmark

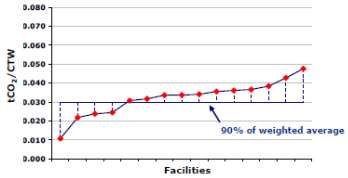
Europe

- Benchmark stringency: arithmetic average of 10% installations with lowest emissions intensity.
- For refineries, this corresponds to *80%* of weighted average emissions intensity

California

- General benchmark stringency: *90%* of weighted average emissions intensity
- Figure shows indicative results of preliminary assessment based on data available; results based on primary data may deviate substantially
- Ideally, the California benchmark would be based on data from California refineries.
- Benchmark is subject to definition of methodology (see earlier topics discussed in this presentation)





Upper figure taken from: Lane, M, (Secretary General, CONCAWE), Presentation at 4thJPEC/CONCAWE Information Exchange Meeting, Tokyo, 31 August, 2011
Lower figure from: Ecofys, "Development of GHG efficiency benchmarks for the distribution of free emissions allowances in the California Cap-and-Trade Program; Refineries – DRAFT WORKING VERSION-," Prepared for California Air Resources Board, August 2012

Thank you for your attention

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Comments

- ARB is requesting feedback on the preliminary findings as presented in Ecofys' draft work product, and areas for additional studies
- Please submit written comments by September 25, 2012, at http://www.arb.ca.gov/cc/capandtrade/comments.htm

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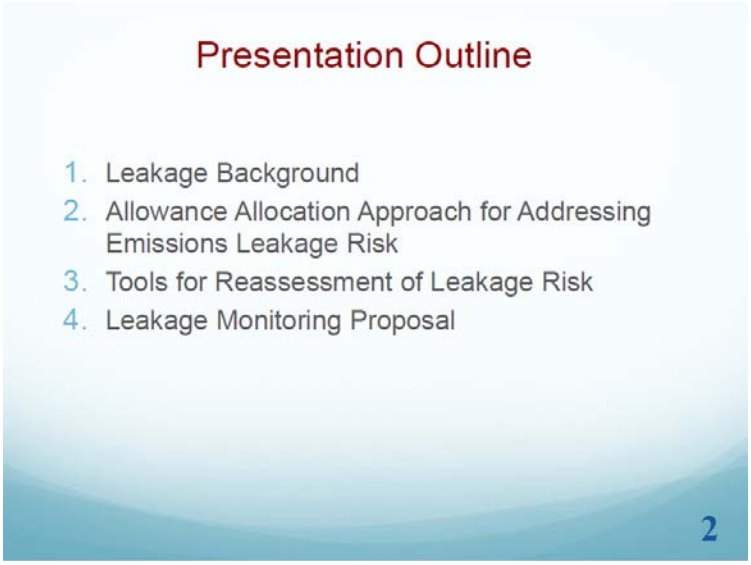
JULY 30, 2012 – CAP-AND-TRADE TECHNICAL WORKSHOP TO DISCUSS EMISSIONS LEAKAGE



Leakage Background

3

What is Emissions Leakage?

- Leakage is a reduction in emissions of greenhouse gases within the State that is offset by an increase in emissions of greenhouse gases outside the State
- AB 32 requires ARB to design measures to minimize leakage to the extent feasible

4

Who is at Risk for Leakage?

- Industries in which production is highly emissions intensive, leading to high compliance costs
- Industries in which competition is strong from out-of-State producers

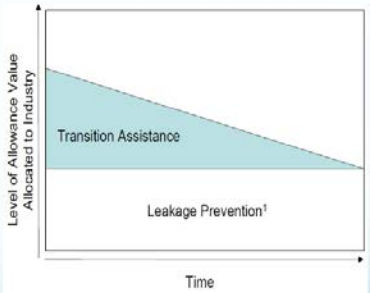
5

Allowance Allocation Approach for Addressing Emissions Leakage Risk

6

Cap-and-Trade Program Allocation Approach to Reduce Leakage

- Goals of free allocation to industry:
  - Short-term: Provide a transition period to smooth market start-up and address uncertainty in evaluation of leakage risk
  - Long-term: Reduce to a level of free allocation needed to prevent leakage



[1] Mitigation of carbon costs that cannot be passed on due to leakage risk

7

Cap-and-Trade Program Allocation Approach to Reduce Leakage

(Continued)

