



Paul Hastings

AB 32 Cap-and-Trade Rulemaking

Compliance Dialogue

Held April 12-13, 2010 in Sacramento, CA

SUMMARY REPORT

On April 12-13, 2010, the Center for Clean Air Policy (CCAP) and the law firm of Paul, Hastings, Janofsky, and Walker (Paul Hastings) convened a stakeholder dialogue, which included potential regulated entities, environmental organizations, and third-party market participants, to discuss compliance issues related to the California Air Resources Board's AB 32 cap-and-trade rulemaking. This document summarizes background information distributed by CCAP and Paul Hastings to each participant in advance of the meeting, outlines the questions presented for discussion at the meeting, and summarizes the convenors' understanding of the resulting dialogue. In certain instances, general points of convergence emerged from the discussion and these areas of convergence are noted. A more in-depth packet of background materials, including further information on precedents from analogous emissions trading programs and regulatory schemes, was distributed to participants prior to the stakeholder dialogue, and is included herein as Appendix A.

It should be noted that this document represents the understanding and interpretation of CCAP and Paul Hastings regarding input provided by stakeholders during the discussion and should not be viewed as a transcript of the dialogue. Moreover, no information in the Summary Report should be attributed to individual participants.

Issue 1 – Timing

1. Surrender Obligations and Compliance Period Length

(a) Summary of Background Information Distributed to Dialogue Participants

The most important timing issue is the length of the compliance period. A closely related issue is when surrender obligations should occur relative to the ending of the compliance period. For example, surrender of allowances and offsets ("compliance instruments") may be required at the end of a compliance period or, for multi-year periods, it may occur as "partial surrender" during the compliance period. Partial surrender requires covered entities to surrender compliance instruments to cover a portion of their emissions before the end of the compliance period,

ensuring there is some reduction early on, but allowing covered entities flexibility in timing implementation of full reduction measures.

Assuming surrender is required only at the end of a compliance period, longer periods provide covered entities with the greatest level of flexibility, with lead time to plan, permit and construct emissions reduction systems and/or identify cost savings associated with technological advances, economies of scale, etc. However, shorter compliance periods present the regulating agency with more frequent opportunities for program design adjustments, may lessen potential adverse impacts on the cap arising from intra-period bankruptcies or dissolutions, and may stimulate more immediate emissions reductions that could mitigate negative effects of climate change more quickly.

Ultimately, each program must strike the balance it believes appropriate to increase compliance, safeguard environmental goals and optimize program design. The European Union Emissions Trading System (EU ETS) sets the compliance period length between three and eight years, but requires annual surrender of compliance instruments to cover *all* annual emissions. The EU's intra-period surrender obligation is designed to counter-balance its heavy reliance on annual allocation of free allowances. Also, the Acid Rain Program (ARP) and New Zealand's proposed cap-and-trade program require annual surrender. The Regional Greenhouse Gas Initiative (RGGI), on the other hand, uses three-year compliance periods and requires surrender only at the end of each period.

The Preliminary Draft Regulation (PDR) issued by the California Air Resources Board (CARB or ARB) currently anticipates utilizing three-year compliance periods with a single surrender obligation. This proposal seems to be driven, at least in part, by a desire to maintain consistency with Western Climate Initiative (WCI) cap and trade design recommendations. Nevertheless, CARB has specifically requested comments regarding the appropriateness of annual surrender or partial surrender provisions.

Once a program settles on the larger timing issue of compliance period length, it may set a definite surrender deadline or it may tie surrender of compliance instruments to the date actual emissions are verified. Definite surrender deadlines offer covered entities more certainty as to timing of surrender requirements, while tying surrender to emissions verification may increase administrative flexibility.

The EU ETS imposes a surrender deadline of April 30th of the following calendar year; RGGI requires surrender by March 1st following each three-year compliance period. The New Zealand program would require surrender of allowances covering each calendar year's emissions by March 31st of the following year.¹ The ARP, on the other hand, does not set a definite surrender deadline, but rather mandates that entities be given a minimum 60-day trading period between emissions verification and any surrender deadline.² Currently, the PDR requires an initial

¹ New Zealand Ministry for the Environment, "The Framework for a New Zealand Emissions Trading Scheme," 54 (Sept. 2007), available at <http://www.mfe.govt.nz/publications/climate/framework-emissions-trading-scheme-sep07/index.html> (hereinafter "NZ Framework").

² Lesley K. McAllister, *Putting Persuasion Back in the Equation: Compliance in Cap and Trade Programs*, 24 PACE ENV'T L. REV. 299, 315 (2007) (citing OFFICE OF AIR & RADIATION, EPA, TOOLS OF THE TRADE: A GUIDE TO DESIGNING AND OPERATING A CAP AND TRADE PROGRAM FOR POLLUTION CONTROL 1-2 (2003)).

surrender at the end of the 3-year compliance period (based on verified emissions for the first two years and an estimate of third-year emissions). Following the initial surrender, final surrender is required within 30 days of third-year emissions verification, which the ARB anticipates occurring sometime during the third quarter of the calendar year following each compliance period. The final surrender would be a true-up between estimated third-year emissions and verified third-year emissions. More clarity in the PDR regarding surrender deadlines might increase certainty and thus reduce inadvertent non-compliance.

(b) **Questions Presented for Discussion in Dialogue**

- How should the final regulation address intra-period insolvency of covered entities?
- Should it shorten the length of compliance periods, use annual partial true-up, or maintain 3-year compliance periods with single reconciliation and surrender periods?
- If annual true-up is appropriate, how should the true-up amount be calculated?
- Should the final regulation set a reconciliation deadline? How long should reconciliation last?

