State of California

Environmental Protection Agency

AIR RESOURCES BOARD

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

FINAL STATEMENT OF REASONS

November 2014

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State of California
AIR RESOURCES BOARD

**Final Statement of Reasons for Rulemaking,
Including Summary of Public Comments and Agency Response**

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

Public Hearing Date: September 18, 2014
Agenda Item No.: 14-7-5

I. GENERAL

A. Action Taken in This Rulemaking

The Staff Report: Initial Statement of Reasons for Rulemaking, entitled "Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms" (Staff Report or ISOR), released July 29, 2014, is incorporated by reference herein. The Staff Report contains a description of the rationale for the proposed amendments. On August 1, 2014 all references relied upon and identified in the Staff Report were made available to the public.

In this rulemaking, the Air Resources Board (ARB or the Board) is adopting amendments to the California Cap-and-Trade Regulation (Regulation) to provide additional details to clarify implementation of the Regulation, increase flexibility and provide clarifications to the requirements for corporate disclosures, change the allocation of allowances to two entities, modify product data definitions, update three quantification methodologies for three compliance offset protocols, and enhance ARB's ability to oversee and implement the Regulation. The amendments were developed pursuant to the requirements of the California Global Warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32). The amendments are codified at Subarticle 12, sections 95802, 95830, 95833, 95852, 95852.2, 95890, 95892, 95895, 95920, 95921, 95973, 95975, 95976, 95983, 95985, and 95990, title 17, California Code of Regulations, as well as updates to three Compliance Offset Protocols.

The amendments to the Regulation were initiated with the publication of a notice in the California Notice Register on August 1, 2014 and notice of public hearing scheduled for September 18, 2014.[1] The Staff Report, the full text of the proposed regulatory amendments, and other supporting documentation were made available for public

[1] California Air Resources Board. Notice of Public Hearing to Consider Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms. Posted July 29, 2014. Available online at: http://www.arb.ca.gov/regact/2014/capandtrade14/capandtrade14.htm.

review and comment starting on August 1, 2014, running for 45 days through to September 15, 2014. The regulatory amendments as proposed would:

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

At its September 18, 2014 public hearing, the Board approved the amendments for adoption, including for three updated Compliance Offset Protocols in Resolution 14-31,[2] but directed the Executive Officer to delay the updates to the common practice values in the U.S. Forests Projects Compliance Offset Protocol until the next proposed update to the protocol in December 2014. In Resolution 14-31, the Board also approved proposed 15-day modifications and directed the Executive Officer to make the modified regulatory language, and any additional conforming modifications, available for public comment, with any additional supporting documents and information, for a period of at least 15 days. The Board directed the Executive Officer to present the Regulation to the Board for further consideration if warranted, and if not, directed the Executive Officer to take final action to adopt the Regulation after addressing all appropriate modifications.

During the 45-day and the subsequent 15-day public comment period, the public submitted comments on the proposed amendments.[3] The 45-day comment period commenced on August 1, 2014, and ended on September 15, 2014, with additional oral and written comments submitted at the September 18, 2014 Board hearing. The 15-day comment period occurred from October 2, 2014 to October 17, 2014.

[2] California Air Resources Board. Board Resolution 14-31. Posted October 7, 2014. Available online at: http://www.arb.ca.gov/regact/2014/capandtrade14/res14-31.pdf.

[3] All public comments received on the proposed amendments can be found online at: http://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=capandtrade14.

B. Mandates and Fiscal Impacts to Local Governments and School Districts

The Board has determined that the proposed regulatory action would not create costs or savings, as defined in Government Code sections 11346.5(a)(5) and 11346.5(a)(6), to State agencies or in federal funding to the State. Eight California public universities, the California Department of Water Resources, several municipal utilities, and one county correctional facility have a compliance obligation under the current regulation that is unchanged by the proposed regulatory action.

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

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. Staff anticipated that regulated business would need to register for accounts, report transactions and disclose corporate affiliates, among other actions. The proposed Regulation specifies exactly what information will be required. Complying with these requirements does not add any additional costs over what was assumed in prior adoptions of the Cap-and-Trade Regulation. The proposed amendments provide more specificity and clarification regarding the information required for registration with ARB in the compliance instrument tracking system and for the reporting of transactions in the compliance instrument tracking system. The collection of this information does not add cost to covered entities over what has been previously estimated for the existing Regulation.

The proposed amendments change the allocation of allowances to two entities that are currently covered by the Cap-and-Trade Program. The proposed regulatory action would increase the allocation of allowances to the Metropolitan Water District and the City of Shasta Lake, reducing their near-term compliance cost.

The Executive Officer has determined that representative private persons and businesses would not be affected by the proposed regulatory action. Pursuant to Government Code section 11346.5(a)(7)(C), the Executive Officer has made an initial determination that the proposed regulatory action would not have a significant State-wide adverse economic impact directly affecting businesses, and little or no impact on the ability of California businesses to compete with businesses in other states. The proposed Regulation would not impose sufficient direct or indirect costs to eliminate businesses in California. A detailed description of the economic impacts associated with the proposed amendments is included in Chapter V of the Staff Report.

C. Consideration of Alternatives to the Proposed Amendments

Staff is required to consider alternatives to the proposed amendments for the Cap-and-Trade Regulation. As discussed in Chapter VI of the Staff Report, staff analyzed the following alternatives to the proposed amendments to the Cap-and-Trade Regulation:

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

For the reasons set forth in the Staff Report, in staff's comments and responses to comments at the Board hearings, and in this FSOR, the Board determined that no alternative considered by the agency would be more effective in carrying out the goals of AB 32, or would be as effective as and less burdensome to affected private persons, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law than the action taken by the Board. Further, none of the options that would have enabled California to meet AB 32 goals were as cost effective as the proposed Regulation and substantially address the public problem stated in the notice. Staff provides a discussion of each alternative in Chapter VI of the Staff Report for the proposed amendments.

II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

A. Modifications Approved at the Board Hearing and Provided for in the 15-Day Comment Period

Pursuant to the Board direction provided in Resolution 14-31, ARB released a Notice of Public Availability of Modified Text and Availability of Additional Documents and Information (15-Day Notice) on October 2, 2014, which placed additional documents into the regulatory record and presented the additional modifications to the regulatory text after extensive consultation with stakeholders.[4]

III. DOCUMENTS INCORPORATED BY REFERENCE

The Cap-and-Trade Regulation and the U.S. Forests Projects Compliance Offset Protocol adopted by the Executive Officer incorporate by reference the following documents:

1. Regional Biomass Equations Used by FIA to Estimate Bole, Bark and Branches. September 2014.
2. FIA Volume Equation Documentation. September 2014.
3. Assessment Area Data File. (Originally approved by the Board in October 2011.)

These documents were incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to publish them in the California Code of Regulations. In addition, some of the documents are copyrighted, and cannot be reprinted or distributed without violating the licensing agreements. The documents are lengthy and highly technical test methods and engineering documents that would add unnecessary additional volume to the regulation. Distribution to all recipients of the California Code of Regulations is not needed because the interested audience for these documents is limited to the technical staff at a portion of reporting facilities, most of whom are already familiar with these methods and documents. Also, the incorporated documents were made available by ARB upon request during the rulemaking action and will continue to be available in the future.

[4] California Air Resources Board. Notice of Public Availability of Modified Text and Availability of Additional Documents and Information. Posted October 2, 2014. Available online at: http://www.arb.ca.gov/regact/2014/capandtrade14/capandtrade14.htm.

IV. SUMMARY OF COMMENTS MADE DURING THE 45-DAY COMMENT PERIOD AND AGENCY RESPONSES

Chapter IV of this FSOR contains all comments submitted during the 45-day comment period and the September 18, 2014 Board hearing that were directed at the proposed amendments or to the procedures followed by ARB in proposing the amendments, together with ARB's responses. The 45-day comment period commenced on August 1, 2014 and ended on September 15, 2014, with additional comments submitted at the September 18, 2014 Board hearing on the proposed amendments.

AB 32 (Health and Safety Code, section 38571) exempts quantification methodologies for the three Compliance Offset Protocols from the Administrative Procedures Act (Government Code, section 11340 *et seq.*) (APA). Those elements of the Compliance Offset Protocol are still regulatory, but are exempt from the rulemaking process of the APA. As such, staff is not required to respond to comments regarding the quantification methodologies of the three Compliance Offset Protocols, but provides responses herein in the interest of completeness.

ARB received 25 letters on the proposed amendments during the 45-day comment period, including the September 2014 Board hearing. In addition, 10 commenters gave oral testimony during the September 2014 Board hearing. Commenters included representatives from the electricity and natural gas sectors, offset project developers and offset registries, and representatives from trade groups. To facilitate use of this document, comments are categorized into one of four sections below (B through E), and are grouped for response wherever possible.

Section A below lists commenters that submitted oral and written comments on the proposed amendments during the 45-day comment period and at the September 2014 Board Hearing, identifies the date and form of their comments, and shows the abbreviation assigned to each.

A. LIST OF COMMENTERS

Abbreviation	Commenter
AB321	Shelly Sullivan, AB 32 Implementation Group Written Testimony: 9/15/2014
AMA1	Patrick Wood, Ag Methane Advisors Written Testimony: 8/2/2014
BS1	Roger Williams, Blue Source Written Testimony: 9/10/2014
BS2	Nico Van Aelstyn, Blue Source, Carbon Finite Carbon, EKO Oral Testimony: 9/18/2014
BS3	Kevin Townsend, Blue Source Oral Testimony: 9/18/2014
CAR1	Derik Broekhoff, Climate Action Reserve Written Testimony: 9/5/2014
CCEEB1	Bob Lucas, California Council for Environmental and Economic Balance Oral Testimony: 9/18/2014
CE21	Tony Brunello, CE2 Carbon Capital Oral Testimony: 9/18/2014
CHEV1	Steve Arita, Chevron Written Testimony: 9/15/2014
CHEV2	Steve Arita, Chevron Oral Testimony: 9/18/2014
CLFP1	John Larrea, California League of Food Processors Oral Testimony: 9/18/2014
CMTA1	Dorothy Rothrock, California Manufacturers & Technology Association Written Testimony: 9/15/2014
CMTA2	Dorothy Rothrock, California Manufacturers & Technology Association Written Testimony: 9/15/2014
CMTA3	Dorothy Rothrock, CMTA & Joint Industry Group & AB 32 Implementation Group Oral Testimony: 9/18/2014
COD1	Nick Facciola, Compliance Offset Developers Association Written Testimony: 9/15/2014
CP1	Jason Armenta, Calpine Corporation Written Testimony: 9/15/2014

Abbreviation	Commenter
ECO1	Kyle Holland, Eco Partners Written Testimony: 9/15/2014
EOS1	Jeff Cohen, EOS Climate, Inc. Written Testimony: 9/4/2014
FC1	Sean Carney, Finite Carbon Written Testimony: 9/15/2014
GF1	Greg Forrester, Private Individual Written Testimony: 8/27/2014
IEP1	Amber Blixt, Independent Energy Producers Written Testimony: 9/15/2014
KB1	Ken Brilliant, Private Individual Written Testimony: 9/6/2014
MWD1	Janet Bell, Metropolitan Water District Written Testimony: 9/15/2014
NF1	Brian Shillinglaw, New Forests Written Testimony: 9/15/2014
PF1	Melissa Poole, Paramount Farms Written Testimony: 8/11/2014
PFT1	Paul Mason, Pacific Forest Trust Oral Testimony: 9/18/2014
PGE1	Matthew Plummer, Pacific Gas & Electric Written Testimony: 9/15/2014
RB1	Ron Birchard, Private Individual Written Testimony: 9/3/2014
RLLC1	Benjamin Hirokawa, Recleim, LLC Written Testimony: 9/12/2014
SCE1	Rebecca Meiers-De Pastino, Southern California Edison Written Testimony: 9/15/2014
SCE2	Frank Harris, Southern California Edison Oral Testimony: 9/18/2014
SCS1	Zane Haxtema, SCS Global Services Written Testimony: 9/15/2014
WSPA1	Cathy Reheis-Boyd, Western States Petroleum Association Written Testimony: 9/15/2014

Abbreviation	Commenter
WSPA2	Michael Wang, Western States Petroleum Association Oral Testimony: 9/18/2014
WT1	Kelle Vigeland, Wheelabrator Technologies Written Testimony: 9/11/2014

B. AUCTION AND TRADING REQUIREMENTS

B-1. Support for Proposal

B-1.1. Comment: ARB staff is proposing to modify section 95830(f)(1) to increase the length of time that entities will have for complying with the requirements to update information on corporate associations. Changes to the regulations would effectively extend the reporting requirements from a "quarterly" responsibility to "at least annually." We support the proposed amendment to section 95830(f)(1). Updating corporate association information quarterly would impose a significant regulatory burden. Annual updating of this information will serve the purposes intended by the regulation – ensuring transparency and preventing market manipulation –while reducing the regulatory burden on covered entities.

Paramount Farms recommends that ARB finalize the regulations with the proposed amendment to section 95830(f)(1). We appreciate the opportunity to provide our feedback and are available to discuss should staff require additional information. (PF1)

> **Response:** Thank you for your support. Staff has modified the regulatory language during the 15-day comment process to require reporting updates within at least one year, which provides greater clarity than "at least annually," and still accomplishes the same flexibility in less frequent reporting disclosure. Staff believes this 15-day modification still meets the commenter's supported approach.

B-1.2. Comment: My name is Bob Lucas. I'm here today representing the California Council for Environmental and Economic Balance, also known as CCEEB. Our interest here today is to comment on the corporate association disclosure requirements and to point out that although we may never get this absolutely perfect forever, this is a dramatic improvement that we very much support and appreciate your help, as well as the help of Edie Chang and her staff in pulling this together in a very cooperative manner. (CCEEB1)

> **Response:** Thank you for your support.

B-1.3. Comment: My name is Dorothy Rothrock here with the California Manufacturers and Technology Association. I'm actually here representing two different groups. And I hoped to have two different three-minute periods, but maybe I'll just take the rest of Bob's time. The first group is we've been coordinating the group of companies that are subject to corporate disclosures requirements. There was over 800 of those companies.

And we met with ARB leadership and staff. And we've been very pleased with the amount of work we've been able to do with them to provide some clear guidance to get us through the July 31st deadline this last year.

But work is ongoing, and I submitted in written comments a joint proposal for further work on that corporate affiliate issue. We hope to work with staff during the 15-day period to make further improvements to that. We also want to make you aware that there was more changes that need to be made that can't be made in this 45-day package. Those include the regulatory investigation attestation piece, as well as the outside counsel disclosure requirements. So work is ongoing, but we are very pleased to date with staff. Thank you for that. (CMTA3)

> **Response:** Thank you for your support. See also Responses to 45-day comments B-5.2 and B-2.3.

B-1.4. Comment: John Larrea with the California League of Food Processors. First, I'd like to echo support for both Bob Lucas and Dorothy Rothrock's comments associated with the corporate disclosure. We have been very pleased with the staff's effort on this and the Board's effort and attention to the detail on that. Also as members of the AB 32 implementation group, we are fully in support of the comments that the group put in as well. And I'd just like to personally thank Jason and his team in their effort on the corporate disclosure. We are not -- most of my members, although some are internationally traded and publicly traded, many of them are family owned or cooperatives or small companies with emissions totaling less than 40,000 tons per year. And so the less onerous the compliance obligation and the reporting obligation is on them, the better it is. And it makes a little more valuable in terms of the allowances they have and the money they have to expend per ton of emissions in order to meet the compliance obligations that most huge corporations just can take into stride with their organizations. So thank you again. (CLFP1)

> **Response:** Thank you for your support.

B-2. Registration with ARB

B-2.1. Comment: My name is Steven Arita with Chevron Corporation. I'd just like to start by saying on behalf of Chevron, we certainly appreciate all of the work and time that Ms. Chang and her staff have done on working with us in particular on the issue of the disclosure of associated entities. Madam Chair, as your staff knows, this is a very important issue to us. So we are very much encouraged and welcome the ongoing discussions with staff. And in particular, we support the recommended Resolution and

working with staff during the 15-day comment period. I'd also like to highlight that as mentioned by Dorothy, we also have included in our comments the joint industry proposal and the recommendations in there. So we certainly look forward to working with staff on all of those recommendations. And we are hopeful and very encouraged that I think we can reach some agreement on the revisions that we think are necessary during the 15-day comment period.

And I guess just in closing, I think one particular point that we would like to highlight is really the importance of the ability to use a list of affiliates submitted by other agencies, such as the SEC, to comply with the unregistered affiliate disclosure requirements that are listed in there. That's right now currently under the guidance. So we certainly would like to see that included in the 15-day rule revisions. With that, again, appreciate all of the work that's been gone into this and look forward to working with staff. (CHEV2)

> **Response:** Thank you for your support. Staff is proposing modifications to address the comments in the 15-day regulatory amendments. New section 95830(c)(1)(H) provides opportunities for registered entities to documents submitted to specific federal agencies, including the SEC.

B-2.2. Comment: Thank you very much. My name is Frank Harris. I represent Southern California Edison. I appreciate the opportunity to address the Board today. Edison submitted written comments I'd like to focus just on a few elements related to corporate disclosure requirements. First, as others have indicated, I wanted to thank staff for their work. As we've been working to implement this regulation, we've gained a lot of valuable experience. And we've seen how various components of the rule actually work. We've had a good number of questions. We've reached out the staff. We've been working with them to better understand these elements of the rule. I want to thank them for their efforts working with our staff to better understand this corporate disclosure requirement element under the rule. But as we've been working on this implementation, we've actually identified some changes that we think will further improve the operability of the rule, while maintaining reasonable corporate disclosure interest of the state. First, we'd like the ARB to modify its disclosure requirement for corporate associations not registered in this program. We noted in the presentation that indirect corporate affiliates that are not registered in the program, that disclosure requirement has been modified. We would like to see that modification applied to the direct corporate affiliates as well.

As Mr. Arita mentioned, we would like to see the rule include an acceptance of reports that we currently submit to other agencies, such as the SEC or CFTC, something of this nature. As an example, we report our affiliates to the SEC under our 10K filing. I believe the SEC filing provides information sufficient to satisfy the monitoring interest of

the state. I think that would further improve the operability and certainty improve the administrative challenges that we're facing here. (SCE2)

> **Response:** Staff believes that for direct corporate associations, which have greater control than indirect corporate associations, it is important for ARB to understand the relationships between these associates to ensure effective market monitoring and oversight. As such, staff declines to restrict disclosures of direct corporate associations to only registered entities. However, staff has proposed modifications during the 15-day comment process to expressly allow for reporting of direct corporate associations that are not registered in the program by utilizing SEC form 10K filings. Public companies list their subsidiaries in the 10K filing with the Securities and Exchange Commission. This list is a valuable resource for staff to evaluate the corporate associations of a public company, and it can help the entity meet certain requirements of the corporate association sections of the Regulation.

B-2.3. Comment: Further, I think ARB should remove the disclosure requirement regarding market investigations of corporate associations. Those corporate associations that are registered with this program already submit that information directly. And I just question the relevance of investigation of information regarding affiliates that aren't registered with the program. Now, on this particular issue, it goes beyond administrative burden. We're finding ourselves pushing up against affiliate compliance rules, other restrictions, such as those imposed on us by the FERC. Key to these comments is our interest to further improve the operability of the program and avoid unintended enforcement challenges. It is a very complicated regulation. As we continue to learn from our shared experience, I expect that we will see the opportunity for further changes and modifications as we go on. Thank you again for your time. (SCE2)

> **Response:** Staff did not propose any changes to the investigation disclosure requirement in section 95912(d)(4)(E) as part of this rulemaking. As such, the comment is outside the scope of the rulemaking. That being said, the requirement for disclosure of investigations of corporate associations is a tool which staff uses for marketing monitoring. The goal is not to burden program participants, but rather to prevent market manipulation. Guidance on this issue has been posted on our website to help program participants comply with the Regulation.

B-2.4. Comment: Mike Wang with Western States Petroleum Association. We've submitted comments in written form to you all, and so I will only hit some of the high

points. First, I want to thank the staff for the efforts they've done in communicating with all of us. And sometimes communication with us is very difficult. So we appreciate the efforts that they expended. Also, it seems from the staff presentation at least some of our issues that we raised in a letter have been addressed. I'll only discuss some of the ones that remain unresolved. As staff is aware, WSPA members have participated in a joint industry group seeking clear compliance pathway to satisfy the corporate associations and disclosure requirements required in the cap and trade regulation. You have heard of this already. I want to stress that a fruitful discussion has taken place between staff and industry and stakeholders over the past few weeks that has gone not only unnoticed, but very much appreciated. However, those discussions have identified some issues that remain unresolved. WSPA supports the joint industry proposal for changes. In particular, WSPA associates ARB's clarification in Attachment B to I think the proposed Resolution 1431 that consistent with the July 29th guidance disclosure by registrants of their form SEC 10k list of subsidiaries will comply with the disclosure requirements. WSPA joins others in noting that there are additional changes that need to be made that are beyond the scope of perhaps the 15-day comment period that is upcoming.

We know, for example, regulatory investigation disclosure and attestation requirements included in section 95912 must be addressed as part of a subsequent 45-day comment period that would be I expect started in 2015. We ask ARB's collaboration with the joint interest group toward a workable long-term solution on this issue as shown in both a 15-day package that will be proposed herein today and in a 45-day package subsequent. (WSPA2)

> **Response:** Thank you for your comment. See also responses to 45-day comments B-5.2 and B-2.3. Staff will continue to work with stakeholders on refinements to the program.

B-2.5. Comment: In Section 95830 (f)(1) of the proposed amendments, ARB has provided some administrative flexibility for regulated entities by allowing for annual updates to certain registration information in lieu of the requirement to provide updates within 30 days or quarterly. In reviewing these proposed amendments, Metropolitan understands that they apply to updates of the list of employees with market knowledge, but not to changes in the names of an entity's directors and officers. Metropolitan thanks ARB for extending the timeframes for updating certain information in CITSS, and for reducing the associated regulatory burden of the more frequent updates. Metropolitan requests that ARB also extend the timeframe for updates to an entity's directors and officers to an annual requirement.

Metropolitan often experiences changes in its Board membership, and an annual requirement will align the reporting requirements and provide additional administrative flexibility for Metropolitan and other similarly situated entities. (MWD1)

Response: Staff did not propose a change to section 95830(c)(1)(B) in the current rulemaking, so the changes proposed by the commenter are outside the scope of the rulemaking and staff cannot make the change at this time.

B-3. Implement Market Simulation Group Recommendations

B-3.1. Comment: In July of 2014, the Market Simulation Group (MSG) submitted a report entitled, "Report of the Market Simulation Group on Competitive Supply/Demand Balance in the California Allowance Market and the Potential for Market Manipulation" that outlined several design flaws in the cap---and---trade program. We share many concerns highlighted in the report and we would like to request that the California Air Resources Board have a public meeting to discuss the findings of the MSG. We recognize that these issues are not addressed through the current regulatory packages related to cap-and-trade before the Board in September, but the program design flaws must be discussed, especially in light of the coming expansion of the cap-and-trade program on January 1, 2015.

With the expansion of the program, all Californians will become direct stakeholders in the cap-and-trade program. To date, the cap-and-trade program has been focused on industrial facilities and the electric utility system. In the case of the electric utility system, the California Public Utilities Commission has developed a program to return cap-and-trade allowance revenue to ratepayers. With the upcoming expansion of the cap-and-trade program to transportation fuels no such return mechanism has been developed.

The Market Simulation Group has warned of small, but potentially significant, design flaws in the cap-and-trade program. These design flaws could trigger significant allowance volatility, potentially impacting all cap-and-trade participants. If those design flaws trigger volatility, it could fundamentally undermine the program and harm all participants in the market and ultimately consumers.

In the Market Simulation Group's Report the authors offer a variety of solutions to address the design flaws. We believe that these potential solutions, along with proposed solutions from stakeholders, should be thoroughly discussed at the next ARB meeting as soon as possible.

In closing, the ARB should pause and discuss these design flaws in the program, especially in light of the coming expansion of the cap---and---trade program. With the significant expansion of the program, any unexpected allowance volatility could create significant issues for obligated entities. Without a discussion, and some public recognition of these issues, we all stand at great risk of unforeseen volatility due to these design flaws that could be addressed. (AB321)

> **Response:** The comment proposes changes to sections of the Regulation which were not amended as part of this rulemaking, and are therefore outside the scope of the proposed changes. Staff will continue to monitor the program and is committed to making modifications that would continue to support an efficient and effective market program. Any future modifications would include a robust public process.

B-4. Requirements for Registration

B-4.1. Comment: The Cap-and-Trade Regulation requires any entity that wishes to hold compliance instruments to register for an account with ARB and provide, among other things, information regarding an entity's directors and officers, shareholders holding more than 10 percent of the voting rights, entities with which the entity has a corporate association, employees with knowledge of the entity's market position, and cap-and-trade consultants and advisors (Section 95830(c)). Furthermore, with the exception of employees with knowledge of the entity's market position, any change to this information triggers a registration update within 30-days of the change becoming effective (Section 95830(f)(1)).

PG&E supports ARB's market monitoring efforts. However, in some cases, requiring event-based trigger filings, as opposed to a date certain, such as quarterly or annual updates, substantially increases compliance burden and risk, while providing, at best, only marginally better information for ARB.

For regulated entities, the certainty of compliance date is much more important than the certainty of compliance time because it allows entities to focus their efforts around a finite set of dates. Currently, to ensure that changes are reported within the 30-day time period, PG&E must continually monitor and compile information. Having a date certain allows the entity to focus its compliance efforts on those dates, eliminating the need for continual and often redundant data collection efforts.

Moreover, there does not appear to be a clear need for trigger-based filings in some cases. Filings based on a triggering event are more appropriate when the change in

information requires a clear and rapid response. However, information on individuals and entities with knowledge of and influence over an entity's market participation is important for monitoring purposes, but does not require an immediate action. Moreover the generation of piecemeal and incremental information may in fact be more cumbersome for ARB staff in contrast to information collected through set reporting dates.

ARB Staff appear to recognize this dynamic and have included helpful revisions in the proposed amendments to the cap-and-trade program. As written, the proposed amendments would require annual updates of employees with knowledge of the entity's market position, rather than quarterly deadlines (Section 95830(c)(1)(I)). The proposed amendments also make positive changes to the type of corporate associations that must be reported. PG&E encourages staff to extend this structure to the remaining registration updates.

Accordingly, PG&E recommends the following changes to section 95830(f) (1), which would require that entities update certain registration information quarterly. Note that PG&E's suggested additions are in **bold and underline** and deletions in ~~**bold and strikethrough**~~. ARB changes are in underline and ~~strikethrough~~.

(f) Updating Registration Information.

(1) Registered entities must update their registration information as required by any change to the provisions of section 95830(c) within 30 days of the changes becoming effective. When there is a change to the information registrants have submitted pursuant to section 95830(c), registrants must update the registration information within 30 calendar days of the change unless otherwise specified below. Updates of information provided pursuant to section 95830(c) (1) (I) may be updated at least annually ~~each calendar quarter~~ instead of within 30 calendar days of the change. **Updates of information provided pursuant to section 95830(c)(1)(B), 95830(c)(1)(C), and 95830(c)(1)(J) may be updated at each calendar quarter instead of within 30 calendar days of the change.** If changes in information submitted pursuant to section 95830(c)(1)(H) are related to entities registered in the Cap-and-Trade Program, the information must be updated within 30 calendar days. If changes in information submitted pursuant to section 95830(c)(1)(H) are related to entities which are not registered in the Cap-and-Trade Program or in a GHG ETS to which California has linked pursuant to subarticle12,the information must be updated at least annually, instead of within 30 calendar days of the change. (PGE1)

Response: ARB has been concerned with the potential for individuals to be affiliated with more than one registered entity due to concerns about coordination of market activities by multiple entities. ARB looks for such affiliations when an entity first discloses the individuals when it registers. Staff chose a "trigger-based" filing requirement for sections 95830(f)(1)(B), (C), and (J) because of the consequences for market competitiveness if individuals associated with one registered entity become affiliated with another registered entity. Waiting for a scheduled annual update would not give ARB the warning it needs to begin monitoring transfers between and by entities that share account registrants. As such, staff declines to make the suggested change.

B-5. Corporate Disclosures

B-5.1. Comment: [Proposes changes to section 95833.]

Joint Industry Proposal

Coordinated by the California Manufacturers & Technology Association

Proposed Amendments to the Corporate Association Disclosure Requirements in the Cap-and-Trade Regulations August 22, 2014

Section 95833. Affiliate Disclosure Requirements. [All text in this section is new. Changes to effective Regulations not shown.]

(a) Disclosure Obligation. To the extent that such disclosure would not violate applicable rules promulgated by a governmental agency or the decision of a court with competent jurisdiction, a registrant must disclose to ARB the following entities: (CMTA1)

Response: The comment is outside the scope of the proposed amendments as the section containing this text was not modified.

B-5.2. Comment: [Proposes changes to section 95833.]

(1) Affiliation with Entities that are also Registrants. All entities (i) that are subject to the requirements of this article or registered with a GHG ETS to which California has linked pursuant to subarticle 12 and (ii) that the registrant majority or minority controls, that majority or minority control the registrant, or that are under common majority or minority control by a third party with the registrant, of which, in the case of minority control relationships only, the registrant has knowledge based on information in its possession or readily available to it; and

(2) Affiliation with Entities that Trade U.S. Carbon Credits. All entities (i) that trade any carbon dioxide equivalent emission commodity issued by a United States federal,

regional or state agency or program, such as regional greenhouse gas initiative allowances and offsets, as merchants and not as end-users and (ii) that the registrant majority controls, that majority control the registrant, or that are under common majority control by a third party with the registrant; and

(3) Additional Entity-Specific Disclosures. Any one of the following:

(A) Private Companies. All entities (i) that trade any natural gas, oil, or power commodity or natural gas, oil or power commodity derivative or swap on exchanges in the Western United States as a merchant and not as an end-user and (ii) that the registrant majority controls, that majority control the registrant, or are under common majority control by a third party with the registrant, of which the registrant has knowledge based on information in its possession or readily available to it; or

(B) SEC Registrants. All entities disclosed by the registrant or its parent to the Securities and Exchange Commission on Exhibit 21 of its most recent Form 10-K; or such agency's market-based rate regulations, under 18 CFR Part 35 and its Order 697, as amended or modified from time to time; or

(C) FERC Registrants. All entities disclosed by the registrant or its parent or any affiliate to the Federal Energy Regulatory Commission pursuant to such agency's market-based rate regulations, under 18 CFR Part 35 and its Order 698, as amended or modified from time to time; or

(D) CFTC Registrants. All affiliates disclosed by the registrant in compliance with applicable registration requirements under the Commodity Exchange Trading Commission's reporting rules; or

(E) Registered Investment Advisers. For a registrant that is or is majority controlled by a private investment fund managed by a Securities and Exchange Commission registered investment advisor, all entities disclosed by such advisor on Part 1A of its Form ADV filed with the Securities and Exchange Commission. (CMTA1)

Response: Staff has proposed additional amendments under the 15-Day Public Notice that allow entities to report unregistered direct corporate associates in specific markets and to satisfy disclosure requirements using existing documentation submitted to other regulatory agencies, as long as the documents contain the required information.

Proposed amendments to section 95830(c)(c)(1)(H) and (H)(1) would allow entities to limit disclosure of unregistered direct corporate associations to entities that participate in markets related to the California Cap-and-Trade Program or

linked programs, that trade, sell, or purchase for resale any natural gas, oil, electricity, or greenhouse gas emission instrument, or natural gas, oil, electricity, or greenhouse gas emission instrument derivative or swap on exchanges.

Proposed amendments to section 95830(c)(c)(1)(H)(1) would allow entities to use any of five documents submitted to U.S. government enforcement agencies to comply with the disclosure requirements.

The amendments retain and clarify the existing requirement that registered entities must disclose unregistered direct and indirect corporate associations when the associated entities are part of a chain of corporate associations between two registered entities. Staff believes these proposed changes substantially address the commenters' concerns and suggested changes.

B-5.3. Comment: [Proposes changes to section 95833.]

(b) Contents of Disclosure. For each entity disclosed pursuant to section 95833(a), the registrant must disclose the following information:

(1) For entities disclosed pursuant to sections 95833(a)(1), (a)(2), or (a)(3)(A):

(A) Name;

(B) CITSS account number, if applicable; and

(C) The degree (direct or indirect), the type (parent, subsidiary or affiliate) and the level of control (majority or minority) of the affiliation being disclosed; and

(2) For entities disclosed pursuant to section 95833(a)(3)(B)-(E), the information disclosed with respect to such an entity or a reference to the information and documentation referenced in those sections.

(c) Additional Information. If the Executive Officer has obtained information providing a reasonable basis to believe that a violation of this Article by a registrant may have occurred, the Executive Officer may, to the extent necessary to investigate the potential violation, request that the registration provide additional information regarding its parents, subsidiaries or affiliates that participate actively in the relevant commodity markets. (CMTA1)

Response: The comment is outside the scope of the proposed amendments as ARB has not proposed amendments to section 95833(d)(1). See also response to 45-day comment B-5.2.

B-5.4. Comment: [Proposes changes to section 95833.]

(d) Timing. An entity must make the disclosures contemplated in sections 95833(a) and (b) to the Executive Officer:

(1) When registering pursuant to section 95830;

(2) For a change to any information disclosed pursuant to section 95833(a)(1), by the earlier of (i) 30 days from the date of the change or, in the case of minority control relationships, form the date the registrant becomes aware of the change; or (ii) for the entity to be eligible to participate in an auction, the auction registration deadline established in section 95912; and

(3) On May 1 of every calendar year for any changes to the information disclosed pursuant to sections 95833(a)(2) and (a)(3) provided that, if the change takes place after April 1, the registrant shall make the disclosure on April 1 of the following year. (CMTA1)

Response: Staff has proposed additional amendments under the 15-Day Public Notice to section 95830(c)(f) that would allow disclosure in some cases of changes to direct and indirect corporate associations within one year of the change, instead of the current 30 days. Changes to employees that are knowledgeable of the entity's market activities and to unregistered entities not involved in a chain of association between two registered entities are eligible for the one-year update deadline.

B-5.5. Comment: [The comment proposes to add the following definitions:]

Section 95802. Definitions [All text is new. Changes to effective Regulations not shown.]

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

(1) "Affiliate"[5] (including the term affiliation) means a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.

[5] This definition tracks the SEC's defined term "Affiliate" under the Securities Act of 1933, codified at 17 CFR 230.405, available at http://www.law.cornell.edu/cfr/text/17/230.405.

(2) “Consolidateable Relationship” means [placeholder for definition to capture relationships that may be consolidated and must share an auction purchase limit and holding limit as used in the remained of the Cap-and-Trade Regulations.]

(3) “End-User”[6] means an any entity, including a commercial user or processor, that is purchasing a commodity or a commodity derivate or swap predominately to meet a compliance obligation, to consume or utilize as an input or feedstock in the ordinary course of its business or to hedge or mitigate a commercial risk.

(4) “Majority Control”[7] (including the terms majority controlling, majority controlled by and under common majority control with) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of an entity, through any of the following means:

(A) In the case of corporation:

1. Holding the right to appoint more than 50 percent of the members of the board of directions of the other entity; or

2. Holding more than 50 percent of the voting power of the corporation;

(B) In the case of a partnership other than a limited partnership, holding more than 50 percent of the interests of the partnership;

(C) In the case of a limited partnership, being a general partner that owns more than 20 percent of the invested capital interests in the partnership; and

(D) In the case of a limited liability company, holding more than 50 percent of the limited liability company interests in the limited liability company;

(5) “Merchant”[8] means an entity, including a trader and a dealer, that actively engages in the trading, market making, selling, and purchasing of commodities or commodity derivatives or swaps not primarily as an end-user.

(6) “Minority Control” means either:

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[6] “End-user” is a defined term under CFTC regulations. See http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/eue_factsheet_final.pdf. The context here is different so the definition had to be adapted but industry participants thought that the concepts were similar and that, accordingly, using the same defined terms is helpful.

[7] This definition is based on the SEC’s defined term “Control” under the Securities Act of 1933, codified as 17 CFR 230.405, available at: http://www.law.cornell.edu/cfr/text/17/230.405, and the criteria for direct corporate associations developed by ARB under the currently effective regulations.

[8] “Futures Commission Merchant” is a defined term under CFTC regulations. See http://www.cftc.gov/IndustryOversight/Intermediaries/FCMs/fcmib. The context here is different so the definition has to be adapted but industry participants thought that the concepts were similar and that, accordingly, using the same defined terms is helpful.

