

## Summary of 15-Day Proposed Rule Changes for Cap and Trade Regulation

Late last night, CARB released 274 pages of proposed rule changes for its pending cap and trade regulation. In conjunction with proposed rule changes, CARB also released specifics on allocation of carbon allowances to electrical distribution utilities and more detail on allowance allocation benchmarking for industrial sectors.

In this massive package CARB has made extensive and significant changes to its cap and trade regulations. The changes touch every facility covered by AB32. Some will be pleased. Others will be disappointed. There are changes that affect every business. Others are SIC code specific. And some changes narrowly affect the business prospects of single facilities.

We believe that businesses should take immediate action to:

1. Fully evaluate the impact of this rule on their California and domestic operations.
2. Protect the special treatment that they have been afforded.
3. Advocate amendments to rectify negative consequences.

CantorCO<sub>2</sub>e suggests that given the import and rapid schedule (workshop on July 15 and Board meeting August 24) this should be a top priority for your organization. Please contact one of our specialists to learn more about the rule package, how it may affect your operations, and what you should do now to protect your California interests.

CantorCO<sub>2</sub>e has done a preliminary survey of CARB's proposed changes to:

- Conduct two allowance auctions in 2012
- Begin facility compliance obligations in 2013
- Allocate allowances to energy and manufacturing facilities
- Auction allowances
- Increase the stringency of offset creation
- Compliance requirements
- Cap and trade mechanics

### Major Changes Proposed by CARB

- Rule language to begin compliance obligation in 2013 while conducting two allowance auctions in 2012
- Allowance allocations for individual electrical distribution utilities
- Development of proposed "product benchmarks" to allocate allowances to industrial sources
- Retention of controversial liability provisions in place for offset buyers

### Rule Change Categories

There are hundreds of changes to the proposed rule, some substantive, others administrative. CantorCO<sub>2</sub>e has grouped the important changes in the following categories for this summary:

- Compliance Schedule And Thresholds
- Compliance Instruments (Allowances And Offsets)

- Early Action Credit
- CARB Offset Protocols
- Exclusions

## COMPLIANCE SCHEDULE AND THRESHOLDS

### 2012 vs. 2013 Timing:

- The regulation reflects CARB's proposal to begin the compliance obligation in 2013, while conducting two auctions in 2012.
- Allocation, auction, trading, and other activities will begin in 2012 before the start of the compliance obligation and the first compliance period. CARB acknowledges that some additional modifications will need to be made prior to finalizing the proposed rule changes for Board approval.
- CARB is requesting comment on which program elements should begin in 2012 and what advantages there are to phasing in various components during 2012.

### Compliance Instruments: *Modifications to section 95840*

- Section 95840(a) was modified to **exclude 2012 from the first compliance period and accommodate the new compliance obligation start date of January 1, 2013.**

### Allowance Budgets Calendar Years 2012-2020: *Modifications to section 95841*

- Section 95841 was modified to **remove the allowance budget for 2012 to accommodate the new compliance obligation start date of January 1, 2013.**

### Inclusion Thresholds for Covered Entities: *Modifications to section 95812*

- Section 95812(a) was modified to specify that **reported and verified annual emissions** must be reported and verified pursuant to the verification sections of the Mandatory Reporting Regulation.
- Section 95812(b) was modified to specify that an entity will be classified as a covered entity if the reported or reported and verified **annual emissions in any data year from 2008 to 2011 exceed the thresholds** identified in sections 95812(c) and (d), and to **remove the term 'aggregated.'**

### Audits

- **Facility Energy Efficiency Audit Requirements:** CARB continues to seek ways to ensure that large industrial sources subject to the recently finalized Energy Efficiency and Co-Benefits Audit regulation be required to take all cost-effective actions identified under those audits.

### Definitions: *Modifications to section 95802*

- New or modified definitions to implement:
  - "first deliverer" approach for the electricity sector
  - benchmarking approach for distribution of allowances for several different sectors.

### Violations and Enforcement: *Modifications to section 96014*

- Section 96014(b) was modified to **clarify that each compliance instrument not surrendered on the appropriate surrender date is a single separate violation. The section was also clarified to allow the violation to accrue every 45 days instead of each day the compliance instruments remain unsurrendered.** These changes were made in response to stakeholder concerns about market volatility if a covered entity was required to obtain a significant number of allowances in a very short period of time, as initially drafted. These changes allow greater time to obtain the compliance instruments and thus maintain stability of the market.

## COMPLIANCE INSTRUMENTS (Allowances and Offsets)

### Quantitative Usage Limit On Designated Compliance Instruments—Including Offset Credits.

#### *Modifications to section 95854.*

- New section 95854(a) was **originally expressed as part of the “O” term in the equation in this section and was moved into its own section to make it more clear which compliance instruments are subject to the quantitative use limit.** This original text was also modified to include a reference to ARB offset credits (section 95820(b)), which was inadvertently omitted from the original regulatory text.
- The text in what is now section 95854(b) references section 95854(a), which clarifies which compliance instruments are subject to the quantitative usage limit so that it is made clearer. This text, as well as the modified text in the Oo and S terms of the equation, **establishes that the quantitative usage limit applies to the triennial compliance obligation and not the annual compliance obligation.** This modification was made in response to stakeholder comments. Staff agrees with stakeholders, who have indicated that applying the limit to each annual surrender is overly complicated and there is no benefit to the program applying it annually.
- Section 95854(c) was added to clarify that **sector based offset credits may only be used for up to 25 percent of the 8 percent total limit on designated compliance instruments, increasing to one half of the 8 percent in the second compliance period.** This reflects the intended changes identified for this section in Attachment B of Resolution 10-42.

### Timely Surrender of Compliance Instruments by a Covered Entity: *Modifications to section 95856*

- Section 95856(a) and (d) were modified to **provide additional time for an entity to meet its annual surrender obligation. Changing the date to November 1, provides consistency between the annual surrender and triennial surrender.** The extended deadline will also allow allocations to be distributed for the following year based on verified data.