(c) **Convenors' Summary of Dialogue**

CARB's Preliminary Draft Regulation (PDR) proposes a three-year compliance period with two separate surrender dates. The initial surrender date would occur at the end of the three year period and would require the regulated entity to surrender compliance instruments equal to the actual emissions that occurred during the first two years of the compliance (based on actual data) plus an estimated amount for the third year for which actual emissions data is not yet available (the estimate under CARB's proposal would simply be an average of the first two years). Data is expected to be available for the third year within three months of the end of the compliance period, but the data would then have to be verified. CARB anticipates that verified data may be available in the third quarter following the initial surrender date. After verification, a true up would occur, and a final surrender date would be specified at which time the regulated entity would have to surrender compliance instruments to cover any shortfall between actual emissions and the estimate. In the event the amount of compliance instruments surrendered by a regulated entity at the initial surrender date were to exceed its actual emissions, the difference would be transferred out of the surrender account and back into a holding account. The dialogue regarding compliance period lengths discussed several options:

- 3-year compliance period, with no annual surrender or partial true-up provisions
 - Pros: Increases flexibility for implementing long-term greenhouse gas (GHG) reduction projects; addresses variations of business cycles and weather variability; potential to increase buy-in from

regulated community; regional consistency (e.g. WCI design recommendations)

- Cons: Concern that 3-year period may encourage compliance procrastination; concern that the general 3-year statute of limitations could be triggered upon submittal of data from first year; intra-period insolvency risk
- 1-year compliance period
 - Pros: Mitigates effects of procrastination; mitigates impacts of intra-period insolvency; increases public accountability; potential for earlier carbon and co-pollutant reductions
 - Cons: Increases administrative costs and legal enforcement burdens; interferes with market liquidity; concern regarding regional consistency
- 3-year “hybrid” – the hybrid approach would maintain the 3-year compliance period, but would require regulated entities to demonstrate acquisition of sufficient compliance instruments to satisfy interim benchmarks (see description of potential hybrid options below)
 - Pros: Potential to maintain flexibility while addressing concerns regarding intra-period accountability
 - Cons: Potential to increase administrative burden; concern that annual surrender requirements will interfere with market liquidity
- Extended compliance period (e.g. 5 years) – particularly after regulatory structure is in place and functioning well
 - Pros: May further reduce administrative burdens and compliance costs
 - Cons: Potential for procrastination; greater insolvency risks; potential for delayed carbon and co-pollutant reductions; concern regarding regional consistency
- In general, there appeared to be some convergence toward a 3-year or 3-year “hybrid” options, provided the statute of limitations issue is resolved
- Possible “Hybrid” Options:
 - Annual surrender or annual showing of some sort; concern that annual surrender requirements will interfere with market liquidity
 - Types of “showing”

- Assurance for financial solvency
 - Assurance for carbon solvency (e.g. holding account minimum balances)
 - Convergence toward carbon solvency as primary concern of cap-and-trade program
- Percentage showing or surrender to be determined
- Additional Issues:
 - Possibility of staggered compliance groups (e.g. January-January compliance group, June-June compliance group) to spread administrative resources more evenly and diminish end of period demand or supply spikes
 - With respect to verification, reconciliation and dispute resolution – there appears to be convergence on the need for distinct timeframes for verification, reconciliation and any associated dispute resolution to provide regulatory certainty and to ensure cap-and-trade program goals

2. **Banking and Borrowing**

(a) **Summary of Background Information Distributed to Dialogue Participants**

Another important compliance timing issue is whether the program should allow banking or borrowing of allowances. Banking involves an entity storing unused compliance instruments for future surrender, while borrowing involves bringing forward allowances from future compliance periods to satisfy current surrender obligations. Both methods increase flexibility for covered entities by allowing them to shift timing of emissions reductions based upon project drivers or economic efficiencies. However, most cap-and-trade programs permit only banking because it reflects immediate emission reductions or avoidances. Borrowing is generally disallowed because it may allow current emissions to continue on a “business as usual” trajectory and thereby delay full implementation of the cap.

The exception to this general rule is the EU ETS, which allows both banking and borrowing, but only within an established compliance period. The EU ETS compliance period is relatively long, ranging from three to eight years. Within this time, an entity covered by the EU ETS can store unused compliance instruments and borrow future allowances to meet annual surrender obligations. During the EU’s first compliance period, the banking of allowances was widely cited as a major factor in depressing allowance prices – this was due to the fact that banked allowances with imminent expiration dates created an over-supply situation.

RGGI, the ARP, and the proposed New Zealand cap-and-trade program allow only banking of unused allowances for future surrender. Although the PDR currently follows this general trend,

allowing banking but not borrowing, the ARB has requested comments regarding the appropriateness of banking and borrowing.

(b) **Questions Presented for Discussion in Dialogue**

- Should borrowing of future allowances be allowed?
- If borrowing is allowed, what limitations on borrowing are appropriate?