(A) In a direct relationship, the presence of any of the indicia set forth in section 95802(d)(1)-(4) in an amount greater than 20 percent but less than or equal to 50 percent of the relevant indicia; or

(B) In an indirect relationship, the presence of any of the indicia set forth in section 95802(d)(1)-(4) in an amount greater than 20 percent but less than or equal to 50 percent of the relevant indicia, when multiplying the indicia of control present at each link in the chain or affiliates between the entities in the indirect relationship.

(C) For the purposes of calculating the level of control in 95802(f)(1) and (2), the indicia of control set forth in section 95802(d)(3) above 20 percent shall be deemed to constitute 100 percent control.

(7) "Parent"[9] means, with respect to a specified entity, an affiliate controlled by such entity directly, or indirectly though one or more intermediaries.

(8) "Subsidiary"[10] means, with respect to a specified entity, an affiliate controlled by such entity directly, or indirectly through one or more intermediaries. (CMTA1)

Response: The comment is outside the scope of the proposed amendments. As explained in responses to 45-day comments B-5.1 to B-5.4, ARB has not proposed amendments to replace the provisions related to direct and indirect corporate associations contained in sections 95830 and 95833. Without changes to the provisions there is no need to change the definitions.

B-5.6. Comment: [Proposes changes to section 95923.]

Section 95823. Disclosures of Cap-and-Trade Consultants and Advisors. [Manual blackline showing changes to effective Regulations.]

(a) A "Cap-and-Trade Consultant or Advisor" is a person or entity that is not an employee of an entity registered in the Cap-and-Trade Program, but is providing the services listed in section 95979(b)(2) of the Cap-and-Trade Regulation or section 95133(b)(2) of the Mandatory Reporting Regulation in relation to the Cap-and-Trade Program or MRR and specifically for the entity registered in the Cap-and-Trade Program, regardless if the Consultant or Advisor is acting in the capacity of an offset or MRR verified. A person or entity providing only legal services as listed in Section 95979(b)(2)(R) of the Cap-and-Trade Regulation and Section 95133(b)(2)(R) of the

[9] This definition tracks the SEC's defined term "Parent" under the Securities Act of 1933, codified at 17 CFR 230.405, available at http://www.law.cornell.edu/cfr/text/17/230.405.
[10] This definition tracks the SEC's defined term "Subsidiary" under the Securities Act of 1933, codified at 17 CFR 230.405, available at http://www.law.cornell.edu/cfr/text/17/230.405.

Mandatory Reporting Regulation is not a Cap-and-Trade Consultant or Advisor. (CMTA1)

Response: The comment is outside the scope of the proposed amendments because ARB has not proposed changes to section 95923.

B-5.7. Comment: [Proposes changes to section 95830.]

Section 95830. Registration with ARB. [Manual blackline showing changes to effective Regulations.]

(c) Requirements for Registration

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

(H) ~~Identification of all other entities with whom the entity has a corporate association, direct corporate association, or indirect corporate association pursuant to section 95833, and a brief description of the association. An entity completing an application to register with ARB and for an account in the tracking system must provide all applicable information required by section 95833.~~ The information required by section 95833: (CMTA1)

Response: Staff has proposed a number of amendments to this section in the 15-Day Public Notice in response to stakeholder comments on the timing of disclosures, so the proposed change is not needed. See response to 45-day comment B-5.2.

B-5.8. Comment: While IEP appreciates the guidance that CARB provided prior to the July 2014 disclosure deadline and the initial steps that CARB has taken in this 45-day process to amend the regulation, IEP is concerned that the changes in this 45-day package fail to implement key clarifications articulated in the Cap-and-Trade Regulation Instructional Guidance document issued July 29, 2014. For example, in the case of non-registered direct corporate associations, the July 29 Guidance clarified that reporting entities could focus on affiliates in carbon, energy, and/or fuel markets. However, the proposed 45-day language does not include any language in regards to this concept. In addition, the July 29th Guidance began to identify documents that could be relied upon to meet corporate disclosure filing requirements, including Securities and Exchange Commission (SEC) filings, etc. and again, the proposed regulations do not speak to this topic. While the guidance document provided a good starting point for clarification, additional language should be incorporated into the Cap-and-Trade Regulations to

further address these issues. IEP recommends that CARB use a 15-day comment period, in connection with the current 45-day period, to incorporate additional language that was initiated in the guidance document, into the Cap and Trade Regulations. (IEP1)

> **Response:** Staff agrees with the suggestion in the comment to provide clarification on which corporate associations need to be reported as well as the documentation that reporting entities may submit. Staff has issued additional proposed changes under the 15-Day Public Notice. Staff has proposed to add section 95830(c)(1)(H)(1) which specifies the documentation reporting entities may submit. The proposed text also provides the option that an entity need only report unregistered direct corporate associates in specified markets. The new text also clarifies that the entity must report any related entity involved in a direct or indirect corporate association between registered entities.

B-5.9. Comment: IEP continues to be concerned that the scope of the proposed regulations is still too broad and an additional narrowing/tailoring of the regulations needs to occur. IEP is aware of and is generally supportive of the efforts of other industry groups to modify the existing regulations regarding the corporate disclosure issue. IEP is hoping to work with CARB and other industry groups on additional language that could be added either through a 15-day package or a subsequent 45-day package. To the extent that changes are still needed that cannot be incorporated in this rulemaking package, IEP recommends that the CARB open another 45-day rulemaking package in early 2015 to resolve any outstanding issues/concerns. (IEP1)

> **Response:** Staff appreciates the concerns expressed in the comment, and has issued 15-day revised text as described in response to 45-day comment B-5.2. For suggested amendments that are outside the scope of this rulemaking, staff will continue to work with stakeholders to resolve the outstanding issues under future rulemakings and/or clarifying guidance, as appropriate.

B-5.10. Comment: IEP is pleased to see CARB's proposal to extend the timeline for reporting changes to information regarding corporate associations with non–registered entities. This change is significant in that it modifies the timeline for reporting a change from "within 30 calendar days of the change" to annually [See Appendix A.1 Proposed Regulation Order, Section 95830(f)(1)]. The original 30-day timeline was a problematic aspect of CARB's proposal because it would be very difficult for large companies, where the volume of unregistered corporate associations is high, to manage, maintain, track, and report changes within a 30-day period. The volume and size of these companies would require them to be constantly reporting changes to the CARB for unregistered,

extraneous entities. Accordingly, IEP is happy to see that CARB has extended the timeline for reporting changes of non-registered corporate associations. (IEP1)

> **Response:** Staff appreciates the support, and as explained in response to 45-day comment B-1.1, has issued additional clarifications in the 15-Day Public Notice.

B-5.11. Comment: WSPA members have participated in a joint industry group coordinated by the California Manufacturers & Technology Association seeking a clear compliance pathway to satisfy the corporate association disclosure requirements included in the C&T regulation. WSPA members have filed numerous comments over the past 18 months expressing grave concerns over the expansion of the disclosure requirements to non-registered entities that became effective on July 1, 2014. WSPA is grateful for ARB's issuance of guidance on July 29 in response to these concerns permitting companies to file their SEC Form 10-K list of subsidiaries to satisfy the disclosure requirements as they apply to unregistered entities.

WSPA supports the Joint Industry Proposal for changes to § 95830, 95833, 95912 and 95923 presented to ARB staff on August 22, 2014. In particular, WSPA urges ARB to retain disclosure of the SEC Form 10-K list of subsidiaries as a compliance option. (WSPA1)

> **Response:** Staff has proposed extensive modifications to sections 95830(c) and (f), and section 95833, that staff believes addresses the concerns raised in the comment. See response to 45-day comment B-5.2.

B-5.12. Comment: ARB also proposes to change the timeframe for updating information on employee and indirect corporate associations not registered in CITSS or a linked jurisdiction to an annual reporting requirement [§ 95830 (f)(1)]. WSPA supports this change. We further recommend ARB include reporting of consultants and advisors in this section as shown below (in strikeout).

Recommendation:

(f) Updating Registration Information.

(1) Registered entities must update their registration information as required by any change to the provisions of section 95830(c) within 30 days of the changes becoming effective. When there is a change to the information registrants have submitted pursuant to section 95830(c), registrants must update the registration information within

30 calendar days of the change unless otherwise specified below. Updates of information provided pursuant to section 95830(c)(1)(l) ~~and (c)(1)(J)~~ may be updated at least annually ~~each calendar quarter~~ [this prior language was struck in the 45 day change] instead of within 30 calendar days of the change. If changes in information submitted pursuant to section 95830(c)(1)(H) are related to entities registered in the Cap-and-Trade Program, the information must be updated within 30 calendar days. If changes in information submitted pursuant to section 95830(c)(1)(H) are related to entities which are not registered in the Cap-and-Trade Program or in a GHG ETS to which California has linked pursuant to sub-article 12, the information must be updated at least annually, instead of within 30 calendar days of the change. (WSPA1)

> **Response:** Staff has proposed amendments under the 15-Day Public Notice that retains the 30-day disclosure requirement for registered entities, and unregistered entities that are part of a chain of corporate associations between two registered entities, but allows disclosures of unregistered direct corporate associates to be completed within one year of the change being reported. Staff believes these changes address the commenter's concerns

B-5.13. Comment: There is an inconsistency in terms between § 95830(c)(1)(H) and the changes ARB has proposed in § 95833 (b),(d) and (e). We believe the use of the generic term "corporate association" in § 95830 (c)(10(H) could unintentionally be applied to indirect corporate associations where neither are registered in CITISS. This seems contrary to ARB's intent.

***Recommendation*:** WSPA recommends the following language change (in strikeout) to § 95830(c)(1)(H).

(H) Identification of all other registered entities ~~pursuant to this article~~ with whom the entity has a ~~corporate association,~~ direct corporate association, or indirect corporate association pursuant to section 95833, and a brief description of the association. An entity completing an application to register with ARB and for an account in the tracking system must provide all applicable information required by section 95833. (WSPA1)

> **Response:** Staff has proposed amendments under the 15-Day Public Notice that makes the change proposed in the comment.

B-5.14. Comment: WSPA continues to be concerned that the current holding and purchase limits are extremely restrictive. The outcome will likely be a constrained market that limits participants' flexibility to comply at the lowest incremental cost. The conservatively low holding/purchase limits disproportionately impact those entities with

large compliance obligations, particularly those sharing holding limits and purchasing limits with one or more directly related entities. Furthermore, this problem will be compounded in 2015, since the compliance obligations of fuel providers are typically much higher than the increase in the holding limit. These constraints leave such an entity no alternative other than to prematurely move large quantities of compliance instruments to its compliance account, rendering useless the multi-year compliance period flexibilities and exposing the company to significant risks of stranded assets in the event of operational or corporate activity changes over the compliance period.

As you are aware, the Emissions Market Assessment Committee (EMAC) recognized these concerns in its November 8, 2013 report and offered two possible recommendations: 1) consideration of adjusting or scaling the holding/purchase limits based upon the compliance obligation for a particular entity, and 2) consideration of additional flexibility in movement of compliance instruments from the compliance account, including allowing a portion of the compliance instruments to be removed and offered for resale into the market. The opinion of the EMAC was that making these modifications would provide additional flexibility to the regulated entity, while still preserving the goal of preventing market manipulation.

Recommendation: ARB should adopt the recommendations prepared by the EMAC. ARB should place specific emphasis on scaling of holding/purchase limits that reflects the size of the entity's obligation, and provides increased flexibility and control by the regulated entity with respect to management of the accounts. (WSPA1)

> **Response:** The comment is outside the scope of the proposed amendments, since ARB did not propose any amendments to the relevant regulatory sections as part of this rulemaking.

B-5.15. Comment: Chevron U.S.A. Inc., "Chevron", has been a California company for more than 130 years and is the largest Fortune 500 Corporation based in the state. We have participated, and will continue to participate, in stakeholder meetings and discussions with ARB senior management and its staff in order to make the cap and trade program and the proposed disclosure requirement rule workable for California, while meeting the goals of AB 32.

We have appreciated the opportunity to work with staff and management to clarify our concerns regarding the corporate affiliation disclosure requirements. Although significant progress has been made, we suggest that these issues need continued stakeholder engagement and more creative solutions in order to effectively resolve our concerns.

Specifically, we urge ARB to continue to work with us and other stakeholders to further explore better options for the following sections of the regulations:

- Disclosure of Corporate Associations – Sections 95830 and 95833 requiring identification and specific information on all other entities with which there is an indirect or direct corporate association.
- Auction Administration and Participation Application – Section 95912 requiring entities who desire to participate in an auction to provide "An attestation disclosing the existence and status of any ongoing investigation or an investigation that has occurred within the last ten years for the entities and any corporate association."

The Expanded Disclosure Requirements

We have previously commented on changes to these provisions that took effect on July 1 of this year. The July 1 changes represent a significant expansion of the previously effective disclosure requirement, which required registrants to disclose their corporate affiliations only with other registrants. The July 1 changes expanded the disclosure requirement to **all** corporate associations, regardless of whether those corporate associations involve affiliates that are not registered under the program or that operate in distant regions of the world. The newly expanded corporate affiliate disclosure requirements add significant market and administrative challenges to a program that is already complex. Complex provisions create administrative burdens and multiply the chances for covered entities to inadvertently trip legal requirements, even when they are complying with the program in good faith.

Chevron recognizes that finding solutions that meet ARB's concerns to prevent fraud and foster an effective program, without burden and potential for inadvertent non-compliance, is difficult. Chevron appreciates that ARB's senior management has engaged with industry on these issues, including as part of joint industry and ARB discussions held on July 27. Chevron also appreciates that ARB provided temporary relief from the new disclosure requirements through guidance issued on July 29, two days before the updated disclosure deadline. In particular, Chevron applauds ARB's decision to allow public company registrants such as Chevron to use existing documentation such as an SEC filing to satisfy the disclosure requirement. The 45-day package's proposed amendments to the disclosure requirement also take a step in the right direction by only requiring updates to the disclosure annually, rather than quarterly. The underlying issue, however, remains unaddressed because covered entities still need to comply with a disclosure requirement that is both overly burdensome and poorly tailored to address ARB's regulatory concerns. (CHEV1)

Response: Staff has proposed amendments under the 15-Day Public Notice that retains the 30-day disclosure requirement for registered entities, and unregistered entities that are part of a chain of corporate associations between two registered entities, but allows disclosures of unregistered direct corporate associates to be completed within one year of the change being reported. The proposed amendments also allow entities to submit documents they submit to federal regulatory agencies when those documents meet the disclosure requirements. See also response to 45-day comments B-5.2 and B-6.1.

B-5.16. Comment: The burden of the corporate reporting is exacerbated by the attestation requirements applicable to entities that wish to participate in an ARB auction. Under the changes that became effective on July 1, the requirement now goes back 10 years and applies to all corporate affiliations disclosed to ARB. The scope plainly creates an undue burden and potential for inadvertent non-- compliance for any large, multi-national public companies whose disclosed corporate affiliates conduct business that is wholly unrelated to the AB 32 market. Chevron urges ARB to limit the regulatory attestation to the auction applicant only and to limit the look-back period to five years which is the typical time period under statutes of limitation. (CHEV1)

Response: The comment is outside the scope of the proposed amendments. See response to 45-day comment B-2.3.

B-5.17. Comment: Chevron agrees with ARB's July 29 guidance which allows for use of the SEC Form 10-K disclosure. Chevron has been working with a joint industry group led by the California Manufacturers and Technology Association **("**CMTA") to develop revisions to the disclosure requirements (the **"Joint Industry Proposal",** included as Exhibit 1 to this letter). Also, Chevron has participated in the work undertaken by the joint industry group and ARB staff to develop a 15-day rulemaking proposal and revised guidance. Although this work is ongoing, the discussion with ARB staff has been constructive and we are hopeful that, together, the 15-day changes and revised guidance will be largely consistent with the Joint Industry Proposal.

What the regulated community truly needs is a set of clear and permanent regulations that industry understands and can implement while at the same time enabling ARB to monitor the AB32 carbon market effectively. The steps outlined above instead rely heavily on guidance to clarify the regulatory provisions which is not as effective as having clear and permanent regulations. Accordingly, we urge ARB to include the Joint Industry Proposal in the next 45-day rulemaking. (CHEV1)

Response: ARB has provided a response to the Joint Industry Proposal in responses to 45-day comments B-5.1 through B-5.7, and B-6.1.

B-5.18. Comment: While IEP appreciates the guidance that CARB provided prior to the July 2014 disclosure deadline and the initial steps that CARB has taken in this 45-day process to amend the regulation, IEP is concerned that the changes in this 45-day package fail to implement key clarifications articulated in the Cap-and-Trade Regulation Instructional Guidance document issued July 29, 2014. For example, in the case of non-registered direct corporate associations, the July 29 Guidance clarified that reporting entities could focus on affiliates in carbon, energy, and/or fuel markets. However, the proposed 45-day language does not include any language in regards to this concept. In addition, the July 29th Guidance began to identify documents that could be relied upon to meet corporate disclosure filing requirements, including Securities and Exchange Commission (SEC) filings, etc. and again, the proposed regulations do not speak to this topic. While the guidance document provided a good starting point for clarification, additional language should be incorporated into the Cap-and-Trade Regulations to further address these issues.

IEP Recommendation: IEP recommends that CARB use a 15-day comment period, in connection with the current 45-day period, to incorporate additional language that was initiated in the guidance document, into the Cap and Trade Regulations. (IEP1)

Response: Staff has proposed amendments under the 15-Day Public Notice that allow entities to submit documents they submit to federal regulatory agencies when those documents meet the disclosure requirements. See response to 45-day comment B-5.2.

B-5.19. Comment: IEP continues to be concerned that the scope of the proposed regulations is still too broad and an additional narrowing/tailoring of the regulations needs to occur. IEP is aware of and is generally supportive of the efforts of other industry groups to modify the existing regulations regarding the corporate disclosure issue. IEP is hoping to work with CARB and other industry groups on additional language that could be added either through a 15-day package or a subsequent 45-day package. To the extent that changes are still needed that cannot be incorporated in this rulemaking package, IEP recommends that the CARB open another 45-day rulemaking package in early 2015 to resolve any outstanding issues/concerns.

IEP is pleased to see CARB's proposal to extend the timeline for reporting changes to information regarding corporate associations with non–registered entities. This change

is significant in that it modifies the timeline for reporting a change from "within 30 calendar days of the change" to annually [See Appendix A.1 Proposed Regulation Order, Section 95830(f)(1)]. The original 30-day timeline was a problematic aspect of CARB's proposal because it would be very difficult for large companies, where the volume of unregistered corporate associations is high, to manage, maintain, track, and report changes within a 30-day period. The volume and size of these companies would require them to be constantly reporting changes to the CARB for unregistered, extraneous entities. Accordingly, IEP is happy to see that CARB has extended the timeline for reporting changes of non-registered corporate associations. (IEP1)

> **Response:** Staff has proposed amendments under the 15-Day Public Notice that retains the 30-day disclosure requirement for registered entities, and unregistered entities that are part of a chain of corporate associations between two registered entities, but allows disclosures of unregistered direct corporate associates to be completed within one year of the change being reported. The proposed amendments also allow entities to submit documents they submit to federal regulatory agencies when those documents meet the disclosure requirements.

B-5.20. Comment: Section 95830(f)(1) governs when registered entities must update their registration information with the ARB. The ARB proposes several changes to the rule, including allowing annual updates to information about associated entities that are not registered in the cap-and-trade program. These changes will not resolve all of the hardships imposed by the required disclosures. In particular, Section 95833(d)(1), which requires registered entities to identify all direct and indirect corporation associations, remains unduly burdensome, especially because it is unclear what benefit, if any, this onerous compliance obligation will provide to the ARB in its regulation of the cap-and-trade program. SCE therefore requests the following changes:

(1) With regards to corporate associations that are not registered in the cap-and-trade program, SCE requests that the ARB modify the regulation to allow registered entities to provide the ARB with an *existing* list of corporate associations that the registered entity already maintains in compliance with the Securities and Exchange Commission (SEC), Federal Energy Regulatory Commission (FERC), Commodity Futures Trading Commission (CFTC), or California Public Utilities Commission (CPUC) (e.g. corporate association list provided to SEC as Exhibit 21 of an entity's 10-K filing, or provided to comply with CPUC affiliate requirements). This list sufficiently identifies associated

entities and should therefore replace the Section 95833(d)(1)(A)-(G) and (d)(2)'s current requirements. Such continuity with other similarly situated regulatory agencies will satisfy the ARB's needs and promote efficiency and accuracy.

(2) With regards to associated entities that are registered in the cap-and-trade program, SCE requests that ARB revise the disclosure requirement to include only: (1) entity name, (2) CITSS number; (3) degree of association, (e.g. direct or indirect); and (4) type of association (e.g. parent, subsidiary, or affiliate). (SCE1)

Response: Staff has proposed amendments under the 15-Day Public Notice that allow entities to submit documents they submit to federal regulatory agencies when those documents meet the disclosure requirements. See response to 45-day comment B-5.2.

The proposal to reduce the types of information to be submitted on corporate associations is outside the scope of the proposed amendments because ARB has not proposed changes to those provisions.

B-5.21. Comment: Even with the proposed change, Section 95830(f)(1) still be requires registered entities to update certain elements of their registration, such as identification of directors and officers and cap-and-trade consultants and advisors, within 30 days of a change. To further reduce the administrative burden imposed by this regulation on both the regulated entities and the ARB, SCE requests that the ARB modify the regulation to eliminate updates that are triggered by an event. Instead, SCE proposes that the ARB streamline the process by requiring registered entities to update their registration information on a quarterly basis.

Standardizes quarterly reporting will not only ensure that the ARB receives information regarding such changes on a timely basis, but will also reduce the time and resources registered entities must expend tracking the timing of changes and filing multiple registration updates. SCE's proposal will similarly reduce the ARB's administrative burden by reducing the time and resources the ARB must expend reviewing and processing what may end up being a steady stream of updates from numerous entities. (SCE1)

Response: ARB has been concerned with the potential for individuals to be affiliated with more than one registered entity due to concerns about coordination of market activities by multiple entities. ARB looks for such affiliations when an entity first discloses the individuals when it registers. Staff chose a "trigger-based" filing requirement for sections 95830(f)(1)(B), (C), and (J) because of the

consequences for market competitiveness if individuals associated with one registered entity become affiliated with another registered entity. Waiting for a scheduled annual update would not give ARB the warning it needs to begin monitoring transfers between and by entities that share account registrants. As such, ARB staff declines to make the requested change.

B-6. Auction Attestation

B-6.1. Multiple Comments: Section 95912(d)(4)(E) of the current regulation requires entities applying to participate in an ARB auction to disclose "the existence and status of any ongoing investigation or an investigation that has occurred within the last ten years" for market rule violations committed by an entity with which the participating entity shares a direct or indirect corporate association and that participates in a carbon, fuel, or electricity market." Requiring registered entities to make such disclosures is unreasonable because existing rules that govern affiliate conduct and standard corporate protocols for information disclosure could prohibit employees of the participating company from accessing this information.

Many entities that participate in the ARB auctions, including investor-owned utilities such as SCE, operate as wholly-owned subsidiaries of parent companies, which may also own other commercial entities, in whole or in part. Many of these other subsidiary companies fall under the ARB's definition of direct or indirect corporate associations as set forth in the Cap-and-Trade Regulation and participate in "a carbon, fuel, or electricity market." These entities are not registered in the Cap-and-Trade program, but would nevertheless be required by this regulation to share their internal files with their affiliates who participate in ARB auctions and have this information disclosed to the ARB, which is problematic for several reasons.

First, affiliate conduct rules and standard corporate protocol may prohibit a participating entity from obtaining the information. In addition, even if the participating entity were to obtain the information, it would not be possible for the participating entity to attest that the information is accurate and complete for the specified reporting period. The ARB cannot reasonably require that an entity applying to participate in the auctions attest to potentially sensitive legal information that it may not have access to about its affiliated corporate entities and cannot confirm is accurate or complete, even if granted access. Moreover, if the affiliated or associated entities are not entities subject to the ARB's regulations, the ARB likely would not be legally entitled to directly access non-public information about such entities. The ARB does not have the legal right or ability to require regulated entities to do what ARB could not legally directly accomplish itself.

SCE appreciates the opportunity to comment on the 45-Day Modifications. SCE continues to urge the ARB to consider ways to reduce the administrative burden of registration and auction reporting requirements. (SCE1)

Comment: [Proposes changes to section 95912.]

Section 95912. Auction Administration and Participant Application. [Manual blackline showing changes to effective Regulation.]

(c) Auction Participant Application Requirements

(4) An entity will be required to complete an auction participant application at least 30 days prior to an auction in which it intends to participate. The entity must provide information and documentation including:

(B) The existence of any direct ~~or indirect corporate associations pursuant to section 95833 and 95914(d)~~ [consolidateable relationships];

(E) An attestation disclosing the existence and status of any final, formal proceedings initiated by a regulatory authority (e.g. a state securities agency, self-regulatory organization, federal regulatory such as the U.S. Securities and Exchange Commission, or foreign regulatory body)[11] ~~ongoing investigation or an investigation that has occurred~~ within the last five ~~ten~~ years with respect to any ~~alleged~~ violation of any rule, regulation, or law associated with any commodity, securities, environmental, or financial market ~~for~~ by the entity participating in the auction~~, and all other entities with whom the entity has a corporate association, direct corporate association, or indirect corporate association pursuant to section 95833 that participate in a carbon, fuel, or electricity market.~~ The attestation must be updated to reflect any change in the status of an investigation that has occurred since the most recent auction application attestation was submitted; (CMTA1)

Comment: IETA appreciates that ARB recently published guidance documentation related to auction application attestation disclosure requirements in accordance with 95912(d)(4)(E) of the Cap-and-Trade Regulation. However, IETA is very concerned

[11] This change tracks the disclosure required for "Regulatory: Final" Disclosure Events by FINRA Rule 8312: FINRA BrokerCheck Disclosure. This disclosure is well understood by the market and systems already exist at a number of companies to track this type of information. BrokerCheck disclosure forms can be reviewed at the SEC's search directory at http://www.adviserinfo.sec.gov/IAPD/Content/Search/iapd_Search.aspx.)

about the breadth of ARB attestation requirements as adopted, and we are disappointed about the lack of proposed changes during the current 15-day modification period. Even with proposed improvements on how entities must identify and disclose their non-registered direct corporate associations, the challenging and onerous auction investigation attestation rules **will prevent a number of major California compliance entities from participating in the November auction and potentially beyond**.

Larger companies, especially those involved in regional and global fuel markets, are simply not in a position to obtain the investigations' information required in ARB's auction attestation, even on a "best efforts" basis. The impact this corporate disclosure attestation language has on a number of our members could affect their ability to cost-effectively comply with regulations. This is unlikely to be ARB's intention (i.e., to prohibit entities from being able to procure allowances via auction to cover their obligations), but could be a direct consequence of the regulation as currently written.

IETA strongly encourages ARB to fashion disclosures related only to entities that participates in the cap-and-trade market. We encourage ARB to consider a more reasonable approach to attestation requirements **as implemented by numerous regulatory agencies across various markets**. In these cases, rather than requiring full disclosure for registrant and related entities of all allegations and investigations in a market (and all related markets), the registered entity must only report final orders, decisions, findings or sanctions that have been imposed against the registered entity for violating rules or regulations, which are specific and ***applicable*** to the behavior the agency is interested in monitoring (e.g., consumer protection, market manipulation, etc.).

For example, under "Disclosures", ARB's revised attestation could state the following:

- Has the registrant, or any of the general partners, or corporate officers or directors, or limited liability company members, managers, and officers, ever been convicted of any felony? *Response Options: (No) or (Yes). If yes, explain on additional page.*

- Within the last 10 years, has the registrant or any of these persons had any civil, criminal, or regulatory sanctions for market manipulation imposed against them pursuant to any state or federal law or regulation? *Response Options (No) or (Yes). If yes, explain on additional page.* (IETA1)

Comment: The California Manufacturers & Technology Association has coordinated the work of a group of companies and trade associations that together represent more than 800 companies in connection with certain disclosure requirements included in the cap-

and-trade program. This group includes the Western States Petroleum Association, BP, Chevron U.S.A Inc., GE, California League of Food Processors, International Emissions Trading Association, Western Power Trading Forum and others.

On July 22 members of our joint industry group wrote to Chairman Nichols, with copies to other members of the Board and the Executive Director, to identify a number of significant issues regarding the disclosure requirements that became effective July 1, 2014 and requesting relief for industry prior to the July 31 reporting deadline.

We thank ARB leadership and staff for the significant progress made on these issues since July. In particular, we are grateful to the senior management team for meeting with our joint industry group on July 27 and for issuing guidance on July 29 that provided a clear compliance pathway for the July 31 deadline.

The currently proposed 45-day changes do not address our concerns, but we understand that they were finalized prior to our July 27 meeting in Sacramento and, accordingly, could not possibly reflect the substance of our discussions.

As a follow up to our July meeting, the joint industry group submitted the enclosed September 15 “Joint Industry Proposal” for disclosure requirements. Since then, we have been working with staff on an interim solution and have been developing 15-day changes that may be combined with revised guidance. Although our work with staff is ongoing, we we feel confident based on the constructive nature of the dialogue that the final package will reflect much of the Joint Industry Proposal. Some of the key points of our position include the following:

1. The ability for registrants to use a list of affiliates submitted to other agencies, such as the Securities and Exchange Commission or the Commodity Futures and, to comply with the unregistered affiliate disclosure requirement.
2. The ability of registrants, particularly those that do not submit affiliate lists to other agencies, to submit a list of unregistered affiliates with which they have a majority control relationship and that operate in markets that are related to the California carbon market.
3. Clarifying the scope of the regulatory investigation attestation that must be included in auction applications. This needs to be addressed before the application deadline for the next quarterly auction.

While the current plan is a good gap-filler, industry cannot rely on guidance indefinitely. In addition, several important elements of the September 15 Joint Industry Proposal cannot be included in the 15-day package due to the limitations of the 15-day rulemaking procedure, and cannot be included in guidance as they require actual

changes in the regulation (*e.g.*, the disclosure requirements pertaining to legal counsel). Accordingly, we ask that the Joint Industry Proposal as a whole be included in the next 45-day changes to the cap-and-trade regulation. This proposal is clear and will be readily understood by the applicable compliance and legal teams within each registrant because it leverages corporate terminology that is standard in the SEC and CFTC markets. (CMTA2)

Comment: WSPA also supports changes to the regulatory investigation disclosure requirements included in § 95912 that must be included in an auction application attestation. Even if it applies to the list of SEC affiliates, the requirement remains too broad, creates an undue burden on industry and provides ARB with limited value. WSPA recommends limiting the disclosure of regulatory investigations to the auction participant only and to adjust the time frame from 10 years to 5 years in a manner consistent with most statutes of limitation.

While we would prefer for ARB to include the Joint Industry Proposal as a whole in the regulation to reflect the full spectrum of compliance options, we understand ARB is considering, as an interim step, making certain post hearing changes that link the regulatory requirements to updated guidance. It is our understanding that the guidance would complement the post-hearing changes until such time that the regulation can be re-noticed to incorporate the Joint Industry Proposal. We appreciate ARB's collaboration with the Joint Industry Group toward a workable solution on this issue. (WSPA1)

> **Response:** ARB did not propose any amendments to section 95912(d)(4)(E) as part of this rulemaking. As such, these comments are outside the scope of the proposed regulatory amendments. See also response to 45-day comment B-5.2 regarding other aspects of the Joint Industry Proposal.

C. ALLOWANCE ALLOCATION

C-1. Legacy Contracts

Duration of Legacy Contract Transition Assistance

C-1.1. Comment: On behalf of Wheelabrator Technologies, Inc., I am submitting comments on the Proposed Amendments (Amendments) to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanism (C&T) issued

July 29, 2014 for public comment. We appreciate the opportunity to submit these comments on the Amendments and in particular Section 95890(e).

Wheelabrator's Norwalk Energy power plant is a legacy contract holder that is a combined cycle generation facility producing energy through three different processes. Natural gas powers a 27-megawatt LM2500 gas turbine to produce electricity and the turbine's exhaust gasses are directed to a heat recovery steam generator (HRSG), where it heats water. The steam from that process turns a second turbine, which also produces electricity. Steam from the HRSG, or the auxiliary boilers, when the turbine is not operating, is also provided through a pipeline to the neighboring state hospital campus where it is used for heating. In addition to electricity and steam, Wheelabrator's Norwalk Energy facility also provides chilled water to the state hospital for space cooling, using three 1,500- ton chillers. Two of the chillers are electrical and the third is an absorption chiller that uses steam from the HRSG.

Wheelabrator's Norwalk Energy facility provides electrical power to Southern California Edison under a 30-year Power Purchase Agreement (PPA) executed on February 14, 1988. The PPA does not provide an explicit means of cost recovery for the facility's compliance with the California C&T Program and meets the definition of a legacy contract. Similarly, the Norwalk Energy facility contract with its thermal customer meets the definition of a legacy contract. With regard to the proposed Amendments, we request clarification with regard to Section 95890(e) that provides allowance allocations to legacy contract generators with an industrial partner. As amended, the language would provide such allowances for the duration of the legacy contract.

However, it is not clear as written that the extension is specific to the facility or the contract itself.
Norwalk holds a legacy contract with an industrial partner and a legacy contract with an electric utility. Under current regulation, we have submitted appropriate forms and information to receive allowance allocations until December 31, 2017 for emissions generated under both contracts. The amendments are clear that Norwalk will receive allowances until the end of the contract term for emissions generated under our thermal contract. It is less clear with regard to treatment of the PPA. Our PPA terminates in February, 2018 and if provided allowances to the end of the contract, Norwalk would be provided two additional months of allowances that could facilitate renegotiations of contracts.

In summation, we ask that the ARB make clear whether the extended allocations are specific to the facility with an industrial partner as a whole - thus extending allowances to the end of both the thermal contract and the PPA held by a legacy facility - or to the individual contract itself without regard to the number or type of additional power contracts held by a legacy facility. (WT1)

> **Response:** The period for which a legacy contract generator can obtain transition assistance depends on the contract. If the contract is with a covered entity eligible for allowance allocation pursuant to section 95891 (an industrial counterparty), allowance allocation for that contract may continue through the end of the contract. For contracts with entities that are not industrial counterparties, the regulation provides for allocation of allowances through the second compliance period (through 2017). As the legacy contract provisions were developed, Board direction was to provide transition assistance, not full coverage of an annual compliance obligation. As discussed in the Final Statement of Reasons for the 2013 amendments to the Regulation, the preferred approach to addressing legacy contracts is for the parties to renegotiate the contract. The 2013 amendments extended allowance allocation through the second compliance period to allow for additional time for the continued renegotiation of the remaining legacy contracts. Allocating allowances through the second compliance period provides the correct incentive and facilitates the implementation of the program design to pass the GHG compliance cost down to the end-user of the electricity.

C-2. Allocation to Wholesale Water Agency

C-2.1. Comment: Metropolitan appreciates the willingness and efforts of ARB staff to address cost impacts on publicly-owned wholesale water utilities and their ratepayers. Metropolitan has reviewed the latest revision of Section 95895 for the proposed allowance allocation to public wholesale water agencies. Metropolitan has noted that although ARB has provided a slight increase in the allowance allocation to Metropolitan, it is only about 40% of what Metropolitan actually needs to fully mitigate the cost impacts of the Cap-and-Trade regulation to its customers, the 26 member agencies mentioned previously. According to ARB, the proposed changes take into account the application of an updated allocation calculation methodology, and the number of allowances is based on the compliance obligation for electricity used to convey water. ARB has proposed only a slight adjustment from the October 2013 Cap-and-Trade regulations, and continues to apply two inappropriate assumptions pertaining to large

hydroelectric power and the renewable portfolio standard (RPS) to the methodology that was utilized, resulting in a much lower allocation to Metropolitan, as a public wholesale water agency, than is actually warranted.

In Metropolitan's previous comment letters on the Cap-and-Trade regulation to ARB on October 22, 2013 and April3, 2014, and in its oral testimony at ARB meetings and hearings, Metropolitan discussed its concerns associated with the misapplication of the large hydroelectric and RPS percentages in ARB's methodology. Additionally, in its April 2014 comment letter, Metropolitan staff recommended an alternative allocation approach to take into account the fact that Metropolitan is not an electric distribution utility (EDU), but is a public wholesale water agency with characteristics that are different and unique from EDUs. Metropolitan requests that ARB staff revisit these two previous comment letters, and reconsider additional revisions to the allocation methodology to address Metropolitan's special circumstances and provide an increase in the allowance allocation.