### Untimely Surrender of Compliance Instruments by a Covered Entity: *Modifications to section 95857*

- Section 95857(b)(4) was modified to **provide a covered entity time to acquire compliance instruments from an auction or reserve before being required to provide CARB the number of compliance instruments assessed for an untimely surrender.** CARB made this change in response to several commenters who did not want to go to the secondary market.
- Section 95857(c) was **rewritten to outline the consequence of not meeting the untimely surrender obligation:** subsection (c)(1) indicates that ARB will determine the number of violations, (c)(2) indicates the entity will have a new untimely surrender obligation that includes the original untimely surrender obligation which has not been satisfied. **This new obligation is due immediately.** These changes are necessary because a new time frame is created by the changes to 95857(b)(4), and additional rules regarding the calculation of the obligation is necessary in the event of a partial surrender. This section is necessary to inform all regulated parties of the consequences of missing the untimely surrender obligation deadline.

### Compliance Obligation for Under- Reporting in a Previous Compliance Period: *New Section 95858*

- New section 95858 was added to address cases when the Executive Officer finds there had been **under-reporting by an entity after they submitted compliance instruments to meet their compliance obligation.** These provisions are necessary so entities with a compliance obligation know what action the Executive Officer would take in the event they are found to have under-reported their emissions.
- New section 95858(a) **provides that entities that are found to have underreported their emissions by less than five percent must not take any further action to replace the deficient compliance instruments.**

- New section 95858(b) provides that **entities that are found to have underreported their emissions by more than five percent must turn in compliance instruments in the amount calculated in** amount equals for the difference in what was initially reported and verified and what is determined by CARB.
- New section 95858(c) was **added to provide entities that must turn in compliance instruments for under-reported emissions a six month period to submit them to CARB.** Staff included a six month period to give covered entities enough time to acquire sufficient compliance instruments and avoid any short-term shocks to the market. This section also specifies which compliance instruments may be used to meet this requirement and provides that if the entity turns in all of the compliance instruments within the six month period they are not subject to the excess emissions obligation under section 95857. They are not subject to excess emissions because if they turn them in within the six months ARB considers the submittal to be a timely surrender.

**Disposition of Allowances:** *Modifications to section 95870*

- Section 95870(a) was modified to **change the date of creation of the Allowance Price Containment Reserve to July 18, 2012.** Section 95870(b) was modified to **change the date at which the Executive Officer would transfer future vintage allowances to the Auction Holding Account.** Both changes are necessary to reflect the change in dates of the first auction and reserve sales.
- Section 95870(b) was **modified to increase the amount of future vintage allowances auctioned each year from 2% to 10% of future allowance budgets.** This change is required to respond to stakeholder concerns about preparing for the second compliance period when there is an increase in the size of the program due to the addition of the transportation fuels and upstream natural gas sectors. The increase in the advance auction will allow covered entities to accumulate allowances for the second compliance period while diminishing the need for banking allowances from the first compliance period, which might otherwise tighten the market in the first compliance period more than is optimal.
- **The number of allowances available for allocation to electrical distribution utilities was increased. See table at the end of this summary.** Additionally, Table 8-1 has been updated to clarify the relationship between activities that produce products at risk for leakage and the sectors in which these activities occur.

**Allocation for Industry Assistance:** *Modifications to section 95891*

- Section 95891(b) was **modified to change the timing of output data to respond to stakeholder concerns about prolonged exposure to recessionary output levels.** A “true-up” term was added to the equation to ensure that the amount of allocation received for a given year is corrected to actual production for that year. The assistance factor (determined by leakage risk) and the cap decline factor were clarified to be a function of activity rather than of sector.
- The product benchmarks for industrial activities, as presented in Table 9-1 of section 95891(b), were added per Resolution 10-42, **to allow allowances to be allocated under the product-based approach.**
- **The name of the “thermal energy based allocation calculation methodology” in section 95891(c) was renamed the “energy based allocation calculation methodology” to more explicitly recognize the impact of electrical energy carbon costs and cost recovery.** A new term was derived from a heat rate based on the pending Public Utilities Commission Qualified Facility settlement to quantify the expected carbon cost recovery in the price of power sold from an industrial facility. Equivalent adjustments were made when establishing the values of the product-based benchmarks. The formula was also altered to show how any combined heat and

power facilities allocated to under this approach will receive allowances. In section 95891(c)(1) text was added to explain that under the energy based approach the baseline annual amount of California GHG Allowances directly allocated to each eligible entity will be representative of current activity but provide appropriate credit for early voluntary reductions in greenhouse gas emissions. The descriptions of data sources that ARB will use to allocate under this methodology were clarified and it was explained that, if necessary, the Executive Officer will solicit additional data to allocate under the energy based approach.

- **The cap decline factor table (Table 9-2), in section 95981(c), was altered slightly to show that this factor impacts the allocation to electrical distribution utilities, as well as to industrial facilities, and to remove the year 2012 to accommodate the change in compliance obligation start date.**
- **In addition to the industrial sectors identified in regulation for industry assistance to trade exposed sectors, additional sectors have also requested direct allocation of all or a portion of their allowances. Staff have reviewed the requests from these stakeholders and determined that some of these sectors are not at risk of emissions leakage, and therefore, do not qualify to receive assistance based on the risk for leakage due to the cap-and-trade program.**

**Allocation to Electrical Distribution Utilities for Protection of Electricity Ratepayers: Modifications to section 95892**

- This section was **modified to show how many allowances each electrical distribution utility will receive as a portion of the total electricity sector allocation created in section 95870.** This allocation to each utility is presented below. Appendix A explains how these values were derived. Additionally, section 95892(a) was added to include the specific allocation of allowances to individual electrical distribution utilities.