(c) **Convenors' Summary of Dialogue**

- Borrowing:
 - Options: Borrowing between compliance periods; optional restrictions on borrowing restricting the amount of borrowing and “discounting” the compliance value of borrowed allowances (e.g. “trading ratio”)
 - Pros: Flexibility to accommodate business cycle variations and provide cost containment (may be a redundant flexibility mechanism if other forms of flexibility like longer compliance periods and offsets are available)
 - Cons: Insolvency risk; impacts public health to the extent GHG reductions are delayed; potentially encourages procrastination; delays in carbon and criteria/co-pollutants reductions; may compromise cap integrity in future periods
 - Assuming 3-year compliance periods without interim surrender requirements or “showings”, general convergence that the need for inter-period borrowing is significantly reduced
- Banking:
 - Options: Banking between compliance periods
 - Pros: Increases flexibility; encourages early GHG reductions (assuming allowances are auctioned); cost containment; provides a potential hedge against pricing volatility
 - Cons: May compound over-allocation (assuming free allocation of allowances); increases potential for market manipulation
 - Baselines based on actual emissions (as opposed to overstated estimated baselines) will reduce potential over-allocation risks and diminish possibility that banking exacerbates such risks; robust price floor also can create stability and thereby mitigate such risks

- Assuming baseline for initial cap is accurate, general convergence toward allowing banking because it encourages early reductions

(d) **Identified “parking lot” issues for further discussion**

- Convergence toward establishing (i) firm surrender timeframes to provide regulatory certainty; and (ii) clear parameters for dispute resolution – this topic warrants further discussion
- Baseline setting – although the methodologies for setting the baseline cap are outside the scope of this dialogue, it is important to note that how the baseline is set will likely impact the workability of compliance timing requirements and affect perceptions regarding fairness and sufficiency of the timing requirements -- this topic may warrant further discussion
- Cross-cutting issues – there is an interrelationship between length of compliance periods, the availability of offsets, and other mechanisms supporting flexible compliance by regulated entities, such as banking and borrowing; these interrelationships may lead to unintended consequences (e.g. shorter compliance periods may lead to increased offset use as opposed to longer-term investment in low carbon technology and equipment)
- Inconsistencies may exist between AB 32’s cap-and-trade and other ARB climate policies – particularly with respect to timelines – mapping these potential inconsistencies may be important
- Re-evaluation – creating a defined process in the regulations for reassessing and re-evaluating timing issues in the cap-and-trade program after a certain period of time would be helpful (e.g. requiring ARB to conduct an assessment after the first compliance period or first couple of time periods)

Issue 2 – Remedies and Penalties

1. Violation Quantification and Penalty Calculation

(a) **Summary of Background Information Distributed to Dialogue Participants**

One of the most important enforcement issues in any regulatory scheme is the calculation and imposition of penalties for non-compliance. All cap-and-trade programs provide for penalties and endeavor to make those penalties sufficient to discourage non-compliance.

In evaluating penalty options for a failure to surrender required compliance instruments, a program must first determine how violations will be quantified. For example, penalties can be quantified based on the number of missing compliance instruments (i.e. penalty assessed per ton of carbon not surrendered) or be quantified based on a single pre-defined penalty amount imposed per violation. Similarly, the program may impose a one-time penalty for the failure to

surrender or it may impose a penalty for each day the regulated entity remains out of compliance. Under the first scenario, the one-time penalty needs to be large enough to deter non-compliance (i.e. significantly greater than the cost the regulated entity would otherwise incur to purchase compliance instruments for the entire compliance period). Under the second scenario, the individual penalty is typically smaller, but the threat of penalties compounding daily is used to encourage non-compliant entities to return to compliance quickly.

The California Global Solutions Act of 2006 currently incorporates the multi-day approach by applying existing penalty provisions set forth in the California Health and Safety Code. The advantage of multi-day penalties is that regulators have a strong tool to push non-compliant entities to rapidly return to compliance, thereby alleviating adverse impacts to the cap arising from non-compliance more quickly. On the other hand, the advantage of a single penalty, if large enough, is that it may be a bigger deterrent that is more likely to discourage non-compliance in the first place.

If daily penalties are imposed, the program must determine when imposition of the penalties is triggered. For example, the penalty clock can start running from the required surrender date, or under a retroactive approach, the penalty clock can start running from the end of the compliance period or even sometime within the compliance period. Obviously, the choices that are made with respect to trigger dates will impact the amount of penalties paid. In general, the goal is to set the penalties sufficiently high enough so as to deter non-compliance and eliminate any potential economic gain arising from non-compliance and at the same time avoid any perception by a court or legislators that the penalties are excessively punitive.

Fines remain the most common form of penalty imposed under cap and trade programs, but each program must undertake its own analysis to determine what amount of fines sufficiently deters non-compliance. In addition, the current cap-and-trade programs employ several additional penalty mechanisms, including violation multipliers and fine multipliers.

The EU ETS counts each ton of carbon not covered by a compliance instrument as a separate violation, and imposes a €100 fee per missing allowance, indexed to the European consumer price index. In addition to imposing a fine, the EU ETS requires non-complying entities to obtain and surrender the missing allowances. The deadline for surrender of the missing allowances is the subsequent compliance period. RGGI is more stringent, allowing each Member State to impose penalty fines per ton, requiring surrender of *triple* the missing allowances, and prohibiting use of offsets to satisfy a non-compliance surrender obligation. The ARP imposes a fine of \$2,000 USD per GHG ton, indexed to inflation, but the GHGs covered under the ARP are emitted in much smaller amounts than carbon dioxide. New Zealand's proposed cap-and-trade program includes a \$30 NZD fine per ton for unwitting non-compliance, and a \$60 NZD fine for knowing non-compliance. Interestingly, with respect to surrendering missing compliance instruments, the New Zealand program would distinguish between inadvertent and intentional non-compliance, requiring a 1-to-1 make-up for the former and a 2-to-1 make-up for the latter. The New Zealand program also would publicly disclose the nature of each violator's non-compliance.