As stated in Metropolitan's April 3rd comment letter, Metropolitan proposes the following allocation schedule:

Table 9-5: Allocation to Each Public Wholesale Water Agency Annual Allocation

Annual Allocation	2015	2016	2017	2018	2019	2020
Metropolitan Water District	496,268	153,110	148,25	154,387	147,01	139,99

(MWD1)

Response: Staff proposed to modify table 9-5 to increase the allocation to Metropolitan Water District (MWD) based on a methodology that takes into account the fact that MWD has a significant amount of hydroelectric generation. Pursuant to direction from the Board, ARB staff worked with MWD in developing the proposed amendments, and shared staff thinking regarding an appropriate methodology that would take into account both the similarities and differences between MWD and the EDUs. In Resolution 11-32, the Board stated that “[w]ater rates should create the appropriate incentives for water conservation, greenhouse gas efficient technologies, and the efficient supply and use of water;” and “[c]arbon pricing is an important function of the cap-and-trade regulation, and that it is equally important that if allowance value is used for the benefit of water

ratepayers it is used consistent with State efforts to promote efficient use and supply of water and water conservation."[12]

Furthermore, ARB staff responded to similar comments on pages 1590 to 1595 of the 2011 FSOR regarding the reasons why water agencies are treated differently than electric utilities. ARB staff notes that the overall allocation to the electric sector took into account the allowances needed for electricity used by water agencies for pumping water and other water processes. Since then, electric utilities have begun to mitigate costs borne by electric and water ratepayers by providing climate credits, or by keeping rates lower than they would have been through using allowances for the benefit of ratepayers.

MWD is the only water agency that is expected to have a direct compliance obligation under this Regulation in 2014 and subsequent years. Staff notes that, as a result of the current drought, many water agencies will need to pump groundwater instead of accessing surface water because surface water rights will be curtailed. The cost of pumping ground water, on average, is higher than the cost of pumping surface water from rivers or reservoirs. What this means is that many water agencies in all parts of the State will face higher electricity costs for pumping. ARB does not provide allowances to any other water agency, even though all water agencies face indirect GHG costs that they must pass through to their ratepayers. For all of these reasons, staff declines to make the requested changes.

D. COMPLIANCE OFFSET PROTOCOLS

D-1. Livestock Project Protocol

D-1.1. Comment: Appendix B (pg.59-60): Section (a) states, "a project encounters baseline flow rate". It seems that the word "baseline" may not belong here, as there

[12] http://www.arb.ca.gov/regact/2010/capandtrade10/res11-32.pdf.

would be no biogas flow meters in the baseline scenario, and therefore no data to need substituting. (AMA1)

> **Response:** ARB staff agrees and has removed the word “baseline” in the 15-Day Modifications.

D-1.2. Comment: Appendix B in general but Section (a)(1) in particular does not seem designed for data gaps in QUARTERLY methane concentration samples that are discrete, limited, non-chronic, and due to unforeseen circumstances. Many if not most projects take quarterly methane concentration samples rather than utilize continuous methane concentration analyzers. Appendix B seems designed for the later, and cannot apply to the former. However, despite diligent efforts by project operators, it is common for there to be one issue or another with a quarterly methane concentration samples (e.g. calibration frequency is off, sample is taken 3 days after end of the quarter, a bag sample sent in for analysis fails to be testable, etc., etc.). Under the Reserve’s program this has been addressed through variances, and the most conservative methane concentration sample from the reporting period is frequently used as a substitute. However, since there are no variances allowed in the Compliance Offset Program, many projects could have substantial issues if there was a small oversight (that may be outside their control) with a quarterly methane concentration sample. They might lose an entire quarter of crediting or more!! It would be helpful if a specific section of Appendix B were added to address data substitution for quarterly methane concentration samples. (AMA1)

> **Response:** In response to comments, ARB staff modified Appendix B (a)(1) and Table B.1 through 15-day modifications to permit the substitution for one quarter of methane concentration data. The data substitution methodologies in Appendix B were primarily designed for continuous data collection, but most projects take quarterly methane concentration samples rather than utilize continuous methane concentration analyzers. This modification allows project operators to utilize the data substitution methodology for one missing quarterly concentration reading per reporting period, but also meets the intent of the protocol in that it requires the use of the highest or lowest value for the other three quarters of methane concentration data, whichever results in greater conservativeness.

D-1.3. Comment: Regarding Table B.1, it is common for data gaps to be near each other, and for the period before and after the gap to overlap. For example an electrical short can cause sporadic data gaps over a period of time. Assume there is a gap on

June 26, 2015 from 1:00 to 13:00, then there is a period of good quality data until 16:00, but a second gap from 16:00 to 23:00. The first gap lasted 13 hours, the second gap lasted 7 hours. Both can be filled using the 90% lower or upper confidence limit of the 24 hours prior to and after the outage, except that the 24 hours periods overlap. Clarification about how to handle this common situation would be helpful. One suggestion is to consider both gaps as one gap, which is 23 hours in length. (AMA1)

> **Response:** The missing data substitution method in the protocol provides flexibility to handle situations including the one outlined in the comment. It would be burdensome for the protocol to explicitly identify and address every possible missing data scenario. ARB staff believes the proposed approach is adequate in addressing the issues identified in the comment and declines to make the suggested change. If necessary, ARB staff will develop guidance to provide increased clarity on the issue.

D-1.4. Multiple Comments: Section 6.2(b) (pg. 31). Assessing calibration drift after cleaning of a biogas flow meter will result in a measure of drift that is not necessarily representative of the drift recorded by the meter before the cleaning, and may result in un- conservative crediting. Frequently, the probes on flow meters accumulate H2S build-up. This can impact the accuracy of biogas flow readings and cause under or over reporting of biogas flow. A meter with calibration accuracy tested before cleaning may be found to have >5% drift, but after cleaning it might have <5% drift. We recommend that the protocol specify assessing calibration drift before cleaning to determine an accurate assessment of the calibration accuracy, which can be applied to biogas flow data as necessary following the protocol. If a meter is found to have >5% drift it can be cleaned and then the calibration accuracy re-tested. If after cleaning it continues to have drift >5% it should be sent to the manufacturer for a full calibration, however if after cleaning it has<5% drift then it can be considered a successful field check, but the pre-cleaning drift can still be applied to biogas flow data resulting in conservative crediting. (AMA1)

Comment: <u>Section 6.2(b) – Calibration Requirements after a Failed Field Check</u>
There are some flow meter models, such as the Sage Prime flow meters, which have a built-in function to test the drift being experienced. According to the Sage Metering Inc., this test can be used as an indicator of corrosion build-up, poor sensor alignment, or other issues that do not necessarily mean that the equipment itself is out of calibration. Such a test is intended to work as a troubleshooting technique to be

performed after the meter is cleaned and/or adjusted further to confirm that the issue was resolved and the as-found condition returned to within a 5% accuracy.

In many cases a simple cleaning of the meter and re-test will show that it is within calibration. In the case of Sage meters the manufacturer states that the meter is within calibration if it is within 5 milliwatts of the calibration millwatt reading. In fact the operations manual states that a result between 6 and 10 milliwatts of the calibration milliwatt reading also indicates that the meter is still in calibration but influenced by another remediable factor present at the installation site. It would seem perverse to require an OPO to have to send their meter back to SAGE – a process which can take up to 6 weeks – for a calibration check if the meter is a few milliwatts out and the problem could have been resolved through simple cleaning as prescribed in the operations manual.

Upon resolution of such an external factor found during a field check, while application of an adjustment as prescribed in Section 6.2(c) is appropriate, sending the flow meter back to the manufacturer for calibration would be an unnecessary burden on the OPO resulting in several weeks without the flow meter in place. The Climate Action Reserve has come to this conclusion and the language provided in the Errata and Clarifications of January 21, 2014 identifies this important correction that CODA encourages ARB to also adopt. (COD1)

> **Response:** The requirement of the “as found/as left condition” in subchapter 6.2(a)(1) of the protocol addresses the commenters’ concern of documenting pre and post cleaning drift. The drift after cleaning is what is considered when determining if a calibration by the manufacture is required. Therefore, staff believes the existing proposal addresses those concerns raised.

D-1.5. Multiple Comments: Appendix A, Table A.1, A.2, and A.4 (p.43-44). Suggest referencing the most updated version of the US EPA annual GHG inventory, so that the TAM and VS values can be updated more frequently rather than fixed by specifying values in these tables which causes them to become outdated as COP livestock protocol updates cannot happen frequently. (AMA1)

Comment: Table A.4 utilized 2010 VS values per livestock category/state. 2011 values are available. If the suggestion above is not possible, suggest at least using the most up-to-date values available at the time of the protocol update. (AMA1)

Response: ARB staff agrees and updated Appendix A, tables A.1, A.2, and A.4 to reflect the 2012 volatile solids (VS) values which are derived from the 2014 US EPA annual GHG inventory in the 15-Day Modifications.

D-1.6. Comment: Section 6.2(c) (pg. 31). Some biogas flow meter manufacturers report calibration accuracy in milliwatts, and state that 1 milliwatt equals 1% drift. However the calibration zero on a certain meter might be 121 mW or 82 mW so arithmetically 1% does not equal 1mW, but the manufacturer's manual (specification) says that 1mW=1%. Please clarify this section and address how this should be handled. It is not clear whether the arithmetic or the manufacturer's specification should take precedent here. (AMA1)

Response: Under the proposed protocol, calibration drift should be calculated according to the manufacturer's specification.

D-1.7. Comment: Section 6.2(c)(1) (pg. 31). Why is "independently for each meter" mentioned here? Calibration accuracy is inherently independent for each meter. In addition, total emissions reductions cannot be calculated independently for each meter as the total biogas flow from all devices (usually each with a separate meter), and the weighted BDE needs to be calculated to get total emissions reductions. Suggest removing "independently for each meter" for clarity. (AMA1)

Response: The intent of subchapter 6.2(c)(1) of the protocol is to clarify that emission reductions should be estimated for each meter drift independently and not grouped as over or under reporting when estimating the emission reductions. Therefore, ARB staff believes the current proposed language is adequate.

D-1.8. Comment: Section 6.2(c)(1)(b) (pg. 31). Frequently, when a meter is sent to the manufacturer for a full calibration the % drift is different at different levels of biogas flow. E.g. at 10 SCFM the drift may be 10% (1 SCFM), at 300 SCFM the drift may be 3% (3 SCFM) and at 1000 SCFM the drift may be 1% (10 SCFM). For an engine meter that commonly operates at > several hundred SCFM using the 10% drift (100 SCFM), which is not representative of the operations, has a substantial adverse impact. It would be helpful if this requirement were revised to reflect the drift that was representative of the flow during the period under consideration. Perhaps like for the data substitution Appendix some sort of confidence interval could be used to assess the predominant flow during the period under consideration. (AMA1)

Response: The protocol specifies that the greatest calibration drift must be used when estimating emission reductions. The protocol does not specify a drift tied to a particular flow rate, so the largest drift determined by the manufacture must be used. This will provide a conservative estimate of the emission reductions. As such, staff declines to make the suggested change.

D-1.9. Comment: Section 6.1(e) (pg. 30); Section 6.1(f) (pg. 30); Section 6.1(g) (pg. 30). Devices that are equipped with valves to prevent leakage should be specifically mentioned here as an exception. (AMA1)

Response: This subchapter 6.1(d)(1) of the protocol already address the issue by not requiring hourly monitoring for devices with safety shutoff devices, so no further change is required.

D-1.10. Comment: Section 6.1(d) (pg. 29). Further specification about the hourly operational data requirement here would be helpful, particularly for projects that have more frequent than hourly flow data (e.g. 15 min). E.g. if there is kWh from an engine at 12:00, does this mean that flow at 11:15 is considered operational? What about flow at 12:45? What about both since they are both within 1 hour of 12:00? (AMA1)

Response: The hourly operational requirement is specified in subchapter 6.1(d) of the protocol. The typical time between readings should ideally be one hour or less. However, the hourly operational activity monitoring requirement can be met if the device is shown to be operating at least once per hour-long block of time, within reason. For the example above, a documented reading of zero kWh for an engine would clearly indicate it was not operational.

D-1.11. Comment: Section 6.1(d)(1) (pg. 30). Thank you for acknowledging that many devices are equipped with valves that prevent gas from escaping when the device is not operational. Further clarification about the data that CARB would want reviewed during the verification would be helpful. The current language leaves open many questions about how to verify that a valve inside an engine is present and operational without dismantling the engine. In addition, flares often have valves and weights so that gas cannot escape until sufficient pressure has built up. But these can corrode, and confirming that they are operational would require constant inspection of a device that is 20+ feet in the air and frequently on fire, which is not practical. (AMA1)

Response: The provisions in subchapter 6.1(d)(1) of the protocol provide flexibility to handle situations including the one outlined in this comment. It would be unfeasible for the protocol to explicitly identify all possible scenarios. Project operators are obligated to provide sufficient evidence for verifiers to reach a reasonable level of assurance. ARB staff believes the proposed approach is adequate in addressing the issues identified in the comment.

D-1.12. Comment: Section 6.2(a)(3) (pg. 31). Please clarify whether the as found/as left calibration accuracy with the percent drift must be documented when a biogas flow meter is sent to a manufacturer for a full calibration other than a field check within 2 months of the end of the reporting period. (AMA1)

Response: Per subchapter 6.3(b)(7) and (8) of the protocol, the Offset Project Operator or Authorized Project designee is required to maintain all field check and calibration results for biogas meters. Calibration results determined by the manufacture would be included in this requirement. Therefore, ARB staff believes the current proposed language is adequate.

D-1.13. Comment: Section 5.1(k) (pg. 16). Further articulation of the details of drainage and cleaning would be helpful. Often farms may use lagoon supernatant to irrigate fields during several months of the year, but there may only be partial removal of lagoon supernatant, and all sludge containing the volatile solids remains in the lagoon. Accurate estimation of % removal is virtually impossible, because although many farms record the volume of liquid removed from the lagoon, the volume before removal is unknown, and cannot be practically measured, nor the % of volatile solids removed easily known, without additional burdensome sampling protocols. **Language describing that volatile solids should only be "zeroed out" following the months when the system was completely drained with sludge removal can effectively clarify this section.** (AMA1)

Response: In the 15-Day Modifications, ARB staff modified the text in subchapter 5.1(k) from "drainage and cleaning of" to "the complete drainage and cleaning of solid buildup from" in order to ensure that the protocol language refers to the complete, not partial, removal of solid buildup. Staff believes these changes address the commenter's concerns.

D-1.14. Comment: Section 5.1(f) (pg. 15); Section 5.1(m) (pg. 17); Section 5.2(q) (pg. 22); Section 5.2(w) (pg. 24). Regarding the availability of site-specific data to document

the fraction of volatile solids directed to each different management on a farm, in many cases operator estimates are the only way to determine a fraction. For example if a farm has 5 barns the operator may have an estimate of the number of cows in each barn on average, but the actual number changes daily. Then from each barn the majority of manure may be sent to the BCS (or lagoon in baseline), but there may be a couple loads of manure each day that are stacked. It is impossible to know exactly what proportion of manure these couple loads represent, and exactly how many cows are in each barn each day, there is simply too much variability. Measuring and verifying data for these parameters is not practical for implementation of the Protocol. However, conservative estimates can be made. These are often based on operator experience and interviews. **Specific mention of conservative estimates based on operator experience and interviews as acceptable site-specific data in these sections would be helpful to OPOs and verifiers in implementing the Protocol. Other data beyond operator experience/interview may not be available, and Table A.9 does not capture all potential situations**. (AMA1)

> **Response:** The provisions in subchapter 5.1(f) and (m), along with 5.2(q) and (w) of the protocol provide flexibility to handle situations including the one outlined in this comment. These provisions are intentionally not prescriptive as to how to determine these values to allow for reasonable and conservative estimates to be used. It is not feasible for the protocol to explicitly identify all possible scenarios. The Offset Project Operator or Authorized Project Designee must be able to justify to the verifier any values used for the emission reduction estimates. ARB staff believes the proposed approach is adequate in addressing the issues identified in the comment.

D-1.15. Comment: Section 5.2(t) (pg. 23). Guidance on acceptable site-specific data for average live weight would be helpful. (AMA1)

> **Response:** The provisions in subchapter 5.2(t) of the protocol provide flexibility to handle situations including the one outlined in the comment. Site specific data for average live weight should be based on monthly real weight data of livestock. ARB staff believes the proposed approach is adequate in addressing the issues identified in the comment and if necessary, staff will develop guidance to provide increased clarity on the issue.

D-1.16. Comment: Section 5.2(j) (pg. 21). Please clarify how digestate within the vessel should be considered when calculating maximum biogas storage volume. Should only the headspace in the digester be considered for a one time venting event? (AMA1)

> **Response:** In each venting event, the maximum biogas vented shall be equal to the maximum biogas that can be stored in the headspace of a digester under the designed maximum allowable biogas pressure per the design documentation.

D-1.17. Comment: Section 6.4, Table 6.1, Parameter: MS,L,BCS (pg. 37). Farms usually do not maintain operational records of the % of manure to different management systems, and this often is not feasible. This number is usually determined based on system designs/layout that is fixed over time until there is a major structural change. Suggest revising. Consistency with the other MS parameters in the table would be helpful. (AMA1)

> **Response:** ARB staff appreciates the concern for a farm's traditional practices that may not maintain operational records required for operational purposes. However, participation in the offset program is voluntary and may require updating practices for project accounting purposes. Project operators must monitor parameters listed in table 6.1 and maintain records of the % of manure in order to conform to the requirements of the protocol. The protocol does not specify how the manure fraction is determined so system design could be used in determining this value. Therefore, ARB staff believes the current proposed language is adequate.

D-1.18. Comment: Section 5.4(d) (pg. 27); Section 5.4(g) (pg. 28). Often purchase receipts and utility records don't distinguish between fossil fuels consumed for the project and those used elsewhere on the farm. For example there might be only one receipt for diesel purchases on the farm during a given month including all tractors and that used to heat a digester. Guidance about how to handle this situation would be helpful. (AMA1)

> **Response:** ARB staff appreciates the concern for how traditional business practices of receipt and record collection may not satisfy the requirements set forth in the protocol. However, participation in the offset program is voluntary and may require updating these business practices for project accounting purposes.

D-1.19. Comment: Appendix A, Table A.10 (pg. 54).

a. The table suggests that a flush system is most common for an anaerobic lagoon on farms with >200 cows. However, in general, flush systems are only practical in areas that don't frequently freeze in winter. In cold climates a flush system would usually turn a dairy barn into a skating rink, so "scrape systems" that feed to an anaerobic lagoon are common. Suggest revising.
b. How was the 10% solid storage value derived for the MSL parameter? Greenfield projects are often the most efficient as the design can start from scratch rather than use a layout that has evolved over years. Therefore 100% of manure is often sent to the anaerobic lagoon.
c. For new large farms with >200 cows, the manure from the lagoon is often removed during many months of the year given nutrient management regulations, the ability for soil to absorb nutrients and the time limitations of spreading a years worth of manure in a short period of time. In addition it is very rare that a lagoon is completely emptied including removal of all sludge. (AMA1)

Response: The simplified assumptions contained within this table are based on the waste management system data compiled by the U.S. Environmental Protection Agency for the development of Table A-194 in Annex 3 of the U.S. Inventory of GHG Sources and Sinks 1990-2010 (2012). This reference was included in the Initial Statement of Reasons document and is consistent with other updated references cited in the proposed livestock protocol. Therefore, ARB staff believes the current proposed language is adequate.

D-1.20. Comment: Chapter 3.4.1 (b)
The language here is focused only on legal requirements for "destruction of methane." However, there is the additional, and crucial, consideration of whether there is a legally-binding mandate that would result in methane avoidance, rendering the baseline scenario invalid. For example, if a greenfield project were located in an area where new lagoons are prohibited, the methane avoidance would be legally mandated, but not the destruction. There may be other regulations related to manure handling which would result in a baseline scenario that does not allow for an uncontrolled, anaerobic lagoon. Recommend revising to specify "destruction or avoidance of methane in the baseline scenario." (CAR1)

Response: The focus of legal requirements for destruction of methane in the livestock protocol is consistent with the previous version of the livestock protocol as well as other ARB offset protocols. It is beyond the purview of ARB to a priori determine if a legally binding mandate would result in methane avoidance in any

one specific jurisdiction. All projects must take into account any legally binding mandates when assessing their baselines as specified in chapter 3.4.1. As such, ARB staff deems the language suggested in this comment to be beyond the scope of the protocol as proposed.

D-1.21. Comment: Chapter 3.4.2 (c)
This says that the baseline scenario for greenfields will be "determined by ARB." We suggest adding additional guidance on how this determination will be made so that project developers may assess the basic eligibility of a potential project before committing the resources required for a formal determination. (CAR1)

Response: The scope of the rulemaking for the revised Livestock protocol is to provide minor updates and clarifications. Any expansion of the determination criteria for greenfield baseline scenarios would be considered outside the scope of this rulemaking. Expansion of the criteria of greenfields may be considered during a future rulemaking. If necessary, ARB staff will develop guidance to provide increased clarity on the issue.

D-1.22. Comment: Chapter 3.5 (b)
Thank you for clarifying the amount of time allowed for an "initial start-up period." Additional clarity is needed around defining the action which triggers the beginning of the "initial start-up period" and, thus, the commencement date. For example, the CAR LSPP v4.0 defines a commencement date ("start date") relative to the loading of manure in the digester. (CAR1)

Response: In 15-Day Modifications, ARB staff modified subchapter 3.5(b) to clarify that the commencement date for a livestock offset project is the date the biogas control system becomes operational.

D-1.23. Comment: Chapter 4 (a)
(1) Land application is an excluded source, yet since it is combined within SSR 7, it is included within the GHG Assessment Boundary. Suggest splitting SSR 7 and placing Land Application outside of the boundary. (CAR1)

Response: Figure 4.1 is only a general illustration of sources, sinks and reservoirs (SSR), table 4.1 provides more detail about what is included and excluded from the project boundary. From table 4.1 it is clearly identified that only

carbon dioxide emissions from vehicles are included in the project boundary for SSR 7.

D-1.24. Comment: Chapter 4 (a)
Figure 4.1: SSR 6 (effluent pond) is indicated as relevant to both the project and baseline scenarios. This SSR is relevant only to the project scenario, as there is no need for treatment of digester effluent in the baseline, since there is no digester. This change is needed in Figure 4.1 and Table 4.1. (CAR1)

Response: If there is not an effluent pond in the baseline scenario then it does not need to be considered when estimating baseline emissions. However, in cases where an effluent pond is in the baseline scenario, emissions from the pond must be included in the SSR for both project and baseline scenarios. As such, staff does not agree that any changes are necessary.

D-1.25. Comment: Chapter 5.1
Equation 5.2 – Recommend removing all instances of the text "by livestock category." This distinction is not relevant since Equation 5.3 sums across all livestock categories. (CAR1)

Response: In the 15-Day Modifications, ARB staff modified equation 5.2 by removing all instances of the text "by livestock category."

D-1.26. Multiple Comments: Chapter 5.2
The protocol states that site-specific testing for destruction efficiency requires prior written approval from the Executive Officer. It would be helpful to add more guidance to the protocol regarding what sort of testing would be deemed acceptable for this purpose. (CAR1)

Comment: Section 5.2(e) (pg. 20); Section 5.3(d) (pg. 25). Further clarification about how to obtain written permission from the Executive Officer regarding utilization of site-specific BDE would be helpful. In addition the requirement for the accuracy of the default BDEs is not clear. It seems this could mean two things; 1) that the site specific BDE must be more efficient than the default value, or 2) that the uncertainty associated with the site-specific BDE is less than the uncertainty associated with the default BDE. If the intent is #1 then is seems CARB would want site-specific values to be less conservative that the defaults rather than more conservative. If the intent is #2) then

please publish the uncertainty associated with each default BDE in Appendix A.6 so there is a way to determine if a site-specific value is more accurate. (AMA1)

Comment: Section 5.2(e) – Site-Specific Destruction Efficiency:
Requires that OPOs/APDs receive prior written approval from the Executive Officer. There are 76 Livestock projects listed or registered on the Climate Action Reserve. If all of these decide to do site-specific tests – and each site may have more than one destruction device – the ARB may need to process in excess of 6 requests per month. CODA supports the ARB permitting the use of site-specific tests but to make the process easy to manage for OPOs/APDs we encourage the ARB to add language stating that if the ARB has not objected to the use of a site-specific test for destruction efficiency within one-week of it being submitted by the OPO/APD then the test shall be deemed approved. We would also appreciate some clarification as to whether tests need to be undertaken for each device every year or whether they are valid for the duration of a projects' crediting period? (COD1)

> **Response:** Site specific destruction efficiencies must be performed by appropriately trained individuals using standard methods. The Offset Project Operator or Authorized Project Designee must provide sufficient data and justification for the Executive Office to be assured that the destruction efficiency is an accurate representation of the true value. More information will be provided in guidance. If necessary, ARB staff will develop guidance to provide increased clarity on the issue.

D-1.27. Multiple Comments: Chapter 5.2
(j) and (k) These two items provide conflicting guidance on determining the number of days of the venting event. Suggest removing one for clarity, keeping only the desired guidance. (CAR1)

Comment: Section 5.2(K) (pg. 21). Regarding venting events in many cases there is a one- time event when the digester is cleaned out and manure is bypassed directly to the lagoon until the digester can be filled again, therefore the average flow from the digester and number of days is not relevant. In other cases there may not be a complete venting of the digester, but there may be venting from one or more pipes which would have gone to a particular device. In this situation the average flow from the digester and number of days is relevant. Equation 5.6 doesn't seem to be able to handle these situations, and seems to require accounting for project emissions that would not have

happened in these common scenarios. We suggest a slight revision to the syntax of the equation to allow for these common either/or situations. (CAR1)

> **Response:** ARB staff reviewed the text in subchapter 5.2 (j) and (k) and determined no conflict in guidance between the two subsections. Subchapter 5.2(j) requires the monitoring and documentation of the venting event and subchapter 5.2(k) identifies how to determine the duration of the venting event. The method for calculating venting provides a conservative estimate of venting emissions in all situations.

D-1.28. Comment: Chapter 5.2
Equation 5.8 – It is common at a number of facilities to separate the digester effluent into multiple treatment systems, typically a liquid effluent pond and a solid storage or bedding system. This equation does not make it clear how to determine the MCF for a project with multiple effluent treatment systems. The common practice is to use an MCF which is an average of the defaults for the different systems, weighted by the percentage of the VS treated by each system. It is recommended that this approach be adopted for the compliance protocol. (CAR1)

> **Response:** ARB staff agrees with the comment and modified equation 5.8 in the 15-Day Modifications to include a summation for the number of effluent ponds used in a project. This change was made in order to determine the methane conversion factor (MCF) for projects with multiple effluent treatment systems. Other minor, non-substantive changes were made to the equation to ensure consistency throughout the protocol. These changes are consistent with the intent of the calculation and ensure the accurate estimation of emission reductions.

D-1.29. Comment: Chapter 5.4
(e) Recommend removal of this item entirely. As written, this assumes that the project will consume the electricity it produces, which is typically not the case. If the project consumes grid electricity, those emissions must be quantified, regardless of the production of renewable energy on-site. By reducing the PE related to grid electricity based on production of onsite RE this policy is accounting for SSR 13, which is specifically excluded. (CAR1)

Response: Subchapter 5.4(d) is unchanged from the originally adopted Livestock protocol and is indented to recognize emission reductions from on-site electricity generation even if the electricity is not used on site.

D-1.30. Multiple Comments: Chapter 6.2
It is not clear whether a meter which is used temporarily during the reporting period must be field checked before being removed from service. Please clarify how this section applies to meters which are used temporarily or replaced during the reporting period. (CAR1)

Comment: Section 6.1(a) (pg. 29). Often manufacturer specifications are not clear, don't specifically address issues considered in the Protocol or don't meet CARB's published/unpublished standards. Guidance about how to handle this situation would be helpful. E.g. Which takes precedent? CARB's interpretation or manufacturer specification? (CAR1)

Response: All equipment should be operated consistent with the original equipment manufacture's specifications unless the ARB standards are more conservative or restrictive. Subchapter 6.2(a) requires **all** meters to be field checked which would include temporary meters.

D-1.31. Multiple Comments: Appendix B
Based on Chapter 5.3(e) and Chapter 6.1(e), the protocol requires that the project apply a BDE value of 0% when a destruction device is inoperable. If flow or methane data are missing during this period, it is necessary to apply data substitution in order to correctly apply the BDE. Appendix B currently erroneously disallows data substitution when a device is inoperable. This guidance was originally developed for landfill gas projects and is not directly applicable to livestock projects. Recommend removing text in Appendix B related to operational status. (CAR1)

Comment: Section 6.1(d) (pg. 30). Frequently one device may not be operational but multiple other devices are operational. The statement that, "No registry offset credits or ARB offset credits will be issued for any time period during which the destruction device is not operational" suggests that a period of zero crediting should be claimed, however it seems more appropriate to apply a zero BDE to the particular device that is not operational, so that project emissions are increased (and crediting related to that device does not happen), but so that the project as a whole and other devices with confirmed

operational destruction can still be credited. Clarification of this common issue would be helpful. (CAR1)

Comment: Appendix B – Data Substitution:
CODA asks for clarification on the following aspects to the Data Substitution Methodology:

Appendix B(c): we are unsure whether this would deem a project unable to generate emissions reductions if one device is inoperable but all other devices are operable. This also seems to contradict 6.1(d)(1). For example, if the thermocouple for a flare was not working an OPO/APD would typically assign a BDE of 0% to any gas flowing through the flare during the period of inoperability but any gas flowing through other devices would be credited as normal, provided operability could be demonstrated. CODA suggests removing the last part of Appendix B(c) so that is reads: *"No data substitution is permissible for data gaps resulting from inoperable equipment that monitors the proper functioning of destruction devices".* (COD1)

Comment: Appendix B – Data Substitution:
CODA asks for clarification on the following aspects to the Data Substitution Methodology:

Table B.1: In cases where data are missing for greater than one week the current approach specified in Table B.1.would not enable any credits to be generated and appears to contradict 6.1(d)(1). For example, take a flow meter which has to be sent back to the manufacturer for repair and which normally measures gas to a generator: It should be possible to estimate gas sent to the generator by using the kWh output of the generator for the period the flow meter is missing and the 99% confidence limit for methane concentration. Table B.1. appears to require any gas estimated as sent to the generator to be given a 0% BDE. Appendix B(c) already requires that no destruction can be credited if the device is inoperable so there does not seem to be a reason as to why the device should be given a BDE of 0%. CODA suggests the wording is modified to: *"To replace the missing data, use the 99% lower or upper confidence limit of all available valid data for the reporting period, whichever results in greater conservativeness".* (COD1)

> **Response:** The intent of the protocol is to prohibit substitution of operational activity data, not to prevent substitution of flow and methane concentration data. ARB agrees that this subchapter as initially proposed is confusing and in the 15-

Day Modifications, ARB staff made changes to Appendix B in order to ensure consistency throughout the protocol and clarify the data substitution quantification methodology, specifically in appendix B(a), appendix B(a)(1), appendix B(a)(2), and appendix B(c). Table references were added to appendix B(a)(1) and appendix B(a)(2) to improve the clarity of the data substitution quantification methodology. Appendix B(c) was also modified to require a conservative biogas destruction efficiency (BDE) determination. The "No registry offset credits or ARB offset credits will be issued for any time period during which the destruction device is not operational" only refers to the not operational device and does not apply to other devices where operational activity has been documented.

D-1.32. Multiple Comments: Section 5.1(i) – Ambient Temperatures:
While it may be appropriate to specify that a weather station should be used with an elevation difference of no more than 300 feet from the project location, the language does not allow for cases in which access to such a weather station is unattainable. CODA suggests that the language be modified to the following:

"The monthly average ambient temperature must be obtained from the closest weather station located in the same air basin and within an elevation difference of no more than 300 feet from the project location, **if available**." (COD1)

Comment: Section 5.1(i) (pg. 16). NOAA maintains many weather stations across the country and the data is readily available. Frequently the weather stations are extremely close to the project locations (i.e. <1mile) and sometimes even on the farm's property. However, often one or two months of data may be missing from the closest NOAA weather station during a reporting period. This data is developed, maintained and provided by NOAA/NWS so is out of the control of the OPO. Therefore data from another nearby weather station needs to be substituted for the closest weather station. Allowing this substitution in the case of data that is not available from NOAA/NWS is crucial. In addition in many situations it may not be practical to know the exact elevation within 300ft of a project in order to compare that to the elevation of the weather station. **Suggest removing the elevation requirement and stating that if NOAA data is not available from the closest station, data from another nearby station may be used.** (AMA1)

Response: ARB staff reviewed the text in subchapter 5.1(i) and modified the text in the 15-Day Modifications to allow project operators to use data from another

nearby weather station when data is missing from the weather station closest to the project location during a reporting period. The elevation requirement was also removed because project locations aren't always located within a 300 feet elevation proximity of a weather station. The protocol's "closest weather station" requirement achieves the same objective as an elevation requirement.

D-1.33. Comment: Section 5.1(k) – Removal of Volatile Solids:
It is common practice for liquids to be partially or fully removed from anaerobic lagoons for use in irrigation. By comparison, the practice of intentional removal of solids build-up is the intended target of Section 5.1(k). Yet the language is sufficiently broad to allow varying interpretations of what it means to "drain and clean" an anaerobic storage/treatment system. Consistency between verifications could be increased if the text was modified to reference the "**complete** drainage and cleaning **of solid buildup** from the anaerobic storage/treatment system." (COD1)

Response: ARB staff reviewed the text subchapter 5.1(k) and modified the text from "drainage and cleaning of" to "the complete drainage and cleaning of solid buildup from" in the 15-Day Modifications to ensure that protocol language refers to the complete, not partial, removal of solid buildup.

D-1.34. Comment: Sections 5.2(d) and 5.3(b) – Quarterly Methane Concentration:
The updated language regarding quarterly methane concentration will cause problems at the beginning of many crediting periods. Previous language allowed for quarterly methane concentration to apply to the entire quarter in which the sample was taken. The proposed language however, does not allow for a sample taken in March to apply to the other two months in the first quarter. If this happens in a livestock project's first reporting period, for example, what values can be used for January and February? CODA suggests the language be improved by including a provision for such scenarios or for allowing the sample to be used for the entire calendar quarter.

Furthermore, it seems that an ordinary "average" of more frequent samples is what was intended here, rather than a "weighted" average, because all observations carry equal weights. This should be revised to avoid confusion.

Finally, in the event that monthly methane concentration is sampled, or even more so if continuous monitoring is in place, the language of Section 5.2(d) requires the samples to be averaged on a quarterly basis. Allowing a provision for monthly

averages would increase the accuracy of the quantified project methane emissions and better reflect any variation in methane concentration. Monthly values, if available, would also increase consistency between Section 5.2(d) and the application of monthly summations in Equation 5.6. (COD1)

> **Response:** The language in subchapter 5.2(d) and 5.3(b) of the protocol does not preclude a project operator from taking a sample in March and applying it to the first two months in the first quarter (e.g. January and February) of the first reporting period of a project. Should this situation come up in later reporting periods, the most recent sample (from the previous reporting period) must be applied until a new methane concentration is taken. The provisions in subchapter 5.2(d) and 5.3(b) of the protocol provide flexibility to use a weighted average of more frequent samples. A weighted average is appropriate because biogas flow rates vary and a methane concentration taken at one time may represent more or less biogas then a concentration taken at another time. As such, staff believes the proposed language achieves the correct result.

D-1.35. Comment: Section 5.2(k) and Equation 5.6 – Venting Events
This equation / section only represents what occurs during uncontrolled venting and does not accurately represent emissions during a scheduled shutdown of the digester. Typically, scheduled shutdowns are for the purpose of cleaning and/or major maintenance. During shutdown manure is removed from the digester, no more is added and heating is stopped while work takes place. Gas is typically drawn off and destroyed in a flare as much as possible prior to the digester being opened up. In these instances it does not make sense to estimate emissions based on the flow of gas for the previous seven days but to require the OPO/APD to account for the venting of the maximum amount of gas which can be stored in the digester and to designate the digester as unable to generate offsets for the period it was shutdown. (COD1)

> **Response:** The scope of the rulemaking for the revised Livestock protocol is to provide minor updates and clarifications. Any changes to the text in subchapter 5.2(k) or the quantification methodology associated with equation 5.6 would be considered outside the scope of this rulemaking. Subchapter 5.2(k) and equation 5.6 provide a conservative estimate of venting emissions. Therefore, ARB staff did not make any substantive changes to subchapter 5.2 or equation 5.6 of the protocol.