**CARB Recommended Allocation to Individual Utilities (Thousands of Metric Tons CO<sub>2</sub>e)**

	2013	2014	2015	2016	2017	2018	2019	2020
<b>Statewide</b>	95,844	94,085	92,229	90,373	88,614	86,758	84,901	83,143
PG&E	25,035	24,872	24,071	23,765	24,190	23,426	23,186	22,733
LADWP	13,624	13,379	12,946	13,070	13,243	13,285	12,733	11,713
SCE	32,700	31,689	31,484	29,631	26,954	25,976	25,110	24,808
SDG&E	6,931	6,560	6,436	6,416	6,470	6,298	6,198	6,156
SMUD	3,161	3,104	2,977	2,997	3,069	3,113	3,161	3,204
City of Anaheim	2,062	2,069	2,025	2,061	2,031	2,037	2,014	2,002
City of Azusa (Azusa Light & Water)	173	174	174	176	178	179	179	181
City of Banning	94	96	95	96	98	98	99	100
City of Burbank	802	807	807	813	820	825	824	826
City of Cerritos	18	18	18	18	19	18	19	19
City of Colton	235	237	239	240	243	242	243	244
City of Glendale	633	625	611	608	613	605	606	616
City of Pasadena	778	774	764	762	758	773	774	782
City of Riverside	1,132	1,123	1,114	1,142	1,140	1,146	1,126	1,120
City of Vernon	397	395	396	391	392	383	372	362
Imperial Irrigation District	1,582	1,585	1,568	1,585	1,607	1,589	1,555	1,534
Modesto ID	1,215	1,210	1,176	1,182	1,193	1,176	1,164	1,168
City of Alameda	51	54	54	55	55	63	63	63
City of Biggs	7	7	6	6	7	6	6	6
City of Gridley	15	15	15	14	15	14	14	14
City of Healdsburg	32	31	29	30	32	33	33	35

City of Lodi	160	159	152	152	155	153	149	150
City of Lompoc	48	47	45	47	48	47	46	47
City of Palo Alto	342	337	324	322	326	319	312	312
City of Redding	431	475	464	463	471	475	465	467
City of Roseville	469	473	470	480	494	476	465	459
City of Ukiah	34	33	30	32	35	37	37	37
Plumas-Sierra Rural Electric Cooperation	62	62	62	61	61	60	59	57
Port of Oakland	31	31	31	31	31	30	29	29

	2013	2014	2015	2016	2017	2018	2019	2020
Silicon Valley Power	1,091	1,087	1,056	1,097	1,154	1,163	1,141	1,158
Truckee-Donner Public Utility District	116	117	118	118	119	119	119	120
Turlock Irrigation District	904	917	913	918	937	929	910	906
Anza Electric Cooperative, Inc.	19	20	20	20	21	20	20	20
Bear Valley Electric Service	0	0	0	0	0	0	0	0
City of Needles	10	10	11	11	11	11	11	11
City of Rancho Cucamonga	25	25	25	26	26	26	26	26
City and County of San Francisco	95	109	124	139	154	170	187	201
City of Shasta Lake	50	51	51	51	53	53	53	54
Lassen Municipal Utility District	49	50	51	51	52	51	52	52
Merced Irrigation District	164	167	169	170	173	172	172	173
Moreno Valley Utilities	38	38	39	39	40	39	40	40
Mountain Utilities	3	3	3	3	3	3	3	3
Port of Stockton	5	5	5	5	5	5	5	5
Power & Water Res Pooling Author	64	65	65	67	71	71	71	73
Liberty Pacific Power Company	217	221	224	226	229	227	228	227
Surprise Valley Electrical Corp	52	52	53	54	55	54	54	54
Trinity Public Utility District	0	0	0	0	0	0	0	0
USBR WAPA Boulder City	319	334	349	353	369	360	363	358
Valley Electric Association, Inc.	0	0	0	0	0	0	0	0
Victorville Municipal	23	23	24	24	24	24	24	24
Hercules	6	6	6	6	7	7	7	7
City of Industry	9	9	9	9	9	9	9	9
Corona	58	59	59	60	61	61	61	61
Pittsburg Power/ Island	4	4	4	4	4	4	4	4
Eastside	5	5	5	5	5	5	5	5
PacifiCorp	270	268	260	269	280	289	294	306

- Section 95892 was modified to **delete the existing requirement that electrical distribution utilities offer all allowances in their limited use holding accounts to auction within the year they were received. New section 95892 requires that one sixth of all 2013 vintage allowances in limited use holding accounts must be consigned to auction in each of the two auctions scheduled for 2012.**
- Section 95892(c)(2) **recreates the existing consignment requirement for auctions taking place in calendar years after 2012. The changes were needed to accommodate the decision to have two auctions of vintage 2013 allowances take place in 2012 before the beginning of the first compliance period.**
- The Department of Water Resources, the Metropolitan Water District and the State Water Contractors have requested direct allocation of allowances to cover their emissions obligation and the potential cost burden of purchasing electricity to convey water from the State Water Project

and the Colorado River Aqueduct. **CARB staff reviewed these requests and does not recommend direct allocation to the water utilities consistent with the October 2010 proposal. Since the allowance allocation provided to electrical distribution utilities as described in Appendix A includes allowances associated with electricity used to convey water, staff believes that the electrical distribution utilities are the appropriate conduit for the return of allowance value associated with electricity generation to ratepayers.**

- **Passthrough of Compliance Costs from IPPs to IOUs.** As detailed in footnote 22 of the Initial Statement of Reasons for the cap-and-trade regulation, some generators and industrial steam producers have reported that some existing contracts do not include provisions that would allow full passthrough of cap-and-trade costs. CARB staff is still evaluating this issue to determine whether some specific contracts may require special treatment on a case-by-case basis. In several cases, staff is aware and encouraged that parties are in the process of or already have negotiated new contracts to resolve this issue. Staff believes that bilateral contract negotiations would provide the best resolution of this issue. Should contract renegotiation not be possible in all cases, staff will continue discussions with counter-parties to consider how this issue should be resolved in the regulation.