- Free allocation will reduce leakage risk by reducing compliance costs
- Allocation approach maintains incentive to produce in California
- Cap-and-Trade Program allocates based upon assessed leakage risk and efficiency benchmarking

8

Basis for Leakage Classification Analysis

- In developing regulatory methods to address leakage, ARB examined the following programs:
  - European Union's Emission Trading Scheme (EU ETS)
  - American Clean Energy and Security Act of 2009 (ACES)
  - Australia's Carbon Pollution Reduction Scheme (CPRS)
- EU ETS, ACES, and CPRS all used a variations of emissions intensity and trade exposure metrics to develop programs to prevent leakage

9

How ARB Determined Sector Leakage Risk

- ARB determined leakage risk for industrial sectors by:
  - Defining industrial sectors through activity
  - Using a combination of two metrics applied to each sector
    - Emissions intensity of production
    - Trade exposure (i.e., cost pass-through ability)
- ARB used California's Mandatory Reporting Regulation (MRR), U.S. Census, and International Trade Commission data to assess risk
- Staff also requested public input in developing ARB's leakage prevention mechanisms

10

Defining Sectors and Activities

- A sector is an aggregation of industrial entities that produce reasonably homogeneous goods by reasonably homogenous processes
- Staff used the North American Industry Classification System (NAICS) at the 6-digit level (where able) to group industrial activities
  - The NAICS 6-digit level is the most disaggregated classification for manufacturing facilities that is widely used
  - In most cases, staff used MRR-reported NAICS codes
- Leakage risk is assessed by activity, not just sector classification

11

Assessing Emissions Intensity

ARB developed the following metric using MRR and U.S. Census data to measure the emissions intensity of a sector:

emissions intensity =
metric tons CO_2e / $million value added*

** Value added data from the Annual Survey of Manufacturers and the U.S. Economic Census*

The emissions intensity is categorized into four risk levels:

- High: > 5000 $mtCO_2e$/$M value added
- Medium: 4999 to 1000 $mtCO_2e$/$M value added
- Low: 999 to 100 $mtCO_2e$/$M value added
- Very Low: < 100 $mtCO_2e$/$M value added

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Assessing Trade Exposure

ARB uses trade share to measure the trade exposure of a sector based upon the following:

trade share =
(imports + exports) / (shipments + imports)*

** Imports, exports, and shipments data from the U.S. Census Bureau and the International Trade Commission*

Trade share is categorized into three risk levels:

- High: > 19 %
- Medium: 19 to 10%
- Low: < 10%

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Assessing Leakage Risk

ARB classifies leakage risk into three categories through combining the metrics of emissions intensity and trade exposure

Leakage Risk	Emissions Intensity	Trade Exposure
High	High	High Medium Low
	Medium	High
Medium	Medium	Medium Low
	Low	High Medium
Low	Low	Low
	Very Low	High Medium Low

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Leakage Risk Classification and Allocations

From the leakage risk classification, an industry assistance factor (AF) is determined for use among other factors in calculating free allocations

	Industry Assistance Factor (AF)		
	Compliance Period *		
Leakage Risk	1st	2nd	3rd
High	100%	100%	100%
Medium	100%	75%	50%
Low	100%	50%	30%

*1st compliance period: 2013–2014
2nd compliance period: 2015–2017
3rd compliance period: 2018–2020

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Potential to Increase Assistance Factor

- i.e., to increase percentages for medium- and low-risk categories for the second and third compliance periods

	Industry Assistance Factor (AF)		
	Compliance Period		
Leakage Risk	1st	2nd	3rd
High	100%	100%	100%
Medium	100%	75%	50%
Low	100%	50%	30%

- Potential way to ease transition into Cap-and-Trade Program, thereby minimizing leakage risk

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Potential to Increase Assistance Factor
(continued)

- No change to classification of leakage risk from current categories of high, medium, and low
  - Research to determine if current risk classification should be changed (described later)
- No changes proposed to high risk category (i.e., will not receive more than 100%)
- Potential for regulatory change in 2013
- Comments are requested in writing

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Tools for Reassessment of Leakage Risk

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Reassessment of Sector Leakage Risk