Additional enforcement options include injunctive relief and criminal sanctions. Moreover, there may be a need to address non-compliance beyond just a failure to timely surrender compliance

instruments. For example, a failure to report or inaccurate reporting may also need to be addressed, either directly through the cap and trade program or indirectly through other regulatory schemes. These types of non-compliant acts may be treated more like acts of fraud or malfeasance.

Currently, the PDR anticipates imposing fines, but seeks comments regarding all facets of penalty implementation.

(b) **Questions Presented for Discussion in Dialogue**

- When should non-surrender become a violation? Should each day during the compliance period, after the compliance period, or after the surrender deadline constitute a separate violation?
- How should violations be quantified? Should non-compliance be a single violation or should each allowance not surrendered constitute a separate violation?
- Should a fine be imposed for violations, and if so, how should it be calculated? Should it be fixed, indexed to inflation, indexed to market price, or some combination?
- Should additional measures, such as multipliers, be used to discourage non-compliance?
- Should criminal liability apply in instances of non-compliance? Is injunctive relief appropriate for non-compliance?

(c) **Convenors' Summary of Dialogue**

- Distinction between Remedies and Penalties:
 - Remedy – purpose is to make program cap whole
 - Penalty – purpose is to deter non-compliance
- Violation types:
 - Failure to surrender
 - Failure to report
 - Inaccurate reporting (other than intentional misrepresentation, third party verification process should address inaccurate reporting problems)
 - Various levels of intentionality may attach to either failures in reporting or surrender; unwitting, intentional, fraud/malfeasance

<u>Remedy</u>	<u>Penalty</u>
<p>Surrender of compliance instruments (General <u>convergence</u> that 1:1 surrender is appropriate because imposing a multiplier on remedy surrender dilutes the availability of compliance instruments for those seeking to satisfy regular compliance obligations – in other words, compliant entities could end up being penalized as a result of using a multiplier)</p>	<p>Options for Assessment: penalty imposed per unit (e.g. per ton or per compliance instrument) or a fixed pre-determined penalty is imposed per violation</p>
	<p>Options for Quantification:</p> <ul style="list-style-type: none"> 1 – Fixed amount 2 – Fixed amount, indexed for inflation 3 – Penalty amount tied to market price of allowances (with or without multiplier) 4 – Surrender of compliance instruments (with or without multiplier); <u>convergence</u> – not desirable – negatively impacts all market participants, not just non-compliant entity 5 – Agency discretion to adjust penalty amount <p>Consider: Ability to pay, volume of non-compliance, how long out of compliance, size of company, intentionality, gravity of environmental harm, previous violations; vs. inherent prosecutorial discretion (i.e. penalties are set and certain, but regulator always has discretion regarding enforcement actions taken); flexible payment plans based upon financial hardship</p> <p>Concern that regulatory discretion must be bound by a discernible metric to provide certainty, clarity, and equity</p>
	<p>Options for Acceleration (to start after surrender obligation is triggered):</p> <ul style="list-style-type: none"> 1 – Accelerated according to volume (penalty escalates as the size of the unmet surrender obligation increases -- the greater the magnitude of non-compliance, the greater the penalty)

	<p>2 – Accelerated through application of daily penalties (the longer the length of violation, the greater the penalty) – per day penalties provide flexibility to impose significant penalty amounts under the existing Health & Safety Code penalty provisions – this flexibility may be necessary to deter non-compliance and recapture economic benefit from non-complying entities, unless one-time penalty is set sufficiently high to achieve this same goal</p>
	<p>Options for Penalty Multipliers:</p> <p>1 – Set factor</p> <p>2 – Interest (compound or simple)</p>

- ARB has criminal/injunctive authority under Health & Safety Code and is considering whether to simply refer to that Code generally or to provide more specificity with respect to what actions might carry criminal or injunctive relief

2. Public Disclosure of Non-Compliance

(a) **Summary of Background Information Distributed to Dialogue Participants**

One additional mechanism widely used and designed to encourage compliance is public disclosure of entities not in compliance with their reporting or surrender obligations. However, such public disclosure, if it includes details regarding non-compliance, may create informational asymmetries that could interfere with competition. For instance, if the number of missing allowances is made public, price gouging or market manipulation by competitors could occur. This potential for competitive inequality could be mitigated by limiting disclosure to the non-complying entity’s name and the fact that it is in non-compliance. In that way, competitors’ access to market sensitive information would be minimized.

The EU ETS requires public disclosure of the names of operators who are in breach of surrender requirements, and, as mentioned above, the proposed New Zealand program also requires disclosure of non-complying entities, as well as the nature of the non-compliance. The PDR does not currently require publication of non-compliance information. Existing regulatory schemes may already impose certain disclosure obligations.

(b) **Questions Presented for Discussion in Dialogue**

- Should public disclosure of non-compliance be required, and if so, should any distinction be made between intentional and unintentional non-compliance?