**Emission Categories Used to Calculate Compliance Obligations for Electricity and Fuel Suppliers.**  
*Modifications to section 95852*

- New section 95852(a)(2) was included to specify that beginning in 2015, combustion emissions resulting from burning specific fuels are not included when calculating an entity's compliance obligation. **This modification was made to specify that the compliance obligation for these specified fuels is at the supplier level in 2015.** This is the case only for stationary combustion and not suppliers.
- Section 95852(b) was modified to **specify how the compliance obligation is calculated for electricity marketers and retailers that import electricity and for natural gas suppliers** – who will subtract out the fuel supplied to entities subject to the cap (e.g., electricity generators) and whose obligation is based on the end user's combustion of the fuel. In addition, the reference to thresholds is added to clarify that first deliverers incur compliance obligations only if they exceed the applicable threshold.
- New section 95852(b)(1) was added to **prohibit resource shuffling and minimize the potential for leakage.** Leakage occurs if a first deliverer switches what resources are deemed to serve California to claim a lower compliance obligation, while total actual emissions within the interconnected western electricity grid are not reduced.
- New section 95852(b)(2) clarifies that, in order to make a specified delivery claim, and that **first deliverers must have ownership rights with a clear link to the source of the electricity delivered** This section was added to clarify what is required for a first deliverer to claim a facility specific emission factor for an electricity delivery.
- New section 95852(b)(3), in conjunction with a **new definition for replacement electricity in section 95802, sets out requirements for claiming the emission factor of a variable renewable resource (wind, solar, or run-of-the-river hydroelectric) for “substitute” electricity that is delivered in place of the real-time generation.** This provision was added to address utility concerns about the treatment of renewable electricity, and to strike a balance between recognizing the value of variable renewable electricity and limiting the possibility for double counting of emission reductions in cases where electricity from a variable renewable resource cannot be directly delivered to California.
- New section 95852(b)(4) requires “direct delivery”, newly defined in section 95802, for electricity with a facility specific emission factor lower than the default emission factor. This section is needed to ensure that claims for electricity from a specific facility are for electricity that is actually

delivered to serve California load, and is not used to serve load outside of California. This requirement is intended to prevent resource shuffling and leakage.

- New section 95852(b)(5) **requires that electricity generated from biomethane, in order to receive a zero emission factor**, must meet reporting requirements pursuant to MRR. This is added to ensure that claims for electricity from biomethane are supported by the reporting of all data necessary to demonstrate that the electricity is not subject to a compliance obligation.
- In conjunction with a new definition of qualified exports, new section 95852(b)(6) **allows a credit against a first deliverer's compliance option based on emissions from electricity that is exported at the same time that the first deliverer is importing electricity**. This provision addresses stakeholder concerns regarding "simultaneous exchanges" and recognizes that this kind of exchange is similar to the wheeling of electricity through California, in that not all of the electricity being imported is actually used to serve California load.
- New sections 95852(c)(1) through (c)(4) were included to **specify that suppliers of natural gas must report emissions delivered to all end users in California**. ARB will then calculate the metric tons CO<sub>2</sub>e of GHG emissions for natural gas delivered to covered entities. The emissions will comprise the CO<sub>2</sub>e emissions 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. These sections were added to clarify how the compliance obligation will be determined for suppliers of natural gas.
- New section 95852(c)(3) specifies that **ARB will provide the supplier of natural gas a listing of all customers and aggregate natural gas volumes and emissions calculated from the supplier's natural gas delivered to covered entities**. Following the verification deadline, the supplier of natural gas will be notified of their compliance obligation. This section is needed to clarify that ARB will provide suppliers of natural gas with the data used to determine their compliance obligation.
- Section 95852(d) was modified to **specify that suppliers of petroleum products have a compliance obligation for every metric ton CO<sub>2</sub>e of GHG emissions** 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 except for products for which a final destination outside California can be demonstrated. This modification is necessary to specify that the obligation is not only for imports into or deliveries into California.
- New section 95852(h) was added to **specify emissions categories used to calculate compliance obligations for oil and gas producers**.

**Auction of California GHG Allowances:** *Modifications to section 95910*

- Section 95910(a) was **modified to match the new schedule of auctions and reserve sales. This was necessary to accommodate covered entities' verification deadlines in MRR and the decision to have two auctions in 2012 and four in 2013 onwards.**
- Section 95910(c)(1) **modifies an existing provision that one fourth of allowances allocated for auction each year by ARB will be sold at each auction to reflect the decision to begin such auctions in 2013.**
- Section 95910(c)(2) **was modified to have the existing requirements for advance auction begin in 2013 not 2012. For 2012, one half of the 2015 vintage allowances allocated to the advance auction will be sold at each of the two auctions taking place in 2012.**
- Section 95910(d)(4) was modified to reflect the change in the auction schedule.

- Revised allowance auction schedule:
  - August 15, 2012
  - November 14, 2012
  - 2013 and following year auctions will be held on the 12<sup>th</sup> business day of the first month of each calendar quarter.
- 2012 and 2013 Auctions will have a reserve price of \$10.00. Unchanged from the original proposed rule, that price that will increase 5% plus the rate of inflation annually.
- The existing text requires that allowances must be consigned to the auction at least 75 days prior to the auction in order for the number of allowances auctioned to be included in the auction notice. For the two auctions in 2012, the consignments need occur only 10 days before the auction because the number of allowances to be consigned is set in regulation and will be known in time to be included in the auction notice.

**Format for Auction of California GHG Allowances:** *Modifications to section 95911*

- Section 95911(b)(3) was modified to clarify that when there are insufficient bids to sell all consigned allowances, the administrator will sell an equal proportion of the consigned allowances from each source.
- Section 95911(b)(4)(A) was added to **clarify that unsold, non-consigned allowances at auction will be allocated equally to the three tiers of the allowance price containment reserve.** Any allowances remaining after this division will be deposited in the lowest price tier. Section 95911(b)(4)(B) was added to clarify that unsold future vintage allowances will be returned to the Auction Holding Account for sale at the next auction.
- Section 95911(b)(6) **modifies the effective dates of the reserve price and the reserve price escalator to reflect the new schedule for auctions.**
- Section 95911(c) **clarifies that the purchase limit for the advance auction will be 25 percent.** A higher purchase limit was chosen for the advance auction because CARB staff concluded that there is a lower risk of market manipulation at the advance auction compared with the current vintage auction, due to the lower proportion of each year's allowance budget sold at the advance auction and the fact that future vintage allowances cannot be used for current compliance.