- Per Board Resolution 11-32, ARB staff must
  - Initiate a study to analyze the ability of the agricultural sector, including food processors, to pass on regulatory costs to consumers, and
  - Recommend to the Board changes to the leakage risk determinations and allowance allocation approach, if needed, prior to allocation for the second compliance period
    - Any changes in leakage risk determinations would require regulatory amendments, which would need to be in place before industrial allocation occurs on November 1, 2014

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Proposed Research on Agricultural Sector

- ARB is taking steps to refine the analysis of emissions leakage within California's food processing sector
  - With input from the California League of Food Processors and the Agricultural Council of California, ARB developed guidelines for the leakage analysis
  - Researchers are interested in performing the study, but are concerned about the willingness of food processors to provide facility-level data to perform the analysis

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Industrial Sector Leakage Research Efforts

- ARB is sponsoring research efforts to establish a leakage baseline and to identify data-driven metrics to establish leakage risk through analysis of energy prices and trade flows
- Economic researchers with Resources for the Future and University of California at Berkeley are here today to discuss these efforts further

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Defining and Measuring Incidence of Carbon Pricing: Leakage and Competitiveness Impacts of AB 32

Joshua Linn
Richard D. Morgenstern
Wayne Gray
CARB
July 30, 2012

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The Context

- Carbon pricing will increase the cost of using energy
  - Potentially adverse effects on prices, sales, profits, output, and employment in EITE industries
  - Output based rebates in AB 32 have the potential to offset some or all impacts, possibly overcompensate
- The importance of developing a rigorous baseline
  - Interested parties are likely to make conflicting claims
  - Limited data will be available in real time, although the carbon price and energy price are readily observed
  - Economic models can provide estimates of likely consequences of a given carbon price

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How Can We Develop a Baseline?

- Simulation modeling:
  - How does an increase in energy costs affect equilibrium output and prices by region and industry?
  - Because industries are aggregated, this approach is most useful for broad-scale analysis
- Econometric Analysis:
  - Use past variation in energy prices as a "natural experiment"
  - Advantages: confidential plant-level data enables much more disaggregated analysis, fewer assumptions on market structure

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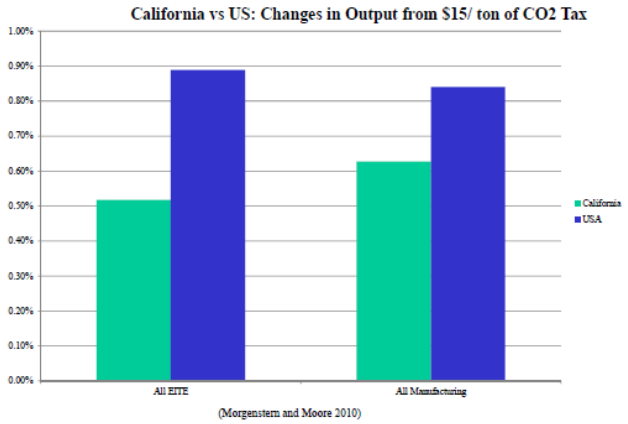

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Overview of Econometric Analysis

- Use energy prices as proxy for carbon price (natural experiment)
  - Lots of historical variation in energy prices, over time and across regions
  - How do plants respond to energy prices in their own and neighboring regions?
  - Cost metrics include value of shipments, profits, employment, investment, consumption (output plus net imports)
- Counterfactual analysis
  - Suppose energy prices in CA were higher, how would plants inside and outside of CA have responded?
  - Assess leakage/competitiveness effects of a carbon price

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Estimation Details

- Sample
  - Assemble data set of plant-year observations that combines Census (every five years) and Annual Survey of Manufactures, 1972-2009
- Key variables
  - Dependent variables: plant-level output, employment, profits
  - Key independent variables: plant-level electricity and natural gas prices, plus energy prices in nearby utility service territories
  - Additional control variables: plant, year, industry fixed effects

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Additional Estimation Issues

- Plant energy prices may be correlated with unobserved factors (e.g., productivity)
  - Use instrumental variables for electricity and gas prices
- Effects of environmental regulation could be correlated with energy prices
  - Control for environmental expenditures and/or nonattainment status
- Competitiveness of imports could be correlated with energy prices
- Estimation and simulations rely on cross-state and temporal variation in energy prices