D-1.36. Section 5.2(l)
Typo on “emissions”

Section 5.2(i) (pg. 22). There is a typo with the word “emissions”. (AMA1)

Response: ARB agrees and corrected the typo in the 15-Day Modifications.

D-1.37. Comment: Section 6.2(a)(2): Options to Satisfy a Field Check:
It is specified in this language that the field check either be carried out by using a portable instrument or manufacturer specifications, but these are not the only ways a field check can be performed. Some livestock projects utilize a permanent fixture upstream to perform a field check. CODA does not see any reason that a permanent fixture with verified accuracy should not be allowed for field checks, though the current language does not permit anything but a portable instrument or manufacturer specifications. The language could be improved by specifying an “in-line” instrument here rather than specifying portable nature of the instrument used to perform a field check.

Furthermore, it appears as though the option to have the equipment calibrated by the manufacturer or a certified calibration service instead of performing a field check (Section 6.1 footnote 21 of the current version of the protocol) has been removed. This was an oft mused provision of the protocol, as (1) oftentimes the equipment is due for factory calibration anyway at the end of a reporting period, and (2) some installations simply do not have sufficient options for an infield check for calibration accuracy. CODA strongly encourages ARB to keep this option in the protocol. (COD1)

Response: ARB staff modified subsection 6.2(a)(2) in the 15-Day Modifications to clarify that permanently fixed instruments, along with portable and manufacturer specified instruments, may be used to field check gas flow meters and continuous methane analyzers. ARB staff has removed the footnote from the previous version of the protocol and placed it in subsection 6.2(a)(3) of the protocol so this option is still available.

D-1.38. Multiple Comments: Section 6.2(d) (pg. 31). Frequently a digester vendor or project developer will have one or more portable methane analyzer’s that are used to take quarterly methane concentration samples from multiple projects. Therefore it is problematic to have the frequency of the instruments calibration tied to each projects

reporting period as the projects are frequently on different schedules. Instead like in the previous version of the protocol it would be very helpful to have the frequency of calibration be related to the meter based on manufacturer specifications or annually at the longest. This is especially significant because missing one quarterly methane concentration sample has a very large impact on crediting since it impacts and entire quarter of a year. Here is an example: Project A has a reporting period from 1.1.15 to 12.31.15. Project B has a reporting period from 7.1.15 to 6.30.16. They share a portable methane analyzer that the manufacturer recommends be calibrated annually. The analyzer comes into service on 1.15.15 and is used quarterly by both projects throughout their reporting periods. The analyzer gets calibrated on 1.15.16 (one year) per manufacturer specification. However this is outside the first reporting period for Project A, which loses credits. If the calibration frequency were tied to the meter not each project, the issue is avoided. (AMA1)

Comment: Section 6.2(d) – Portable Instrument Calibration:
Whereas the language in Section 6.2(d) requires a calibration during each reporting period, this is not necessarily the most appropriate way to line up such an event. There are often third-party service providers who use their own portable devices for a quarterly field checks. They may own several units of identical equipment but they will use whichever device is available when called to do the onsite work. Such equipment may have been recently and appropriately calibrated yet may predate the reporting period. This particular device might not be used again and hence might not be recalibrated during the reporting period.

As such, requiring the equipment to be calibrated within the project's reporting period causes complexities that cannot be resolved when working with third-party service providers who are properly maintaining their equipment and presenting records demonstrating as much. The reporting periods would create a calibration scheduling requirement that would differ for every client, without resulting in improved data assurance. CODA recommends that language in Section 6.2(d) require that the portable instrument be *used no longer than a year from its last manufacturer calibration*, without specifying that the calibration date be within the reporting period. (COD1)

> **Response:** Staff understands the complexities associated with calibrating an instrument through a third party service during a reporting period. However, there needs to be assurance that the device used during the reporting period is calibrated. Therefore, staff will maintain the current proposed language in

subchapter 6.2(d) of the protocol. Please note that the project operator has the option of using an instrument that is not a portable instrument as a substitute for this requirement.

D-1.39. Multiple Comments: Section 1.2(a)(18) and Table A.3 – Enclosed Vessel: The definition provided for Enclosed Vessel differs from the literal interpretation of Table A.3. As ARB staff are aware, this table was previously contained within the Climate Action Reserve's Livestock Project Protocol Version 2.2, released in November 2009. Note that the Climate Action Reserve adopted this table from the U.S. EPA Climate Leaders' protocol[13]. The long-standing interpretation amongst developers, verifiers and the Climate Action Registry has been such that the covering of an anaerobic lagoon with a cover would have greater potential for gas leakage than an enclosed vessel specifically designed and constructed for use as an anaerobic digester. The covered lagoons therefore warrant the use of a lower biogas collection efficiency (BCE). Under this differentiation of digester system types, the use of the BCE table has been fairly straightforward and generally uncontested for years throughout hundreds of verifications.

As CODA members understand it, ARB has determined to interpret the table differently requiring that that the cover type on anaerobic digesters should ultimately determine the Biogas Collection Efficiency rather than the digester type, and that the cover type is essentially either "rigid/dual membrane" or "not rigid". More specifically, the difference between an "enclosed vessel" and a "bank-to-bank" cover is being approved fully determined by the following definition: "Enclosed vessel means a digester that is topped by a hardened or dual membrane flexible cover that provides a complete enclosure to the digester itself." Any cover that does not meet this criterion will be considered a bank-to-bank cover.

The original table developed by Climate Leaders, shown below, was created using information sourced from technical papers to arrive at a range of Methane Collection Efficiencies based on the digester system type. In the original table, "Cover Type" is a secondary descriptor used only to distinguish between lagoons that are partially covered (modular) or fully covered (bank-to-bank). The original research found that two main categories of system types exist in regards to BCE: (1) those designed and constructed specifically for use as a digester (complete mix, fixed film or plug-flow) or

[13] U.S. EPA Climate Leaders, Offset Project Methodology for Managing Manure and Biogas Recovery Systems, August 2008.

(2) an anaerobic lagoon initially designed for liquid manure storage that was capped with an impermeable cover and thereby converted to a biogas collection system. Each of the cited sources in the original table reference studies of lagoon covers' effectiveness of collecting gases and odors, and with this information the authors converged upon the BCE range of 95 to 100% for anaerobic lagoons covered from "bank to bank". In regards to purposefully-designed digesters that are not covered lagoons, the original research did not result in any differentiation by type, as evidenced by the single entry in the table, and so the cover type listed here as "enclosed vessel" seems to imply that any differentiation is not applicable because each of these vessels, by design, are enclosed. In other words, complete mix digesters, fixed film digesters, and plug-flow digesters are conventionally considered to be enclosed vessels by default, regardless of whether they contain a dual-membrane cover, flexible or rigid cover. Furthermore, the sources cited in the Climate Leaders table do not suggest that cover rigidity is a significant factor affecting gas leakage from purpose-engineered in-vessel digesters, nor are we aware of any scientific studies that have concluded otherwise.

Table IIf. Digester Collection Efficiencies

System Type	Cover Type	Percent of National Population	Methane Collection Efficiency	Description
Covered anaerobic lagoon (biogas capture)	Bank to bank, impermeable	<1%	95 to 100%	Methane reductions from biogas capture and utilization/flaring. Discounted from 100% due to cover leaks.
	Modular, impermeable	<1%	50 to 90%	Methane reductions from biogas capture and utilization/flaring. Percent methane reduction based on % surface area covered.
Complete mix, fixed film, or plug-flow digester	Enclosed vessel	<1%	98 to 100% (reduction from 100% due to system leaks)	Methane reductions from vessel containment of biogas and post-digester biogas combustion.

Source: Derived from data on cover effects as presented in Sommer et al., 2000, Bicudo et al., 2004, Nicolai et al., 2004, and Emission Solutions et al., 2000.

CODA urges ARB to reconsider its interpretation on the use of this table to come into line with the way the research was carried out – if ARB is aware of specific research which contradicts the current understanding then CODA asks that the research be made available. The reclassification of the information in this BCE table to be

primarily based upon cover type rather than system type seems to be unfounded and clearly misinterprets the original source of the information. (COD1)

Comment: Section 5.2(g) (pg. 20). In the past there has been confusion and rumors among market participants about the BCE of a complete mix digester with a cover that can be removed in the event of vessel maintenance and repair. Please clarify in Table A.3 how systems like this will be considered. (AMA1)

> **Response:** ARB staff amended the definition of "enclosed vessel" in section 1.2(a) of the 15-Day Modifications to improve clarity of the existing definition and overall protocol, and also to ensure that the protocol is consistent with the Regulation. The definition of "enclosed vessel" was modified to include appropriate digester types (and corresponding digester covers) that will achieve the BCE for enclosed vessels as outlined in appendix A, Table A.3 of the protocol. ARB staff believes these changes address the commenters' concerns.

D-1.40. Comment: CODA would like to comment on one aspect of the Proposed Regulation Order, Article 5, Section 95973(b). Greater clarity in the Regulation can help ODS and Livestock projects avoid uncertainty regarding future invalidations. Our concern is that minor indiscretions could cause an invalidation which eliminate offsets from a project's entire reporting period rather than limiting it to the specific period of the violation. CODA suggests the following changes, **in bold**, to Section 95973:

> (b) Local, Regional, and National Regulatory and Environmental Impact Assessment Requirements. An Offset Project Operator or Authorized Project Designee must fulfill all local, regional, and national requirements on environmental impact assessments that apply based on the offset project location. In addition, an offset project must also fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location and that directly apply to the offset project, including as specified in a Compliance Offset Protocol. The project is out of regulatory compliance if the project activities were subject to enforcement action by a regulatory oversight body during the Reporting Period **as a result of the operation of the project**. An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire ~~Reporting Period if~~ **period in which** the offset project is not in compliance with regulatory requirements directly applicable to**, and as a result of,** the offset project during the Reporting Period. (COD1)

Response: The scope of the rulemaking for the revised Livestock protocol is to provide minor updates and clarifications. ARB did not propose any changes to section 95973(b) as part of this rulemaking, so these comments are outside of the scope of the proposed modifications.

D-1.41. Comment: If FAQs are utilized to address certain sections we recommend that FAQs be updated monthly, as new issues arise and new/modified interpretations are determined. If FAQs are only published semi-annually for example, then more than half of a projects reporting period may have passed before information about a change in guidance is available. This delay can have a serious adverse impacts on a projects ability to conduct monitoring in accordance with evolving guidance, resulting in reduced offset volume, and economic loss simply because the information was not publically available. Given that there may only be 2-3 issues a month (if that), which require updating the FAQs, the burden of adding them to an evolving guidance document would be minimized, and project developers would have access to crucial guidance on a timely basis.

Offset Project Operators (OPOs) work diligently to comply with the protocol, and it is challenging and frustrating to them to have interpretations change without any publication and therefore no method to be aware of the change. This makes participation difficult for OPOs, adversely impacting their interest in and ability to participate. Without OPOs there would not be a functional and effective Compliance Offset Program. Providing clear, timely and transparent information is crucial to the success of the program. (AMA1)

Response: These comments are outside of the scope of the proposed modifications.

D-2. Ozone Depleting Substances Protocol

D-2.1. Comment: Definitions.
(ADD) (15) “ODS Blowing Agent” means ODS entrained in insulation foam that was used in manufacture of the foam to provide insulation, structural and other performance properties. When purified, ODS blowing agents have identical chemical properties as ODS refrigerants and may be sold and used as refrigerants. (EOS1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The additional language suggested in this comment is intended to add a scenario in which ODS blowing agent is extracted from foam and treated as ODS refrigerant. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.2. Comment: Section 2.1 Eligible Destruction Activities
(b) A destruction facility must meet ~~any applicable~~ all monitoring and operational requirements under CAA and NESHAP standards, as well as all applicable federal, state, and local laws, that apply directly to ODS destruction activities during the time the ODS destruction occurs.

(c) At the time of ODS destruction the destruction facility must have a valid Title V air permit, if applicable, and any other air or water permits required by local, state or federal law to destroy ODS and document compliance with all monitoring and operational requirements that apply to ODS destruction and ODS destruction project activities.

Rationale:

As we noted in prior comments submitted to ARB in June of 2013 & 2014, ODS destruction facilities operate under multiple permits, with hundreds of monitoring, recordkeeping, reporting, and operating requirements that are not related to ODS destruction activities. It is highly unlikely that any destruction facility will be able to demonstrate compliance with 100% of all permit conditions for 100% of the time.

For example, destruction facilities that utilize incineration technology to destroy ODS operate under U.S. Clean Air Act Title V permits, as well as State permits. These permits specify the Destruction and Removal Efficiency and overall combustion dynamics to assure operation within the Permit Conditions, Applicable MACT Standards and other site-specific parameters derived from Annual Compliance Performance Tests. So long as an ODS destruction facility demonstrates that it meets the Title V Permit Rules and Permit conditions applicable to operation during an ODS Destruction event, the facility should be deemed in compliance with the ARB ODS Protocol.

Another scenario is a facility that had non-compliance status prior to the destruction event, but was determined to have returned to compliance at the time of the destruction event. This facility should be considered in compliance for purposes of the Protocol. Facilities subject to the ARB ODS protocol can still receive and destroy ODS, even if the facility is in non-compliance with permit terms and conditions, provided there is a compliance agreement or consent order between the facility and a regulatory agency, overseeing the facility, which contains a schedule to return the facility to compliance, coupled with confirmation from the regulatory agency that the facility can continue to receive ODS, for destruction, as the matter subject to the compliance order is not material to the effective destruction of ODS, under the ARB protocol. Examples of non-compliance which may be addressed through the Consent Order Process include, but are not limited to, storm water management and NPDES violations, OSHA violations, and non-ODS destruction related RCRA hazardous waste management violations.

The edit suggested above is consistent with ARB's intent to clarify the definition of regulatory compliance in the recently proposed revision to the general cap-and-trade regulations, 17 C.C.R, Section 95973(b):

"An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire Reporting Period if the offset project is not in compliance with regulatory requirements *directly applicable* to the offset project during the Reporting Period." (EOS1)

> **Response:** The language in these subchapters is consistent with, and a minor clarification to, the language in the existing version of the protocol. Regulatory compliance is addressed in subchapter 3.8 and is independent of the requirements here. These subchapters do not extend the regulatory compliance requirement but merely identify the standards that must be met by a destruction facility. The documentation requirement in subchapter 2.1(c) is limited to permits that are required for ODS destruction.

D-2.3. Comment: <u>Section 2.2 Eligible ODS</u>

(a) ODS destroyed under this protocol must be from one or more of the eligible sources listed below:

(1) Refrigerants from industrial, commercial or residential equipment, systems, and appliances or stockpiles;

(2) ODS blowing agents extracted and concentrated from appliance foams; ~~or~~

(3) Intact foam sourced from building insulation; <u>or</u>

(4) ODS that can be sold for controlled use as aerosols in medical inhalers.

Rationale:
Under the Montreal Protocol “essential use nominations” program, limited production of CFCs was authorized in the U.S. and other countries for metered dose inhalers (MDIs). Essential use production in the U.S. was gradually phased out as the Food and Drug Administration approved CFC-free products, including HFC-propelled MDIs, dry powder inhalers, and oral medications. As of January 1, 2012, all production and import of CFCs in the U.S. for MDIs ended, and on January 1, 2013, sale of CFC-based inhalers ended in the United States. With the exception of Russia and China, the rest of the world has also ended production and consumption of CFC HFCs.

A portion of the CFCs that had been produced under the essential use nominations in the U.S. before 2012 have never been used. The resulting stockpile is now eligible for export and sale for use in MDIs in Russia and China. According to the Montreal Protocol Medical Technical Options Committee of the Technology and Economics Assessment Panel, there will no additional production of CFCs in Russia beginning in 2015 (TEAP, 2014). There may be new, limited production of CFCs for MDIs in China in 2015, pending approval by the Parties to the Montreal Protocol (TEAP, 2014). Even if CFC production is approved for China for 2015, if some of the existing CFC stockpiles are destroyed, there would be no new, compensatory CFC production; the essential use nominations and production allocations are fixed quantities based on projected demand and the status of the transition to CFC-free alternatives (TEAP, 2014).

Under business as usual, the U.S. CFC stockpile will be sold for use, and eventually released to the atmosphere. In contrast, under the alternative “project” scenario, the CFCs would be destroyed. The destruction would prevent direct GHG emissions, and result in increased use of CFC-free alternative products. The CFC-free alternative products will include HFC-based inhalers so the proposed protocol revision would account for the GHG emissions associated with “replacement technologies”.

Medical aerosols destroyed before 2012 when the U.S. phased out all essential use exemptions would not be eligible for offset credits.

EOS will work with U.S. EPA and industry stakeholders to develop the methodology for ARB’s approval to quantify the GHG emission reductions associated with destruction of eligible ODS aerosols. (EOS1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The additional language suggested in this comment adds ODS intended for aerosols in medical inhalers as an eligible ODS. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.4. Comment: Eligible ODS

(c) ODS produced exclusively for or used as solvents. ~~medical aerosols,~~ or applications not listed above are not eligible.

Rationale:
In many cases, the same CFCs were produced for a variety of applications. There are stockpiles of CFCs that were originally produced for multiple potential markets that have never been used, and that are eligible for use as refrigerant applications today. These materials should therefore be eligible for destruction credits. The restriction against destruction credits would still apply to ODS that has been used as solvent. (EOS1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The modifications suggested in this comment add ODS intended for aerosols in medical inhalers as an eligible ODS. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include a greater opportunity for public discussion on expansion of eligible project activities. ARB staff disagrees that adding the words "exclusively for" is helpful. This would require project developers and verifiers to discern the intent of those manufacturing ODS which would place an added burden on project developers.

D-2.5. Comment: Section 2.2.1 Refrigerant Sources

(c) ODS extracted from a foam source that are eligible for use in refrigeration or air conditioning equipment are considered as ODS refrigerants provided that the ODS are extracted under negative pressure in a nitrogen environment. ~~not part of this source category and must be considered as a foam source.~~

Rationale:

The protocol assumes a baseline whereby insulation foam is landfilled. As a result, not a single foam project has been undertaken due to the restrictions and discounting of the current protocol. Instead, since the protocol was developed in 2009, the new business-as-usual for a significant quantity of appliance foam in the U.S. is extraction of the CFC-11 blowing agent for re-use as a refrigerant. CFC-11 is being extracted from foam at major appliance recycling centers in the U.S. The extracted CFC-11 is being processed for sale and re-use as a refrigerant to recharge older air conditioning/refrigeration equipment, as allowed by U.S. EPA.

Over the past 2 years, EOS has provided ARB with information on the relevant technologies and the activities. EOS is willing to work with US EPA and industry stakeholders to provide ARB with additional, current data and other technical information.

The new baseline would only apply to projects that demonstrate that the extracted CFC-11 or other ODS blowing agent can be sold and used as a refrigerant. (EOS1)

> **Response:** The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The additional language suggested in this comment is intended to add a scenario in which ODS blowing agent is extracted from foam and treated as ODS refrigerant. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.6. Comment: Section 2.2.2 Foam Sources
(c) The only foam sources eligible under this protocol are building and appliance insulation foams. *Other sources, such as transport refrigeration units, are not eligible.*

> We are interested in the rationale for excluding foam from transport refrigeration units. (EOS1)

> **Response:** The scope of the rulemaking for the revised ODS protocol is to provide updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. Transport refrigeration units are currently ineligible under the existing protocol and removing the exemption would be an expansion of the scope of the

protocol. ARB staff has received inquiries about what may or may not qualify as building and appliance foam. ARB staff thought it helpful to provide this example of what is not an eligible foam source. ARB may consider additional ODS sources in future revisions of the protocol. At that time, a separate set of parameters for emission factors, emission rates, and substitutes may be needed for transport refrigeration units.

D-2.7. Comment: Section 2.2.2 Foam Sources

(d) To be eligible to generate ARB or registry offset credits, the ODS blowing agent must be destroyed in one of two ways:

(1) The ODS blowing agent must be extracted from the foam under negative pressure in a nitrogen environment and collected, stored, and transported in cylinders or other hermetically sealed containers;

Rationale:

To insure worker and public safety, and minimize risks of fugitive emissions, the protocol should require best available technology for extraction of ODS blowing agent, including maintenance of a nitrogen environment in addition to negative pressure. (EOS1)

Response: ARB staff does not agree with this comment. The commenter does not include enough evidence in the comment to conclude that using a nitrogen environment is and will remain the best available technology.

D-2.8. Comment: Section 5.3 Accounting for Disqualified ODS Material After Destruction

(a) The total weight of each container of disqualified ODS shall be considered as the original container's full capacity when the ODS was purchased and must include documentation identifying the weight capacity of the disqualified container.

Rationale:

Section 5.3 (a) is ambiguous in describing which container of disqualified ODS must be considered. We suggest clarifying that the disqualified ODS container is the container that the ODS was originally purchased in. The OPO must also have full documentation on that particular container to be able to make the calculations for backing out the disqualified ODS post-destruction. (EOS1)

Response: ARB staff agrees with this comment and has proposed revisions to address the ambiguity in the 15-day modifications. Staff has not used the

suggested term “original” to avoid any suggestion that the container could not have previously been used for other ODS material.

D-2.9. Comment:

Section 6.2 Point of Origin Determination

(b) Point of Origin is defined as follows:

(1) For refrigerant ODS which is stored ~~within~~ as a stockpile for more than 24 months prior to acquisition by the Offset Project Operator:

(A) The point of origin for stockpiled refrigerant ODS ~~which became part of the stockpile before January 1, 2015~~ is the location of the stockpile.

(B) ~~The point of origin for refrigerant ODS after December 31, 2014 is the site at which greater than or equal to 500 pounds of ODS is first aggregated into a single or multiple containers after December 31, 2014. The point of origin may be the location of the stockpile or a site prior to the ODS becoming part of the stockpile~~

Rationale:

We are unclear on the intent of the draft language in 6.2(b)(1). The subsequent section 6.2(b)(2) already defines the point of origin for ODS stockpiled “for at least 24 months prior to acquisition” by the OPO. As written, this new Section 6.2(b)(1) would eliminate ODS refrigerants stockpiled after December 31, 2014. We do not see any rationale for such a change. (EOS1)

Response: This provision was included to address concerns that some ODS which is currently ineligible could become eligible by being added to a stockpile and then remaining there for 24 months. To address this concern, this clarification specifies that for ODS refrigerant which enters a stockpile after December 31, 2014, the project operator may be required to identify a point of origin which is prior to the stockpile location.

D-2.10. Comment:

Section 6.2 Point of Origin Determination

(c) (3) If refrigeration or air conditioning equipment containing at least 500 pounds of ODS is transported prior to the ODS being removed from the equipment, then the point of origin is the site at which the refrigerant was removed from the refrigeration or air conditioning equipment ~~was last in service.~~

Rationale:
There are many cases where refrigeration equipment is removed and transported to other locations and stored for extended periods of time prior to extraction as part of the demanufacturing process. Via email on 2/21/14 and again in the 6/20/14 version of the protocol, ARB clarified that the point of origin for refrigerant removed from refrigeration equipment that has been transported from its service location should be considered as the location where the refrigerant is extracted. By changing the interpretation, ARB will unnecessarily eliminate otherwise eligible ODS and increase the atmospheric release of these gases. (EOS1)

> **Response:** The language in question was vague in the original version of the protocol. Due to this, ARB elected to consider the point of origin the place of refrigerant removal when providing guidance until ARB was able to modify the language in the protocol. The proposed language shifts the point of origin back to the site the equipment was in service to help assure the eligibility of the ODS. Staff was concerned that ineligible ODS could be imported in equipment and become eligible if the point of origin was ODS removal.

D-2.11. Comment:
Appendix D ODS Mass and Composition from Refrigerant and Appliance Foam Projects – Quantification Methodology
(b) (1) (C) A refrigerant container with a capacity of over 1,000 pounds must be placed on the scale motionless for at least 3 minutes before the weight measurement is recorded.

Rationale:
The above changes are to ensure the time measurement isn't interpreted as meaning exactly three minutes, and that the container may be left motionless on the scale longer as needed to obtain an accurate weight measurement.

The following sections within Appendix D should also include the same language as above on the 3-minute weight interval to provide additional time as needed for accurate weight determination.

(b) (2) (B) & (b) (3) (C) (EOS1)

Response: ARB staff agrees and has included the comment's suggested language in the 15-day modifications.

D-2.12. Comment:

Section 6.6 Other Monitoring Requirements – Quantification Methodology

(a) Projects using this protocol to quantify emission reductions from destroying ODS refrigerant, extracted from foam, must meet the following requirements:

1) Documentation that the ODS is eligible for sale and use as refrigerant
2) Documentation that ODS extracted using the same technology from the foam in identical types of refrigeration equipment has been processed and sold for use as refrigerant
3) The extraction must occur under negative pressure in a nitrogen environment
4) The recovered ODS must be collected, stored, and transported in containers meeting DOT standards for refrigerants
5) The processes, training, QA/QC, and management systems relevant to the collection, storage, and transport of the ODS must be documented.

Rationale:
As noted in our comments above related to Section 2.2.1, ODS is being extracted from foam and sold for use as refrigerant. In those cases, the baseline scenario and the environmental outcome is the same as ODS recovered from refrigeration and air conditioning equipment for re-use as refrigerant. This proposed additional monitoring requirement would put the burden on the project developer to prove that the ODS extracted from foam can in fact be sold as refrigerant. (EOS1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The additional language suggested in this comment is intended to add a scenario in which ODS blowing agent is extracted from foam and treated as ODS refrigerant. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.13. Comment:

Section 6.6 Other Monitoring Requirements – Quantification Methodology

(b) Projects destroying ODS blowing agent recovered from foam must meet the

monitoring requirements listed above in Section 6.6(b)(3), (4), and (5), and follow the procedures in appendix C. The Offset Project Operator or, if applicable, the Authorized Project Designee must collect and maintain documentation showing conformance with the procedures in appendix C.

Rationale:
Clarifying that the recovery/extraction of ODS from foam requires the same procedures and monitoring under any project scenario. (EOS1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The additional language suggested in this comment is intended to address a scenario in which ODS blowing agent is extracted from foam and treated as ODS refrigerant. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.14. Comment: Appendix B, Table B.2 Parameters for ODS Foam

ODS Blowing Agent	100-yr Global Warming Potential (t $CO2_e$/t ODS) (GWP_i)	Appliance ODS blowing agent 10-year emission rate (ER_i,app)	Building ODS blowing agent 10-year emission rate ($ER_{i,build}$)
CFC-11	4,750	~~44%~~ 56%	~~20%~~ 38%
CFC-12	10,900	~~55%~~ 63%	~~36%~~ 47%
HCFC-22	1,810	~~75%~~ 80%	~~65%~~ 72%
HCFC-141b	725	~~50%~~ 58%	~~29%~~ 41%

Rationale: As we have commented previously, for quantification of baseline emissions of ODS from appliance foam, the ARB protocol is still relying on the assumptions in the CAR 1.0 ODS Protocol regarding the percentage of blowing agent that is released during: (a) foam shredding, plus (b) foam compaction, plus (c) landfill decomposition.

The estimated release of ODS over the course of landfill decomposition of the remaining foam material was derived from a laboratory study (Scheutz et al., 2007) where pure ODS blowing agent was mixed in test tubes with simulated landfill material,

inoculated with anaerobic bacteria capable of digesting CFCs and HCFCs. ***This study was not intended to reflect real world conditions and yielded extremely high estimates for the amount of ODS that would be decomposed in an actual landfill***:

- The idealized anaerobic conditions maintained in the laboratory test tubes would be unlikely in an active landfill
- The "landfill" material in the study contained only shredder residue, rather than the diverse mix of solid waste in a typical municipal landfill
- In contrast to the simulated conditions in the experiments, actual landfills would not be biologically pretreated, and there would be larger quantities of landfill gas generated

Based on an admittedly conservative reading of the laboratory study, the CAR protocol assumed that 35% of the CFC-11 blowing agent remaining in the landfilled material would be released in the landfill, and that 95% of that CFC-11 would undergo anaerobic degradation in landfills. This resulted in an estimate that 1% (0.35 * 0.05) of the CFC-11 blowing agent in appliance foam would be released to the atmosphere. When added to the contributions from shredding and compaction (24% + 19%, respectively), the protocol estimates for the baseline that a total of 44% of CFC-11 in appliance foam would be released to the atmosphere.

In its protocol, CAR recognized that there is considerable uncertainty regarding the extent of anaerobic degradation of ODS foam blowing agents in U.S. landfills. At the time of the CAR protocol development, EOS and other working group members suggested that given the major limitations in the Scheutz et al laboratory study, that the protocol use a 50% factor for the amount of ODS blowing agent degraded in the landfill, rather than 95%. Since then, the researchers involved in the Scheutz et al. study have also made the same comments to EPA and to ARB staff.

More recently, a German research institute (RUK Ingenieugruppe, 2012)[14] subjected the assumptions made by Scheutz et al. to experimental and computational checks and concluded the following:

- Scheutz et al. 2007 assumed that the half-life of the anaerobic degradation of R11 was ten times longer than that indicated by the laboratory experiments.
- A value of 5% for the percentage of CFC-11 that would not undergo anaerobic degradation is only justified for the kind of "mono-landfill" investigated by Scheutz et al that generates very small quantities of landfill gas. Only in very rare cases will the type of mono-landfill assumed in the CAR methodology provide an adequate representation of baseline emissions.

[14] *Landfill behaviour of CFCs in foams recovered from end-of-life refrigeration equipment – Application of results to specific waste disposal scenarios*. Ingenieugruppe RUK on behalf of RAL Quality Assurance Association for the Demanufacture of Refrigeration Equipment (March 2012).

- The value assumed for the percent of ODS blowing agent degraded should reflect the particular type of landfill under consideration.

RUK calculated R-11 landfill degradation rates for a range of solid-waste disposal sites representing a range of climate zones. The re-calculated degradation rates are based on case studies using the landfill gas forecasting model used in CDM and JI projects, approved by the UNFCCC:

Location	Climate Zone	Percent of released CFC-11 blowing agent not degraded in anaerobic landfill conditions
Europe: Central, without biological pre-treatment	Wet temperate	83.6%
Europe: Northern	Wet temperate	64.2%
Asia: South-central	Moist and wet tropical	62.9%
Africa: Southern	Wet temperate	61.9%
America: Central	Dry tropical	55.2%
Asia: Western & Middle East	Dry temperate	48.3%
Minimum: mono-landfill for shredder waste (as assumed in CAR methodology)	(no relevant influence)	5.0%

Since the UNFCCC landfill modeling was developed for CDM/JI projects, the RUK analysis does not present factors specific to the United States. However, the range of geographic regions in the U.S. are fairly represented by the range of case study locations used by RUK, and therefore it would be reasonable to use the range of factors listed above (48.3-83.6%) to reflect the range in U.S. landfill conditions, with the mid-point of this range (66%) a good estimate for the average U.S. landfill.

Incorporating this updated degradation factor, the R11 emissions from foam that is shredded and landfilled or “randomly dumped” can be calculated using the following equation from the original protocol:

$FR_D = (1 – FR_S – FR_V) * F * R$

where:

FR_S: Percentage of R11 released during shredding

FR_V: Percentage of R11 released during compaction

F: Percentage of remaining R11 released during anaerobic conditions

R: Percentage of released R11 not degraded in anaerobic landfill conditions

Assuming the same terms as in the original protocol for shredding, compaction, and R-11 released in the landfill, yields a revised factor for the total amount of R11 that would be released:

24% + 19% + 13% = 56%

The RUK analysis did not calculate degradation rates for the other blowing agents; here we assume the same rate (66%) as calculated for R-11.

ODS Blowing Agent	Appliance Blowing Agent 10-year emission rate (ER_{ij})	Building ODS blowing agent 10-year emission rate (ER_{ij})
CFC-11	56%	38%
CFC-12	63%	47%
HCFC-22	81%	72%
HCFC-141b	58%	41%

(EOS1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. Under the limited scope of the protocol revisions, ARB did not have time to fully evaluate these emission rates through a public process and therefore did not propose any such changes. Staff has concerns about the fact that none of this data is from the United States and how this would affect emission rates. ARB is committed to evaluating this data, and to providing the public the opportunity to review it as part of any future rulemaking.

D-2.15. Comment:

Appendix D. ODS Mass and Composition from Concentrated ODS – Quantification Methodology

(3) The full weight must be measured no more than 48 hours prior to commencement of destruction per the ~~Certificate of Destruction~~ CEMS data;

(4) The empty weight must be measured no more than 48 hours after the conclusion of destruction per the ~~Certificate of Destruction~~ CEMS data;

Rationale:
The Certificate of Destruction only provides the start and end **dates** of destruction. It does not provide an hourly start or end time of destruction, however, the Continuous Emissions Monitoring System data does. Requiring that the dates on the Certificate of Destruction be used to comply with a deadline calculated in hours would not be feasible. (EOS1)

> **Response:** ARB staff agrees with this comment and has modified the proposed protocol in 15-day modifications.

D-2.16. Comment: Chapter 2.2
(j)While the requirement that technicians have the proper EPA certification is important, the Reserve recommends that this requirement be clarified and applicable only from the project point of origin forward. Without such clarity, the Reserve is concerned this requirement could be interpreted as applicable earlier in the chain of ODS custody prior to the point of origin. For materials that are collected in small quantities from many sources prior to aggregation at the point of origin, this would be unduly burdensome and provide minimal benefit. (CAR1)

> **Response:** ARB staff declines to make the requested change because staff believes the protocol language is adequately clear. ARB staff will work with stakeholders to address any additional issues which may arise about EPA technician review and point of origin through guidance as necessary.

D-2.17. Comment: Figure 4.1 and Table 4.1
Projects which destroy mixed ODS, as defined by the protocol, must carry out mixing procedures. This should be viewed as a distinct SSR, outside of the GHG Assessment Boundary. It often occurs at a separate facility. (CAR1)

> **Response:** ARB staff appreciates this concern but considers mixing to be covered in SSR 5. Mixing is part of handling and transport from the point of origin to the destruction facility.

D-2.18. Comment: Chapter 5.1

(d) and Chapter 5.2(d). If project developers must quantify and exclude moisture content, the Reserve strongly recommends that the method by which to do so be outlined in this section. There is requirement in Appendix D(d)(3) that moisture content must be less than 75% of the saturation point, but it is not clear whether (and how) the project developer actually calculates a value of moisture to subtract from Qrefr,i. The Reserve's guidance on this issue under its ODS Protocol is:

"While water is also considered ineligible material, the moisture content requirement in the protocol (i.e. that the moisture content must be less than 75% of the saturation point for the ODS) already ensures that the weight of any moisture present will not have a material impact on the quantification of emission reductions. Thus the weight does not need to be adjusted to reflect the weight of moisture present in the sample."[15] (CAR1)

> **Response:** While the weight of water may not have a material impact on crediting it could still result in a significant number of credits, if included. The amount of water in a sample is provide as part of the routine analysis of ODS composition and is easily removed from the weight of ODS. This assures a conservative crediting of ODS destruction only and not allowing for water weight to be credited. ARB also excludes the weight of high boiling residue (HBR), ineligible ODS, and other ineligible material which may not have a material impact in credits issued but are part of the routine analysis and easily excludable. As such, staff declines to make the suggested changes.

D-2.19. Comment: Chapter 5.1
Equations 5.3 and 5.4: Strongly encourage that a deduction for vapor composition risk be included in these equations. Because the protocol only requires that a liquid sample be taken for composition analysis, for containers of mixed ODS, there is a real risk that the composition in the vapor could be different than the composition in the liquid due to differences in the thermodynamic properties of the chemicals, potentially resulting in an offset material misstatement. The Climate Action Reserve ODS Project Protocol v2.0 Section 5.3 describes the nature of the risk in more depth and presents two tables and an equation for determining if a discount for the vapor composition risk must be applied and, if so, the value of the discount. The discount is applied to the calculation of baseline emissions (Equation 5.3 and/or Equation 5.4, depending on the nature of the project). (CAR1)

[15] Errata and Clarifications to U.S. ODS Project Protocol Version 2.0 (April 11, 2013)

Response: ARB staff understands the concerns for vapor composition risk. However, staff views this as outside the scope of the current rulemaking. ARB staff will continue evaluating this suggestion and consider it for future rulemaking.