**Sale of Allowances from the Allowance Price Containment Reserve:** *Modifications to section 95913*

- Section 95913(a) was modified to clarify that a financial services administrator will conduct the financial transactions for sales from the Allowance Price Containment Reserve Account. This is necessary to make clear that ARB will not actually be conducting financial transactions and they will occur only through a third party.
- Section 95913(c) was **modified to clarify that only covered entities, as defined in the regulation, that are registered shall be eligible to purchase allowances from the Allowance Price Containment Reserve Account.** This clarification and limitation is necessary because the purpose of the Allowance Price Containment Reserve Account is to protect covered entities from the possibility of allowances being unavailable. If all registered participants were able to purchase from the Allowance Price Containment Reserve Account, the policy of ensuring allowances are available would be substantially undermined.
- Two changes to accommodate the change in start date for the compliance obligation in the cap-and-trade program. **In section 95913(c)(3)(A) the date of the first reserve sale was changed from 2012 to 2013.**

- In section 95913(d) CARB **changed the effective dates for setting the prices in each tier, as well as the price escalation mechanism, to reflect the new compliance obligation start date.**
- At the suggestion of stakeholders, section 95913(f)(3) was **modified to implement a new process for determining the number of allowances purchased from the Allowance Price Containment Reserve. This change was made in response to stakeholder comments that the original bid process in original section 95913(e)(1) was unnecessarily cumbersome and together with the tie-breaking procedure in section 95913(f)(4) could result in bidders paying too much for or not getting the allowances they need.** Some stakeholders recommended that ARB replace bidding on specific tiers of the reserve with a process in which bidders specify a quantity and a maximum price, and the bids are filled with the lowest priced allowances available. Staff agreed with the comments and is proposing this change. ARB requests comment on whether this process represents a simplification and reduces uncertainty.

**Trading: Modifications to section 95920**

- New section 95921(b) adds **new provisions that the holding limit does not apply to allowances contained in a limited use holding account. In addition, allowances held by a clearing entity will be counted against the holdings of the entity to whose account the instruments will be transferred when the transaction has been cleared.** The section adds a requirement that if a transaction is discovered to violate the holding limit after the transaction has been discovered, then the transaction may be reversed and a penalty applied.
- New section 95920(c) was **added to clarify that the holding limit will be applied separately to allowances which can be used for current compliance and to allowances from future vintages which cannot be used for current compliance.**
- New section 95920(d)(1) contains the existing holding limit formula to be applied to allowances which can be used for current compliance. **New section 95920(d)(2) contains an extensive clarification of the calculation of the existing limited exemption from the holding limit in section 95920(d)(1).** Stakeholders had commented that the language did not convey that the exemption was cumulative through the compliance period nor was it clear how the exemption would be calculated based on emissions reports.
- New section 95920(e) **contains a formula for calculating the holding limit for future vintage allowances which cannot be used for current compliance.** The formula is similar to the one in section 95920(d)(1), except that the “base” parameter was multiplied by three and the formula is calculated using the entire compliance period budget rather than a single budget year.

**General Requirements for CARB Offset Credits: Modifications to section 95970**

- **Section 95970 was modified to distinguish between a CARB offset credit and a registry offset credit and establish the requirements that each must meet.** These clarifications were necessary because the originally proposed language could have been interpreted to mean that any offset credit could be used in the cap-and-trade program without limiting them to ARB issued offset credits.

**Requirements for Compliance Offset Protocols: Modifications to section 95972**

- Section 95972 was **modified to require that all Compliance Offset Protocols must specify the geographic location where they are applicable. This requirement clarifies that compliance offset protocols can only be applicable in North America.** This change was necessary because stakeholders were confused about the possible location of the offset projects for which ARB would issue ARB offset credits.

**Requirements for Offset Projects Using ARB Compliance Offset Protocols:** *Modifications to section 95973*

- Section 95973 was **modified to address stakeholder comments by clarifying the eligibility criteria for offset projects. The text was also modified to address requirements that unintentionally would prohibit early action offset projects from being able to transition to Compliance Offset Protocols based on the offset project commencement date.**
- A new section 95973(c) **now makes it clear that early action offset projects may have commencement dates prior to December 31, 2006**, which is consistent with the requirements in section 95990.
- Section 95973(d) was added to clarify that offset projects developed on lands related to federally-recognized Indian tribes are eligible only if the Offset Project Operator or Authorized Project Designee demonstrates the existence of a limited waiver of sovereign immunity between the Tribe and ARB, entered into pursuant to section 95975 of this article. This modification also clarifies the categories of lands to which this requirement applies. This new provision is needed to ensure Offset Project Operators or Authorized Project Designees meet the requirements for listing in section 95975.

**Issuance of ARB Offset Credits:** *Modifications to section 95981*

- Section 95981 **was modified to apply only to the issuance of ARB offset credits. ARB offset credits can only be issued by ARB because they are able to be used for compliance.** The issuance of both ARB and registry offset credits were originally in section 95980. **This modified section and modified section 95980 clarify the difference between the issuance of ARB and registry offset credits.** In addition, new attestations that must be made by Offset Project Operators and Authorized Project Designees were added to the process for issuing ARB offset credits (new section 95981(c)). This will help to ensure all the requirements of the program are met before ARB offset credits are issued.

**Process for Issuance of ARB Offset Credits:** *New section 95981.1*

- New section 95981.1 was added to clarify the process by which ARB would issue ARB offset credits. The processes for issuing both registry and ARB offset credits were originally in section 95981. **This new section and new section 95980.1 were added to establish the difference between the processes for issuing a registry offset credit and an ARB offset credit and provide clarity.**

**Ownership and Transferability of ARB Offset Credits:** *Modifications to section 95984*

- Section 95984 **was modified to specify for which purposes an ARB offset credit can be used. These changes were needed to make it clear to market participants how an ARB offset credit can be used within the cap-and-trade program. Additionally, a numbering structure was added to this section for readability.**

**Invalidation of ARB Offset Credits:** *Modifications to section 95985*

- Section 95985(a)(2) was deleted and moved to section 95985(a). Section 95985(a)(1) was **deleted because it was mistakenly included in the original regulation. All offsets will be retired once they are used for compliance, therefore we cannot require that all retired offsets be invalidated.**
- Section 95985(b) was **modified in response to stakeholder comments to include a statute of limitations within which ARB would be able to invalidate an ARB offset credit. CARB staff determined that an 8 year time limit was sufficient** to allow two verification bodies to review all the related offset project documentation, since verification bodies must be rotated once every six years. This gives ARB sufficient time to review all verification related material.