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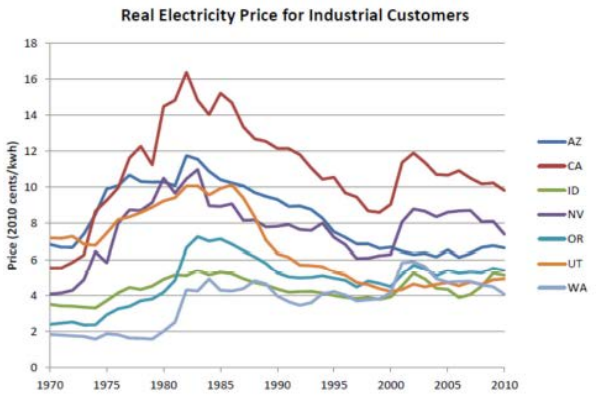

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Source: EIA

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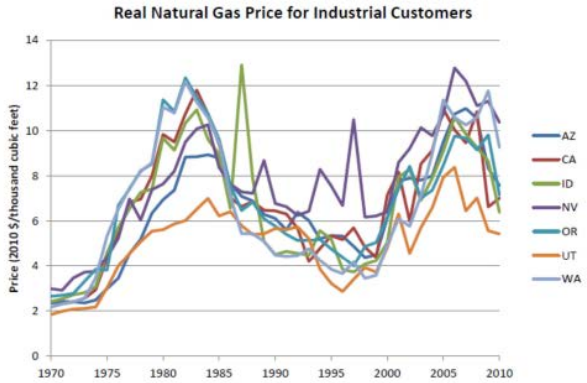

RESOURCES FOR THE FUTURE

Source: EIA

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Correlations Between State Growth Rates

Panel A: Electricity Prices	Arizona	California	Idaho	Nevada	Oregon	Utah
California	0.63					
Idaho	0.52	0.56				
Nevada	0.52	0.74	0.51			
Oregon	0.64	0.56	0.69	0.47		
Utah	0.59	0.56	0.68	0.53	0.8	
Washington	0.41	0.44	0.4	0.27	0.75	0.42

Panel B: Natural Gas Prices	Arizona	California	Idaho	Nevada	Oregon	Utah
California	0.68					
Idaho	0.48	0.37				
Nevada	0.4	0.42	0.28			
Oregon	0.57	0.33	0.49	0.25		
Utah	0.61	0.67	0.33	0.28	0.36	
Washington	0.66	0.65	0.41	0.49	0.6	0.61

Source: Calculated from EIA

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Key Datasets

- Longitudinal Research Database (LRD)
- Manufacturing Energy Consumption Survey (MECS)
- Longitudinal Business Database (LBD)
- Standard Statistical Establishment List (SSEL)
- Pollution Abatement Control Expenditures (PACE)
- Commodity Flow Survey (CFS)
- Attainment/nonattainment status by county
- Utility Service Territory data
- I-O tables

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Industries to be Studied

NAICS Code	Industry Name
311	Food Mfg.
3152	Cut and Sew Apparel Mfg.
312120	Breweries
322121	Paper (except Newsprint) Mills
322130	Paperboard Mills
324110	Petroleum Refineries
324199	All Other Petroleum and Coal Products Mfg.
325120	Industrial Gas Manufacturing
325188	All Other Basic Inorganic Chemical Mfg.
325199	All Other Basic Organic Chemical Mfg.
325311	Nitrogenous Fertilizer Mfg.
331511	Iron Foundries
333611	Turbine and Turbine Generator Set Units Mfg.

NAICS Code	Industry Name
325412	Pharmaceutical Preparation Mfg.
325414	Biological Product (except Diagnostic) Mfg.
327211	Flat Glass Mfg.
327213	Glass Container Mfg.
327310	Cement Mfg.
327410	Lime Mfg.
327420	Gypsum Product Mfg.
327993	Mineral Wool Mfg.
331111	Iron and Steel Mills
331221	Rolled Steel Shape Mfg.
331314	Secondary Smelting and Allyoing of Aluminum
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)
336411	Aircraft Mfg.
331511	Iron Foundries
333611	Turbine and Turbine Generator Set Units

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Short-Run and Long-Run Analysis