(c) **Convenors’ Summary of Dialogue**

- Public Disclosure of Non-Compliance:
 - General convergence that state and/or federal law already provides for limited disclosure and requiring issuance of a public document identifying non-complying entities following a compliance period is a routine feature of other regulatory programs and may be good public policy
 - Convergence that amount of compliance shortfalls should not be made public in order to minimize potential price gouging risks

(d) **Identified “parking lot” issues for further discussion**

- Clarification is needed regarding the process that will be used for remedy/penalty demands, including:
 - Enforcement documentation (e.g. abatement order or other mechanism);
 - Timeframe for cure periods (e.g. timelines for purchasing replacement allowance) and rules, if any, governing such cure periods; and
 - Standards for review
 - Dispute resolution procedures

Issue 3 – Liability

Liability topics relevant to a cap-and-trade program may include liability issues surrounding offset use as well as a range of other liability topics. The liability discussion in the April 2010 CCAP-Paul Hastings Compliance Dialogue focused primarily on liability issues surrounding offset use; for that reason, the bulk of the liability discussion in this document has been incorporated under the Issue 4 Offsets heading below to aid readability. Liability issues not associated with offset use remain under this Issue 3 heading.

1. Summary of Background Information

If an entity subject to the cap becomes insolvent before surrender is due, any compliance instruments it may be holding at the time of bankruptcy could be redistributed as assets in the bankruptcy proceeding, rather than surrendered to cover pre-bankruptcy emissions. The gap between emissions and surrender created by such bankruptcies could damage the integrity of the cap. The PDR specifically requests comments to address this problem.

A second potential liability gap derives from emissions reporting. The PDR requires entities to submit independently-verified emissions reports annually, and the Executive Office must

subsequently review the reports.³ Erroneous verifications could damage the integrity of the cap by underestimating actual emissions, or could damage regulated entities by overestimating emissions.

Yet another liability issue derives from facility closures and abrupt cut-backs in facility operations, particularly if allowances are distributed through free allocation. To alleviate windfalls from already allocated allowances, facilities that close or nearly-close can be required to surrender any allowances held. Such a surrender requirement, however, may create a perverse incentive for potentially inefficient facilities to stay open and operating.

The PDR relieves an entity of its surrender obligation after its reported emissions stay below the 25,000-ton threshold for six consecutive years.⁴ The PDR does not address what happens to allowances held by facilities that close or drastically reduce their operations. The EU ETS requires facilities that close or reduce operations below 10% to surrender all allowances held, rather than allowing the facilities to sell their excess allowances in the market.⁵ However, because the EU ETS utilizes free allocation, there is greater concern that facility closures could create windfalls profits. The Economic and Allocation Advisory Committee is recommending that allowances be distributed by auction, rather than by free allocation. If auctioning is adopted as the method of distribution under California's cap and trade program, the impact of facility closure or drastic reduction of facility operations will be of far less concern.

2. **Questions Presented for Discussion in Dialogue**

- How should damages to the cap-and-trade program from the dissolution or insolvency of regulated entities be addressed?
- How should the final regulation address erroneous (or fraudulent) verification of emissions?
- What provisions should apply to facilities that close or drastically reduce operations during a compliance period?

3. **Convenors' Summary of Dialogue; Identified "parking lot" issues for further discussion**

- For further discussion: Provisions for handling allowances related to insolvency, dissolution, and/or facility closure/cut-backs – return of allowances to the state may be one option, but the method of allocation of allowances (i.e. free allocation vs. purchase at auction) may affect the analysis of whether such a return is deemed desirable

³ CARB, PDR §95980, pgs. 43-45.

⁴ CARB, PDR §95830(b), pg. 27.

⁵ A. Denny Ellerman, *New entrant and closure provisions: how do they distort?*, The Energy Journal (Feb. 2008), <http://www.entrepreneur.com/tradejournals/article/176818749.html> (last visited March 5, 2010).

- For further discussion: Design of provisions for verifier penalties or liability, if any

Issue 4 – Offsets: Liability, Regulator’s Role, and Geographic Restrictions/Jurisdiction

1. Liability

(a) Summary of Background Information Distributed to Dialogue Participants

One of the most important compliance issues related to offsets is determining who should bear the risk that an offset will fail to achieve its expected emissions goals. Offset credits are compliance instruments issued for projects that generate emission reductions/avoidances or provide sequestration and that are real, additional, quantifiable, permanent, verifiable, and enforceable. Recognition of such offsets helps reduce compliance costs for regulated entities by allowing for investment in areas where emissions gains are more economically efficient. In addition, use of offsets may spur emissions reductions in non-covered sectors by creating a financial incentive for projects that voluntarily reduce, avoid, or sequester emissions.

However, offset projects may fail to generate the benefits anticipated. Offset failure can create a situation in which emissions actually exceed the cap while appearing “covered” on paper. There are three main ways to allocate the risk that an offset will fail: (1) the cap-and-trade program could absorb the loss of any emissions that go uncovered due to offset failure; (2) the regulated entity submitting an offset could remain responsible to replace the credit if the underlying project fails; or (3) the offset provider could be held responsible for replacing any of its credits that fail. A fourth possibility is to impose liability for offset failure on project verifiers. While regulators may not be willing or able to have the cap-and-trade program absorb such losses, they may also be limited in their ability to assign liability to offset providers which may be located outside the legal or practical reach of the enforcing agency. Insurance, pooling arrangements, and contractual arrangements may be introduced to address liability sharing.

The existing programs do not provide much guidance on this issue. Currently, the PDR recommends that the regulated entity submitting offsets be held responsible for replacing offsets that are found on review to be deficient. ARB expects that covered entities will deal with the issue through private “make whole” contracts with offset providers to ensure the market appropriately values offset quality. However, the ARB is seeking specific comments on the proper allocation of the risk for offset failure.