- Original section 95985(d), now section 95985(f), was **modified to change the replacement timing from 30 days to 90 days to give entities enough time to acquire allowances at auction, or purchase additional ARB offset credits in the market.**

## EARLY ACTION CREDIT

### Recognition of Offset Credits for Early Action: *Modifications to section 95990.*

- New section 95990(a), original section 95990(c), **was modified to change the dollar amount of professional liability insurance that Early Action Offset Programs must hold from two million to one million. This change was made in response to stakeholder comments that currently operated voluntary registries only hold one million dollars.** This section was also modified to remove the requirements that Early Action Offset Programs track prices and counter parties. This was removed in response to stakeholder comments that Early Action Offset Programs do not have the capability to track them.
- New section 95990(c)(3) was added to the list of original requirements. **This section requires that GHG reductions or GHG removal enhancements must result from an early action offset project listed prior to January 1, 2013.** Originally the timing was tied to the offset project commencement date of January 1, 2012. Staff made this change because the acceptance of early action offset credits is tied to vintage years as opposed to offset project commencement. The date was changed from 2012 to 2013 because the offsets program will not be implemented by January 1, 2012.
- Original sections 95990(b)(5)(D) and (E) were combined into new section 95990(c)(5)(D), original section 95990(b)(5)(E)(i) was deleted and original section 95990(b)(5)(E)(ii) was moved into new section 95990(c)(5)(D). **These changes were made because once the requirement to have a conservation easement was deleted, the requirements for all the forest projects are the same and do not need to be in separate provisions. The requirement for conservation easements was deleted because it is not needed since all projects are required to contribute to the Forest Buffer Account.**
- New section 95990(d) was added to **require that Offset Project Operators and Authorized Project Designees register with ARB. All entities implementing an offset project must register with ARB to ensure the agency has all necessary information about the owners of an offset project.** These requirements are similar to those for offset project coming in directly under an ARB Compliance Offset Protocol.
- Original section 95990(e) was moved to new section 95990(h)(6). New section 95990(e)(1) was added to **include listing requirements for early action offset projects. These requirements are similar to those required of Offset Project Operators and Authorized Project Designees bringing in a compliance offset project under an ARB Compliance Offset Protocol.** CARB states that listing is necessary to ensure that ARB has access to all information regarding early action offset projects. New section 95990(e)(2) was added to require Early Action Offset Programs to make specific information regarding early action offset projects publicly available. The changes to this section also clarify what happens to the crediting periods of early action offset projects once they transition to ARB Compliance Offset Protocols.
- Section 95990(f) was **modified to clarify the requirements for regulatory verification of early action offset projects.** New section 95990(f)(1) includes **new requirements that the verifier performing the re-verification services must be different than the one that did the initial verification for the Early Action Offset Program.** This ensures that the review is completely independent and unbiased. The new requirements include a desk review of each Offset Project Data Report (new section 95990(f)(3)) by an ARB accredited verification body based on all original early action offset project documentation. A desk review by an independent body that is

accredited by ARB is sufficient to determine if the information originally submitted regarding the offset project is complete and accurate. Staff has also included provisions to allow all Offset Project Data Reports for an individual offset project to be included in one desk review (new section 95990(f)(3) in response to stakeholder concerns that re-verification costs may be exceedingly high.

- Section 95990 was **further modified to include a threshold based on offset material misstatement in section 95990(f)(4) that, if found to be exceeded during the desk review, would trigger full offset verification services for the Offset Project Data Reports that exceed the threshold. Staff set this threshold at 3 percent or more or 25,000 metric tons CO<sub>2</sub>e, whichever is smaller.** The 25,000 threshold is the same as the threshold for inclusion of covered entities in the cap-and-trade program and staff anticipates that three percent would be around this level as well. This provision allows for the same verifier that performed the desk review to conduct the full verification services because at this point in the process staff feels that the review by the same verifier is still independent and unbiased however, it may not be done by the verification body that did the initial verification under the Early Action Offset Program for reasons mentioned above. This provision also allows all Offset Project Data Reports that exceed the threshold and must undergo full offset verification services to be done as one verification service. This was included in response to stakeholder concerns that re-verification costs may be exceedingly high. Sections 95990(f)(4)(A) through (E) replace original sections 95990(f)(3) and include all the requirements that must be met to ensure that the early action offset credits are verified according to regulatory verification requirements of all ARB offset credits as found in section 95977.1.
- CARB is seeking stakeholder comments on potential ways to facilitate the regulatory verification of early action offset credits that is efficient, does not require multiple verifiers to look at the same offset project data, and potentially provides a single, shared cost for verification services for an Offset Project Data Report.
- New section 95990(g) was moved from original section 95990(f)(2) and **modified so that conflict of interest is now assessed only against any party that holds more than 30 percent of the early action offset credits issued in each data year.** Originally the regulation required that conflict of interest be assessed against all holders of the early action offset credits. Staff made this modification to reflect stakeholder concerns that applying conflict of interest to all early action offset credit holders is unnecessary and overly burdensome.
- New section 95990(h) was **added to clarify the criteria that early action offset credits must meet to be issued ARB offset credits.** These requirements are similar to the issuance requirements for ARB offset credits in new section 95981. New sections 95990(h)(1), (3), (4) provide that ARB offset credits will be issued for those early action offset credits that meet the requirements of sections 95990(c), (e), and (f).
- **New section 95990(h)(2) requires that all the GHG reductions or removal enhancements must be achieved by December 31, 2014.** This is because beginning on January 1, 2015 all offset projects must use Compliance Offset Protocols and are no longer eligible to be brought into the compliance program if they are using Early Action Offset Program protocols approved pursuant to this section.
- New sections 95990(i)(1)(A) through (C) **specify that one ARB offset credit will be issued for each early action offset credit** that meets the requirements of section 95990(h) if the offsets occurred under the identified protocols in these sections.
- New section 95990(i)(1)(D) **identify conditions that must be met for an ARB offset credit to be issued if the projects are using one of the identified protocols in this section.**

