

August 11, 2011

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, California 95814

Re: 15-day comments on proposed changes to cap and trade regulations; July 10 Draft
Subchapter 10 Climate Change, Article 5, Sections 95800 to 96022,
Title 17, California Code of Regulations

This comment is submitted with respect to the further proposed revisions to the proposed rules for implementation of the cap and trade program. It is submitted on behalf of the GHG Early Action Group, which consists of parties who have undertaken or invested in greenhouse gas emission reductions well before being required by law to do so. These reductions meet the substantive criteria for early action offsets proposed by the California Air Resources Board ("ARB"). The group includes a wide cross-section of industry types in the GHG mitigation arena: developers, investors, and potential end users of carbon offset credits. The Members of the GHG Early Action Group are listed on Attachment A.

In the aggregate, the GHG Early Action Group holds approximately half a million tonnes of GHG reductions, primarily from Ozone Depleting Substances as defined by ARB. These entities hold credits issued for ODS destruction and livestock methane destruction from the Chicago Climate Exchange ("CCX"). These credits were issued by the CCX under quantification rules and requirements nearly identical to those in the ARB protocols for ODS destruction and livestock methane destruction. Attachment B provides a side by side comparison of the CCX and the CAR protocols. A careful review demonstrates that the credits held by these entities have the same quality as those which CAR has issued, and in many cases were developed by the same entities.

Though these credits were issued under protocols which are substantially equivalent as two of the methods recognized by ARB, were developed using public participation procedures, and even though some of the project represented here have "migrated" to the Climate Action Reserve, the credits which are the subject of this comment are not susceptible to transfer. These credits remain valid and ought to be recognized.

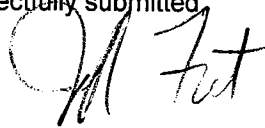
At the same time, while the CCX has advised that it has in place each of the requirements for an Early Action Offset Program in 95990(a) with respect to these credits, the CCX may or may not be continuing to issue credits. Given the proposed language of 95990(a), there is some question as to whether the CCX would be eligible.

To avoid any misunderstanding and to allow this substantial quantity of offset credits to be available as compliance instruments, we propose three clarifications to 95990 as set forth in Attachment C.

The Members of the GHG Early Action Group have devoted substantial resources to abate GHG emissions and have clear proof of those GHG reductions. We urge that ARB not preclude these reductions from being recognized as they were created in good faith, and they meet the substantive conditions for early action credits.

We would further request a meeting to clarify and resolve any questions that ARB and its staff may have with respect to these credits.

Respectfully submitted,



Common Counsel for the GHG Early Action Group

cc:

GHG Early Action Group
Steve McComb

Attachment A: Current Members of GHG Early Action Group

AEP Energy Services, Inc

Environmental Capital Management LLC

Excelsior Capital Management, LLC

Hudson Technologies, Inc

NRG Energy, Inc

Remtec International, Inc

Attachment B: Comparison of Methodologies

1. Comparison of ODS Methodologies



CCX Comparison of
CCX and CAR ODS Pr

2. Comparison of Livestock Methodologies



CCX Comparison of
CCX and CAR Livesto

Comparison of CCX and CAR Offset Protocol

-ODS Destruction-

Element	Chicago Climate Exchange ("CCX")	Climate Action Reserve ("CAR")
Protocol	Ozone Depleting Substance Destruction Available here .	Ozone Depleting Substance Destruction Available here .
Design Framework	ISO 14064-2 <i>Specification with guidance at the project level for quantification, monitoring, and reporting of greenhouse gas emissions reductions or removal enhancements, Version 1.</i>	Based on general CAR principles.
Project Definition	<p>Destruction of eligible ODS gas at an eligible destruction facility. Projects are distinct gas destruction runs.</p> <p>Destruction of ODS trapped in appliance insulation foam is eligible.</p>	<p>Same as CCX. Projects may be batches of gas destruction runs grouped together over a 12 month period.</p> <p>Destruction of ODS trapped in building and appliance insulation foam is eligible.</p>
Role of the project developer	Developer or registering firm must have title to the emission reductions.	Same as CCX.
Location	<p>US ODS is eligible.</p> <p>ODS may be imported for destruction from locations where it is phased out of production and importation by law.</p>	<p>US ODS is eligible.</p> <p>ODS imported to the US for destruction has a separate protocol. Same eligibility standard as CCX.</p>
Eligible Destruction Facility	All destructions must occur in the US at a RCRA or EPA licensed facility using TEAP approved destruction technology.	Same as CCX.
Start Date	January 1, 2007.	Initial protocol approved in February of 2010 with a start date of February 2008. As of February 2011 projects must be listed no more than 6 months after their start.
Crediting Period	Not applicable since projects are distinct destruction runs of gas in stocks, not flows, see baseline.	Same as CCX.
Eligible ODS	<p>CFC 11, 12, 13, 113, 114, 115.</p> <p>HCFC 141b.</p> <p>Halon 1211, 1301, 2402.</p> <p>Carbon tetrachloride.</p> <p>Methyl Chloroform.</p>	<p>CFC 11, 12, 114, 115.</p> <p>HCFC 22, 141b.</p>
Baseline for gaseous or liquid ODS	Unmitigated release of ODS in accordance to U.S. EPA vintaging models.	Release of ODS over a 10 year horizon. Crediting from 77% to 95% of ODS destroyed, depending on CFC destroyed.
Baseline for ODS entrained in foam	CCX assumes that only ODS emissions resulting from the shredding of foam are emitted to atmosphere. Of the total destruction of ODS in foam, only 24% is credited (i.e. the baseline emissions is	CAR assumes that ODS emissions resulting from shredding, compaction, and degradation in the landfill are emitted to atmosphere. Of the total ODS in the foam, 44% is credited.

Comparison of CCX and CAR Offset Protocol

-ODS Destruction-

	24% of the amount in foam).	
ODS Foam Destruction	ODS trapped in foam may be destroyed by burning foam material at an eligible destruction facility.	ODS trapped in foam must be extracted from the foam and destroyed in its gaseous form.
Additionality	CCX reviewed the common practice for destroying ODS and ODS trapped in foam and determined that destruction is not common practice.	Same as CCX.
Voluntary Installation	All projects must be voluntary.	Same as CCX.
Project Boundary Details:		
<i>Refrigerant</i>	Leaks from continued operation and servicing is the baseline.	Same as CCX.
<i>Refrigerant</i>	Leaks of substitute ODS gas not included in project boundary.	Included in project boundary.
<i>Destruction</i>	No crediting during periods of improper incinerator operation.	Same as CCX.
<i>Destruction</i>	Oxidation of carbon in ODS included.	Same as CCX.
<i>Destruction</i>	Emissions associated with fossil fuel use at the destruction facility included as project emissions.	Same as CCX.
<i>Extracting ODS from foam</i>	Emissions from separating foam from appliance not included in project boundary.	Included in project boundary.
<i>Appliance and Foam Shredding</i>	Emissions from shredding appliance included in project boundary.	Same as CCX.
<i>Transportation Emissions</i>	Included.	Same as CCX.
Point of Origin Tracking	Proof that materials were not produced under a 'Critical Use Exemption' or from a government stockpile.	Required at each point where the aggregated materials exceeded 500 lbs., or materials must be stockpiled for 24 months.
Materiality Threshold for Verification	CCX requires reporting of any individual or aggregation of errors, omissions, and misrepresentations could affect the GHG assertion and could influence CCX's decision to register the Project. The concept of materiality is used when designing the verification and sampling plans to determine the type of substantive processes used to minimize risk that the verifier will not detect a material discrepancy. The concept of materiality is used to identify	Conceptually the Same as CCX. Have also specified quantitative materiality at 5% for projects registering less than 25,000 tons/year, 3% for 25,000 to 100,000 tons/year and 1% for projects registering more than 100,000 tons/year.