D-2.20. Comment: Chapter 5.3 (c)
Reference to equation 5.6 is missing from this section. If material is disqualified and removed from the calculation of baseline emissions, it should also be removed from the calculation of project emissions due to use of substitute refrigerants. (CAR1)

Response: ARB staff considered whether equation 5.6 should be included to remove any disqualified ODS from project emissions and concluded it should not. Even though the material is ineligible for crediting, it still results in project emission which should be accounted for under the protocol. Staff believes the subchapter as it currently exists is the most appropriate and conservative accounting of ineligible ODS.

D-2.21. Comment: Chapter 6.2
(d) "over 500 pound <u>of</u> ODS" ("of" is missing) (CAR1)

Response: This comment refers to subchapter 6.2(d). That subchapter does not exist. ARB staff believes this comment was intended to refer to subchapter 6.2(c)(3). For subchapter 6.2(c)(3), ARB staff agrees with the comment and has made the suggested change in 15-day modifications.

D-2.22. Comment: Table B.6
The eGRID emission factors appear to be updated from 2007 to the most recent 2010 emission factors, however references in this section do not reflect that update. (CAR1)

Response: The term "reference" appears in the protocol only in Table 6.1. ARB staff concurs that the title of Figure B.1 should be changed to include "2010" instead of "2007" and made this change in the 15-day modifications.

D-2.23. Comment: Appendix D
(b) These additional requirements seem reasonable. However, they are quite extensive, and we strongly recommend that ARB staff discuss these procedures in detail with both OPOs and ODS destruction facilities to ensure that it will be possible to implement everything that is required. (CAR1)

Response: Thank you for the support. If necessary, ARB staff will develop guidance to provide increased clarity on the issue.

D-2.24. Comment: Appendix D
(f)(1) Clarify that required sampling *for this section only* may be conducted at destruction facility or prior to delivery. (CAR1)

Response: This comment is referring to Appendix D subsection (g)(1). Since it is under (g), which is referring to mixed ODS, staff believe it is clear that (g)(1) only refers to mixed ODS. ARB staff believes this clarification is unnecessary as it is already clear.

D-2.25. Comment: Aggregation of ODS
The process at the Recleim facility involves both the collection and destruction of ODS. Specifically, ODS is removed from individual appliances and stored in ODS storage containers. These smaller containers may later be aggregated into larger containers before destruction.

In the proposed protocol, Appendix D paragraph (a)(4) states:

> Each single compartment, cylinder, drum, or any other eligible ODS container arriving at the destruction facility must be weighed separately, sampled separately, and treated as a separate destruction event.

In illustration 4.1 of the proposed protocol, recovery and collection (and aggregation as part of the process) are outside the offset project boundary. . The process assumes that aggregation is complete before the container is shipped to the destruction facility. When the recovery, collection, aggregation, and destruction occur at the same facility, the project boundary is not as clearly defined by the shipment to the destruction facility. For clarity, the project boundary should be defined as a container that has been identified and destined for destruction. For a facility that performs off- site destruction this designation would immediately precede shipping to the destruction facility. For Recleim, this designation immediately precedes destruction. In both cases, the offset project boundary is more clearly defined by this designation.

Recleim would like to request rewording the protocol in order to clarify the project boundary for facilities that perform both capture and destruction of ODS. Following is language proposed for this purpose:

Appendix D

(a)(4) Each single compartment, cylinder, drum, or any other eligible ODS container that has been identified and destined for destruction must be weighed separately, sampled separately, and treated as a separate destruction event.

(5) All recovery, collection, and aggregation activities may occur until the container has been identified and destined for destruction. After the ODS container has been identified and destined for destruction, ODS must not be added or removed. (RLLC1)

Response: ARB staff agrees with the comment and has modified the proposed protocol accordingly in the 15-day modifications.

D-2.26. Comment: Inclusion of HCFC-22 and HCFC-142b as Refrigerants
In sections 2.2.1 (b), ARB presents the refrigerants that are eligible for offset generation. Recleim feels that HCFC-22 and HCFC-142b should be added to the list of eligible refrigerants.

In 40 CFR Part 82.15, the use of HCFC-22 and HCFC-142b are banned except for

1. Transformation or destruction
2. Use in equipment that is manufactured prior to January 1, 2010
3. Export to an article 5 country.
4. HCFC-22 produced before January 1, 2010 may be used in medical equipment and thermostatic expansion valves prior to January 1, 2015.

While there are still allowances for the refrigerants to be produced for the service of existing equipment manufactured prior to January 1, 2010, the recycling process at Recleim destroys both the refrigerant and the refrigeration equipment. This destroys not only the ODS but also the equipment that could legally receive the refrigerant in the future. The simultaneous destruction of the equipment ensures permanence of the ODS destruction as the equipment cannot be refilled with newly produced refrigerant later thereby negating the destruction activity. As such, Recleim recommends the inclusion of these ODS refrigerants in the list of eligible refrigerants with the requirement that both the refrigerant and the original equipment be destroyed in the process. (RLLC1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The inclusion of additional refrigerants is outside the scope of the current rulemaking. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.27. Comment: Inclusion of HCFC-142b as a Blowing Agent
In sections 2.2.2(b), ARB presents the blowing agents that are eligible for offset generation. Federal regulation in 40 CFR Part 82.15 bans and provides no allowance for the use ofHCFC-142b as a blowing agent after January 1, 2010. Recleim recommends the inclusion of HCFC-142b as an eligible blowing agent. (RLLC1)

Response: The scope of the rulemaking for the revised ODS protocol is to provide minor updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. The inclusion of additional blowing agents is outside the scope of the current rulemaking. Changes outside the scope of this proposed protocol update will be considered by ARB at a future rulemaking, which will include opportunity for public discussion on expansion of eligible project activities.

D-2.28. Comment: Protocol Language Referencing Refrigerated Shipping Containers
Transportation Refrigeration Units (TRUs) have been identified by EPA as a significant source or greenhouse gas emissions. In 2010, the transport refrigeration sector accounted for about 9% of global HFC consumption in the refrigeration /AC sector—approximately 80 million metric tons of carbon dioxide equivalent ($MMTC0_2$ eq.)—or approximately 7% of HFC consumption across all sectors. (USEPA, Transitioning to Low-GWP Alternatives in Transport Refrigeration, 2011, http://www.epa.gov/ozone/downloads/EPA_HFC_Transport.pdf)

In the proposed protocol, Section 2.2.2 paragraph (c) it states:

> The only foam sources eligible under this protocol are building and appliance insulation foams. Other sources, such as transport refrigeration units, are not eligible.

While Recleim has had discussions with ARB staff on the possibility of inclusion of TRUs in the protocol, it is not clear why this statement has been added to the protocol. In these conversations with ARB, it has been understood that the refrigerated shipping containers are not eligible under the current protocol without modification. However, the conversations were productive in that there was agreement that TRUs may be eligible with relatively minor modifications.

The specific exclusion of TRUs with this statement is counter to these discussions and sets a precedent that could potentially make future modifications of the protocol and inclusion of this significant greenhouse gas source more difficult. Recleim requests the removal of the latter sentence in this paragraph or, at a minimum, the removal of the reference to TRUs in the sentence. This modification will change the scope of the protocol or any protocol method. (RLLC1)

> **Response:** The scope of the rulemaking for the revised ODS protocol is to provide updates and clarifications. With this revised protocol, ARB staff does not intend to expand the scope of ODS activities which are eligible under ARB's ODS protocol. Transport refrigeration units are currently ineligible under the existing protocol and removing the exemption would be an expansion of the scope of the protocol. ARB staff has received inquiries about what may or may not qualify as building and appliance foam. ARB staff thought it helpful to provide this example of what is not an eligible foam source. ARB may consider additional ODS sources than those eligible under the original ODS protocol in future revision of the protocol. At that time, a separate set of parameters for emission factors, emission rates, and substitutes may be need for transport refrigeration units.

D-2.29. Comment: Calpine fully supports the Proposed ODS Protocol Amendments because they would clarify what we believe to have been the purpose and intent of the Cap-and-Trade Regulation and existing ODS Protocol all along: The regulatory compliance requirement is placed upon and limited to the offset project, and does not encompass operations or activities that are unrelated to GHG emission reductions or occur outside of the offset project boundary. In the context of CARB's ongoing investigation of offset credits generated at the Clean Harbors Incineration Facility, the Proposed Amendments clearly demonstrate that the violations alleged against Clean Harbors do not provide a basis for invalidation of such offset credits because none of the alleged violations pertains to "the collection, recovery, storage, transportation, mixing, and destruction of ODS." Proposed ODS Protocol Amendments § 3.8.

The ODS Protocol currently states – under the heading "Regulatory Compliance" –that "[a]s stated in the Regulation, [] Offset Project Operators or Authorized Project Designees must fulfill all applicable local, regional and national requirements on environment impact assessments that apply based on the offset project location. Offset projects must also meet any other local, regional, and national requirements that might apply. Offset projects are not eligible to receive ARB or registry offset credits for GHG reductions that occur as the result of collection or destruction activities that are not in compliance with regulatory requirements." ODS Protocol § 3.5.

The ODS Protocol continues: "The regulatory compliance requirement extends to the operation of destruction facilities where the ODS is destroyed. Destruction facilities have the potential to contribute to environmental impacts beyond ozone depletion and climate change. Accordingly, all destruction facilities must meet the full burden of applicable regulatory requirements during the time the ODS destruction occurs. Any upsets or exceedances of permitted emission limits must be managed in keeping with an authorized startup, shutdown, and malfunction plan required by EPA (40 CFR 63. 1206)." *Id.*

The first paragraph of section 3.5 of the ODS Protocol stated above is substantially similar to section 95973 of the Cap-and-Trade Regulation. This section of the Regulation states that "[a]n Offset Project Operator or Authorized Project Designee must fulfill all local, regional, and national requirements on environmental impact assessments that apply based on the offset project location. In addition, an offset project must also fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location and that directly apply to the offset project, including as specified in a Compliance Offset Protocol. The project is out of regulatory compliance if the project activities were subject to enforcement action by a regulatory oversight body during the Reporting Period. An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire Reporting Period if the offset project is not in compliance with regulatory requirements directly applicable to the offset project during the Reporting Period." Cap-and-Trade Regulation § 95973(b). Relatedly, if "[t]he offset project activity and implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB offset credit was issued", CARB "may determine that [such] ARB offset credit is invalid." *Id.* § 95985(c)(2).

Proposed ODS Protocol Amendments

The Proposed ODS Protocol Amendments would revise the Regulatory Compliance section by striking the two paragraphs cited above (i.e., ODS Protocol § 3.5) and insert the following:

(a) An offset project must meet the regulatory compliance requirements set forth in section 95973(b) of the Regulation.
(b) The regulatory compliance requirements apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS.

Proposed ODS Protocol Amendments § 3.8.

Discussion of Proposed Amendments

Calpine fully supports the Proposed ODS Protocol Amendments. We believe the Proposed Amendments clarify how the ODS Protocol is intended to function vis-à-vis the existing Cap-and-Trade Regulation and, therefore, promulgating the Proposed Amendments would promote regulatory coherence.

The ODS Protocol currently states that"[t]he regulatory compliance requirement extends to the operation of destruction facilities where the ODS is destroyed." ODS Protocol § 3.5. This statement can be read in a way that does not align with the Cap-and-Trade Regulation. The Cap-and-Trade Regulation states that *"an offset project* must [] fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location and that directly apply to the offset project…" Cap-and-Trade Regulation § 95973(b) (emphasis added). Significantly, the focus of the Regulation's compliance requirement is on the offset project. Indeed, if "[t]he *offset project activity* and implementation of the *offset project* was not in accordance with all local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB offset credit was issued", CARB may invalidate such offset credit. *Id* § 95985(c)(2) (emphasis added).

The Regulation defines offset project as "all equipment, materials, items, or actions that are *directly related to or have an impact upon* GHG reductions, project emissions, or GHG removal enhancements within the offset project boundary." *Id* § 95802(a)(245). In turn, the offset project boundary is "defined by and includes all GHG emission sources, GHG sinks or GHG reservoirs that are affected by an offset project and under control of the Offset Project Operator or Authorized Project Designee. GHG emissions sources, GHG sinks or GHG reservoirs not included in the offset project boundary." *Id.* §

95802(a)(246). Accordingly, the offset project consists of those actions that are directly related to the actual GHG emission reductions in the location where the project operates. Under the Regulation, the offset *project* has the responsibility to comply with all environmental laws. *Id* § 95973(b).

On the other hand, the current ODS Protocol states that "[t]he regulatory compliance requirement extends to the operation of destruction facilities where the ODS is destroyed." ODS Protocol § 3.5. While Calpine believes the most reasonable interpretation of this statement is to define it in terms of section 95973(b) of the Regulation – which speaks exclusively to the compliance requirements of offset projects – one could view this statement as encompassing operations at destruction facilities that are *unrelated* to the offset project and/or *outside* the offset project boundary. This latter reading would be incorrect, in our view, because the whole purpose and intent of the regulatory compliance requirement is to ensure that the offset projects comply with all environmental laws.

The Proposed Amendments would clarify the regulatory compliance requirements in the ODS Protocol by deleting this language and stating that "[t]he regulatory compliance requirements apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS." Proposed ODS Protocol Amendments § 3.8. This revision clarifies the ODS Protocol in two important respects. First it explicitly shifts the focus of the regulatory compliance requirement from the operation of the ODS destruction facility to the process of destroying the ODS itself. This more closely aligns with the regulatory compliance requirement of the Cap-and-Trade Regulation, which places such requirement on offset projects (i.e., the set of actions that are directly related to the GHG emission reductions.)

Additionally, the regulatory compliance requirements explicitly applies to a specific set of actions – the collection, recovery, storage, transportation, mixing, and destruction of ODS – that parallels the meaning of an "offset project" in the ODS destruction context. In other words, the collection, recovery, storage, transportation, mixing, and destruction of ODS are the "actions that are directly related to or have an impact upon GHG reductions" (Cap-and-Trade Regulation § 95973(b)) and therefore, these actions constitute the ODS offset project. It is logical that the regulatory compliance requirement would apply to these actions (and these actions only) because the offset project is confined to these actions with respect to ODS destruction.[16]

[16] Indeed for all potential ODS projects (i.e., Refrigerant Projects, Appliance Foam Projects, and Building Foam Projects), the project boundary terminates upon destruction of the ODS. *See* ODS Protocol § 4,

Relation of Proposed Amendments to Investigation of Offset Credits Issued for ODS Destruction Events at Clean Harbors Incineration Facility

Calpine purchased offset credits that were issued by CARB for ODS destruction events occurring at the Clean Harbors Incineration Facility in Arkansas.[17] On May 29, 2014, CARB provided notice that is reviewing if certain offset credits issued for destruction events occurring at this facility may have been generated while the facility was not in compliance with provisions of its operating permit issued under the federal Resource Conservation and Recovery Act ("RCRA"). The alleged noncompliance related exclusively to alleged violations occurring *after* ODS destruction, or with respect to standards for completely unrelated storage tanks or an unrelated and immaterial administrative violation.

Calpine believes that the existing Cap-and-Trade Regulation and ODS Protocol fully support our view that the offset credits issued for destruction event occurring at the Clean Harbors Incineration Facility should not be invalidated. The violations alleged against Clean Harbors have nothing to do with the offset project that generated the relevant offset credits and, therefore, there is *no* basis to asset that "[t]he offset project activity and implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations", such that invalidation of the offset credits would be permissible in this instance. *See* Cap-and-Trade Regulation § 95985(c)(2). As we have previously conveyed, it is not the act of destroying ODS which was the subject of the U.S. Environmental Protection Agency's ("EPA's") enforcement action, but Clean Harbors; alleged mismanagement of the Saturator Sludge *after* completing of the incineration process and removal of the resulting sludge from the associated air pollution control equipment.[18] Invalidation of

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pp. 9-10. The project boundary does not continue to downstream activities occurring after the destruction of the ODS.

[17] These offset credits were initially verified pursuant to the Climate Actions Reserve's ("CAR") U.S. Ozone Depleting Substances Project Protocol, Version 1.0 (Feb. 3, 2010). Offset projects verified pursuant to the CAR Protocol are expressly recognized as early action offset credits pursuant to the Cap-and-Trade Regulation, which may be converted to compliance-grade offset credits upon completion of CARB's subsequent review and approval. Cap-and-Trade Regulation § 95990(c)(5)(C).

[18] *See* letter from Jason Armenta, Alternate Account Representative for Calpine Energy Services, L.P., to Rajinder Sahota, Branch Chief, Cap-and-Trade Program, re: Additional information Submitted by Calpine Energy Services, L.P. in Response to Initial Determination of Grounds for Invalidating of Ozone Depleting Substances Offset Credits, June 20, 2014, at 6, note 11, citing 40 C.F.R. § 264.351, Comment ("… throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(d) of this chapter, that the residue *removed* from the incinerator is not a hazardous waste, the owner or operator *becomes* a generator of hazardous waste and must manage it in accordance with applicable requirements of parts 262 through 266 of this chapter.") (emphasis added)).

offset credits due to Clean Harbors' failure to accurately characterize its sludge as hazardous waste and then manage that sludge in accordance with the requirements for same would be no different than invalidation of offset credits generated under the U.S. Forest Projects protocol due to a forest products manufacturer's failure to adhere to applicable requirements when processing sustainably harvested timber. Neither the Cap-and-Trade Regulation, nor the ODS Protocol, reaches so broadly in defining the scope of the offset project activity and regulatory compliance requirement.

Nevertheless, Calpine believes the Proposed Amendments are a welcome revision to the ODS Protocol. The Proposed Amendments clarify what Calpine believes to have been the purpose and intent of the Cap-and-Trade Regulation and existing ODS Protocol all along: that the regulatory compliance requirement is placed upon and limited to the offset project, and does not encompass operations or activities that are unrelated to GHG emission reductions or occur outside of the offset project boundary. In the context of CARB's ongoing investigation of offset credits generated at the Clean Harbors Incineration Facility, the Proposed Amendments clearly demonstrate that the violations alleged against Clean Harbors do not provided a basis for invalidation of ODS offset credits generated at the facility because none of the alleged violations pertain to "the collection, recovery, storage, transportation, mixing, and destruction of ODS." Proposed ODS Protocol Amendments § 3.8. (CP1)

> **Response:** ARB staff thanks Calpine for supporting the regulatory compliance language in the updated ODS protocol. However, the term destruction does encompass all aspects of destruction, including the handling of any resulting byproducts. Additional clarification to this section was added in the 15-day text.

D-3. U.S. Forests Projects Protocol

D-3.1. Multiple Comments: Comments Related to the Current Proposed Quantification Methodology Updates

Table A2. Height Measurements: The wording is unclear. There is no obvious value to what is added through the edit. It is obvious that height measurements must be used for the biomass models and that the height values are from the inventory, either directly, indirectly through regression estimation, and/or grown from direct or indirect height estimates. It is not clear how the definition of 'high degree of accuracy' will be applied. The statement that the measurements are subject to passing sequential sampling and verification should be revised since sequential sampling is part of verification. Indeed,

verification through sequential sampling techniques will test the accuracy of height estimates.

Table A2. Deductions for Missing Biomass: Recommend standardizing the methodology for calculating missing biomass to increase consistency across projects.

Table A3(b). Summarizing Total Carbon by Carbon Pool and Stratum: It is not clear what the intent is for a table that displays carbon estimates and summary statistics by stratum. Recommend removing what appears to be a requirement to report inventory confidence by stratum or adding language to explain what the intent of the table is.

B.2 Using models to forecast carbon stocks: The language seems to indicate the POs need to project anticipated project carbon stocks and create a chart with the projection. Predicting the trajectory of carbon stocks is fraught with uncertainty and is irrelevant to the quantification of actual GHG reductions/removals and the issuance of offset credits. The requirement should be dropped, or explanation should be provided how projections will be used and why they are necessary.

Appendix C. Estimating Carbon in Wood Products: Recommend developing standardized spreadsheets (or other such tools) to assist POs in consistently calculating harvested wood products.

Appendix C.1 Determine the Amount of Carbon in Harvested Wood Delivered to Mills: Recommend abandoning the use of peripheral references for wood densities since all equations provided by FIA have their own built-in wood density estimates. This will enhance consistency between calculations of other portions of the tree (using FIA supported equations) and wood products. It also would simplify a somewhat perplexing set of calculation steps.

6.2.1 Estimating Baseline Onsite Carbon – Private Lands. Step 4: Recommend revision of language to address the challenge of independently calculating below-ground biomass since it is inextricably linked to above-ground biomass.

Equation C.2: Recommend not striking the reference to “prior to delivery to the mill” as it would cause an error in the intent of the calculation.

Appendix C. Notes at bottom of section (page 99): The note that addresses the condition of biomass model producing a bole estimate, without bark, should be

highlighted and take precedence over the alternative method of producing a bole estimate. We believe all biomass models provide the ability to calculate the bole biomass independent of bark and are preferred to the complex alternative. Additionally, the method is consistent with other calculations of biomass. Recommend developing the thought a bit more and moving to the top of the section. The alternative method could likely be completely removed.

The second note on the same page is confusing and needs some clarification.

Appendix F. New language addressing Forest Service Site Class values: Recommend defining the acronyms in this section (NIMS, for instance).

Guidance is needed as to how landowners are expected to calculate site class; at the plot level and at the aggregate level. Are the Forest Service prediction methods clearly defined and does ARB recommend utilizing the methodologies specified in the FIA manual? Are landowners to determine an average productivity across all lands with the project area or stratify into the included definitions of high and low and develop a weighted average Common Practice?

General Comments Unrelated to the Current Proposed Quantification Methodology Updates:

Overall, we suggest incorporating released FAQs into text of the updated protocol, or updating FAQs where necessary to reflect changes to protocol.

Chapter 2.2: Recommend additional language to indicate that the Forest Owner(s) must have the capacity to effect change in the forest.

Chapter 3.2: The language referring to viable commencement dates suggests that the commencement date for an IFM project is restricted to only the three actions listed, which is not consistent with how this section has been previously interpreted. It might be helpful to clarify whether it is intended that the three activities are the only three activities which can denote a commencement date or whether they are examples of a larger set of activities

The language in this section states that the sustainable harvesting practices requirements must be met at the time that commercial harvesting is “either planned or initiated”. As “planned” is particularly unclear, we suggest removing “planned” and clarifying the language. As an example, the Reserve has submitted Errata and

Clarifications to ARB which were approved for publication, including a Clarification on this requirement. In it, we state “The requirement for meeting one of the Sustainable Harvesting Practices options is to be assessed at the time that a harvest plan is submitted to a state or federal agency or when commercial harvesting is initiated.”

Chapter 4: The protocol reads “…that resulted in the release of at least 20 percent of the project’s above ground standing live tree biomass being emitted.” This sentence is unclear, as biomass cannot be released or emitted. We suggest revising to make the statement consistent with the reforestation project definition in Section 2.1.1: “…that has been subject to a Significant Disturbance that resulted in the removal of at least 20 percent of the project’s above ground standing live tree biomass.”

We recommend clarifying in this section that after the second site visit verification, the Project Area boundaries are set for the duration of the entire project lifetime.

Chapter 6.2.1.1: The definition and procedure for determining a Logical Management Unit are unclear. As such, the Reserve drafted an Errata & Clarification to clarify the language in this section. It is replicated here:

“A ‘logical management unit’ or ‘LMU’ is defined as either all landholdings, or any subset of the entire landholdings that are/is managed explicitly as a defined planning unit. The area of analysis for defining LMU(s) is the set of landholdings owned by a Forest Owner and its Affiliate(s) within the same Assessment Area(s) where the project is located.

Where LMUs are subsets of the entire landholdings, they are generally characterized by having unique biological, geographical, and/or geological attributes, are generally delimited by watershed boundaries and/or elevational zones, and contain unique road networks. Additionally, where LMUs are defined as subsets of the entire landholdings and are harvested for timber, the Forest Owner must demonstrate that the volume of timber harvested over the past 10 years, scheduled for harvest in a management plan for the next 10 years, or a combination of actual historical harvest and scheduled harvest spanning a contiguous period of 10 years (i.e. 7 years of past harvest and 3 years of scheduled harvest) can be perpetuated for the next 50 years without a decline in onsite standing live carbon stocks. In the absence of a management plan that indicates harvest volumes, the standing inventory of the subset (proposed LMU) must be within 20% of the standing inventory of the landholdings owned by the Forest Owner and its Affiliate(s) within the Assessment Area(s).

The demonstration that the timber volumes harvested or scheduled to be harvested must be conducted through modeling growth and yield with an approved growth and yield model or conducted through a stand table projection that indicates sustainable harvest levels.

If an explicit, existing LMU containing the Project Area cannot be identified, the Project Submitter must define the LMU by identifying all lands where the Project Submitter and its affiliate(s)(as defined above) either own in fee or hold timber rights on within the same Assessment Area(s) covered by the Project Area. Assessment Areas covered by the Project Area are identified in Step 1, above, following the guidance in the Assessment Area Data File."

Chapter 6.2.2: The guidance in this section for developing a baseline for projects on public lands is unclear. We recommend providing additional clarity around what "comparable forested areas" and "relatively free of harvest" mean. The Reserve has provided clarity around these two terms, and the clarification provided here for reference:

"In order to produce a consistent and standardized approach to baseline for public lands that demonstrate an increasing inventory of carbon stocks over the past ten years, a comparable forest shall be modeled from initiation out to 60 years using an approved growth model as described in Appendix B. The modeled forest shall be comparable to the project area in terms of acreage, site class and species composition. Throughout the 60-year modeling period, only commercial and noncommercial thinning for the purposes of controlling stocking levels will be allowed. The carbon stocks of the modeled forest at 60 years shall be the project baseline, and shall be considered static throughout the project life."

Chapter 10.2.6: We suggest that a site visit verification be required whenever confidence deductions and/or reversal risk ratings are changed. This is because changes to reversal risks and confidence deductions need to be confirmed with on the ground observations.

The glossary defines "Standing Live Tree Carbon Stocks" but throughout Appendix A there are references to "Standing Live Carbon Stocks". For consistency, we suggest using "Standing Live Tree Carbon Stocks".

For calculating the below-ground portion of standing live carbon stocks, the protocol language should clarify whether the Cairns equation is meant to be applied to the Standing Live Tree Carbon Stocks before or after deductions for defects, or at least

clarify that, whether the OPO calculates it with gross biomass or net biomass, it must be consistent in both project and baseline accounting. (CAR1)

Comment: Section 6.2.1.2 Step 2: Language: “To determine if initial above-ground standing live carbon stocks per acre expressed (ICS) in MTCO2-e, are above or below Common Practice, perform the following steps” Comment: We suggest changing “carbon stocks per acre expressed (ICS) in MTCO2-e” to “carbon stocks per acre (ICS) expressed in MTCO2-e” for greater clarity.

Section 6.2.1.2 Step 4: Language: "Estimate independently baseline carbon stocks for all other required onsite carbon pools identified for the offset project…"Comment: The meaning of the term "independently", as used here, is unclear. It is also unclear whether the presumed intended meaning is accurate. Standing live below-ground carbon stocks, for example, are typically not estimated independently of standing live above-ground carbon stocks because below-ground stocks are estimated as a function of above-ground stocks using the Cairns equations.

Section 6.2.1.2 Step 4: Language: "...and the portion of harvested above- ground standing live carbon stocks for species delivered to the mill, used for calculating harvested wood products)." Comment: Unfortunately, this language subtracts clarity rather than adding it. It does not appear to be necessary, and, aside from being confusing, appears to conflict with the requirement to "produce a final baseline for all onsite carbon pools" (since harvested wood products is, arguably, not an "onsite" carbon pool). It is suggested not to be inserted.

Section 6.2.1.2 Step 4: Language: "Average the modeled results of each independent carbon pool, so that a single annual averaged value for each carbon stock results." Comment: See the above comment regarding the term "independent". Also, the term "stock" is inconsistent with common usage of the term. Please considering replacing with "pool" (assuming that is what was meant).

Section 6.3.2: Language: "…and will not change over the course of the offset project life." Comment: The term "life" has been added to Section 6.3.2 but not to the corresponding text in Section 6.2.3. Unless this difference is intentional, it is recommended that the changes be applied consistently. (SCS1)

Comment: In addition to expanding project eligibility to Coastal Alaska, ARB should allow avoided conversion projects in Hawaii to be eligible, since avoided conversion

projects do not require the use of common practice values for determining baseline, and the biomass equations for Hawaii are currently available from the US Forest Service.

We recommend that the Air Resources Board consider the following amendments or clarifications to improve the functioning of the Forest Protocol:

1. Issue guidance clearly allowing the extension of listing, OPDR submittal and OVS issuance deadlines for the initial OPDR, primarily by allowing OPOs to amend the initial reporting period up to the 24-month time limit.
2. Revise definition #189 in the Cap and Trade Regulation regarding intentional reversals to exclude wildfire caused by negligence.
3. Clarify that minor property right holders who do not possess a fee or timber right interest on forest project areas are not required to demonstrate sustainable harvesting practices.
4. Clarify that fires set by landowners to protect their property from wildfire ("backburning") are excluded from the category of intentional reversal. (NF1)

Response: Per the California Global Warming Solutions Act of 2006 (AB32), comments related to updates to quantification methodologies are exempt from Administrative Procedure Act (APA) requirements. As such, no response is required. Staff will consider comments outside the scope of the proposed amendments for potential future updates to the protocol.

D-3.2. Multiple Comments: This draft has seen changes made to the Common Practice statistics, however there is little guidance for OPOs regarding how and whether changed Common Practice statistics will apply to projects currently listed and under development. Guidance is needed so projects in various stages of development will know how to proceed with their projects. It is recommended that projects that have been submitted be able to continue with the assumptions they used to initiate the project. (CAR1)

Comment: Blue Source broadly supports ARB's proposed Quantification Methodology Updates with two important exceptions: the changes to the Assessment Area Data File, and the associated shift in "high" vs. "low" site class designation.

Taken together, these two changes are of critical significance to the forest program, as they are central components in establishing common practice levels for all Improved Forest Management ("IFM") projects. Unfortunately, at this stage, the underlying method by which ARB established the new Assessment Area Data File values – which is also the basis for modifying the high/low class definitions – has not been provided to

the public and, therefore, is not fully understood by the stakeholder community. This appears to have been an unintended oversight and not consistent with ARB's practice to date, which has generally been in accordance with the process set forth in its *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (May 2013) (the "Protocol Process Guidance").[19] The Protocol Process Guidance sets forth a "full stakeholder process" (*id.* at page 5), and in our experience ARB has typically adhered to it, but unfortunately the critically important material upon which the proposed changes are based apparently fell through the cracks. Thus, these particular changes are before the Board without the benefit of the normal "full stakeholder process." Additional time to understand these complex materials and an opportunity to provide informed comments upon the proposed changes is necessary.

Due to the complexity and importance of determining representative common practice values, Blue Source requests that the Board not move forward with the proposed changes to the Assessment Area Data File and site class designation system at this time, but instead allow them to be included in ARB's upcoming Regulatory Review Update for the Protocol. Inclusion in the Regulatory Review Update would allow for appropriate public involvement and interaction, consistent with ARB's normal process for adopting and modifying offset protocols. The Board has the authority to decline to move forward on these two discrete portions of the Quantification Methodology Updates now before it while approving the rest. *See, e.g.,* Protocol Process Guidance at page 6.

Blue Source specifically proposes that the Board not move forward on two elements of the proposed Quantification Methodology Update to the Protocol – *i.e.*, that they in effect be removed – so that ARB can instead incorporate them into the upcoming Regulatory Review Update process:

- High/Low site class definition– The change to this definition (which is on page 109[20] of the proposed Quantification Methodology Updates) modifying the High/Low classifications, should be postponed and the definition remain unchanged pending the Regulatory Review Update process.

[19] The Protocol Process Guidance is available on the first page of ARB's Cap-and-Trade Program webpage (http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm). The Protocol Process Guidance provides that, "Information related to new offset protocols will be shared in a transparent and public process so as not to give any one entity a potential market information advantage over another entity." *Id.* at page 5.

[20] The proposed changes would re-define a "high" site class as the average of site class productivity codes I-IV, and a "low" site class as the average of site class productivity codes V-VII.

- Assessment Area Data File– ARB's proposal to modify the data file should be delayed pending the Regulatory Review Update process and the current values should remain unchanged pending further review.

We believe this requested modification to ARB's process is justifiable for a number of reasons:

1. Changes to baseline methodology and classifications are complex and go beyond simple quantification updates: Sufficient stakeholder review is needed to ensure that the most accurate approach to determining common practice baselines is adopted and calculations are correct. The proposed changes to determining baselines and site classifications involve methodological revisions that go beyond simple quantification changes and, therefore, are more appropriately considered under the broader Regulatory Review Update process.

2. There has not been sufficient review of Assessment Area Data File changes by stakeholders: The actual changes in the Assessment Area Data File were not sufficiently included in ARB announcements or publically released documents, and, to this day, have not been published anywhere on the ARB website. In addition, no redline or explanation of specific changes to the Assessment Area Data File has been provided. Further, the changes to the Assessment Area Data File are not mentioned in the formal Description of *Quantification Methodology Changes – US Forests* document released on July 29th, and therefore, have not been subject to the meaningful public review appropriate for such an important component of the forest carbon program.

3. Beyond the particular changes that are currently proposed, even simple updates to common practice figures have significant market impact and must be made following a transparent process developed with stakeholder input: Projects developed under this Protocol have extremely long lead times. Sufficient notice as to when critical Protocol updates are going to be adopted is needed in order to avoid the sudden 'shifting of goal posts' and corresponding erosion of market confidence in the program by landowners, buyers and other market participants. It is our understanding that the time intervals at which baseline updates will be carried out is already slated as a component to be addressed in the upcoming Regulatory Review Update process. Therefore, the current proposed changes to site class designation and common practice baseline determinations should be included in the broader Regulatory Review Update process. (BS1)

Comment: As a carbon offset developer, we believe one of the core principles of the program is to ensure that offsets issued under the program meet the criteria of being real, additional, quantifiable, permanent, verifiable, and enforceable. We consider it the responsibility of all stakeholders to ensure that the rules developed by ARB are consistent with these principles.

Unfortunately, it has been recently brought to our attention that ARB intends to make significant policy changes which will affect common practice values which have not been subject to a public rulemaking process. Common practice values directly impact the volume of offsets issued to every forestry project and any policy which changes these values risks creating non-additional offsets. Therefore, we think it is critical that any policy changes which affect common practice values be subject to a transparent rulemaking process that seeks input from stakeholders including landowners and environmental organizations.

The current methodology for calculating common practice was approved as part of the Regulation and was therefore subjected to intense public scrutiny from a wide range of stakeholders, ensuring its legitimacy. Making significant policy changes to this methodology which results in significantly different values should be subject to the same transparent public process.

ARB has proposed two significant changes which will impact how forest carbon project offsets are calculated: changes to the Assessment Area Data File and changes to how “high” and “low” site classes are determined.

Site class and common practice values are the core components used to determine the number of carbon offsets which are issued to offset projects. ARB has not published its reasoning for the change to the determination of high/low site classes nor the new Assessment Area Data File values to its website for stakeholder review. In a file provided privately to Finite Carbon for its review, it appears that in some cases the number of offsets which will be issued to projects in certain areas of the country will be significantly higher than the current values would allow. Therefore, these changes have been proposed to the board without first being made available to the public and may result in board approval of new policy which could result in the issuance of non-additional carbon offsets.

Given the lack of transparency of these policy changes and the inherent risk of approving such policy changes without the opportunity for feedback from an expert community of forestry and environmental experts, we recommend that these changes be postponed and subject to further review. Specifically:

1. We recommend that changes to the determination of high and low site class found on page 109 of the proposed Quantification Methodology Updates remain unchanged.
2. We recommend that ARB's proposed changes to the Assessment Area Data file be delayed until the scheduled Regulatory Review Update process and current values remain unchanged. (FC1)

Comment: While ecoPartners welcomes the majority of the proposed changes to the Compliance Offset Protocol for U.S. Forest Projects, we would like to comment on the proposed changes to Appendix F. The proposed changes to the determination of the Common Practice value, both in changes to the assessment area data and the methods of site class stratification, have a significant impact on current projects and projects in development. For an Improved Forest Management (IFM) project, the calculation of the Common Practice value is extremely important as this is tied to the baseline carbon stocks, and thus the total emissions reductions of a project. Changes to the Assessment Area Data File values have not been made public and has therefore not been subject to stakeholder review. This lack of transparency makes it impossible to fully assess the impacts of the proposed changes.

Additionally, proposed changes to the determination of site class lack clarity, introducing the undefined acronym "NIMS" and raising more uncertainty to this task. Furthermore, changes to the methods of site class stratification are potentially conflicting, recommending the use of site trees to classify site productivity codes and recommending the use of soil data for this stratification in the following paragraph.