(b) Questions Presented for Discussion in Dialogue

- How should the final regulation address failure of offsets to achieve their anticipated emissions reductions/avoidance? Who should be liable for such failure?
- How should intentionality with respect to project failure be reflected in remedies or penalties? (e.g. fraud vs. invalid/deficient offsets vs. “no fault” failure of offsets)

(c) Convenors’ Summary of Dialogue

- While it is important to examine who is liable by party type (recognizing that it is possible for multiple party types to have liability as discussed below); it is also important to note that there are different types of offset failures – and that the different types of offset failure may impact thinking about liability distribution.
- Failures associated with sequestration projects present non-traditional compliance challenges especially with respect to the 100-year permanence standard associated with such projects and the need for enforcement authorities to continue during that time period (statute of limitation issues are implicated and must be examined; retaining enforcement authorities against multiple party types may be especially desirable given lengthy timeframes of sequestration projects and increased risk of dissolution and bankruptcy of parties over longer time horizons).
- ARB is leaning toward regulated entity liability with private liability pooling or private contractual arrangements for liability sharing; but this may be problematic for reasons described below.
 - For sequestration projects – risk of reversal of stored carbon; permanence issues (permanence defined as 100 years per IPCC definition under CAR and an international norm; a sequestration offset purchased in year 1 must be maintained for 100 years in order to equal an emissions reduction allowance for year 1) – permanence issues a potential driver for thinking through liability timeframes and liability sharing/spreading arrangements
 - Unintentional (e.g. wildfire)
 - May want liability sharing mechanism like insurance or buffer pools [private or state run (or state mandated) liability sharing mechanisms]
 - Intentional (e.g. cutting down forest project)
 - Implicates desire for provider liability
 - For emissions avoidance projects – conforms to traditional forms of contract failure and notions of liabilities/remedies/penalties (e.g. equipment breakdown, provider becomes insolvent, etc.)
- Options for who is liable for offset failure:
 - Regulated Entity/Buyer/Surrendering Entity
 - Pros: Simplicity for regulators (make whole); intuitive appeal corresponding to program surrender obligation; might be best-positioned to negotiate liability sharing with providers (as opposed to state)

- Cons: Lack of liability for offset providers creates potential enforcement authority gap for ARB; may disincentivize voluntary reporting of offset failure; may be difficult for regulated entities to negotiate and enforce liability sharing contracts; concern that lack of provider liability sharing (in absence of negotiated private contracts) will mean that an offsets market won't materialize or offsets use will be disfavored; regulated entities may dissolve or become insolvent during timeframe required for permanence of sequestration type offsets and without additional liable parties the state may be left with residual liability; potential for double-enforcement if verified by external system with separate; enforcement focus not on entities with greatest control over offset project
- Verifier
 - Pros: Verification process already addresses concerns; certainty/fairness for entities to rely on verified offsets; avoids “hot potato” offset problem when offsets are traded several times before discovery of their failure; keep liability on entity most able to control efficacy of the project; incentivizes those with greatest ability to control risk to ensure validity and permanence of offset; verifiers are insured against verification errors
 - Cons: Jurisdictional/enforcement issues (particularly where located outside of CA); concerns about fly-by-night operations; imposing liability on verifiers could limit available verification services (no one will verify, b/c no incentive to do so without taking a financial interest in the project which would create a conflict of interest) and undermine the offset market; want to maintain verifier impartiality (i.e. ensure verifiers have no financial stake in transaction)
- Project Originator/Provider
 - Pros: Incentivizes entity closest to project and best-positioned to control risk to ensure validity and permanence of offset; would close an apparent gap in enforcement authority that would appear to exist if ARB recourse is limited solely to regulated entities (e.g. if a regulated entity dissolves and ARB has no 3rd party enforcement rights in any liability sharing contract between the regulated entity and the provider – and ARB lacks any other regulatory authority to seek a remedy for offset failure from a provider – then a provider might choose to terminate an offset project after the regulated entity dissolution without any liability ramifications)

- Cons: Potentially complicates enforcement especially where providers are located in external jurisdictions; fly-by-night operations
- Aggregators, secondary market participants
- Cap-and-Trade Program absorbs offset failures – convergence that the liability must be allocated on at least one actor because it is undesirable for the system to absorb losses caused by offset failure
- Other concepts: Buffer pools (particularly for sequestration projects), insurance, private contracts; ARB leaning toward regulated entity liability with private pooling or contractual arrangements
- Alternate viewpoint: Additional regulatory authority to enforce against and impose liability on providers and verifiers may be desirable (particularly when providers and verifiers are based in California); provides additional (make whole) coverage for cap-and-trade program against problems potentially created by insolvency of regulated entities
- Remedy vs. Penalty in the Offsets Failure Context; Shared Liability
 - Options:
 - Make-whole liability on regulated entities, but no penalty for submitting verified offsets (potential penalties on providers?)
 - Remedy and penalty on offset provider
 - Joint & Several liability for all party types (for both make-whole and any penalties?); may be draconian from a fairness standpoint especially where “fault” to a particular party can be shown – and this option is likely to be strongly opposed by regulated entities/providers/verifiers, but other forms of liability sharing arrangements may be desirable and recommended
 - Another form of combined liability across party type (what would this look like?); as noted above – if ARB enforcement authorities are solely limited to regulated entities, unintended and perverse outcomes may arise; enforcement authorities against providers located in geographic areas outside CA may have jurisdictional hurdles (see discussion below regarding geographic issues associated with offset compliance)
 - While some might anticipate the organic development of private pooling arrangements and insurance instruments to address the risk of project failure, state mandates for pooling/insurance (akin to auto insurance

requirements) may be necessary or desirable to: 1) help spur the development of pooling structures and insurance instruments, and 2) protect the integrity of the cap-and-trade program against the possibility that “uninsured” offsets become financially attractive on a broad scale; state run liability pooling arrangements or insurance programs are another potential option, but may be administratively burdensome or complex