Comparison of CCX and CAR Offset Protocol
-ODS Destruction-

	information that, if omitted or misstated, would significantly misrepresent a GHG assertion to CCX, thereby influencing the conclusion of CCX. Acceptable materiality is determined by CCX based on the required level of reasonable assurance.	
Verifier Conflict of Interest	Verifiers must execute a project-specific conflict of interest assessment with the project developer for each verification and it must be approved by CCX prior to beginning verification work.	Conceptually the Same as CCX. Verification firm may not perform more than six verifications consecutively.
Verifier Accreditation	Verifiers must be ANSI accredited per ISO 14065 and approved by CCX.	Verifiers must be ANSI accredited and approved by CAR. Note: protocol says ISO accredited. CCX assumes this to mean ANSI accredited per ISO 14065.

Comparison of CCX and CAR Offset Protocol
-Livestock Methane Destruction-

Element	Chicago Climate Exchange ("CCX")	Climate Action Reserve ("CAR")
Protocol	Livestock Methane Destruction Available here .	Livestock Methane Destruction Available here .
Design Framework	ISO 14064-2 <i>Specification with guidance at the project level for quantification, monitoring, and reporting of greenhouse gas emissions reductions or removal enhancements, Version 1.</i>	Based on general CAR principles.
Project Definition	Projects consists of the installation and operation of a new agricultural methane gas collection and control system at livestock operations that that would otherwise have been emitted to atmosphere.	Same as CCX.
Role of the project developer	Developer or registering firm must have title to the emission reductions.	Same as CCX.
Location	USA and Kyoto Protocol non-annex 1 countries (i.e. developing countries).	USA and Mexico (Mexican projects have their own applicable protocol).
Earliest Eligible Project Start Date	Initial protocol approved by the CCX Offsets Committee in 2004 had an earliest eligible start date of January 1, 1999. Current protocol has earliest eligible start date of January 1, 2003.	Initial protocol approved in June 19, 2007 included earliest state date of January 1, 2001. Current protocol has an earliest start date of no more than 6 months prior to the listing of the project with CAR.
Crediting Period	8 years.	10 years.
Additionality	CCX evaluated the prevalence of digesters at dairy and swine operations within the US and determined that any new and voluntary installation is additional.	Same as CCX.
Voluntary Installation	All projects must be voluntarily installed. Projects do not receive credits once they are legally required.	All projects must be voluntarily installed. Projects continue to receive credit through the crediting period (10 years) even if the system has become legally required.
Global Warming Potential multiplier	Each metric ton of methane destroyed earns 21 metric tons of CO ₂ reduction.	Same as CCX.
Baseline Emissions Estimation Model	Both protocols follow a volatile solids based production and methane generation model based on IPCC methodologies and using default national or state-specific factors as in the US National GHG Inventory. CAR's protocol requires a greater number of site specific data than CCX.	
Baseline Crediting	CCX protocol requires that the developer compare estimated and	Same.

Comparison of CCX and CAR Offset Protocol
-Livestock Methane Destruction-

Approach	measured (at the flow meter) biogas production. The lower value is taken as the baseline emissions.	
Boundary and Project Emissions	<p>Takes into account all known sources, sinks and reductions.</p> <p>Emissions associated with the project (e.g. vehicle fuel combustion etc.) must be measured or assumed and included in the project calculation.</p> <p>In order to avoid the double counting of emissions associated with a project, CCX Members subject to the CCX emission reduction commitment may omit the inclusion of project-related emissions in the project report because all GHG sources associated with the Members activities are verified and included within the Members cap for the specific year.</p>	<p>Takes into account all known sources, sinks and reductions.</p> <p>Same as CCX.</p> <p>Member cap as described for CCX is not applicable.</p>
Boundary and Project Emissions	Both protocols include CO ₂ emissions from stationary sources; CAR includes project-related methane emissions based on methane flow data, destruction device efficiency, effluent storage and other manure handling practices. CCX addresses these issues in its calculation methodology for methane destruction it also assumes that project-related methane emissions are relatively small under most circumstances and does not require site-specific estimates.	
Flow Monitoring	Continuous monitoring, 15 minute reading, daily tabulation, factory calibration specs, correction for temperature and pressure.	Same as CCX requirements for performance. One flow meter must be installed for each destruction device unless the destruction devices are identical. Generally requires a single flow meter for each destruction device.
Destruction Device Monitoring	Evidence of continuous operation via thermocouple temperature (i.e. for flares) or electrical engine generation logs.	Same as CCX.
Biogas Measurement	Option to measure biogas continuously or by sample on a quarterly basis. Manufacturer calibration must be followed for all gas measurement devices.	Same as CCX.
Generator Use as Destruction Device	Where an engine is used as a destruction device, CCX allows the proponent to calculate biogas destruction based on electricity production. This methodology requires	Not included in protocol.