- Short run
  - Short-run includes operational responses within a year
  - Estimate effect of plant's and regional energy prices on output, employment, etc.
- Long run
  - Consider longer time horizons using cinquenial Census years
  - Analyze capital stock adjustments using plant level investment as dependent variable
  - Analyze entry and exit by utility territory and year

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Expected Research Outputs

- Estimated short-run elasticities of employment, output, and other metrics w.r.t energy prices for NAICS industry
- Simulation of short run impact of AB 32 on plant level output, employment, and emissions for NAICS industries
- Comparable results for long run analysis

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Thank you

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Trade exposure and emissions leakage: measurement and analysis

Meredith Fowlie
UC Berkeley
Mar Reguant
Stanford University
Stephen Ryan
MIT

July 30, 2012

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The big picture

- Incomplete environmental regulation creates the potential for adverse competitiveness impacts and emissions leakage.
- Leakage can operate through multiple channels:
  - Immediate loss of market share to competitors in unregulated jurisdictions.
  - Long run changes in investment/entry/exit decisions.

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Three distinct but related objectives

1. Refine/improve upon measures of trade exposure and trade responsiveness.
2. Establish credible and well substantiated baseline measures of trade activity for use in leakage monitoring.
3. Construct precise estimates of key parameters in economic models used to model leakage/competitiveness impacts.

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Current approach

- Leakage risk assessment is currently based on two measures: emissions intensity and trade exposure.

- Rationale: Adverse competitiveness impacts most likely to manifest in emissions intensive industries that face competition from entities in unregulated jurisdictions.

Leakage Risk	Emissions Intensity	Trade Exposure
High	High	High Medium Low
	Medium	High
Medium	Medium	Medium Low
	Low	High Medium
Low	Low	Low
	Very Low	High Medium Low

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Current metric

- Trade share used to identify sectors facing competition from unregulated entities:

$$s_i = \frac{foreign\ imports_i + foreign\ exports_i}{shipments_i + foreign\ imports_i}$$

- Seemingly simple metric difficult to construct using publicly available data.

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Overcoming immediate data challenges

- Limitations of public data well documented by ARB staff:
  - State level data on imports and exports unavailable.
  - Regional trade data are aggregated to 4 digit NAICS.
  - No per unit price data.

- We propose to use transaction-level and establishment level data to more accurately construct trade share metric.

Key data sets include:
- Annual Survey of Manufactures (ASM)
- Census of Manufactures (CM)
- Longitudinal Firm Trade Transaction Database
- Data collected from trade organizations.

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Refining measures of leakage risk

- Current trade share metric is an imperfect measure of carbon cost pass through potential.
- Some potential shortcomings of current approach:
  - Treats all imports/exports and sourcing strategies equally.
  - Ignores interstate, intra-national trade.
  - Ignores structural differences across industries.
- Census data and econometric modeling can be used to construct and evaluate alternative measures of trade exposure and trade responsiveness.

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Three distinct but related objectives

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Baseline measures of trade activity

- Experiences with other cap-and-trade programs have demonstrated the importance of establishing a credible baseline against which to measure ex post observed outcomes.
- Future measures of production and trade activity can be compared against baseline measures in order to identify the effects of carbon policy.
- Comparing measures both across jurisdictions and across time helps to control for other confounding determinants of trade activity

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Baseline measures an essential input to leakage monitoring going forward

- Surprisingly little is known about trade flows/sourcing strategies in EITE industries.
- Transaction-level and establishment-level Census data (covering 1995-2012) will allow us to measure short-term and long-term trends in:
  - Industry-specific, state-specific import and export shares and intensity.
  - Sourcing strategies by state/industry.
  - Determinants of firm-level sourcing decisions.

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Baseline measures of trade responsiveness

- Trade responsiveness parameters capture response of trade flows to relative changes in operating/supply costs?
- These parameters are essential inputs to economic modeling of emissions leakage.
- Existing parameter estimates are very imprecise.
- Highly disaggregated data can be used to estimate these parameters with unprecedented precision.

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Econometric Estimation approach

- Estimate trade responsiveness parameters at industry and state/regional level.
- Control for time varying factors that can shift the demand for imports/exports, including industry specific GDP, measures of construction activity, domestic energy costs, currency exchange rates, etc.
- Use naturally occurring, exogenous variation in transportation costs (freight rates), exchange rates, ad valorem duties to identify how imports and exports respond to changes in relative operating costs.
- Because economic and market shocks are often associated with time lags, specifications will accommodate lagged responses.