2. **Regulator’s Role**

(a) **Summary of Background Information Distributed to Dialogue Participants**

The administering agency must determine its role in the offset component of its cap-and-trade program. The agency may act as an offset-issuing body, an accrediting body for externally-issued offsets, or both. The PDR anticipates that ARB will act as both an offset issuer, verifying offset projects qualifying for credit, and an accrediting body, recognizing offset credits issued by external programs with similarly-stringent offset qualification requirements. An additional crucial offset issue that may affect the regulator’s role involves the availability of and conditions for linking of different cap-and-trade programs such that offset credits may be used interchangeably.

(b) **Questions Presented for Discussion in Dialogue**

- What is ARB’s role with respect to offsets: approval, issuance, both?

(c) **Convenors’ Summary of Dialogue**

- ARB’s Role with Respect to Offsets
- Approval (convergence that ARB needs to act as an approving body, not a verifying or issuing body; but query whether ARB has all needed expert technical capacity for this role – or whether this will also requires other state agencies like the CEC, CalFire, etc.)
 - Approving what?
 - Protocols
 - Projects
 - External programs with or without additional quality (or quantity) governors (e.g. CDM or sectoral crediting)
 - Linkage programs (e.g. WCI)
 - What flows from approval?
 - Concurrent approval or creation of registry

- Monitoring obligations or provisions
- Enforcement obligations
- Issuance
 - Having ARB act as the offset issuer could discourage the market because ARB does not have sufficient resources or expert capacity to serve in this role
- Verification
 - Having ARB act as a verifier could discourage the market because ARB does not have sufficient resources to verify a robust supply of offsets (will create a bottleneck) and may also lack technical expertise to serve as a verifier; potential conflicts of interest
- Monitoring – limitation of monitoring capacity outside jurisdiction; MOUs to deal with monitoring issues may be created (but may have no enforceability)
- Reporting – periodic true up to deal with permanence issues?; approval or creation of a registry?
- Combination of above roles?

3. Geographical Restrictions/Jurisdiction

(a) Summary of Background Information Distributed to Dialogue Participants

The carbon reductions or avoidances provided by offset projects may be inherently local or regional. This raises the question of whether *local* reductions and avoidances are sought, or whether progress anywhere is the goal. Offsets may not reduce co-pollutant emissions in California if the offsets are from projects completed in locations away from California. There may also be qualitative concerns regarding offsets from jurisdictions which have different offset standards or which recognize different offset project types.

The EU ETS recognizes the global need for emission reductions, but limits recognition of offsets to those issued by Kyoto Protocol member countries. The PDR notes the potentially local- or regional-only impacts of extra-territorial offset projects, and specifically seeks comments regarding the appropriate geographic scope of permissible offsets.

In general, cap and trade programs may link to other programs, allowing trading of allowances and offsets between programs. However, there is concern, particularly with respect to offsets, that the farther a credit is generated from the regulating program, the easier it is for poor quality or fraudulent activity to go undetected. Accordingly, detailed conditions for linkage between programs are vital.

The EU ETS includes relatively little room for linkage beyond its *de facto* linking of all Member States. While it does allow for linking to programs with nations that have agreed to the Kyoto Protocol, this obviously does not include the United States so linkage to the EU ETS may not be feasible for any California system. However, nothing in RGGI appears to prevent linking with a California cap-and-trade program, and Governor Schwarzenegger has explicitly directed ARB to work toward linking with RGGI. Accordingly, the PDR allows the Board to approve external programs for unilateral or bilateral linkage, but imposes strict requirements to ensure external compliance instruments do not undermine the environmental goals of California's program. These requirements essentially permit linkage only to programs that significantly mirror the standards of the California program.

(b) **Questions Presented for Discussion in Dialogue**

- What geographic restrictions should be placed on offsets and how does this relate to jurisdiction and authority to regulate quality of offsets?
- What mechanisms are available for ensuring the environmental quality of offsets (and credits) issued by external programs and:
 - What enforcement mechanisms, if any, are associated with these mechanisms;
 - If these mechanisms fail, is the presumption that offset purchasers (regulated entities) should bear liability (offset replacement responsibility)
 - Considerations of fairness?
 - Likely to lead to collapse of demand for offsets from external systems?

(c) **Convenors' Summary of Dialogue**

- Issues:
 - Possibility of designing incentives to favor purchase of CA/local offsets first to address concerns about public health concerns for CA communities and ARB mandates under AB32; one suggested incentive was to eliminate quantitative limits on the use of offsets generated from projects based in California; applying a multiplier to CA offsets might be another
 - Concerns that any limitations on geographical availability will shrink offset supply and significantly increase compliance costs for regulated entities
 - Recognition of international offsets in the CA cap-and-trade program may support U.S. global commitments to support REDD and other emissions reductions efforts in developing countries

- Mechanisms for cross-jurisdictional enforcement:
 - Linkage or MOUs – does an MOU or linkage equate with implicit approval of all project types within an external program? does MOU/linkage mean that ARB delegates monitoring responsibilities? Will MOUs include negotiated MRV provisions or enforcement provisions with respect to providers/verifiers? What enforcement authorities does the State have, if any, with respect to provisions included in MOUs/Linkage programs (treaties may not be issued by CA, but may be issued by U.S. with CA participating)
 - Offset failure in external jurisdictions may be addressed through holding regulated entities liable and relying on regulated entities to pursue liability sharing arrangements with providers through private contractual arrangements; but if regulated entities dissolve or become insolvent – what recourse for the program if liability only attaches to regulated entities
 - Combination of (1) and (2) above