Comparison of CCX and CAR Offset Protocol
-Livestock Methane Destruction-

	continuous monitoring of production and uses the engine's heat rate and biogas energy content to determine biogas destruction. The approach is seen as conservative since engines rarely operate at their measured heat rate (meaning more biogas is being destroyed than is being credited). The method is also practical since it eliminates the requirement for costly flow and biogas quality meter(s).	
Destruction Device Efficiency	98% as an average for all devices and gas use types.	98% average for flares, engines and boilers. 96.5% for use as LNG fuel and pipeline injection.
Materiality Threshold for Verification	CCX requires that any individual or aggregation of errors, omissions, and misrepresentations could affect the GHG assertion and could influence CCX's decision to register the Project be reported to CCX. The concept of materiality is used when designing the verification and sampling plans to determine the type of substantive processes used to minimize risk that the verifier will not detect a material discrepancy. The concept of materiality is used to identify information that, if omitted or misstated, would significantly misrepresent a GHG assertion to CCX, thereby influencing the conclusion of CCX. Acceptable materiality is determined by CCX based on the required level of reasonable assurance.	Conceptually the same as CCX. Have also specified quantitative materiality at 5% for projects registering less than 25,000 tons/year, 3% for 25,000 to 100,000 tons/year and 1% for projects registering more than 100,000 tons/year.
Verifier Conflict of Interest	Verifiers must execute a project specific conflict of interest assessment with the project developer for each verification and the assessment must be approved by CCX prior to beginning verification work.	Conceptually the same as CCX. Verification firm may not perform more than six verifications consecutively.
Verifier Accreditation	Verifiers must be ANSI accredited per ISO 14065 and approved by CCX.	Verifiers must be ANSI accredited and approved by CAR. Note: protocol says ISO accredited. CCX assumes this to mean ANSI accredited per ISO 14065.

Attachment C: GHG Early Action Group Proposed Revisions

Proposed revisions to July 10, 2011 Language

1. Clarify 95990(a): CCX advises us that it can meet all of the requirements for an Early Action Offset Program, but that it may or may not continue to issue further credits. Some have read 95990 to require that the Early Action Offset Program must be one that is continuing to issue offset credits. We would ask that the rule be modified to remove the suggestion that an ongoing issuance of credits is required. The proposed language for 95990(a) would remain, except for the following addition at the end of (a)

(7) Nothing in this rule shall preclude a program which meets the requirements of this section from being an Early Action Offset Program solely because it is not longer issuing offset credits.

2. Clarify 95990(c)(5). As written, this section could be interpreted to mean that ONLY credits issued by Climate Action Reserve may qualify. That is not the message which has been communicated by ARB with respect to early offsets. Instead, we understand that the referenced CAR methodologies represent the standard for quantification, not the exclusive way to obtaining early action credits. We therefore request the following change to 95990(c)(5):

(5) Results from the use of one of the following offset quantification methodologies, or methodologies which provide a substantially equivalent quantified result from the same activity:

A similar change is appropriate in 95990(i)(1).

3. Clarify who may submit information or be identified under 95990(e): As written, the only persons who can submit information under (e)(1) are "Offset Project Operator or Authorized Project Designee". And under (e)(2) the program only needs to list the same persons. The list of persons who may submit information under (e)(1) and who should be identified under (e)(2)(C) should be expanded to those who currently hold the offset credits, whether they be CFIs, CRTs, VCUUs, or ERTs. As shown by the Members of the Early Action Offset Group, these early carbon credits do have value and have been sold. Whether now held by investors or potential end users, those persons too should be entitled to start the process for issuance of ARB offset credits in 95990(e).