Our greatest concern is the effect that the proposed changes will have on existing projects and those under development. They will certainly have a substantial effect on the offset credits generated by a project, and consequently a project's feasibility. Without public access to the Assessment Area Data Files, we are unable to quantify this effect. We recommend postponing the aforementioned changes until a full stakeholder review can be completed so impacts can be fully evaluated. (ECO1)

Comment: When adopting new common practice values:

a. Because origination of forest carbon offset projects can often take a year or more, allow adequate time for landowners and project developers to transition to the new common practice values by requiring projects listed on July 1, 2015 or later to use the updated common practice figures and site class definitions.
b. Ensure consistency and predictability for projects by not requiring existing projects to change their established project baselines to incorporate updated common practice values and/or site class definitions. Under the terms of the Forest Protocol a project's baseline must remain unchanged for the duration of the project life. (NF1)

Comment: Members of the Board, my name is Nico Van Aelstyn. I'm here today on behalf of forestry offset project developers Blue Source, Finite Carbon and Eko Asset Management Partners. These three constitute the majority of the project developers in ARB's forest offset program and are responsible for the substantial majority, both by acreage and tons of the currently certified improved forest management, or IFM, projects and these IFM projects -- and those IFM projects that are currently in a certification pipeline. We appreciate this opportunity to speak here today in relation to the proposed quantitative methodology update to the U.S. forest offset protocol. We also take this opportunity to again thank the ARB staff and the Board for all the work that has gone into developing the forest protocol and the success of the program to date. Blue Source, Finite, and Eko generally support the proposed changes in the QM update. However, as stakeholders that have worked closely with ARB for years in support of this program, we are very concerned about the impact that certain proposed changes will have on IFM projects.

We also are troubled by the failure, frankly, of ARB to follow its established process for making changes to the protocol. A fair and transparent process with robust public involvement has been the hallmark of ARB's AB 32 rulemaking to date. The departure from that process here has deprived stakeholders of any meaningful involvement on this important update. That is why I'm here today. Let me make one thing very clear. Blue Source, Finite and Eko are not saying that the changes and the data on which they are based are necessarily wrong or unacceptable. Indeed, my clients ultimately may support them. What we are saying is that we've not been given adequate opportunity to review the data, to verify their accuracy, to determine if they are sufficiently robust to serve the critical role they serve in the QM, to consider potential alternative data sets, and to engage with ARB about all of this.

It is in input by the most directly affected and most experienced stakeholders that has been denied. As a result, there is a major shadow hanging over the QM and, by extension, the program itself. We, therefore, ask the Board not to move on too discrete

aspects of the proposed QM update. These are the qualitative changes that have the potential to have a major impact on the program. They're not quantitative changes. They are first: The changes to be assessment area data file which are changes in the methodology for calculating common practices and thus report calculated carbon offsets from projects; and second, the associated shift in high versus low site class designations for certain projects. These critical changes affect components in the establishment of common practice levels for all IFM projects. They involve complex and subjective decisions that go beyond the purely quantitative arena. This raises another item -- if I may just take a little of Bob's time. The changes could affect IFM projects in the pipeline and those already certified. That frankly could cause chaos. It's imperative that my clients investments in these projects that were started based on the current protocol be protected somehow. Not sure how. Better to delay the process all together. Put them off to the upcoming methodology reviews scheduled for the fall. I have the details here. I can submit the comments here ways in which we believe that the process guidance of ARB's May 2013 process for the review and approval of compliance offset protocols has not been abided by. That requires any changes to a protocol be adopted in the same process as the adoption of the protocol itself. There was robust public involvement on these two particular issues on the original protocol. It's imperative that we get that same kind of stakeholder process in the update that really could effect how these programs and these projects operate. (BS2)

Comment: Madam Chair and members of the Board, my name is Kevin Townsend. I'm the Chief Commercial Officer for Blue Source. We're to date the largest contributor of forest carbon offsets to ARB's program. I really appreciate the opportunity to speak here in relation to the proposed QM to the forest offset protocol. Our organization would like to thank the Air Resources Board and the staff for all the excellent work they've done on the development of the forest protocol over the years. In general, we strongly support the proposed changes to the QM update. However, there are two important aspects of the update as iterated by Mr. Van Aelstyn that we believe the Board should delay until the upcoming regulator review update after they have been subject to a transparent and participatory stakeholder process. The two changes are again: One, the changes to the assessment area data file and to the associated shift in high versus low site class designation. These are critical importance and are not nearly quantitative in nature.

And unfortunately, as Mr. Van Aelstyn already discussed, the underlying method by which ARB established these changes has not been provided to the public and therefore is not fully understood by the stakeholder community. So as not to reiterate Mr. Van Aelstyn's comments about process guidance, I would simply like to confirm that we were not aware of what changes were being proposed until after the submission was

made to the Board. We were also not provided any of the underlying data until weeks later after we became aware of their existence. To my knowledge, this has not been made publicly available. Without this data, one is unable to assess what specific changes are actually being made to common practice and site classification. Simply put, some stakeholders have received information that others have not. And most haven't had time to vet the new data to determine if it is sufficiently robust. It may well be that stakeholders end up agreeing this is the most important data but the public should be provided were an opportunity to evaluate and it and comment on it. That is after all why ARB has this process so these highly technical and very important offset protocols benefit from the input of those with the most experience and expertise in the relevant fields.

We ask that you, the Board, give the stakeholders the opportunity to provide input on these critically important and potentially damaging changes to the update and request that the Board at this time not move forward with the proposed changes to the assessment area data file and the site class designation system found on page 109 of the proposal. The Board does have the authority to decline to move forward on these two discrete portions of the quantification methodology update while approving the rest, and we strongly encourage you to do so. Thank you for the opportunity to voice our concerns here today. I do appreciate your ongoing work. (BS3)

Comment: Paul Mason, Pacific Forest Trust. I can be fairly brief, because I'm largely going to follow the same list of concerns that were raised earlier by Nico and Kevin about the changes to those couple of pieces of the forest protocol. And our technical staff has looked at them, has a couple of questions. I do feel like there could be more stakeholder discussion around those. And it might be less of an issue if there wasn't also this sort of inherent market instability and uncertainty that Tony Brunello was just referencing as well that I think when you start having some of these changes happening where the very offset developers who are going to be most likely to be bringing these projects to market have concerns about the changes in how it's going to effect to quantification methodologies, that trickles out to land owners and makes people further reluctant to engage in offset development. So to the extent that it's actually possible to take an extra couple of months to have a little more conversation about this, if that's feasible within this process, I think that would be a great solution. Thank you. (PFT1)

> **Response:** Per Resolution 14-31, staff removed the proposed updates to common practice values in the Assessment Area Data File that use the latest data from the U.S. Department of Agriculture Forest Service (Forest Service) Forest Inventory and Analysis (FIA) National Program and Forest Service

adjustments for the classification of high and low site class productivity to align with the site class stratification used in the adjusted common practice values for the U.S. Forest Projects Compliance Offset Protocol and reverted back to the Assessment Area Data File and classification of high and low site classes originally approved by the Board in October 2011. The updates will be included in the updated forestry protocol to be considered by the Board in December 2014, which will ensure additional public comment.

The comments related to market uncertainty are outside of this rulemaking process. Regardless, ARB endeavors to provide information and data to the market in a transparent and coordinated process to ensure all market participants, including offset project developers, have a clear understanding of the program requirements and all receive market related information at the same time to avoid giving one market participant an advantage over another.

E. COMMENTS UNRELATED TO THE PROPOSED AMENDMENTS

E-1. Mandatory Reporting Regulation and AB 32 Cost of Implementation Fee Regulation

E-1.1. Comment: In the October 2013 revision to the Cap-and-Trade regulations, ARB included a definition specific for public wholesale water agency which recognizes that Metropolitan is not an EDU, and requires a new definition that more accurately reflects its actual activities as a public water agency. This definition of public wholesale water agency, which should refer to the Statutes of 1969, instead of the Statutes of 1960, aligns with Metropolitan's inclusion in and use of the NAICS Code for Water Treatment and Distribution in its MRR submittals. Although ARB states that the proposed amendments to the regulations for Cap-and-Trade, MRR, and COI Fee are designed to align definitions, ARB has not included the definition of public wholesale water agency in the MRR and COI Fee regulations. Metropolitan requests ARB to add the definition of public wholesale water agency to both the MRR and COI Fee regulations. (MWD1)

Response: These comments address the Mandatory Reporting Regulation and the AB 32 Cost of Implementation Regulation. These comments are addressed in the 2014 Mandatory Reporting Regulation Final Statement of Reasons and the AB 32 Cost of Implementation Fee Regulation Final Statement of Reasons.

E-1.2. Comment: Additional Reporting Requirements – Primary Refinery Products

Any new data collection and reporting provisions that are not directly related either to allocation of emission allowances or to assessment of fees necessary to cover the cost of implementing AB 32 programs should be eliminated from the regulation. ARB should reconsider the need amend to primary refinery product reporting requirements. The practical effect of the proposed regulation is it will distract entities from the ongoing task of compliance and create an additional reporting burden that should not be done through the MRR regulation.

Incorporating the proposed reporting provisions would create an annual reporting obligation, which may not be necessary to achieve the objectives sought by ARB. More importantly, it would create uncertainty as to whether the data is subject to existing regulatory requirements for measurement accuracy, material misstatement, third party verification, etc. This uncertainty exists despite the fact that it would have no bearing on allowance allocations to the regulated entity.

Recommendation: Remove the Primary Refinery Products Reporting Provisions from the MRR regulation because they are not related to allowances or fees. Any additional data sought by ARB should be clearly justified, the intended use of the data disclosed and the data should be gathered by non-regulatory means, such as a one-time survey. At a minimum, if ARB believes it must require submittal of the data through the regulation, it should be subject to a reasonable sunset provision such as 2 years.

Clarification Needed

WSPA requests clarification on the following technical issues.

- Is § 95103 (h)(1) a reference to 95103 (m)(1)(A)? 95103 (m)(1)(A) [as shown in the proposed regulation] does not appear to exist.
- § 95103 (h)(4): WSPA does not agree with the elimination of best available methods for measuring by-product hydrogen. The by-product hydrogen is not currently incorporated into the CWB calculation and resultant allocations so it should not be subject to the more stringent accuracy requirements.
- § 95103 (l): We do not believe the phrase “may elect to” should be changed to “must”. Since there is no “missing data” provision in the regulation, operators should have the flexibility to include or exclude data at the operator’s discretion. However, if an operator is required to include data that is not within ±5% accuracy, then ARB must confirm that the data will not be subject to a finding of non-conformance.

WSPA needs more clarification in the interpretation of: 1) temporary use of meters in case of equipment failure; 2) ability to exclude CWB data following verification without

risk of non- conformance; and 3) ability to exclude CWB data in advance if included or specified in the company's monitoring plan.

- MRR § 95113 (l)(3), which appears to support the COI regulation, requires that "for transportation fuel products listed in Table MM-1, the operator must report CARBOB as RBOB…". The term "transportation fuel products" does not appear in table MM-1 and is not defined in ARB regulations. Please specify what products in Table MM-1 are referenced by this provision.

  Also, it seems this provision is just trying to identify gasoline-range fuel used in California and blended with ethanol. By definition, this is only CARBOB. Conventional gasolines and CBOBs would only be exported outside of California and the other fuels (i.e., distillates) are not blended with oxygenates, in which case it is not clear why Table MM-1 is referenced at all in this provision. Moreover, § 95113 (l)(3) is even more confusing in light of proposed § 95113 (m)(1). How is (m)(1) different from (l)(3)?

- § 95103 (m)(1) appears to imply that § 95103 (m)(2) and (3) are only applicable to facilities proposing a permanent change to a lower-tier emissions or product data reporting method.

***Recommendation*:** If WSPA's interpretation is correct, we recommend the following changes (in red) to add clarity:

(m)(2): When proposing a permanent change to a lower-tier in a monitoring or calculation method to the Executive Officer, an operator or supplier must indicate why the change in method is being proposed, and include a demonstration of differences in the data estimated under the two methods.

(m)(3): When permitted, a change to a lower-tier in method must be made after the completion of monitoring for a data year...except in the circumstances described in part (m)(4).

- § 95103 (m)(1) is amended to limit the ability of reporting entities to change from a lower tier calculation method to a higher tier calculation method following notice. WSPA believes entities should be able to improve their data monitoring or calculation at any time during the year. Improved data is of value to both the entity and ARB.

Recommendation: WSPA recommends the following changes (in red) to the second sentence in this provision:

Permanent improvements to emissions monitoring or calculation methods do not require approval in advance by the Executive Officer ~~however~~ (WSPA1)

Response: These comments address the Mandatory Reporting Regulation and are addressed in the 2014 Mandatory Reporting Regulation Final Statement of Reasons.

E-1.3. Comment: WSPA has reviewed the proposed changes to the COI regulation and offers the following comments and recommendations.

Consistency in Requirements – Record Retention (§ 95204(i)).

The MRR and COI record retention requirements should be made consistent. § 95204(i) should just reference MRR (§ 95105) which specifies a 10 year retention requirement, but requires submittal within 20 days following a request, instead of 5, and allows the records to be kept out of state. There is no need for the COI regulation to be different, much less more restrictive in these areas.

***Recommendation*:** Modify this section to read, "Entities subject to this sub-article must maintain copies of the information reported pursuant to the applicable sections of the Mandatory Reporting Regulation~~. and provide them to an authorized representative of ARB within five business days upon request. Records must be kept at a location within the State of California for five years~~."

Clarification Needed

WSPA requests clarification on the following technical issues.

- § 95201(c) references B100 and R100 for biodiesel and renewable diesel, respectively. The terms in the MRR have been changed to recognize that these may be B99+ and R99+ in § 95121(d), Table 2. The MRR terms are more accurate and the COI regulation should be further amended to incorporate the MRR terms.
- The emission factors in § 95203(d) are proposed to be removed and instead Table MM-1 is referenced for entities reporting pursuant to § 95204(e) – fuel providers. An averaging technique is mentioned, but it is unclear which fuel grades will be included from Table MM-1, how they link to gasoline and diesel, and how these grades will be averaged. This process needs to be explicitly described so that regulated parties understand how ARB will use the data.
- § 95204(b) specifies that all entities subject to this sub-article are required to certify reports pursuant to the requirements of MRR. ARB should be specific as to which sections in MRR are being incorporated by reference.
- What is the justification for the significant increase in the emission factor and corresponding fee for catalyst coke? We see no basis for the change since the regulation was first adopted. (WSPA1)

Response: These comments address the AB 32 Cost of Implementation Fee Regulation and are addressed in the 2014 AB 32 Cost of Implementation Fee Regulation Final Statement of Reasons.

E-1.4. Comment: Timing of Implementation and Non-Retroactivity

Any amendments related to implementation (effective date) of new regulations covering data collection, calculation, processing, etc. for all three regulations must be attached to a feasible implementation schedule. For example, regulations adopted in 2014 covering annual data collection and reporting requirements should apply to data collected in 2015 and reported to ARB in 2016. This lead time is necessary to allow the regulated entity to implement any changes to data collection and reporting procedures that may be necessary to comply with the new requirements. In many cases, technology must be acquired and adopted, labor resources must be on-boarded, and training must be performed to adequately and competently implement the requirements of these rules. A minimum 1 year implementation period should follow all adopted rules.

Recommendation: For changes in the regulation that affect data collection and reporting for purposes of compliance or record-keeping, such provisions will apply to data collected and reports submitted during the calendar year following the effective date of the regulation. For example, regulatory changes that take effect January 1, 2015 shall apply to data collected in 2015 and reports submitted in 2016.

Rulemaking and Rule Adoption Need for Process Improvements

WSPA continues to be concerned with the last-minute changes proposed for inclusion in MRR regulations and others that appear either in guidance or via ARB instructions to verifiers. Most recently, for example, our members have heard from verifiers that ARB has instructed them to pass along agency-desired changes in natural gas reporting and hydrogen content (of fuels). They have also received direct, but informal requests from ARB to correct liquid CWB throughput volumes for temperature changes. Notwithstanding the concerns that arise when the ARB announces proposed changes through verifiers or other ad-hoc means, these changes must, for consistency and clarity, be raised in a more formal regulatory context.

As a practical matter, a truncated process that involves Board adoption of proposed regulatory changes during the same week the formal 45-day public comment period closes, and then relies on post-hearing changes to address issues identified during the

public comment period, will inevitably lead to confusion and failure to resolve important issues. This is certainly not the process envisioned in the California Administrative Procedures Act (APA). While informal, pre-rulemaking dialogue is helpful to identify and resolve some issues in advance of the formal rulemaking process, it should not be used as a substitute for a meaningful formal rulemaking process. Both ARB and the regulated community need to have adequate time to analyze proposed changes, understand their potential impact on facility operations and identify additional changes that may be necessary to mitigate those impacts. For future rulemakings, WSPA urges ARB to adhere to the formal rulemaking process established by the APA and allow sufficient time to address public comments ***in advance*** of Board adoption rather than through abbreviated post-hearing changes.

In addition, ARB recently indicated that it cannot make substantive post-hearing changes to regulations unless they pertain to the regulatory language proposed in the original 45-day public notice. ARB asserts that such changes would require another round of rulemaking and a separate 45- day public notice and comment period. Yet ARB announced in a September 8, 2014 e-mail that it now seeks to incorporate in the MRR regulation the above noted temperature adjustment for liquid throughputs by way of post-hearing changes and a 15-day public notice and comment period. It is not clear how ARB can consider this change to fall within the scope of the 45-day notice while at the same time rejecting other important technical fixes, such as necessary revisions to holding limits, or revising requirements concerning corporate associations. If ARB can reconcile a change in reporting requirements for liquid throughputs in a post-hearing package with the “sufficiently related” standard in the APA, then other technical changes should also be eligible for the post-hearing 15-day process.

In this regard, WSPA specifically requests ARB include in its post-hearing changes revisions to MRR Section 95103(k)(10) that would allow operators to demonstrate through engineering methods that a product meter is accurate and, if approved by their verifier, data from the meter should not be subject to a finding of non-conformance. WSPA members have expressed to ARB in the past their concerns that a qualified positive verification in this instance is neither appropriate nor acceptable because the classification is, in and of itself, pejorative.

Recommendation**:** ARB should establish a consistent practice of incorporating technical changes to existing regulations through the formal rulemaking process. This would allow needed improvements to be implemented in a more transparent fashion.

ARB should also convene periodic (perhaps every 60-90 days) meetings with the regulated industry, verifiers and interested stakeholders to identify issues that COULD

BE addressed in the future (either in guidance or future rulemaking). Periodic meetings would surface issues at a much earlier stage in the process and reduce the frequency with which last minute guidance or rulemaking is needed. Such an improvement would: 1) assist in building in time to review possible impacts, understand how impacts could be addressed or mitigated, provide input to the ARB and then make needed changes to facilitate implementation of the regulation; and 2) improve communication between and among ARB, stakeholders and qualified verifiers. Finally, these process improvements would reduce the need for the abbreviated regulatory process that has recently been the norm and reduce the tendency to clarify rule ambiguities through guidance. (WSPA1)

> **Response:** These comments focus on proceeds and the MRR rulemaking, and are therefore outside the scope of the proposed regulatory amendments.

E-1.6. Comment: Suppliers of Transportation Fuels and Renewable Diesel

In § 95121(a), ARB is proposing a new requirement to report volumes of renewable diesel supplied. Note that renewable diesel can be blended to diesel product both at the refinery and at the terminal. Reporting (e-GGRT) forms should be modified to allow for reporting volumes from either but prevent the possibility of double-reporting of the volumes and double-obligation under Cap-and-Trade.

Additionally, it is very likely that significant renewable fuel blending may occur upstream of terminal rack locations, particularly for renewable diesel which will be much more likely to be blended at refineries. Because blend percentages will vary depending on operational circumstances and product availability, it will likely be difficult to accurately track the precise movement of those renewable fuel volumes from the refinery (or bulk blending facility) to the point where the blended product is dispensed into a truck at the terminal rack. It would therefore be beneficial to add a paragraph to the § 95121 reporting procedures to clearly allow a reporting party to report the total renewable fuel blended upstream of the terminal rack and subtract it from the total blended product delivered to market.

> ***Recommendation:*** WSPA recommends the following paragraph be added to follow § 95121(d)(1-4).
>
> "(5) Refiners who blend renewable fuels at a refinery or bulk facility and displace blendstock or distillate fuel oil may report the total volume of renewable fuel blended at the refinery or bulk facility and subtract the displaced volume from the blendstock and distillate fuel oil totals reported under paragraphs (1) through (4), provided it can be demonstrated that the

renewable fuel volume was not reported under paragraphs (1) through (4) by the refiner or any other party."

As an illustration of how this might work, a reporting party could blend renewable diesel at a refinery and report the total renewable diesel volume blended for the year. That party would then calculate the total CARB diesel volume delivered to market per § 95121(d)(1-4) and subtract the renewable diesel volume. The remainder would be reported as CARB diesel delivered. Following this reporting, the reporting party's verification auditors would confirm that the reporting party ensured the credit for the renewable diesel volume was not claimed elsewhere, either through clear product transfer documents or contractual agreements. (WSPA1)

Response: These comments address the Mandatory Reporting Regulation and are addressed in the 2014 Mandatory Reporting Regulation Final Statement of Reasons.

E-2. Transportation Fuels

E-2.1. Comment: I was interested if our local Indian tribe will have to follow Cap and Trade rules beginning at first of year. We have a gas station in our area owned by a local Indian tribe. It is named Eagle Feather Trading Post. It's located outside Porterville on HWY 190 in Tulare County. They import their fuel from Nevada. They admit they do not pay any excise or sales tax. They always have some of the cheapest gas in the state. Will they have to start purchasing fuel in the state. Your response will be greatly appreciated. (GF1)

Response: These comments are outside the scope of the proposed regulatory action. Staff will follow-up with the commenter to ensure there is a clear understanding of the regulatory requirements and their applicability.

E-2.2 Comment: I am writing to voice my opposition to the gas tax associated with the cap and trade the will be effective Jan. 1, 2015. This tax will do nothing but drag California back into the recession. You cannot take 2 billion dollars out of the economy and not expect huge economic repercussions. Such as business, closing, layoffs, home foreclosures. This tax will hit every person in the state and especially hurt the working person/family who are just now trying to work their way out of the recession.

This tax will force people to move out of state as they cannot afford to live here or their are no jobs to be had that they can get to support their families.

Their are parts of the state that are still experiencing high unemployment, such as the central valley and this will just knock the legs out from underneath whatever ground the people might have gained back.

The people will pay twice for this tax, first for their own vehicles and then in the form of higher prices for the items they have to have to survive (ie: food)

So please do the people of this state a favor and eliminate this tax as there is absolutely nothing good that come from it in the way of helping the people of Ca. to provide for their families.

Remember every dollar that comes out of the economy in the form of a tax is one less dollar that the people have in their pockets to save, or purchase items to continue to make the economy grow.

So, use common sense and eliminate this tax for the good of every working person and retired person in the state. (RB1)

> **Response:** These comments are outside the scope of the proposed regulatory action. As such, no response is required. However, ARB staff believes it is important to note that the Cap-and-Trade Regulation is not, as the commenter suggests, a tax; nor was it created without proper public process. Rather, it is a regulatory program to reduce greenhouse gas emissions. The underlying legislation, AB 32, was chaptered through the normal legislative process and clearly authorizes the use of market-based measures such as Cap-and-Trade. The Regulation, including the inclusion of transportation fuels, was adopted by ARB in 2011 after a multi-year development process that included dozens of public workshops, hundreds of meetings with stakeholders, extensive consultation with leading economic and regulatory design experts, coordination with other State agencies, briefings and discussions with members of the legislature, and public board hearings.
>
> Transportation fuels are responsible for about 40 percent of the State's greenhouse gas emissions, nearly 80 percent of the emissions of ozone-forming gases, and over 95 percent of diesel particulate matter. Reducing emissions from the transportation sector is critical to achieving our climate change goals as well as meeting ambient air quality standards and reducing localized health impacts. The Cap-and-Trade Program is an essential part of this effort.

Delaying inclusion of fuels would create an uneven playing field for California's businesses. Every major sector of the economy has been complying with the Cap-and-Trade Program for two years, and delaying the inclusion of fuels would place an unfair burden on these sectors to benefit one industry. Further, any delay in implementing a rule that has been on the books since 2011 would create uncertainty across all parts of the Cap-and-Trade system, as businesses would become less confident in the stability of the program and therefore become uncertain about taking actions to reduce their greenhouse gas emissions. The business community needs regulatory certainty to undertake the planning necessary to support the most cost-effective action possible.

E-3. Climate Science

E-3.1. Comment: I hope you find my subject heading a bit humorous because I really don't know what the term means. The fact of the matter of why I am writing you this memo, is that I can't find the real science anywhere, that carbon or carbon dioxide is a pollutant. I feel this element and that compound have be re-defined as such by environmentalists who are propagating the greatest myth today -- global warming caused by man-made pollutants.

Please show me the science. I'm not convinced that California, or any state of the union for that matter, is under threat of pollution. My memory serves me well enough, that when I was just a youngster, growing up in the San Francisco East Bay Area, I could smell the morning smog emanating from the Martinez refineries
exhaust smog from the cars of that era. There was a real noticeable sign of air pollution and that pollution came from obvious sources. Although my lungs did not suffer by it, the smell was obvious and poor air quality was mildly annoying. That was then in the '70's. Since about mid 1980's and forward, the air has cleaned up significantly to the point I don't smell any car exhaust pollution lingering, and the oil refineries still in operation today are not longer belching out any obnoxiousness (to reinforce my recollection of how it was, I recall the jokes my brothers and I made that while driving up to Lake Tahoe while passing the martinez refineries on the way, we would laugh and joke "look, it's the booger factory!". That was the rotten egg-smell like oder which is an odor no longer present today).

Today, long after the EPA's successful achievement in controlling air pollution "all angles", cars have cleaner exhaust, refineries have scrubbers, and the air quality is restored. No signs of pollution can be smelled in the air. Ever.

This is simply my own account of how at one time pollution in water and in air was an issue in this country. With the advent of the EPA, created by President Nixon, this agency has performed its function to a sense of completion.

Unfortunately, the EPA is not stopping, but going beyond the call of duty. How will the EPA effect the production of cheap energy...

... I don't know. I think we need to abolish the EPA. They were needed back in the days of Nixon, but now? (KB1)

> **Response:** These comments are not addressed to any of the amendments proposed in the 15-day package, and are therefore outside the scope of the proposed regulatory action. As such, no response is required. However, California recognized the serious environmental threat of climate change, as well as the widespread scientific consensus regarding climate science and its impacts when it adopted AB 32 and the measures and regulations required by AB 32. ARB staff notes that this recognition was articulated in response to comments similar to this commenter's in the initial Staff Report released at the inception of the Cap-and-Trade Program. See for example response to comments O-18 in the 2010 Staff Report on p. 1087.

E-4. General Cap-and-Trade Regulation

E-4.1. Comment: I'm also here on behalf of the AB 32 Implementation Group to describe some of our disappointment about some of the things that are not covered in the 45-day package that we think need to be addressed before we enter into the major expansion of the program that starts in 2015. We are also another year closer to the third compliance period in cap and trade and the potential reduction in industry assistance that will happen in that period. So we think it's important to deal with some issues soon as we're entering into the next phase here. The first item you're aware of was a report done by the Market Simulation Group where they identified some very significant risk, not insignificant risks, of very high prices in the market under some scenarios. And we suggest that the ARB host a workshop or some kind of public meeting to discuss that report and kick around, debate some of the options for addressing that. There are many different ways it could be addressed, and we think it's important to have the debate on that and get it resolved prior to moving into 2015 or much further than that.

A second item is related to that. And that is the holding limits requirement, particularly how the holding limit impacts the largest compliance entities. It also -- the holding limit at this point we believe reduces liquidity in the market. I believe it's been mentioned also in the market simulation group report. This is also important to be addressed very soon.

And finally, related to the industry assistance factor, a few years ago, ARB engaged Berkeley researchers and others to study the leakage risk issues for industry to inform

how you will go forward in the third compliance period for each sector. So the third compliance period starts the beginning of 2018. So the report should have been done by now. It was started a few years ago. But now the Scoping Plan updates says we won't see that leakage research until 2016. That's a few years before the third compliance period.

We think this is all becoming a very short time for industry planning purposes, and we need -- and the need for them to purchase allowance and plan what their expenses are going to be in the future. We would really like to Board to consider keeping the current industry assistance levels through 2020, or at least we'd like a briefing very soon on the status of that research and when it could be completed perhaps prior to 2016. Thank you very much for the extra time. (CMTA3)

> **Response:** These comments are outside the scope of the proposed amendments and therefore no response is required.

E-4.2. Comment: Hi. I'm Tony Brunello with California Strategies representing CE2 Carbon Capital. Thanks for the time to speak today. I think first starting off is want to commend the staff and everyone who's helped put together the protocols at this time, which we think have been air tight, produced well, and looked at the process. Commend the staff in that process. Second is the time line that was presented earlier, November 3rd, when capped entities have to present their allowances or offsets to ARB. One thing that is significantly disrupting the offset market at the moment is the investigation into the clean harbors issue. And so we assume that that was going to be about 30 days to determine. It's about four months since that's occurred. And what we're asking is to see if there can be more transparency and at least some information on where that's going to go, because it does have significant impacts on the offset market. So I just wanted to highlight that. I know we haven't talked about it very much today. I know there's reasons for that. But I do think that some signals about where that's headed is something that would be very helpful for the offset market at this time. That's it. Thank you.

> **Response:** These comments are outside the scope of the proposed amendments and therefore no response is required. Regardless, ARB has since issued a preliminary determination on the ODS investigation and is currently drafting the final determination to share with stakeholders.

V. SUMMARY OF COMMENTS MADE DURING THE 15-DAY COMMENT PERIOD

Chapter V of this FSOR contains all comments submitted during the 15-day comment period for the proposed amendments. The 15-day comment period commenced on

October 2, 2014 and ended on October 17, 2014. Due to technical difficulties at ARB on October 17, 2014, one 15-day comment was delayed and received October 20, 2014. That comment is included in the regulatory documents and considered submitted during the 15-day comment period.

ARB received 14 comments on the proposed amendments during the 15-day comment period. Similar to Chapter IV of this FSOR, comments are categorized into one of 4 sections below, and are grouped for response wherever possible.

Table V-1 below lists commenters that submitted oral and written comments on the proposed amendments during the 15-day comment period, identifies the date and form of their comments, and shows the abbreviation assigned to each.

A. LIST OF COMMENTERS

Abbreviation	Commenter
AMA2	Patrick Wood, Ag Methane Advisors Written Testimony:10/17/2014
BP1	Ralph Moran, British Petroleum Written Testimony: 10/16/2014
CCEEB2	Gerald Secundy, California Council for Environmental and Economic Balance Written Testimony: 10/17/14
CH1	Phillip Retallick, Clean Harbors Environmental Services, Inc. Written Testimony 10/20/2014
CHEV3	Michael Rubio, Chevron Written Testimony: 10/17/2014
ECC1	Nico Van Aelstyn, Beverage and Diamond (for Environmental Credit Corp.) Written Testimony: 10/17/2014
EOS2	Todd English, EOS Climate Written Testimony: 10/16/2014
IETA1	Katie Sullivan, International Emissions Trading Association Written Testimony: 10/17/2014
PF2	Melissa Poole, Paramount Farms Written Testimony: 10/10/2014
PH1	Paul Harper, BBW Associates Written Testimony: 10/17/2014
PH2	Paul Harper, BBW Associates Written Testimony: 10/17/2014
PRAX1	Gerald Miller, Praxair Written Testimony: 10/16/2014
TESO1	Miles Heller, Tesoro Written Testimony: 10/17/2014
WSPA3	Cathy Reheis-Boyd, Western States Petroleum Association Written Testimony: 10/172014

B. AUCTION AND TRADING REQUIREMENTS

B-1. Corporate Disclosures

B-1.1. Comment: Paramount supports the proposed amendments to section 95830(c)(l)(H), that would lessen the currently onerous corporate disclosure requirements a…;follows:

When identifying direct corporate associations pursuant to section 95833(d) that are not registered in the Cap-and-Trade Program or in a GHG ETS to which California has linked pursuant to subarticle 12, an entity may opt to limit this identification by disclosing only those unregistered direct corporate associated entities that participate in a market related to the Cap-and-Trade Program in accordance with section 95830(c)(l)(H)(l) .

As we interpret the Proposed Rules, covered entities with direct corporate associations that do not participate in any of the specified activities would not be subject to the corporate disclosure requirements under 95830 or 95833 of the Cap-and-Trade Regulations. Paramount supports the amendment, however we recommend ARB release guidance documents, or further specify through regulatory language, the intent of this section.

We support the change to section 95830(c)(l)(H) as we understand it, which would give covered entities the option to only disclose those direct unregistered corporate associations that are also registered in the Cap- and-Trade Program and/or "trade, sell, or purchase for resale any natural gas, oil, electricity, or greenhouse gas emission instrument, or natural gas, oil, electricity, or greenhouse gas emission instrument derivative or swap on exchanges". These regulatory changes would require that covered entities only disclose information related to a company's organizational structure when those other entities are also engaged in a related market. This change accomplishes the purpose of the regulation as we understand it, namely prevention of market manipulation and protecting the integrity of the California Cap-and-Trade Program, while lessening the currently onerous and unnecessary regulatory burden on registered entities to disclose confidential corporate information.

In addition to the modifications related to the corporate disclosure requirements, Paramount also supports the changes that ARB staff are proposing under section 95830(£)(1), relating to updating registration information. We believe these modifications will significantly reduce the administrative burden that covered entities face when complying with the Cap-and-Trade Program. Specifically, we

support the change allowing entities to update corporate disclosure information pursuant to section 95830(c)(l)(H) within one year of any change, *as* opposed to 30 calendar days, as this will reduce the regulatory burden, while still maintaining transparency in the marketplace. Paramount supports ARB finalizing the Proposed Rules with this proposed amendment. (PF2)

> **Response:** Thank you for your support. Your understanding of the amendments is correct, and ARB will consider issuing additional clarifying guidance as appropriate.

B-1.2. Comment: Tesoro appreciates the progress CARB has made addressing industry's concerns regarding corporate association reporting. We seek two additional clarifications based on the language in the 15-day package.

Tesoro understands that 95830 (c)(1)(H)(1) is created to allow a registered entity to use an alternate reporting method for direct corporate association not registered in Cap-and-Trade and linked ETS programs. Alternative documents include SEC Form 10-K, FERC application, NFA application, Form 40 or 40S filed with CFTC, Part 1A of Form ADV filed with SEC. Other than this alternative all information specified in 96833 (d)(1)-(2) must be reported. Tesoro understands the need to provide the information in 96833 (d)(1)-(2)for all direct and indirect corporate association. However, prior CARB guidance indicated that such information was not necessary for indirect corporate associations not registered in Cap and Trade or linked jurisdiction. This exception is not clear in the revised language. Tesoro proposes not to delete the “an unregistered entity” qualifier for indirect corporate associations in 95833(d). (TESO1)

> **Response:** Thank you for your support. Regarding the requested changes, staff declines to make them because staff believes the modifications proposed in the 15-day package are clear as to which entities must be reported. Registered direct and indirect corporate associations must always be reported; modified section 95830(c)(1)(H) provides additional flexibility in reporting of unregistered direct corporate associations. However, section 95830(c)(1)(H) also clarifies that all entities (regardless of whether they are registered or not) involved in the line of direct or indirect corporate associations between two registered entities, must be disclosed. These modifications reflect the guidance referenced by the commenter. As necessary, ARB staff will develop additional guidance to provide increased clarity on this issue. See also response to 45-day comment B-5.2,

B-1.3. Comment: Secondly, please clarify which entities are referenced in the language below (see question in parenthesis):

Last sentence of 95830 (f) - If changes in information submitted pursuant to section 95830(c)(1)(H) are related to entities (direct, indirect, or both?) which are not registered in the Cap-and-Trade Program or in a GHG ETS to which California has linked pursuant to subarticle 12, and which are not involved in the line of direct or indirect corporate associations between two registered entities, the information must be updated within one year of the change at least annually, instead of within 30 calendar days of the change. (TESO1)

> **Response:** The provision allowing up to one year for reporting of changes applies to reporting of direct corporate associations with unregistered entities. Reporting of direct or indirect corporate associations with unregistered entities must take place within 30 days of a change if the unregistered entity is part of a chain of associations between two registered entities.