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Three distinct but related objectives

1. Refine/improve upon measures of trade exposure and trade responsiveness.
2. Establish credible and well substantiated baseline measures of trade activity for use in leakage monitoring.
3. Construct precise estimates of key parameters in economic models used to model leakage/competitiveness impacts.

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Improved modeling of policy impacts

- Economic modeling of the impacts of carbon policies is highly sensitive to demand elasticities and trade responsiveness parameters.
- Census data allow us to estimate these parameters with unprecedented precision.
- Economic models can be recalibrated in order to more accurately capture short run impacts of AB 32 on plant level sourcing strategies, trade flows, industry profits, and emissions leakage.

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In summary

- Leakage works through changes in relative production, investment, and trade flows which are observable in principle.
- High resolution, high quality census data, together with state-of-the-art analytical techniques, can be used to construct detailed measures of production activity, trade activity, and trade responsiveness in EITE sectors.
- These measures can be used to assess relative leakage potential, calibrate economic simulation models, and serve as a benchmark for analysis going forward.

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Opportunity to ask Questions about Leakage Research

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Leakage Monitoring Proposal

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Leakage Monitoring Need

- Ability to measure and monitor leakage in a timely manner is essential to the success of the Cap-and-Trade Program and ARB's other efforts to address climate change
- Per Board Resolution 11-32, ARB staff are directed to continue to review information concerning the emissions intensity, trade exposure, and in-State competition of industries in California

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Leakage Monitoring Proposal

- To better monitor leakage, staff is proposing to collect the following facility-level economic data from industry, possibly through MRR:
  - Total value of product shipped and other receipts;
  - Annual payroll before deductions;
  - Total capital expenditures;
  - Cost of materials, parts, packaging, fuels, and electricity;
  - Number of production workers and other employees.
- Collection of these data would allow for timely monitoring of leakage, which would allow ARB to refine or develop policies to minimize leakage

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Data Confidentiality

- All non-emissions data collected under this proposal for the purpose of evaluating emissions leakage would be held as confidential information, pursuant to California Code of Regulations sections 91000–91022
- In addition, staff is exploring U.S. Census methods for handling confidential business information

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Current Availability of Data

- Staff has investigated several state and federal agencies that collect data that may indicate leakage
  - California agencies
    - Employment Development Department
    - Board of Equalization
    - Franchise Tax Board
    - California Energy Commission
  - Federal agencies
    - Bureau of Labor Statistics
    - Internal Revenue Service
    - Energy Information Administration
  - Dun and Bradstreet

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Current Availability of Data
(continued)

- Although some of these agencies collect data that may be useful in a leakage analysis, none of them collects all the necessary data
  - Some agencies may have different methodologies and definitions in data collection
- Some of these agencies have rigorous regulatory and statutory restrictions on access to the disaggregated data due to issues of confidentiality
  - ARB needs data disaggregated to at least the 6-digit NAICS code level
  - Most of these data are only available at highly aggregated levels

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CARB Leakage Monitoring Proposal

Wayne Gray
Clark University
CARB Leakage Workshop
July 30, 2012

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Leakage Monitoring Goals

- Important to address leakage
  - Impacts on California economy
  - Limits the actual aggregate reductions in GHG
- Important to address leakage efficiently
  - Likely to be variations across industries
  - Avoid over- or under-correction
- Assistance Factors
  - Free allocations to reduce leakage risk
  - Based on emissions intensity and trade exposure
  - Interaction of EI and TE factors
- Decreasing Assistance Factors over time
  - Highest leakage risk group gets 100% free
  - Middle, low groups get declining % free

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Census Research

- RFF project – energy price differences
  - Historical variations in energy prices
  - Cross-state and international energy price differences
  - Impacts on output, employment, and profits
  - Comparison of outcomes in CA vs. other states
  - Models differences in impacts across EITE industries
- UCB project – trade exposure
  - Detailed Census data on exports and imports
  - Focus on international effects
  - Better measures of trade exposure
  - Models differences in trade responsiveness across EITE industries