- New section 95990(i)(1)(D)(i) **requires that a portion of offset credits calculated pursuant to Compliance Offset Protocol U.S. Forest Projects be placed into the Forest Buffer Account.** Like compliance offset projects, early action forest projects are also subject to reversals; therefore, these projects must also contribute ARB offset credits into the account to cover any potential losses.
- New section 95990(i)(1)(D)(ii) **specifies that the ARB offset credits may come from a buffer account that is already being run by an Early Action Offset Program or may be subtracted from the total ARB offset credits issued at the time of conversion.** The first case is identified because stakeholders have made ARB aware that some voluntary registries have already required their forest projects to contribute to a buffer account. If those registries will release the offsets to ARB, they will be accepted to meet this requirement. The second case is designed to cover those offset projects that have not contributed to a buffer account already or cannot get the offsets released to ARB by the voluntary registry.
- New sections 95990(i)(1)(D)(3.) and (4.) were included to **identify what happens in the event that there is a reversal from an early action forest offset project.** These provisions treat reversals the same way as they are treated for compliance offset projects pursuant to section 95983. This ensures that all forest offset credits are meeting the same standards.
- New section 95990(i)(1)(E) provides the **requirements that early action offset projects using Climate Action Reserve Forest Project Protocol, Version 2.1 must meet only if they plan to transition their early action offset projects to Compliance Offset Protocol U.S. Forest Projects.** If the offset project will not transition to the compliance program, they would follow the rules in section 95990(i)(1)(D). **Offset projects transitioning into the compliance system must recalculate their baseline based on the requirements in Compliance Offset Protocol U.S. Forest Projects.** If they would have been issued more early action offset credits after they recalculate their baseline, ARB will issue them ARB offset credits in that additional amount, otherwise they will be issued ARB offset credits on a 1:1 basis. These provisions are necessary because the project baselines for offset projects using Climate Action Reserve Forest Project Protocol, Version 2.1 need to be recalculated as averaged baselines.
- New section 95990(i)(2) through (4) **outline the process that ARB will use to notify the Early Action Offset Program that ARB offset credits have been issued to replace their early action offset credits.** These provisions are necessary so these programs can retire the appropriate offsets in their own systems, to avoid the same GHG reductions or GHG removal enhancements being credited twice in multiple systems.
- New section 95990(j) was moved from original section 95990(d) and **modified to include a timeframe of 15 days for ARB to notify the original holders of the early action offset credits that they have been issued ARB offset credits.** This section further requires that those claiming that the early action offset credits belong to them must prove they own them and register for ARB. These steps ensure ARB has transferred the ARB offset credits to the correct parties, and that ARB can track their participation in the market.
- New section 95990(k) was added **to clarify how early action offset projects transition to compliance offset projects.** New sections 95990(k)(1)(A) through (C) **specify that early action offset projects using Early Action Offset Program protocols identified in the provisions must use the specified Compliance Offset Protocols and must begin using the Compliance Offset Protocols by December 31, 2014.** These provisions are necessary so Offset Project Operators and Authorized Project Designees know which Compliance Offset Protocols they must use and the timing for when they must transition.
- New section 95990(k)(1)(D) **specifies that early action offset projects using Climate Action Reserve Forest Project Protocol version 2.1 must recalculate their baselines pursuant to**

**Compliance Offset Protocol U.S. Forest Projects.** This provision is necessary to ensure consistency across all forest projects in the compliance program.

- New section 95990(k)(1)(E) **requires that all early action offset projects using Climate Action Reserve Forest Project Protocol versions 3.0 through 3.2 subtract any optional pools that are excluded from Compliance Offset Protocol U.S. Forest Projects beginning with the last reporting period.** This provision is necessary to ensure consistency across all forest projects in the compliance program because these pools will be excluded for any new projects coming into the program beyond December 31, 2014.
- New section 95990(k)(2) was added to **clarify that all early action offset projects which transition to a Compliance Offset Protocol will begin a new crediting period.** This provision was included to provide clarity for stakeholders on the length of eligibility for transitioned offset projects.
- New sections 95990(k)(3) and (4) was added to **require that once an early action offset project transitions it must meet all the requirements that all compliance offset projects must meet if they begin under Compliance Offset Protocols.**
- New section 95990(l) was added to **provide that ARB offset credits issued to non-forestry early action offset projects are also subject to the invalidation provisions in section 95985.** These provisions are necessary to ensure that there are replacement measures in place in the event an ARB offset credit is found to be invalid, and also ensure consistency across all offset projects in the compliance program beginning in the second compliance period, 2015.

## **CARB OFFSET PROTOCOLS**

### **1. Modifications to Compliance Offset Protocol Urban Forest Projects.**

- This protocol was also modified to clarify that offset projects on lands related to federally-recognized Indian tribes are eligible under this protocol only if the tribes enter into a waiver of sovereign immunity with ARB related to the tribes' participation in the requirements of this protocol and the Cap-and-Trade Regulation. This ensures ARB's ability to pursue judicial remedies, if necessary, regarding these offset projects when enforcing the requirements of this protocol and the Cap-and-Trade Regulation, similar to ARB's ability to pursue judicial remedies regarding all other offset projects commenced under this protocol.

### **2. Modifications to Compliance Offset Protocol Livestock Projects.**

- This protocol was also modified to clarify that offset projects on lands related to federally-recognized Indian tribes are eligible under this protocol only if the tribes enter into a waiver of sovereign immunity with ARB related to the tribes' participation in the requirements of this protocol and the Cap-and-Trade Regulation. This ensures ARB's ability to pursue judicial remedies, if necessary, regarding these offset projects when enforcing the requirements of this protocol and the Cap-and-Trade Regulation, similar to ARB's ability to pursue judicial remedies regarding all other offset projects commenced under this protocol.