B-1.4. Comment: On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we wish to provide you with brief comments on ARB's proposed amendments to the items referenced above. CCEEB is a non-profit, non-partisan association of business, labor, and public leaders, which advances balanced policies for a strong economy and a healthy environment.

As you know, CCEEB has been an active stakeholder in the many rule-making processes conducted by the Air Resources Board (ARB). The ARB released a series of three proposed regulations earlier this year amending: the "California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms"; the "Regulation for the Mandatory Reporting of Greenhouse Gas Emissions"; and, the "Cost of Implementation Fee Regulation."

CCEEB supports the proposed amendments to the "California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms" related to the provisions regarding corporate associations. We appreciate the time and effort ARB staff spent on working with our members to cooperatively achieve supportable harmonization of data reporting requirements. (CCEEB2)

> **Response:** Thank you for your support.

B-1.5. Comment: ARB has proposed changes governing the types of documentation that may be submitted to satisfy disclosure requirements in Sections 95830 and 85833. These modifications build on clarifications provided in the regulatory language

released during ARB's 45-day comment period and include specific information filed with certain government entities, including the US Securities and Exchange Commission (SEC) and the Federal Energy Regulatory Commission (FERC).

IETA supports these changes and appreciates the added clarity and flexibly. However, we also believe that ARB should consider accepting other regulatory filings. For example, some IETA members belong to corporate families subject to securities regulation in Canada rather than by the SEC. These entities (and/or their affiliates) file, under oath, documentation regarding their corporate organization in similar detail to that required by Exhibit 21 of the Form 10-K submitted to the SEC. **We request that ARB expand the acceptable disclosure list to include such filings or, through supportive guidance, indicate that such filings are acceptable to satisfy the disclosure requirements of 95830(c)(1)(H)** – provided these are submitted to a regulatory body and contain materially similar attestations and information regarding corporate affiliations as in the specified filings. (IETA1)

> **Response:** Staff does not agree that the Regulation should be changed to expand the acceptable disclosure list to include documents submitted to foreign regulatory bodies. Expanding the scope of acceptable disclosures outside of the United States would result in a loss of standardization and would increase administrative costs for ARB. The information submitted to foreign regulatory bodies can help inform the disclosure of corporate associations, but cannot be submitted in satisfaction of compliance.

B-1.7. Comment: Corporate Disclosure Requirements. WSPA supports ARB's ongoing work with industry stakeholders to streamline corporate association disclosure requirements. We are particularly appreciative of ARB's action to incorporate in the regulation language from its July 29, 2014 guidance allowing companies to substitute specified information filed with the Securities and Exchange Commission (in particular the Form 10-K list of subsidiaries), the Federal Energy Regulatory Commission and the Commodities and Futures Trading Commission, for the disclosure requirements that otherwise apply to unregistered entities.

ARB's decision to incorporate WSPA's proposed changes to section 95830 (f)(1) will further reduce the administrative burden associated with updating registration information for consultants and advisors. However, we would like confirmation that the proposed regulatory language in this 15-day package continues to exempt entities from reporting indirect corporate associations not registered in the cap and trade program as noted in Guidance issued in July of this year.

As ARB is aware, the industry coalition proposal, dated August 22, 2014, contains a number of important changes to the Cap and Trade regulation which ARB counsel determined are not eligible for inclusion in this 15-day package. One such issue is the regulatory investigation disclosure requirements that must be included in an auction application attestation (section 95912). WSPA appreciates ARB's issuance of guidance on October 10 in response to these concerns by allowing use of best available data for the 5- to 10- year old investigation and to use best available data for corporate affiliates. However, we remain concerned about the overly broad and extremely burdensome nature of the attestation requirement relating to such investigations and the inadequate notice given to registered companies. We also remain concerned about ARB's issuance of guidance on this matter just a few days (10) prior to the deadline for participation in the upcoming auction.

Given the very recent release of this guidance WSPA has not had time to study it in any detail. We urge ARB to take the next step to revise the regulations rather than continue to rely on guidance for the reasons stated above. We understand that it is ARB's position that any such change lies beyond the current scope of rulemaking and ARB will initiate a new Cap and Trade rulemaking in the very near future to address this issue and the other remaining elements of the industry coalition proposal.

We are optimistic that the collaborative dialogue which produced the above noted amendments will continue to bear fruit in the form of further amendments toward a more workable and effective Cap and Trade regulation. We look forward to working with you to incorporate the coalition proposals into new regulatory language in advance of a formal Notice of Proposed Rulemaking. (WSPA3)

> **Response:** Thank you for your support for the modifications made regarding to the disclosure of corporate associations. Comments related to the auction attestation are outside the scope of the proposed regulatory amendments. See also response to 45-day comment B-5.2 and B-6.1.

B-1.8. Comment: Holding Limits Issues Still Unresolved. While we recognize that changes to holding limit requirements is beyond the scope of this 15-day package, the expected inclusion of fuels under the cap will pose even more challenges to market. Thus the need for changes to the current holding limit requirements is even more urgent. WSPA reiterates the importance of accommodating greater flexibility for holding and purchase limits in the next round of amendments to the Cap and Trade regulation. As we noted in our September 15, 2014 comments (as well as in 2011 and 2013), the very low holding and purchase limits in the current regulation constrain the marketplace,

limiting participants' flexibility to comply at the lowest incremental cost, and disproportionately impact entities with large compliance obligations.

WSPA urges that ARB address this issue in early 2015. A blueprint for regulatory changes has already been developed by the Emissions Market Assessment Committee (EMAC). The key EMAC recommendations address scaling of holding and purchase limits to reflect the size of the regulated entity's compliance obligation, and provide increased flexibility and control for the regulated entity with respect to management of compliance accounts. (WSPA3)

> **Response:** These comments are outside the scope of the proposed regulatory amendments.

B-1.9. Comment: Disclosure of Corporate Affiliations – Section 95830(c)(1)(H)1

Chevron strongly supports the Proposed 15 day Amendments to the California Cap-and Trade Regulation Section 95830(c)(1)(H)1 that clarifies acceptable methods for compliance with the corporate affiliation requirements. We specifically support the changes to allow use of publically disclosed corporate affiliate information via SEC (10K), FERC and CFTC as a compliance alternative. Chevron is thankful to ARB for providing guidance on this matter in July 2014 and proposing regulatory changes that add necessary certainty for registrants using this alternative method. We appreciate ARB's overall responsiveness and collaborative exchange of information in addressing this issue. The process of developing this alternative option through a series of meetings between a broad coalition and ARB was exemplary in the open exchange of concerns and ideas by both groups. (CHEV3)

> **Response:** Thank you for your support.

B-1.10. Comment: Auction Application Attestation Disclosure - Section 95912(d)(4)(E) Although not part of this 15 day package, we also wish to express support of ARB's 10/10/14 guidance on regulatory requirements related to submitting an Auction Application Attestation Disclosure, as described in Section 95912(d)(4)(E). Chevron has not had the opportunity to fully analyze the guidance but believes that it goes in the right direction by defining investigation and setting reasonable standards for older data and data from corporate affiliates. Just as ARB moved from guidance to regulation for disclosure of corporate affiliates, we recommend that the auction application attestation disclosure be treated in the same fashion. Regulations are needed to create a stable ongoing registration process that meets ARB's information needs without imposing inadvertent compliance risks.

We understand that it is ARB's position that it could not make these changes because they lie beyond the current scope of rulemaking. We ask therefore that ARB continue to work with the broad coalition to initiate a new Cap and Trade rulemaking in the very near future to address this particular issue. (CHEV3)

> **Response:** As the commenter notes, these comments are outside the scope of the proposed regulatory amendments. See response to 45-day comment B-6.1.

C. ALLOWANCE ALLOCATION

C-1.1. Comment: Praxair, Inc., ("Praxair") provides the following comments on the *October 2, 2014 Fifteen Day Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms* ("October 2nd Amendments"). Praxair was founded in 1907 and became an independent publicly traded company in 1992. Praxair is a supplier of atmospheric gases and coating services business, and is globally recognized for its sustainability efforts (Dow Jones Sustainability World Index in each of the last twelve years, and World CDP Leadership Index for seven consecutive years). In California, Praxair as 1000 employees at 80 locations and five production facilities: two atmospheric, two carbon dioxide ("CO_2"), and one hydrogen. Praxair creates technologies, products and services that support our mission of making our planet more productive. We are committed to improving our customers' environmental performance. And we do that by developing and implementing applications that help customers reduce operating costs, increase process efficiencies and improve their environmental performance.

As discussed below, Praxair requests that the Air Resources Board ("ARB") further evaluate the proposal to remove CO_2 importers from the list of "emissions without a compliance obligation". Even though there are currently only minor CO_2 imports, we believe this will change. As discussed below, new technologies using CO_2 will significantly increase demands for CO_2 in California. Some of these new demands may further California's environmental goals and be responsive to the drought conditions. The ARB should not remove the exemption without further analysis of the future demand of CO_2. The ARB should also consider whether there is a need to maintain consistency with other aspects of the cap-and-trade by allowing a CO_2 importer to reduce its compliance obligation based on exports of CO_2.

DISCUSSION

The ARB proposes to amend the Cap-and-Trade Regulation to remove the compliance obligation exemption for carbon dioxide importers.[21] According to the ARB, the exemption is unnecessary because currently no entities import CO_2 at levels that require reporting.[22] However, the ARB needs to consider the potential for importing CO_2 as a novel, environmental mitigation strategy. Energized fracturing using CO_2 is a proven, effective and clean approach to increase oil and gas production. CO_2 has been used in this application for more than three decades.

Praxair recently launched a new technology called DryFrac™, which is a waterless fracturing technology. DryFrac™ replaces water use in fracturing wells that are in shale and tight sand formations through the use of liquid CO_2. Through Praxair's state-of-the-art technology and extensive carbon dioxide supply chain, Praxair will be able to provide an alternative to water-intensive fracturing.[23] This technology will have numerous environmental benefits when compared to the use of water for fracturing. DryFrac™ will help reduce water usage during California's drought conditions. In addition, Praxair and others are continuing to develop capabilities to capture and recycle CO_2 in this application. Various studies have confirmed the sequestration potential of shale formations.[24] Finally, this new utilization of CO_2 product will create a new market demand for CO_2 as a byproduct that would otherwise be directly emitted as a waste product.

By removing the exemption for CO_2 imports, the ARB may place a barrier on the integration of DryFrac™ or other sustainable technologies that will rely on CO_2 imports as the CO_2 product supply chain adjusts to the new market demand for CO_2 product. Ultimately, Praxair envisions that the CO_2 product supply chain adjusts to the new market demand for CO_2 product. Ultimately, Praxair envisions

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[21] See proposed revisions to 17 Cal. Code Reg. Sec 95852(b)(12), available at: http://www.arb.ca.gov/regact/2014/capandtrade14/capandtrade1415dayattach1.pdf.

[22] ARB Staff presentation at September Board Meeting, Slide 8, available at: http://www.arb.ca.gov/board/books/2014/091814/14-7-5pres.pdf.

[23] Praxair September 18, 2014 Press Release, available at: http://www.praxair.com/-/media/North%20America/US/Documents/News~~20Releases/20%20l%204/Praxair%20Launches%20%20DryFrac%20Waterless%C2%B0/o20Fracturing%20Technology.ashx.

[24] See National Energy Technology Lab, *Interdisciplinary Investigation of CO_2 Sequestration in Depleted Shale Gas Formations* (June 2013), available at: http://www.netl.doe.gov/File%20Library/Research/Coallcarbon%ADstorage/FE0004731.pdf; See also, New Scientist, *Fracking Could Be Combined with Carbon Capture Plans* (August 2012), available at: http://www.newscientist.com/article/dn22232-fi-acking-could-be-combined-with-carbon-capture%ADplans.html#.

that the CO_2 product would be sourced locally/regionally (e.g. within California) to minimize transportation costs. However, it would take time for the market to develop and stabilize and for infrastructure to be implemented. The ARB should therefore not remove the exemption for CO_2 imports.

If the ARB nevertheless removes the CO_2 importer exemption, then the ARB should allow CO_2 importers to reduce their compliance obligation based on the quantity of CO_2 that the company exports. The resulting compliance obligation should be the net of imports vs. exports. This "netting" approach is consistent with the treatment of other industries in the Cap-and-Trade. For example the compliance obligation associated with imported electricity can be reduced by "qualified exports" or through "wheeled" transactions.[25] In addition, the ARB should consider whether CO_2 importers will be subject to more than one emissions obligation if the jurisdiction where the CO_2 is sourced also imposes an emissions reduction obligation. Such double regulation could create significant hurdles to the new sustainable technologies discussed above.

Even though there are currently no reportable imports of CO_2 into California, the ARB should more fully analyze the potential ramifications of removing the exemption for CO_2 importers. Praxair would be pleased to work with staff on this issue and provide additional information on the potential environmental benefits associated with CO_2 imports. Praxair appreciates the opportunity to submit these comments. (PRAX1)

> **Response:** No changes were made in the 15-day amendments to any of the regulatory provisions to which this comment refers. Therefore this comment in its entirety is outside of the scope of the 15-day modifications, and does not require a response. As stated in the rationale for changes to Section 95852.2 presented in the Staff Report, these edits were made to conform to section 95852. Imported CO_2 was always meant to have a compliance obligation, because imported CO_2 is assumed to be emitted within the State. The compliance obligation for imported CO_2 is comparable to the compliance obligation for transportation fuels imported into the State.[26]

D. COMPLIANCE OFFSET PROTOCOLS

[25] 17 Cal. Code Reg. Sec. 95852(b)(1)(B).
[26] Staff Report: Initial Statement of Reasons, page 36, available at: http://www.arb.ca.gov/regact/2014/capandtrade14/capandtrade14isor.pdf.

D-1. Livestock Project Protocol

D-1.1. Comment: Section 3.4.1. (pg. 12): If legal requirements change in during a projects crediting period, will it be able to continue to generate credits during the remainder of the crediting period, given that the project was initiated before the legal requirements took affect? (AMA2)

> **Response:** Since no modifications were proposed to this section during the 15-day comment period, this comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation and no response is required. However, the crediting period was created to give project operators some assurance of a return on their investment. If legal requirements change during a project's crediting period, the project will continue to be able to generate offset credits for the remainder of the crediting period, assuming the project met the requirements of subchapter 3.4.1 at the beginning of the crediting period.

D-1.2. Comment: Eq. 5.8 (pg. 26): The equation was modified to account for multiple effluent ponds. It is common for projects to use the anaerobic lagoons present before installation of the BCS to store post digestion effluent. It is not necessary to make any physical changes to the structure of the lagoons, but in the protocol the lagoons would now be called effluent ponds. The most common arrangement of these ponds is a multi-stage system. Manure flows into one, when that is full it flows into the next, and so on in series for 2, 3 or sometimes 4 separate ponds/lagoons. However the change in Eq. 5.8 presents substantial questions particularly regarding the quantity of VS in each pond. There is no practical way to measure the quantity of VS in each pond. In addition it varies throughout the year based on the volume of manure in each pond. Since all ponds are > 1 meter in depth and function the same way with the same MCF values it seems they can be considered one pond, and it is possible to calculate the VS to that one pond based on the digester effluent. This is how the protocol has operated until this proposed change to Eq. 5.8. Guidance on whether this method can continue and how project developers should estimate the VS in each pond would be helpful. (AMA2)

> **Response:** There are too many possible combinations of effluent treatment activities to have a unique equation for each one. Equation 5.8 was modified to account for a wide-range of effluent pond arrangements. Not all effluent ponds are designed as multi-stage systems. The generalized equation provided in the protocol provides a conservative estimate of the emissions from effluent treatment under a wide variety of circumstances. Project operators must do their best to provide verifiable estimates of VS values for additional effluent ponds.

ARB staff believes the current proposed change adequately represent most situations and OPOs/APDs are free to contact ARB for guidance on their unique situation.

D-1.3 Comment: Section 6.2(b), (pg. 34), states, “The Offset Project Operator or, if applicable, Authorized Project Designee must maintain documentation of efforts to calibrate the equipment within 30 days of the failed field check or a biogas destruction efficiency of zero must be assigned to all destruction devices monitored by the equipment from date of discovery until calibration.” Clarification about what efforts are required to calibrate the equipment within 30 days would be helpful. Does this mean that as long as they start the process of getting the equipment calibrated within 30 days, even if the calibration doesn’t happen within 30 days that they do not need to take a BDE of zero? This would be helpful given that sometimes there is a long wait for a project to obtain a spare meter and then wait again for the manufacturer to perform the calibration. These delays are frequently beyond the control of the project. In addition, it seems that recording flow with known documented drift which can be accounted for per the protocol is better than having no meter present to record the flow. Depending on how this section is implemented farms may be forced to send meters to the manufacturer with no spare in place. (AMA2)

Response: Since no modifications were proposed to this section during the 15-day comment period, this comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation so no response is required. However, an operator must make a good faith effort to obtain calibration of the failed device within 30 day. ARB recognizes that calibration may not always be possible within 30 days so there is no requirement for calibration, only that the operator document all efforts to obtain calibration within 30 days. If no documented effort is taken within 30 days then a BDE of zero will be assigned to the destruction device(s) monitored by the equipment. Therefore, ARB staff believes the current proposed language is adequate.

D-1.4. Comment: Section 5.2(k), (pg. 24) states, “The number of days for each uncontrolled venting (tk) must date back to the last field check date without any uncontrolled venting events.” It is unclear what this means and how it fits into the calculations, and why it is necessary. If the issue is documenting when a venting event began, then operational data should suffice. Requiring a venting event to date back to the last successful field check might include several months or more of project operations. If the start of the venting event can be documented then such a drastic and penalizing measure should not be necessary. (AMA2)

Response: Since no modifications were proposed to this section during the 15-day comment period, this comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation so no response is required. However, the language in Section 5.2(k) ensures that t_k accurately reflects the number of days for each uncontrolled venting event from the BCS system. The last field check date refers to a date that has verifiable evidence that a venting event was not occurring and can be a combination of inspection, monitoring and measurement. Therefore, ARB staff believes the current proposed language is adequate.

D-1.5. Comment: Section 5.2(o), (pg. 25). The statement is redundant, defining a term with itself resulting in confusion. Suggest revising. (AMA2)

Response: Since no modifications were proposed to this section during the 15-day comment period, this comment is outside of the scope of the proposed 15-dayamendments to the Cap-and-Trade Regulation so no response is required. However, the language in Section 5.2(o) specifies that RD_{rp} represents all the days in the reporting period and cannot be a subset of the days in the reporting period. Therefore, ARB staff believes the current proposed language is adequate.

D-1.6. Comment: Section 6.4(d), (pg. 34). The section states, "If a portable instrument is used (such as a handheld methane analyzer), the portable instrument must be calibrated per manufacturer's specifications or at least once during each reporting period, ***whichever is more frequent, by the manufacturer or at an ISO 17025 certified laboratory."*** The final two clauses of the sentence appear to not belong and may be a type. Suggest revising. (AMA2)

Response: ARB staff believes the commenter meant to reference section 6.2(d), as there is no section 6.4(d). Since no modifications were proposed to section 6.2(d) during the 15-day comment period, this comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation so no response is required. However, the language 6.2(d) specifies that portable instruments must be calibrated on a frequency required by the manufacture or once each reporting period whichever is shorter. The calibration must be performed by the manufacturer or an ISO certified laboratory. ARB staff believes the current proposed language is adequate.

D-1.7. Comment: Section 6.4, Table 6.1, Parameter: $VS_{,EP}$ (pg. 40). The table says this is a calculated value. However per the protocol in Eq. 5.8 the value is 30% therefore it should be a reference value not calculated. (AMA2)

Response: Since no modifications were proposed to this section of the protocol referenced in the comment during the 15-day comment period, this comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation so no response is required. However, VS_{ep} is calculated according to equation 5.8 with the 30% default value representing the amount of VS that exits the digester as a percentage of the VS entering the digester as one parameter in the VS_{ep} equation. ARB staff believes the current proposed language is adequate.

D-1.8. Comment: Appendix B (pg.59-61): Regarding Table B.1, it is common for data gaps to be near each other, and for the period before and after the gap to overlap. For example an electrical short can cause sporadic data gaps over a period of time. Assume there is a gap on June 26, 2015 from 1:00 to 13:00, then there is a period of good quality data until 16:00, but a second gap from 16:00 to 23:00. The first gap lasted 13 hours, the second gap lasted 7 hours. Both can be filled using the 90% lower or upper confidence limit of the 24 hours prior to and after the outage, except that the 24 hours periods overlap. Clarification about how to handle this common situation would be helpful. One suggestion is to consider both gaps as one gap, which is 23 hours in length. (AMA2)

Response: ARB staff specifically addressed this issue in its 45-day response to comment D-1.3.

D-1.9. Comment: Section 6.2(b) (pg. 32). Assessing calibration drift after cleaning of a biogas flow meter will result in a measure of drift that is not necessarily representative of the drift recorded by the meter before the cleaning, and may result in un-conservative crediting. Frequently, the probes on flow meters accumulate H2S build-up. This can impact the accuracy of biogas flow readings and cause under or over reporting of biogas flow. A meter with calibration accuracy tested before cleaning may be found to have >5% drift, but after cleaning it might have <5% drift. We recommend that the protocol specify assessing calibration drift before cleaning to determine an accurate assessment of the calibration accuracy, which can be applied to biogas flow data as necessary following the protocol. If a meter is found to have >5% drift it can be cleaned and then the calibration accuracy re-tested. If after cleaning it continues to have drift >5% it should be sent to the manufacturer for a full calibration, however if after cleaning it has <5% drift then it can be considered a successful field check, but the pre-cleaning drift can still be applied to biogas flow data resulting in conservative crediting. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.4.

D-1.10. Comment: Appendix A, Table A.4 (p.48-29). Suggest referencing the most updated version of the US EPA annual GHG inventory, so that the TAM and VS values can be updated more frequently rather than fixed by specifying values in these tables which causes them to become outdated as COP livestock protocol updates cannot happen frequently. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.5.

D-1.11. Comment: Section 6.2(c) (pg. 34). Some biogas flow meter manufacturers report calibration accuracy in milliwatts, and state that 1 milliwatt equals 1% drift. However the calibration zero on a certain meter might be 121 mW or 82 mW so arithmetically 1% does not equal 1mW, but the manufacturer's manual (specification) says that 1mW=1%. Please clarify this section and address how this should be handled. It is not clear whether the arithmetic or the manufacturer's specification should take precedent here. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.6.

D-1.12. Comment: Section 6.2(c)(1) (pg. 34). Why is "independently for each meter" mentioned here? Calibration accuracy is inherently independent for each meter. In addition, total emissions reductions cannot be calculated independently for each meter as the total biogas flow from all devices (usually each with a separate meter), and the weighted BDE needs to be calculated to get total emissions reductions. Suggest removing "independently for each meter" for clarity. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.7.

D-1.13. Comment: Section 6.2(c)(1)(b) (pg. 34). Frequently, when a meter is sent to the manufacturer for a full calibration the % drift is different at different levels of biogas flow. E.g. at 10 SCFM the drift may be 10% (1 SCFM), at 300 SCFM the drift may be 3% (3 SCFM) and at 1000 SCFM the drift may be 1% (10 SCFM). For an engine meter that commonly operates at > several hundred SCFM using the 10% drift (100 SCFM), which is not representative of the operations, has a substantial adverse impact. It would be helpful if this requirement were revised to reflect the drift that was representative of the flow during the period under consideration. Perhaps like for the

data substitution Appendix some sort of confidence interval could be used to assess the predominant flow during the period under consideration. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.8.

D-1.14. Comment: Section 6.1(e) (pg. 33); Section 6.1(f) (pg. 30); Section 6.1(g) (pg. 30). Devices that are equipped with valves to prevent leakage should be specifically mentioned here as an exception. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.9.

D-1.15. Comment: Section 6.1(d) (pg. 33).

a. Further specification about the hourly operational data requirement here would be helpful, particularly for projects that have more frequent than hourly flow data (e.g. 15 min). E.g. if there is kWh from an engine at 12:00, does this mean that flow at 11:15 is considered operational? What about flow at 12:45? What about both since they are both within 1 hour of 12:00?

b. Section 6.1(d) (pg. 33). Frequently one device may not be operational but multiple other devices are operational. The statement that, “No registry offset credits or ARB offset credits will be issued for any time period during which the destruction device is not operational” suggests that a period of zero crediting should be claimed, however it seems more appropriate to apply a zero BDE to the particular device that is not operational, so that project emissions are increased (and crediting related to that device does not happen), but so that the project as a whole and other devices with confirmed operational destruction can still be credited. Clarification of this common issue would be helpful.

c. Section 6.1(d)(1) (pg. 33). Thank you for acknowledging that many devices are equipped with valves that prevent gas from escaping when the device is not operational. Further clarification about the data that CARB would want reviewed during the verification would be helpful. The current language leaves open many questions about how to verify that a valve inside an engine is present and operational without dismantling the engine. In addition, flares often have valves and weights so that gas cannot escape until sufficient pressure has built up. But these can corrode, and confirming that they are operational would require constant inspection of a device that is 20+ feet in the air and frequently on fire, which is not practical. (AMA2)

Response: ARB staff specifically addressed these issues in its response to 45-day comments D-1.10, D1-11, and D-1.31.

D-1.16. Comment: Section 6.1(a) (pg. 32). Often manufacturer specifications are not clear, don't specifically address issues considered in the Protocol or don't meet CARB's published/unpublished standards. Guidance about how to handle this situation would be helpful. E.g. Which takes precedent? CARB's interpretation or manufacturer specification? (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.30.

D-1.17. Comment: Section 6.2(a)(3) (pg. 34). Please clarify whether the as found/as left calibration accuracy with the percent drift must be documented when a biogas flow meter is sent to a manufacturer for a full calibration other than a field check within 2 months of the end of the reporting period. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.12.

D-1.18. Comment: Section 5.1(f) (pg. 19); Section 5.1(m) (pg. 21); Section 5.2(q) (pg. 26); Section 5.2(w) (pg. 27). Regarding the availability of site-specific data to document the fraction of volatile solids directed to each different management on a farm, in many cases operator estimates are the only way to determine a fraction. For example if a farm has 5 barns the operator may have an estimate of the number of cows in each barn on average, but the actual number changes daily. Then from each barn the majority of manure may be sent to the BCS (or lagoon in baseline), but there may be a couple loads of manure each day that are stacked. It is impossible to know exactly what proportion of manure these couple loads represent, and exactly how many cows are in each barn each day, there is simply too much variability. Measuring and verifying data for these parameters is not practical for implementation of the Protocol. However, conservative estimates can be made. These are often based on operator experience and interviews. **Specific mention of conservative estimates based on operator experience and interviews as acceptable site-specific data in these sections would be helpful to OPOs and verifiers in implementing the Protocol. Other data beyond operator experience/interview may not be available, and Table A.9 does not capture all potential situations.** (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.14.

D-1.19. Comment: Section 5.2(K) (pg. 224). Regarding venting events in many cases there is a one- time event when the digester is cleaned out and manure is bypassed directly to the lagoon until the digester can be filled again, therefore the average flow from the digester and number of days is not relevant. In other cases there may not be a complete venting of the digester, but there may be venting from one or more pipes which would have gone to a particular device. In this situation the average flow from the digester and number of days is relevant. Equation 5.6 doesn't seem to be able to handle these situations, and seems to require accounting for project emissions that would not have happened in these common scenarios. We suggest a slight revision to the syntax of the equation to allow for these common either/or situations. (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.27.

D-1.20. Comment: Section 6.2(d) (pg. 34). Frequently a digester vendor or project developer will have one or more portable methane analyzer's that are used to take quarterly methane concentration samples from multiple projects. Therefore it is problematic to have the frequency of the instruments calibration tied to each projects reporting period as the projects are frequently on different schedules. Instead like in the previous version of the protocol it would be very helpful to have the frequency of calibration be related to the meter based on manufacturer specifications or annually at the longest. This is especially significant because missing one quarterly methane concentration sample has a very large impact on crediting since it impacts and entire quarter of a year. Here is an example: Project A has a reporting period from 1.1.15 to 12.31.15. Project B has a reporting period from 7.1.15 to 6.30.16. They share a portable methane analyzer that the manufacturer recommends be calibrated annually. The analyzer comes into service on 1.15.15 and is used quarterly by both projects throughout their reporting periods. The analyzer gets calibrated on 1.15.16 (one year) per manufacturer specification. However this is outside the first reporting period for Project A, which loses credits. If the calibration frequency were tied to the meter not each project, the issue is avoided. (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.38.

D-1.21. Comment: Section 5.2(t) (pg. 26). Guidance on acceptable site-specific data for average live weight would be helpful. (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.15.

D-1.22. Comment: Section 5.2(j) (pg. 24). Please clarify how digestate within the vessel should be considered when calculating maximum biogas storage volume. Should only the headspace in the digester be considered for a one time venting event? (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.16.

D-1.23. Comment: Section 6.4, Table 6.1, Parameter: $MS_{L,BCS}$ (pg. 40). Farms usually do not maintain operational records of the % of manure to different management systems, and this often is not feasible. This number is usually determined based on system designs/layout that is fixed over time until there is a major structural change. Suggest revising. Consistency with the other MS parameters in the table would be helpful. (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.17.

D-1.24. Comment: Section 5.2(e) (pg. 23); Section 5.3(d) (pg. 29). Further clarification about how to obtain written permission from the Executive Officer regarding utilization of site- specific BDE would be helpful. In addition the requirement for the accuracy of the default BDEs is not clear. It seems this could mean two things; 1) that the site specific BDE must be more efficient than the default value, or 2) that the uncertainty associated with the site-specific BDE is less than the uncertainty associated with the default BDE. If the intent is #1 then is seems CARB would want site-specific values to be less conservative that the defaults rather than more conservative. If the intent is #2) then please publish the uncertainty associated with each default BDE in Appendix A.6 so there is a way to determine if a site-specific value is more accurate. (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.26.

D-1.25. Comment: Section 5.4(d) (pg. 30); Section 5.4(g) (pg. 31). Often purchase receipts and utility records don't distinguish between fossil fuels consumed for the project and those used elsewhere on the farm. For example there might be only one receipt for diesel purchases on the farm during a given month including all tractors and that used to heat a digester. Guidance about how to handle this situation would be helpful. (AMA2)

> **Response:** ARB staff specifically addressed this issue in its response to 45-day comment D-1.18.

D-1.26. Comment: Appendix A, Table A.10 (pg. 59).

a. The table suggests that a flush system is most common for an anaerobic lagoon on farms with >200 cows. However, in general, flush systems are only practical in areas that don't frequently freeze in winter. In cold climates a flush system would usually turn a dairy barn into a skating rink, so "scrape systems" that feed to an anaerobic lagoon are common. Suggest revising.

b. How was the 10% solid storage value derived for the MSL parameter? Greenfield projects are often the most efficient as the design can start from scratch rather than use a layout that has evolved over years. Therefore 100% of manure is often sent to the anaerobic lagoon. For new large farms with >200 cows, the manure from the lagoon is often removed during many months of the year given nutrient management regulations, the ability for soil to absorb nutrients and the time limitations of spreading a years worth of manure in a short period of time. In addition it is very rare that a lagoon is completely emptied including removal of all sludge. (AMA2)

Response: ARB staff specifically addressed this issue in its response to 45-day comment D-1.19.

D-2. Ozone Depleting Substances Protocol

D-2.1. Comment: BP shares the view that a robust and liquid market for offsets is critical in order to provide cost containment for the cap and trade program. We also share CARB's objective that all offsets are real and verifiable. We believe there are significant opportunities to improve the regulatory language that deals with Requirements for Offsets Projects (Section 95973), Invalidation of Offset Credits (Section 95985) and the related sections of the offset protocols – specifically the ODS protocol. Taking advantage of these opportunities would bring clarity and consistency to the regulation – and would focus CARB's resources on material risks concerning offset validation.

The language contained in the Cap and Trade Regulation dated August 2014 clarifies the compliance requirements for offset projects (Section 95973) making it clear that the project must comply with the relevant health, safety and environmental regulations that "directly apply to the offset project". The changes also made it clear that any protocol specific compliance requirements must be followed, such as those in the ODS protocol which extends compliance to the destruction facility.

However, the provisions relating to invalidation of CARB offset credits (Section 95985) remain inconsistent with the requirements above and suggests <u>any</u> non-compliance with relevant health, safety and environmental laws could lead to invalidation. The

inconsistency between Section 95973 where compliance is directly related to the project activity and Section 95985 where compliance is not limited to the project activity will continue to make it difficult for developers to interpret and rely on the regulations and for CARB to provide consistent application of the rules.

BP understands the intention of CARB is to ensure compliance of the offset project during the reporting period for all project types. We also appreciate the issues associated with large waste disposal facilities that may be destroying ODS as part of their waste stream, hence the Early Action offset protocols and the first release of the Compliance Protocol have extended the compliance for ODS projects to the entire facility. We understand the need for CARB to protect the integrity of the program and the environmental integrity of the offset credits. As such, we offer the following recommended amendments to the regulation.

For reference, we include the existing regulatory language (dated August 2014) for Section 95973:

Regulation Section 95973: Requirements for Offset Projects Using ARB Compliance Protocols

> *(b) Local, Regional, and National Regulatory and Environmental Impact Assessment Requirements. An Offset Project Operator or Authorized Project Designee must fulfill all local, regional, and national requirements on environmental impact assessments that apply based on the offset project location. In addition, an offset project must also fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location and that directly apply to the offset project, including as specified in a Compliance Offset Protocol. The project is out of regulatory compliance if the project activities were subject to enforcement action by a regulatory oversight body during the Reporting Period. An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire Reporting Period if the offset project is not in compliance with regulatory requirements directly applicable to the offset project during the Reporting Period.*

The text shown below is the proposed Cap and Trade Regulation and ODS Protocol in the 15-day package with BP's recommended amendments included. Proposed additions are underlined and deletions shown as strikethrough.

Regulation Section 95985: Invalidation of ARB Offset Credits

(c)(2) The offset project activity and implementation of the offset project was not in accordance with ~~all~~ local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB offset credit was issued as required under 95973(b); or

Compliance Offset Protocol Ozone Depleting Substances Projects Section 3.8: Regulatory Compliance

(a) An offset project must meet the regulatory compliance requirements set forth in section 95973(b) of the Regulation.

(b) The regulatory compliance requirements that directly apply to the project under 95973(b) apply to the ~~include for a project apply to the~~ collection, recovery, storage, transportation, mixing, and destruction of ODS, including disposal of the associated post-destruction waste products. ~~The regulatory compliance requirements extend to the destruction facility during the time ODS destruction occurs.~~

(c) The regulatory compliance requirements in relation to 95973(b) and 95985(c)(2) extend to the destruction facility in relation to significant non-compliance with local, state, or national environmental and health and safety regulations (as defined by the relevant agency) during the Reporting Period.

The rationale for the changes to Section 95985 is to ensure that as a starting point, for all project types, the compliance requirements are consistent between the requirements for offset projects (Section 95973) and invalidation (Section 95985). This would clarify an important point that Section 95973 covers the entire project including invalidation rather than invalidation being a separate part of the process. This results in invalidation provisions (Section 95985) applying to compliance requirements that are directly applicable to a project activity, unless the protocol extends the compliance scope.

The rationale for the changes to the ODS protocol is to make a clear distinction between the two types of violations:

1. A non-compliance that is directly applicable to the ODS destruction project that occurred during the Reporting Period and either was known prior to issuance (captured under Section 95973(b)) or was determined after

issuance (captured under Section 95985(c)(2))

2. A non-compliance that is **not** directly applicable to the ODS destruction project that occurred during the Reporting Period and either was known prior to issuance (captured under Section 95973(b)) or was determined after issuance (captured under Section 95985(c)(2))

Where there is a violation that is **not** directly applicable to the project, there should be some form of qualifier to ensure that minor violations that do not affect the environmental integrity of the credits or the integrity of the emission reductions do not lead to invalidation of credits.

The proposed amendments would provide an improved framework for managing compliance across all project types while maintaining the extended compliance scope for ODS. A minor non-conformance at an ODS destruction facility that is not applicable to the project would not trigger the invalidation process, providing a more efficient process for CARB with a focus on significant violations.