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Census Research

- Census Data
  - Long history of detailed establishment-level data
  - National data - California and surrounding states
  - International – trade flows, energy prices
  - Allows estimation of econometric models
  - Short- and long-run responsiveness
  - But not timely data – several years old
- Results predict differences in sensitivity of EITE industries to impact of A.B. 32
  - Could test for significant differences in impact
  - Could also test for overall level of impact
  - Could adjust Assistance Factors (groups and levels)

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Leakage Monitoring Project

- Collect annual data from all MRR reporters
- Questions based on Census questions
  - Output and specific products
  - Labor inputs, capital investment, materials
  - Additional information on energy usage and costs
- Much more timely data to address leakage
- Provides larger sample size of California facilities
  - But doesn't contain non-California facilities
- Comparable data not available elsewhere
  - Range of information from single source
  - Consistency with Census data questions

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Specific Data Requested

1. SALES, SHIPMENTS, RECEIPTS, OR REVENUE

A. Total value of products shipped and other receipts _____ ($000)

B. Top three (highest-revenue) product categories

	Product category	NAICS code	value of shipments
i.	_____	_____	_____ ($000)
ii.	_____	_____	_____ ($000)
iii.	_____	_____	_____ ($000)

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Specific Data Requested

2. EMPLOYMENT AND PAYROLL

	Production workers	All workers
A. Number for pay period Including March 12	_____	_____
B. Annual payroll before deductions (exclude employer's cost for fringe benefits)	_____ ($000)	_____ ($000)

3. CAPITAL INVESTMENT

A. Total capital expenditures for new and used buildings, machinery and equipment _____ ($000)

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Specific Data Requested

4. MATERIALS AND ENERGY

A. Cost of materials, parts, containers, packaging, etc.; cost of products bought and sold without further processing _____ ($000)

B. Total fuels and electricity spending _____ ($000)

	Cost	Quantity Consumed
i. Electricity	_____ ($000)	_____ (000 kwh)
ii. Natural Gas	_____ ($000)	_____ (Mbtu)
iii. Other _____ (type)	_____ ($000)	_____ (Mbtu)
iv. Other _____ (type)	_____ ($000)	_____ (Mbtu)

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Leakage Monitoring Analysis (1)

- Direct measures at establishment level
  - Annual measures of output and employment
  - Annual measures of energy costs and usage
- Ability to examine changes over time
  - Variation in annual changes across EITE industries
  - Variations in changes within industry
  - Variations in energy costs within and across industries
- California only – some comparisons possible
  - BLS-CES – national employment, detailed industries
  - BLS-QCEW – state employment, less industry detail

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Leakage Monitoring Analysis (2)

- Test research predictions from historical data
  - Census research predicts industry responsiveness
  - Compare industry-level outcomes to predictions
  - Identify variation in outcomes within industry
  - Identify variation in energy cost/usage
- Identify outcome deviations (actual – predicted)
  - Average impact across all industries
  - Impact on specific industries
  - Impact on establishments within industries
- Analyze data to explain deviations

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Leakage Monitoring Analysis (3)

- Long-run analysis (eventually)
  - After accumulating multiple years of data
  - Variation in output, employment changes over time
  - Distribution of changes in industry's energy costs
- Possible to expand research analysis
  - Taking advantage of similarity to Census questions
  - Combine Post-AB 32 results with Census research
- Re-estimate research models
  - More precise estimates of impacts on industries
  - Identify changes in industry parameters over time

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Leakage Monitoring Program Results

- Provides detailed data relatively quickly
  - Much quicker than waiting for new Census data
  - Much more industry detail than published sources
  - Can identify differences in outcomes within industry
- Comparable to Census data
  - Reduces respondent burden (familiar questions)
- Permits multiple layers of analysis
  - Comparisons of outcomes across industries
  - Deviations from Census research predictions
  - Eventual updating of Census research results

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Thank you

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Opportunity to ask Questions about Leakage Monitoring Proposal

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Comments

- Staff is requesting feedback on the following:
  - Potential increase in assistance factors for medium and low leakage risk categories
  - Proposal to collect facility-level economic data as a major means by which to monitor for leakage, especially
    - Collecting the data through Mandatory Reporting Regulation
    - Suggestions for additional data to collect
- Please submit written comments by August 30, 2012 at:

  http://www.arb.ca.gov/cc/capandtrade/comments.htm

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