### **3. Modifications to Compliance Offset Protocol Ozone Depleting Substances Projects.**

- This protocol was **modified to add CFC 113 as an eligible refrigerant and a carbon ratio was added for CFC 115. The leakage rate was changed to include the impact of California's Refrigerant Management Program.** Staff also clarified that a third-party must verify compliance with the United Nations Technical and Economic Assessment Panel TEAP requirements.
- This protocol was also modified to clarify that offset projects on lands related to federally-recognized Indian tribes are eligible under this protocol only if the tribes enter into a waiver of sovereign immunity with ARB related to the tribes' participation in the requirements of this

protocol and the Cap-and-Trade Regulation. This ensures ARB's ability to pursue judicial remedies, if necessary, regarding these offset projects when enforcing the requirements of this protocol and the Cap-and-Trade Regulation, similar to ARB's ability to pursue judicial remedies regarding all other offset projects commenced under this protocol.

#### 4. Modification to Compliance Offset Protocol U.S. Forest Projects.

- This protocol was clarified to **require that the 10-year look-back at management activities on project lands is independent of past ownership to avoid crediting of regrowth of trees that were recently harvested.**
- CARB staff made **clarifications to the protocol that state forest projects are not eligible to receive qualified positive offset verification statements**, specifying the number of sample plots to be measured and which statistical tests to use, requiring that the project acreage to be verified, requiring that the verification team include a person with demonstrated competence in forest biometrics and modeling, and including requirements for less intensive verification, which requires site visits once every six years after initial verification.
- This protocol was also modified to clarify that offset projects on lands related to federally-recognized Indian tribes are eligible under this protocol only if the tribes enter into a waiver of sovereign immunity with ARB related to the tribes' participation in the requirements of this protocol and the Cap-and-Trade Regulation. This ensures ARB's ability to pursue judicial remedies, if necessary, regarding these offset projects when enforcing the requirements of this protocol and the Cap-and-Trade Regulation, similar to ARB's ability to pursue judicial remedies regarding all other offset projects commenced under this protocol.

#### Forestry Offset Reversals: *Modifications to section 95983.*

- **The timing for Offset Project Operators or Authorized Project Designees to notify ARB of an intentional reversal was changed in section 95983(b) from six months to 30 days.** CARB staff believes since the notification is based on the discovery of the reversal as opposed to its occurrence that 30 days is sufficient for notification.
- Section 95983(b)(1)(A) was moved to section 95983(b) and section 95983(b)(1)(B) was moved to section 95983(b)(1) to provide clarity without changing the intent of the original text. **Section 95983(b)(2) was modified to clarify how ARB offset credits are retired from the Forest Buffer Account in the event of an unintentional reversal and removes an inaccurate citation.**
- Sections 95983(c)(1) and original section 95983(c)(2) were **modified and/or deleted to clarify the process for notifying ARB of an intentional reversal.** ARB will not notify the Offset Project Operator or Authorized Project Designee of its determination because the occurrence of an intentional reversal is required to be verified in new section 95983(c)(2) within one year of the occurrence of an intentional reversal. This verification will determine if there is an intentional reversal.
- New section 95983(c)(3) **replaces original section 95985(e) which requires that Offset Project Operators or Authorized Project Designees replace ARB offset credits with valid compliance instruments in the case of an intentional reversal. The original replacement timing was 30 days and staff changed it to 90 days to give entities enough time to acquire allowances at auction, or purchase additional ARB offset credits in the market.**
- A new requirement was added to section 95983(c) that says **ARB offset credits will be retired from the Forest Buffer Account if the reversed tons are not replaced by the Offset Project Operators or Authorized Project Designees within the 90 days.** This ensures that the system is made whole and that the environmental integrity of the program is intact. If the Offset Project Operator or Authorized Project Designee does not replace the ARB offsets within the 90 days and

ARB offset credits are retired from the Forest Buffer Account, ARB will assess penalties pursuant to section 96014. This allows the program to be made whole and still requires that the “bad actors” are appropriately penalized for not making the program whole.

- New section 95983(c)(4) was **added to clarify what happens in the case of an early forest project termination. These provisions were added to deter forest project owners from terminating their offset projects early given permanence requirements that require the sequestration of carbon for 100 years.**
  - If there is an early project termination, ARB will retire ARB offset credits from the Forest Buffer Account and notify the Offset Project Operator or Authorized Project Designee of the retirement. This ensures that the system is made whole and that the environmental integrity of the program is intact.
  - The Offset Project Operator or Authorized Project Designee must replace all of the reversed tons calculated pursuant to Compliance Offset Protocol, U.S. Forest Projects to ARB within 90 calendar days.
  - If the Offset Project Operator or Authorized Project Designee does not replace the ARB offsets within the 90 days and ARB offset credits are retired from the Forest Buffer Account, ARB will assess penalties pursuant to section 96014. This allows the program to be made whole and still requires that the “bad actors” are appropriately penalized for not meeting the requirements of this article and not making the program whole.

## EXCLUSIONS

### **Emissions without a Compliance Obligation:** *Modifications to section 95852.2*

- Sections 95852.2(a) was modified to **further clarify which types of waste sources do not have a compliance obligation.** Also in this section, CARB staff deleted text that would not allow biogas from digesters to be exempt from a compliance obligation.
- New section 95852.2(b) was modified to **specify that emissions from geothermal generating units and geothermal facilities do not hold a compliance obligation.**
- Section 95852.2(s) **excludes emissions from facilities that directly combust municipal solid waste to energy in an existing permitted facility.** This provision was added because including emissions from these facilities in cap-and-trade would cause statewide GHG emissions to increase as a result of diversion of waste to landfills. This exclusion is based on CARB analysis of the potential economic impacts created by a cap-and-trade program and the potential increase in methane emissions resulting from diversion of waste to landfills even after the implementation of early action measures. CARB also believes this provision is consistent with recognition of one facility as Renewable Portfolio Standard eligible and with similar provisions in the European Union Emissions Trading System (EU-ETS) and the Regional Greenhouse Gas Initiative (RGGI) where these facilities have no compliance obligations.