In order for offsets to provide their full cost containment benefit, it is vital that the rules around offset requirements and invalidation strike the proper balance between clarity, consistency, reasonableness and the ability to ensure that offsets are real and verifiable. Offset project developers, compliance entities and the market must have a clear understanding of the requirements for offset projects and be able to clearly understand the process around invalidation investigations and risk. Moreover, the cap and trade program would benefit from a regulation that allows regulators to focus on significant and material risks and that more clearly defines the process for offset invalidation investigations. We believe incorporation of the proposed amendments contained in this letter would provide valuable clarity, consistency and focus to the regulation in this regard. (BP1)

> **Response:** This comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation. Thus, no response is required. As the investigation is ongoing, ARB declines to comment until that process is complete. Staff will work with stakeholders to consider modifications and clarifications to the invalidation process and criteria as part of a future rule making.

D-2.2. Comment: Section 3.8 Regulatory Compliance Proposed Amendment … Comment:

The regulatory compliance requirements for a project apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS, <u>including disposal of the</u>

associated post-destruction waste products. The regulatory compliance requirements extend to the destruction facility during the time the destruction occurs.

The proposed language would only partially correct the prevailing uncertainty regarding the definition of regulatory compliance for an offset project. This uncertainty has been at the center of ARB's investigation of the offset credits associated with the Clean Harbors facility. If ARB's intent is to minimize or eliminate the uncertainty, which we have been advocating for over 2 years, we suggest the following revisions (in bold) for clarity and for consistency with related regulatory language:

The regulatory compliance requirements for a project apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS, including disposal of the ~~associated~~ post-destruction waste products *that are directly applicable to the ODS destruction project activities.* The regulatory compliance requirements *in this section apply* **to the incinerator and any other unit or operation at the destruction facility, directly related to the destruction activities,** during the time ODS destruction occurs. (EOS2)

> **Response:** The proper disposal of post-destruction waste products was previously included under the broad category of "destruction." This 15-day amendment clarifies that intent. ARB staff does not believe the modifications proposed by the commenter provide further clarification and appear to limit regulatory compliance to the incinerator at the destruction facility. The clear intent of this section includes collection, recovery, storage, transport, mixing and waste disposal operations as well. Therefore, ARB staff believes the current proposed language is adequate.

D-2.3. Comment: Appendix D. ODS Mass and Composition from Refrigerant and Appliance Foam Projects – Quantification Methodology … Comment:

Section (a) (4)

Each single compartment, cylinder, drum, or any other eligible ODS container that has been identified and destined for destruction must be weighed separately, sampled separately, and treated as a separate destruction event.

Section (a) (5)

Recovery, collection, and aggregation activities may occur until the container has been identified and destined for destruction. After the ODS container has been identified and destined for destruction, ODS must not be added or removed, except for the purpose of sampling and analysis.

Identifying when a container is destined for destruction is ambiguous. We believe it is important for offset project operators and verifiers to clarify more precisely when a container is "identified and destined" for destruction. We suggest defining the point at which a container is destined for destruction as the time when a sample is taken at the destruction facility from the container for analysis in preparation for destruction as part of the ODS destruction project. Up to that point, there are many scenarios where a container may or may not be destined for destruction. (EOS2)

> **Response:** This provision was modified to account for facilities that are both aggregators and destruction facilities to prevent them from having to sample and weigh each incoming ODS container prior to identifying them for destruction. Appendix D(a)(5) clarifies that the container can be identified for destruction after recovery, collection, and aggregation activities have occurred but prior to sampling for composition analysis. This should provide a fairly narrow, well-defined window during which the container is identified for destruction.

D-2.3. Comment: While ECC firmly agrees with ARB that offset projects must comply with all environmental laws and regulations directly applicable to the project activities, ECC opposes the proposed modification of the ODS Protocol to extend the "regulatory compliance" requirements beyond the scope of the project activity to the disposal of post-ODS destruction waste products….

As discussed below, these proposed changes are inconsistent with the Cap and Trade Regulation ("CTR") and the California Administrative Procedure Act ("APA"), and will hurt the viability of future ODS projects. ECC urges the Executive Officer and the Board not to adopt the proposed 15-day changes to section 3.8 of the ODS Protocol.

Extending the Regulatory Compliance Requirement to the Disposal of Post- Destruction Waste Products is Contrary to the Regulation and the Goals of AB 32.

Section 95973(b) of the CTR governs regulatory compliance of offset projects, and provides as follows:

> Local, Regional, and National Regulatory and Environmental Impact Assessment Requirements. An Offset Project Operator or Authorized Project Designee must fulfill all local, regional, and national requirements on environmental impact assessments that apply based on the offset project location. In addition, an offset project must also fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location *and that directly apply to the offset project*, including

> as specified in a Compliance Offset Protocol. The project is out of regulatory compliance if the project activities were subject to enforcement action by a regulatory oversight body during the Reporting Period. An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire Reporting Period *if the offset project is not in compliance with regulatory requirements directly applicable to the offset project during the Reporting Period.*

17 C.C.R. § 95973(b) (emphasis added). Section 95973(b), therefore clearly limits the requirement for regulatory compliance of offset projects to those environmental, health and safety requirements that "*directly apply*" to the project. In addition, Section § 95858(c)(2) of the CTR provides that for an invalidation of offset credits due to regulatory noncompliance, ARB must find that, "The offset project activity *and* implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB offset credit was issued." (Emphasis added.) How the larger facility handles its waste streams simply has no bearing on the implementation of the offset project, which is the ODS destruction activity.

As ARB recently noted in its Preliminary Determination on its investigation of offset credits issued for destruction of ODS at the Clean Harbors facility, "[t]he Cap-and-Trade Regulation and the ODS destruction Protocol are complementary regulatory documents that must be read in harmony with each other." Preliminary Determination at 3 (Oct. 8, 2014). The proposed amendment to section 3.8 of the ODS protocol, which extends the regulatory compliance requirement to the "disposal of the associated post-destruction waste products" is not harmonious with nor reconcilable with CTR sections 95873(b) and 95858(c)(2).

At the Clean Harbors facility in El Dorado, Arkansas, as well as other ODS destruction facilities, wastes from the destruction of ODS are mixed with wastes from the destruction of other materials. Isolation of ODS wastes would surely increase the cost of ODS projects, and may be technically or practically unfeasible. ODS offset project operators do not control the management of waste streams by these larger facilities. Moreover, ODS offset project operators have no way of assuring that all other aspects of the destruction facility are fully compliant with all applicable environmental, health and safety requirements after the time of destruction. If adopted, the proposed amendments to section 3.8 of the ODS Protocol thus would threaten the viability of all ODS destruction projects, which would not serve the objectives of AB 32.

ARB's Proposed Changes to Section 3.8 of the ODS Protocol are not Appropriate for a 15-Day Rulemaking.

The APA provides that a state agency must give the public a 45-day notice and comment period before holding a hearing to adopt, amend, or repeal any regulation. Gov. Code § 11346.4(a). The APA further provides that

> No state agency may adopt, amend, or repeal a regulation which has been changed from that which was originally made available to the public pursuant to Section 11346.5, unless the change is (1) nonsubstantial or solely grammatical in nature, or (2) sufficiently related to the original text that the public was adequately placed on notice that the change could result from the originally proposed regulatory action.

Gov. Code § 11346.8(c).

Neither the transcript of the September 18, 2014 Board meeting, nor the resolution adopted by the Board on that date, order staff to make substantial changes to the regulatory compliance requirements in the ODS Protocol. Indeed, in its September 18, 2014 resolution adopting and approving the 45-day changes, the Board simply noted that:

> The Proposed amendments to update three compliance offset protocols without making substantive changes to the protocols originally adopted in 2011 are necessary to address formatting changes and updates to quantification methodologies.

Resolution 14-31 at 5 (Sept. 18, 2014); *see also* Initial Statement of Reasons ("ISOR") for the 45-Day Changes to CTR at 11 (July 29, 2014) (while noting that certain changes to the Offset Protocols were "considered a regulatory update [and] subject to the full regulatory development process pursuant to the APA," the ISOR was silent on the specific modifications to the ODS Protocol). Absent any language in the ISOR, the transcript of the Sept. 18 Board meeting or the Resolution 14-31, one is left only with the 45-day changes themselves. The currently proposed 15-day changes clearly exceed the scope of those changes.

ARB's proposed 15-day modification to section 3.8 of the ODS Protocol would extend the regulatory compliance requirement to the disposal of post-destruction wastes. This is effectively a reversal of position with respect to the 45-day rulemaking change to section 3.8 that was adopted on September 18. That change amended the prior 2011 version of the ODS Protocol to clarify that the "regulatory compliance requirements"

apply only to “the collection, recovery, storage, transportation, mixing and destruction of ODS” and no longer “extend[] to the operation of destruction facilities where the ODS is destroyed,” as the 2011 version of the ODS Protocol did. *Compare* section 3.5 of the 2011 ODS Protocol *with* section 3.8 of the Sept. 18, 2014 ODS Protocol. Thus, the proposed 15-day change exceeds ARB’s authority to make “nonsubstantial or solely grammatical” changes to the Protocol

This proposed amendment represents a substantive change in the policy that the Board adopted on September 18. As such, it is the type of amendment that is appropriate only after a 45-day notice period. Should ARB adopt the proposed 15-day changes to section 3.8 of the ODS Protocol, it would be in direct violation of Government Code sections 11346.4(a) and 11346.8(c).

ECC therefore respectfully requests that the Executive Officer and the Board not adopt the proposed 15-day changes to section 3.8 of the ODS Protocol. (ECC1)

> **Response:** The proper disposal of post-destruction waste products was previously included under the broad category of “destruction.” This amendment provides that clarification. A project cannot end at the physical destruction of the ODS. It was the intent of the protocol that the waste products of destruction, whether solid, liquid, or gas, be handled according to applicable laws and regulations. The original protocol (adopted 10/20/2011) acknowledged that destruction facilities have the potential to contribute to environmental impacts beyond ozone destruction and climate change. Project-related activities should be considered as any activity that would not have happened but for the project. The waste generated from ODS destruction would not have happened but for the ODS being destroyed as a result of a project.
>
> Contrary to the commenter’s statements, since this amendment clarifies an existing provision, the modification is consistent with the APA requirements since they are non-substantial and directly related to the original text.

D-2.4. Comment: IETA welcomes many of the proposed changes to ARB’s compliance offset protocols in the Proposed 15-Day Modifications package. However, we are confused about ARB’s proposed changes to the ODS protocol **sub-chapter 3.8** (Regulatory Compliance) and discrepancies with Cap-and-Trade Regulation provisions; a concern that also speaks to a more general, yet critical, market concern about discrepancies across Regulation provisions and protocols.

In March 2014, the Board approved new regulatory compliance language in California’s cap-and- trade regulation. The amended language, which came into effect on 1 July

2014, emphasizes the importance of a direct relationship between regulatory compliance and the offset project….

In adopting the amended 95973(b), we believe that ARB took an important step towards more clearly defining that offset project activities (across all compliance offset projects, including ODS destruction) must comply with environmental, health, and safety requirements that are *directly applicable to the offset project* and that non-compliance events must result from an enforcement action levied against the project activities[4]. For all compliance offset protocols – including ODS - IETA believes that the areas of a project which are subject to ARB compliance regulatory language should be **narrowly defined to those activities directly applicable to the offset project**.

ARB's 15-day proposed amendment (underlined below) to Section 3.8 of the ODS protocol reads:

> *"The regulatory compliance requirements for a project apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS, including disposal of the associated post- destruction waste products. The regulatory compliance requirements extend to the destruction facility during the time ODS destruction occurs."*

This proposed protocol revision would only partially correct the prevailing uncertainty regarding the definition of regulatory compliance for an offset project. And this uncertainty has been at the center of ARB's investigation of the offset credits associated with the Clean Harbors facility.

We therefore suggest the following revisions (in bold) for both clarity and consistency regarding the given regulatory language in the ODS protocol:

> *"The regulatory compliance requirements for a project apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS, including disposal of the ~~associated~~ post- destruction waste products* ***that are directly applicable to the ODS destruction project activities****. The regulatory compliance requirements* ***in this section apply to the incinerator and any other unit or operation at the destruction facility, directly related to the destruction activities,*** *during the time ODS destruction occurs."*

More generally, a growing concern for IETA members is that the Cap-and-Trade Regulation's invalidation provision (95985) refers to compliance, but has little to no clear relationship with the Regulation's compliance provision (95973) or the compliance protocol. Looking beyond the 15-day comment period, we encourage ARB to more strongly and clearly link regulatory invalidation and compliance provisions in the Cap-

and-Trade Regulation. Such an improvement would ensure that any invalidation is directly related to the project and would create a unified and clear set of rules for project developers and verifiers. (IETA1)

> **Response:** The proper disposal of post-destruction waste products was previously included under the broad category of "destruction." This amendment provides that clarification. ARB staff does not believe the modifications proposed by the commenter provide further clarification and appear to limit regulatory compliance to the incinerator at the destruction facility. The clear intent of this section also includes collection, recovery, storage, transport, mixing, and waste disposal operations as well. Therefore, ARB staff believes the current proposed language is adequate.
>
> The second part of the comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation. Thus, no response is required. As the investigation is ongoing, ARB declines to comment until that process is complete. Staff will work with stakeholders to consider modifications and clarifications to the invalidation process and criteria as part of a future rule making.

D-2.5. Comment: WSPA opposes the proposed change in the ODS Offset Protocol Section 3.8(b) bolded/underlined below, which extends regulatory compliance requirements beyond the offset project to the entire ODS destruction facility during the time ODS destruction occurs (and thus expands the buyer's liability beyond that directly associated with the offset project to any activity performed at the ODS destruction facility).

3.8 Regulatory Compliance

(a) An offset project must meet the regulatory compliance requirements set forth in section 95973(b) of the Regulation.

(b) The regulatory compliance requirements for a project apply to the collection, recover, storage, transportation, mixing, and destruction of ODS, including disposal of the associated post-destruction waste products. ***The regulatory compliance requirements extend to the destruction facility during the time the ODS destruction occurs.***

This proposed change is in direct conflict with ARB's existing rules and policies governing all offsets as well as policies embedded in other project protocols. For example, in April 2014, ARB adopted amendments to Section 95973(b) (Requirements

for Offset Projects Using ARB Compliance Offset Protocols) by adding new language in bold below:

> Section 95973(b) In addition, an offset project must also fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location ***and that directly apply to the offset project***, including as specified in a Compliance Offset Protocol. The project is out of regulatory compliance if the project activities were subject to enforcement action by a regulatory oversight body during the Reporting Period. An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire Reporting Period ***if the offset project is not in compliance with regulatory requirements directly applicable to the offset project during the Reporting Period.***

The proposed change to the ODS protocol is in conflict with this recent change. The existing regulation is clear that changes that might give rise to an invalidation event at an ODS project should be tied to the project itself, and not the facility more broadly.

Imposing a broad facility-related regulatory compliance clause on ODS projects would add additional liability burden to ODS destruction offsets, and in so doing, could limit the amount of ODS that gets destroyed, disincentivizing an excellent technology for reducing High Global Warming Pollutants. The Cap and Trade program and the covered entities need consistent approaches and policies that provide clear equitable rules for all offset projects. (WSPA3)

> **Response:** The proper disposal of post-destruction waste products was previously included under the broad category of “destruction.” This amendment provides that clarification. A project cannot end at the physical destruction of the ODS. It was always the intention of the protocol that the waste products of destruction, whether solid, liquid, or gas, be handled according to applicable laws and regulations. The original protocol (adopted 10/20/2011) acknowledged that destruction facilities have the potential to contribute to environmental impacts beyond ozone destruction and climate change. Project-related activities should be considered as any activity that would not have happened but for the project. The waste generated from ODS destruction would not have happened but for the ODS being destroyed as a result of a project.

D-2.6. Comment: Clean Harbors has a keen interest in California Air Resources Board's (ARB) proposed amendments to the State's Cap and Trade Program, and

especially those provisions that affect the Definitions of a Destruction Facility and Regulatory Compliance under California's Cap and Trade Program Rules and Regulations. ARB proposes to re- define an "Eligible Destruction Facility" within Attachment 2 at Chapter 2.1 of the Proposed 15-Day Modifications to the Compliance Offset Protocol for Ozone Depleting Substances Projects.

“2.1 Eligible Destruction Facilities

(a) The end fate of the ODS must be destruction at either:

(1) An approved HWC subject to the RCRA and with a RCRA permit for the ODS destruction facility stating an ODS destruction efficiency of at least 99.99%; or

(2) A transformation of destruction facility that meets or exceeds the Montreal Protocol’s TEAP standards provided in the Report of the Task Force on Destruction Technologies.

(A) A facility must demonstrate DRE of 99/99% and emission levels consistent with the guidelines set forth in the TEAP report.

(B) A facility must have been certified by a third party no more than three years prior to the offset project commencement date and must show that it maintains its operational status as stated in the certification.

(b) A destruction facility must meet any applicable requirements under CAA and NESHAP standards, as well as all applicable federal, state, and local laws.

(c) At the time of ODS destruction the destruction facility must have a valid Title V air permit, if applicable, and any other air or water permits required by local, state or federal law to destroy ODS and document compliance with all monitoring and operational requirements.

(d) Any upsets or exceedances must be managed in accordance with an authorized SSMP.”

Clean Harbors submits that the definition of Destruction Facility should be limited to only those aspects of a facility that directly apply to the actual destruction of the ODS, which would be the actual ODS Destruction Unit that meets the provisions outlined in Chapter 2.1.(a). In other words, ***the Hazardous Waste Incineration Unit, where the ODS injection takes place, and where destruction of the ODS occurs, should be defined as the Destruction Facility.*** This amendment would add clarity to the Cap and

Trade Program, consistent with the Legislative Intent embodied in AB-32 and numerous other definitions in the Cap and Trade Regulations. (CH1)

Response: This comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation. Thus, no response is required. However, the proper disposal of post-destruction waste was previously included under the broad category of "destruction." A project cannot end at the physical destruction of the ODS. It was always the intention of the protocol that the waste products of destruction, whether solid, liquid, or gas, be handled according to applicable laws and regulations. The original protocol (adopted 10/20/2011) acknowledged that destruction facilities have the potential to contribute to environmental impacts beyond ozone destruction and climate change. Project-related activities should be considered as any activity that would not have happened but for the project. The waste generated from ODS destruction would not have happened but for the ODS being destroyed as a result of a project. Therefore, the definition of Eligible Destruction Facility must be broader than the incinerator where ODS is destroyed. Also, this comment's proposed definition would improperly exclude other technologies besides incineration that are eligible for use in ODS destruction.

D-2.7. Comment: We also note that the meaning of the word "Destruction Facility" within Chapter 2.1. is highly important in the context of the Definition of Project and Destruction Facility Regulatory Compliance outlined in Chapter 3.8. entitled "Regulatory Compliance".

"3.8 Regulatory Compliance

(a) *An offset project must meet the regulatory compliance requirements set forth in section 95973(b) of the Regulation.*

(b) The regulatory compliance requirements for a project apply to the collection, recovery, storage, transportation, mixing, and destruction of ODS, including disposal of the associated post-destruction waste products. The regulatory compliance requirements extend to the destruction facility during the time ODS destruction occurs."

Clean Harbor's Hazardous Waste Incineration Facilities are subject to a wide variety of Local, State and Federal Laws, Rules and Regulations. For example, our Facilities utilize personal communications devices that are licensed by the Federal Communications Commission (FCC). It would seem highly inappropriate, in fact, nonsensical for the ARB to propose that a lapse on Clean Harbors' part to renew its

FCC License, in a timely manner, would trigger invalidation of ODS Cap and Trade Project Credits. Similarly, if one of Clean Harbor's employees working at an ODS Destruction Facility injures himself or herself, triggering a State or Federal Occupational or Health and Safety Administration Investigation and the Company is subsequently fined $500 for a violation of Health and Safety Code, Regulation or Statute, would that violation also trigger invalidation of an ODS Cap and Trade Project that was being compliantly managed, within the Destruction Unit, at the time of the infraction? We don't believe that the California State Legislature ever envisioned that AB 32 would grant authority to ARB to hold any ODS Destruction Facility or any Project Developer to such an arbitrary and capricious standard of compliance.

Clean Harbors offers the following recommended change to the proposed definition of destruction facility incorporated under Chapter 1.2. entitled "Definitions" in the Proposed ARB Amendment to resolve the ambiguity that still exists in ARB's proposed amendment:

(6) *"Destruction Facility- shall mean the Destruction Unit where ODS is injected for the purpose of compliant destruction of ODS, in conformance with all regulatory requirements, permits and operating conditions applicable to the safe and compliant operation of the Destruction Unit."*

Clean Harbors also recommends that the meaning of "Regulatory Compliance", as outlined in Chapter 3.8. of ARB's Proposed Amendment to the Protocol, be further amended as noted below:

3.8. Regulatory Compliance

(a) *An offset project must meet the regulatory compliance requirements set forth in section 95973(b) of the Regulation.*

(b) *The regulatory compliance requirements for a project that directly apply to the project under 95973(b) apply to the collection, storage transportation, mixing, and destruction of ODS in a Destruction Unit as defined under Chapter 1.2(6), that are directly applicable to the ODS destruction project activities. The regulatory compliance requirements that extend to the destruction facility in this section apply to the ODS Destruction Unit, as defined in Chapter 1.2 of the protocol."*[27] *Non-compliances which result solely due to administrative issues are considered immaterial.* (CH1)

[27] Incorporating the proposed amendments offered by Clean Harbors.

Response: The first comment is outside of the scope of the proposed 15-day amendments to the Cap-and-Trade Regulation. Thus, no response is required. However, the proper disposal of post-destruction waste was previously included under the broad category of "destruction." A project cannot end at the physical destruction of the ODS. It was always the intention of the protocol that the waste products of destruction, whether solid, liquid, or gas, be handled according to relevant laws and regulations. The original protocol (adopted 10/20/2011) acknowledged that destruction facilities have the potential to contribute to environmental impacts beyond ozone destruction and climate change. Project-related activities should be considered as any activity that would not have happened but for the project. The waste generated from ODS destruction would not have happened but for the ODS being destroyed as a result of a project. Therefore, the definition of Destruction Facility must be broader than the unit where ODS is injected.

As stated above, the proposed modifications to Subchapter 3.8 are too narrow to encompass all project activities. Therefore, this comment's proposed changes will not be incorporated.

D.3. U.S. Forest Projects Protocol

D-3.1. Comment: The current language in 6.2.1.3 does not result in a reasonable test of the financial viability of baseline modeling. It should allow comparison with harvest plans filed in the past on the same property that the carbon project is proposed. This is the best and most logical test of whether modeled timber harvesting is financially viable - that is it has happened before in that very same location.

In addition, when a comparison is made with a nearby THP, the language in 2.a. states that slopes cannot exceed slopes in the Project Area by MORE than 10%. However, it should say LESS because if a THP is viable on much steeper slopes, then it is certainly viable on gentler slopes, other things being equal. (PH2)

Response: This comment is related to updates to quantification methodologies which, per AB32, are exempt from the Administrative Procedure Act (APA) requirements. As such, no response is required.

D-3.2. Comment: The revisions to the site class system in Appendix F are quite confusing. In particular, the definition of the Forest Service's 7 site class system and the table just below this description on page 114. It is unclear how the standard method of site index by species should be converted into the 7 classes. Will a project proponent

have to calculate cubic foot annual growth? If so, at what stage of stand development or over what portion of the baseline projection? Is there a crosswalk that is approved for use? Also, the column header is "Basal Area Cubic feet/acre/acre". These are 2 different measurement so what does it mean?

Please make an effort to clarify this language or else I fear there will be a great deal of mis-interpretation on the part of the verifiers and project developers. (PH1)

> **Response:** Per Resolution 14-31, staff removed the proposed updates to common practice values in the Assessment Area Data File that use the latest data from the U.S. Department of Agriculture Forest Service (Forest Service) Forest Inventory and Analysis (FIA) National Program and Forest Service adjustments for the classification of high and low site class productivity to align with the site class stratification used in the adjusted common practice values for the U.S. Forest Projects Compliance Offset Protocol and reverted back to the Assessment Area Data File and classification of high and low site classes originally approved by the Board in October 2011.

E. COMMENTS UNRELATED TO THE PROPOSED AMENDMENTS

E-1. Mandatory Reporting Regulation and AB 32 Cost of Implementation Fee Regulation

E-1.1.Comment: Additional Reporting Requirements. Several additional reporting requirements proposed by ARB are unrelated to compliance with the Cap and Trade program and should be removed from the regulation. While it is reasonable for ARB to address policy questions from its Board, WSPA continues to object to ARB's use of the MRR regulation as the mechanism to obtain such information because it has failed to demonstrate a regulatory need for the information. The proposed requirements are unrelated to allocation of emission allowances or assessment of fees necessary to cover AB 32 program costs. Moreover, using the MRR regulation as the reporting mechanism for information not required for compliance needlessly and unjustifiably compounds the burden associated with the information request by virtue of the myriad data collection, verification and reporting requirements embedded in the MRR regulation.

The following data requirements ***should be removed*** from the MRR regulation:

- Primary refinery products (section 95113(l)(1))

- By-product hydrogen gas (section 95114(j)); if by-product hydrogen reporting is not removed, then ARB should allow BAM for this reporting since it is not necessary for CWB.
- Sampling and reporting of atomic hydrogen content in hydrogen production feed gas (section 95114(e)(1))
- Energy Intensity Index (95113(l)(4))

WSPA previously indicated its willingness to develop with ARB a non-regulatory mechanism for generating the data it seeks, such as a one-time survey, provided there is a clearly defined purpose and the intended use of the data is disclosed to the reporting entities. We anticipate further discussion with ARB to explore alternative approaches that can accomplish the intended purpose without building additional complexity, administrative burden and compliance costs into the MRR regulation.

It is imperative that ARB sunset reporting requirements for data which are no longer needed to ensure compliance.

Implementation Period and Other Technical Issues Remain Unanswered. WSPA is disappointed that ARB chose not to incorporate several of the recommendations in our September 15, 2014 comment letter into the proposed 15-day MRR language (See attached). Our recommended changes and requests for clarification in sections 95103(h)(4), (l) and (m)(1) are intended to facilitate compliance with the regulation by promoting consistent interpretation of MRR requirements and additional, reasonable flexibility for regulated entities. We respectfully request that ARB reconsider the specific requests and recommendations in our prior comment letter.

Need for Lead Time to Implement MRR Changes. We especially note the need for lead time for facilities to implement changes and collect data that is expected to be required as of January 1, 2015. WSPA noted the unique challenge posed by passage of a regulation so close to its implementation date by noting both in writing and in oral testimony, that data collected in 2014 and reported in 2015, would not be subject to these new requirements. With respect to data collected in 2015, WSPA testimony and Board response noted that a phase-in period, where best available methods and technology currently employed should be allowed in 2015 as companies phase-in newly required practices. In many cases, technology must be acquired and adopted, labor resources must be on-boarded, and training must be performed to adequately and competently implement the requirements of these rules. A minimum 1 year implementation period should follow all adopted rules. Failure to address these issues could undermine the integrity of the data derived from the regulation and frustrate ARB's

efforts to accurately assess progress toward meeting statutory emission reduction goals.

Reporting of CWB Throughputs. ARB proposes to change Section 95113(I)(5)(A) to require operators to report only fresh feed and to exclude recycled streams as part of the CWB throughput reporting requirement. WSPA is concerned with ARB making this change at the tail end of the process in a 15-day comment period instead of allowing a full 45-day comment period. Making this change so late in the process also raises questions concerning ARB's expectations as to how operators should be collecting and tracking this information, including levels of accuracy for reporting both fresh and recycled feeds. For example, Solomon acknowledges that for ISOMER units, reported throughputs already include both fresh and recycled feeds.

WSPA recommends ARB delete its proposed language changes in section 95113(l)(5)(A) and instead work with WSPA and its members through a formal workshop process that will provide operators a meaningful opportunity to comment on what is both necessary and technically feasible to address ARB's concern with recycled and fresh feed reporting.

Definition of Sub-Facility (Section 95102(a)(444)). WSPA requests ARB include additional clarifying language in the definition at Section 95102(a)(444).

Recommendation: Add the following language (in red text) to subdivision 444: "Sub-facility" for purposes of reporting data disaggregated pursuant to section 95156(a), means the geographic area, or areas, within a single township or within a group of contiguous or adjacent townships identified in the Public Land Survey System of the United States, where operations and equipment are located. The operator may disaggregate sub-facilities based on contiguous township areas to smaller sub-facilities according to similar operational, geological, or geographical characteristics. Operators may also designate one or more contiguous or adjacent properties under common ownership or common control as sub-facilities. Sub-facility disaggregation may be retained from year to year, or may be updated when some of the operations cease or equipment is reconfigured within the previously designated sub-facilities. Sub-facility disaggregation must be updated from previous reporting years if there are new operations or equipment that lies outside previous township boundaries. The Principal Meridian name, Township and Range designations, and the section numbers that apply to each sub-facility, must be identified in the operator's GHG Monitoring Plan required pursuant to section 95105(c). The operator must also describe in the GHG Monitoring Plan any operational, geological or geographical characteristics used to determine sub-facility boundaries.

Use of Best Available Method (BAM) for Reporting 2014 Primary Refinery Product and Calcined Coke Data (Section 95103(h)(1)). WSPA supports ARB extending the use of BAM for primary refinery products and calcined coke data reporting for the 2014 reporting year. WSPA requests ARB clarify that BAM, as defined in the MRR regulation, are methods based on criteria that is reasonably feasible for facility fuel use or other facility process data in conjunction with ARB-provided emission factors, and other industry standard methods for calculating GHG emissions. Use of BAM methods utilizing data collected from CWB meters should be deemed sufficient for demonstrating the ±5% accuracy requirement, and operators should not be required to provide additional data or information beyond that which is reasonable or feasible and available.

Population Count and Emission Factors (Section 95153(p)). WSPA supports ARB removing the actual component count requirement in Section 95153(p). As WSPA has stated previously, the EPA component count and emissions factor method is a valid approach for quantifying GHG emissions.

Calculation of HHV (Sections 95156(a)(9), (10), 95156(b), 95156(d)). ARB proposes revising the method for calculating HHV on an annual basis using average HHV of quarterly gas samples as stated in Section 95153(y)(D). Currently, some operators conduct a monthly weighted calculation and aggregate it to the annual total. In these instances the resultant annual total may be more accurate than with the proposed method. Because using data collected on a monthly basis would be more accurate than on a quarterly basis, WSPA requests ARB allow operators the flexibility to use calculations that can be demonstrated to be more accurate than what is listed in the MRR regulation.

Suppliers of Transportation Fuels and Renewable Diesel. As stated in our September 15, 2014 letter, ARB is proposing a new requirement to report volumes of renewable diesel supplied. WSPA feels compelled to reiterate the point that renewable diesel can be blended to diesel product both at the refinery and at the terminal, and therefore Reporting (e-GGRT) forms should be modified to allow for reporting volumes from either the terminal or the refinery in a manner that prevents the possibility of double-reporting the same volumes of fuel and a doubling of one's compliance obligation under Cap-and-Trade.

Additionally, it is very likely that significant renewable fuel blending may occur upstream of terminal rack locations, particularly for renewable diesel which is much more likely to be blended at refineries. Because blend percentages will vary depending on operational circumstances and product availability, it will likely be difficult to accurately track the precise movement of those renewable fuel volumes from the refinery (or bulk

blending facility) to the point where the blended product is dispensed into a truck at the terminal rack.

Therefore, WSPA recommends ARB add a paragraph to the § 95121 reporting procedures that would allow a reporting party to report the total renewable fuel blended upstream of the terminal rack and subtract it from the total blended product delivered to market.

Recommendation: WSPA recommends the following paragraph be added to follow § 95121(d)(1-4): "(5) Refiners who blend renewable fuels at a refinery or bulk facility and displace blendstock or distillate fuel oil may report the total volume of renewable fuel blended at the refinery or bulk facility and subtract the displaced volume from the blendstock and distillate fuel oil totals reported under paragraphs (1) through (4), provided that it can be demonstrated that the renewable fuel volume was not reported under paragraphs (1) through (4) by the refiner or any other party."

As an illustration of how this might work, a reporting party could blend renewable diesel at a refinery and report the total renewable diesel volume blended for the year. That party would then calculate the total CARB diesel volume delivered to market per § 95121(d)(1-4) and subtract the renewable diesel volume.

The remainder would be reported as CARB diesel delivered. Following this reporting, the reporting party's verification auditors would confirm that the reporting party ensured the credit for the renewable diesel volume was not claimed elsewhere, either through clear product transfer documents or contractual agreements. (WSPA3)

> **Response:** These comments are outside the scope of the proposed regulatory amendments as they concern the Mandatory Reporting Regulation. These comments will be addressed in the Mandatory Reporting Regulation Final Statement of Reasons.

E-1.2. Comment: COI Fee Regulation

WSPA appreciates ARB's proposed changes in the 15-day language in response to our comments, including changes to section 95201(c) to exclude biodiesel and renewable diesel fuels consistent with the MRR regulation, removal of the term "catalyst coke" from the definition of petroleum coke in section 95202(a)(111) and the clarification in section 95203(d) that fuel emission factors will be calculated using an arithmetic average of fuel grades from column C of 40 CFR 98 Table MM-1.

WSPA notes that the proposed changes in section 95204(i), intended to align the records retention provisions in the fee regulation with those in the MRR, only corrected one of the inconsistencies. We request that ARB also strike the requirement to maintain records in California to achieve conformity with the MRR regulation:

***Recommendation*:** Modify this section to read: "*Entities subject to this subarticle must maintain copies of the information reported pursuant to the applicable sections of the Mandatory Reporting Regulation*~~. Records must be kept at a location within the State of California for five years~~."

WSPA, representing companies that actually implement the emission reduction requirements planned by ARB, appreciates the opportunity to continue these discussions. We look forward to the addressing issues that remain unresolved in future rulemaking. (WSPA3)

> **Response:** These comments are outside the scope of the proposed regulatory amendments as they concern the AB 32 Cost of Implementation Fee Regulation. These comments will be addressed in the AB 32 Cost of Implementation Fee Regulation Final Statement of Reasons.

VI. PEER REVIEW

Health and Safety Code section 57004 sets forth the requirements of peer review of identified portions of rulemakings proposed by entities within the California Environmental Protection Agency, including ARB. Specifically, the scientific basis or scientific portion of a proposed rule may be subject to this peer review process. Here, ARB determined that the rulemaking at issue does not contain scientific basis or a scientific portion subject to peer review, and thus no peer review as set for in section 57004 was or needed to be performed.

ATTACHMENT A: ACRONYMS

AB32	Assembly Bill 32 -- California Global Warming Solutions Act of 2006
ACR	American Carbon Registry
APA	Administrative Procedures Act
ARB	California Air Resources Board
BAM	best available methods
BDE	bond disassociation energy
BP	British Petroleum
CAA	Clean Air Act
CAR	Climate Action Reserve
CARB	California Air Resources Board
CCEEB	California Council of Economic and Environmental Balance
CCR	California Code of Regulations
CEA	Commodities Exchange Act
CEQA	California Environmental Quality Act
CFTC	Commodity Futures Trading Commission
CITSS	Compliance Instrument Tracking System Service
CMTA	California Manufacturers & Technology Association
CO_2	carbon dioxide
CODA	Compliance Offset Developers Association
CPUC	California Public Utilities Commission
CWB	complexity weighted barrel
ECC	Environmental Credit Corp.
EDU	Electrical Distribution Utility
EMAC	Emissions Market Assessment Committee
EO	Executive Officer
EPA	U.S. Environmental Protection Agency
FCC	Federal Communications Commission
FERC	Federal Energy Regulatory Commission
FINRA	Financial Industry Regulatory Authority
FSOR	Final Statement of Reasons
GHG	greenhouse gas
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HSC	Health and Safety Code
IEP	Independent Energy Producers
IETA	International Emissions Trading Association

IFM	improved forest management
ISOR	Initial Statement of Reasons
JPA	Joint Powers Agency
LMU	logical management unit
MACT	Maximum Achievable Control Technology
MCF	methane conversion factor
MRR	Mandatory Reporting of Greenhouse Gas Emissions Regulation
MSG	Market Simulation Group
MTCO2-e	Metric ton of carbon dioxide equivalent
MWD	Metropolitan Water District
NERC	North American Electric Reliability Corporation
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFA	National Futures Association
NOAA	National Oceanic and Atmosphere Administration
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NWS	National Weather Service
ODS	ozone depleting substance
OPO	Offset Project Operator
OSHA	Occupational Health and Safety Administration
PG&E	Pacific Gas and Electric
SCFM	Standard Cubic Feet per Minute
SEC	Securities and Exchange Commission
SSMP	stockpile and stewardship management plan
TEAP	Technology and Economic Assessment Panel
VS	volatile solids
WSPA	Western States Petroleum Association