(d) **Identified “parking lot” issues for further discussion**

- Standards for MOUs/bilateral agreements with respect to international offsets – such agreements may provide liability provisions and enforcement arrangements
- CA may have additional qualifiers on offsets from external programs; e.g. it may choose to accept only certain offsets from an external program which meet specified standards; further discussion is warranted regarding the viability of these types of qualifiers and what they might look like

Issue 5 – Secondary Markets : Transparency, Fraud, and Market Manipulation

1. Summary of Background Information Distributed to Dialogue Participants

In addition to compliance issues related to covered entities, cap-and-trade programs usually spur the creation of active secondary markets. Secondary markets facilitate the “trade” aspect of cap-and-trade, and may even facilitate trading of financial products derivative of compliance instruments. However, as with most markets, fraud and market manipulation could pose threats to the stability and efficiency of such a system and undermine the confidence of participants in the market.

In addition to more common forms of transaction fraud, carbon markets arising in response to cap-and-trade regulation must be particularly vigilant of compliance instrument hoarding. Hoarding manipulates the market by concentrating an essentially government-created finite resource in the hands of a few entities that may subsequently drive up allowance prices artificially. This problem could be further exacerbated by a PDR provision allowing entities not

covered by the cap-and-trade program to participate in the market. Theoretically, non-emitting investors could opt in to California's cap and trade program, buy as many ARB-issued or external allowances as possible, and then hold financially hostage those covered entities that have a surrender obligation.

One valuable tool to limit opportunities for hoarding is the imposition of "purchase limits" or "position limits." Purchase limits, which ARB anticipates developing for the final regulation, restrict an entity from purchasing more than a set percentage of allowances in each auction. Position limits similarly restrict an entity from amassing more than a certain percentage of total allowances available for a particular program.

To render limits meaningful and to combat fraud and market manipulation, a regulating agency needs comprehensive and timely information on compliance instrument transactions in order to monitor the market. While the PDR's combination of reporting requirements and purchase limits may be sufficient for an agency to monitor and protect against fraud or manipulation with regard to primary transactions, secondary and derivative transactions will likely require oversight as well.

To further counter potential market-manipulating hoarding, the PDR indicates that the Commodity Futures Trading Commission (CFTC) will exercise oversight for secondary and derivative markets. It is anticipated that the CFTC will be responsible for developing market rules on position limits and reporting. ARB plans to develop information-sharing agreements with the CFTC.

While ARB believes information available to regulators from exchange trading may be sufficient for monitoring those venues, a related issue is how the agency will obtain similar levels of information for bilateral trades and non-exchange traded derivatives. ARB is interested in stakeholder input on development of transaction disclosure rules to insure that a similar level of information is available for bilateral trades as is available for exchange-based trades. Stakeholder comments may aid ARB in developing creative and effective ways to achieve this goal.

2. Questions Presented for Discussion in Dialogue

- Should the final regulation include measures additional to position limits to protect against market manipulation? Should position limits be extended to include linkage markets?
- Who should be allowed to enforce anti-fraud provisions?
- Should trading facilities be required to register with ARB?
- What special issues related to secondary or derivative markets have been identified, and is California capable of addressing these concerns directly or indirectly?

3. Convenors' Summary of Dialogue

- Purchase and Position Limits
 - Pros: Limits potential for market manipulation; may reduce price volatility
 - Cons: Limits flexibility; discourages early purchase; limits liquidity; limits use of compliance instruments between systems
 - For consideration: Mechanisms to prevent hoarding and market manipulation; placing limits on beneficial ownership; limit banking by non-regulated entities
- Enforcement issues associated with trading and secondary markets
 - ARB retains primary authority for enforcing limits through registry – and will require every transfer of ownership of allowances to be reported on a registry; however, not all trades involve changes in ownership and therefore such trades would not be reflected on a registry
 - Exchange-based trading – existing reporting requirements
 - Non-exchange/bilateral trading – report price, summary statistics; limited public disclosure to ensure confidentiality
 - Convergence regarding maintaining confidentiality of detailed information on registry (limited, not absolute, confidentiality; balancing public interest in disclosure vs. private interest in confidentiality)
- Options:
 - Registry for all transactions
 - Run by ARB
 - Run by private contractor
 - Require registration of trading facilities
 - Pros: Facilitates fraud detection; centralizes information and learning; provides transparency and oversight
 - Cons: Hampers market efficiency; chills innovation
 - Convergence that ARB should retain some oversight of trading facilities to prevent undermining market confidence
 - Potential use of trading restrictions as sanctions

- Security measures on computer systems to prevent system vulnerability with respect to information hacking, phishing schemes, etc.
- Designated account representative
- Beneficial Ownership Limitations

(a) **Identified “parking lot” issues for further discussion**

- An ARB workshop on secondary markets would be helpful; explicit delineation of ARB and CFTC (or CFTC equivalent agency) roles would aid identification of potential gaps in regulating authorities and potential vulnerabilities in system design around trading

[APPENDIX A]

**CCAP-PAUL HASTINGS – PREPARATORY MATERIALS PACKET
FOR COMPLIANCE DIALOGUE ON
AB32’S CAP AND TRADE RULEMAKING**