

COMMENTS ON ARB'S PROPOSED CAP-AND-TRADE REGULATIONS

(Addendum on biomass-based fuels and the compliance obligation exemption)

Submitted by:

Coalition for Emission Reduction Projects (CERP)

Submitted to:

California Air Resources Board

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I. Executive Summary

The Coalition for Emission Reduction Projects (CERP) appreciates this opportunity to provide comments to the Air Resource Board on the proposed cap-and-trade regulations and proposed revisions to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule). The below comments serve as an addendum to more extensive comments submitted to the Air Resources Board by CERP on December 6, 2010. We appreciate your consideration of these additional comments regarding the compliance exemption for biomass-derived fuel. CERP's recommendations, explained more fully below, are as follows:

- Biogas from manure digest offset projects is carbon neutral, and should qualify for the same compliance exemption provided for other biogenic fuel sources.
- The relevant provisions of the Mandatory Reporting Rule should be revised to clarify that a biomass-derived fuel project that earns Renewable Energy Credits will not be disqualified from earning the compliance exemption in the cap-andtrade program.
- The compliance exemption for biomass-derived fuels should also be applied to:
 - (1) any biomass-derived fuel that was delivered into California before January 1, 2010 (where this can be proven and verified), regardless of whether the fuel was obligated under contract to a California operator and regardless of whether the fuel continues to be sold to the same California operator;
 - (2) any conversion of a biogenic methane flare to beneficial use; and
 - (3) any efficiency improvement in the beneficial use of a biomass-derived fuel.

II. Comments

A. <u>Exemption for offset project biogas:</u> Biogas from manure digester offset projects is carbon neutral, and should qualify for the same compliance obligation exemption provided for other biogenic sources.

Section 95852.2 of the Proposed Regulations provides a compliance obligation exemption for a series of source categories, including combustion emissions from solid waste, agricultural crops or waste, waste oils, and fuel ethanol. The exemption also applies to biomethane and biogas from landfills, wastewater treatment plants, and fugitive emission capture. This exemption is good policy because the emissions



generated by combusting these materials are carbon neutral. The source materials are biogenic in origin—they can very quickly be traced back to plants that sequestered the same quantity of carbon later emitted through combustion. By providing a compliance obligation exemption to the combustion of biogenic materials, ARB is encouraging the productive use of these carbon neutral materials to generate electricity and heat and to fuel cars.

Section 95852.2 also provides, however, that the exemption does not apply to biogas from projects registered under the ARB Livestock Manure Digester Protocol. The failure to apply the exemption to biogas from livestock manure digester projects does not make sense, for all the reasons provided above. The emissions generated from biogas combustion are carbon neutral whether the biogas originated from a manure digester, a landfill, a wastewater treatment plant, or any other biogenic source. The fact that the manure digester is also receiving offset credits is no bar to the gas being recognized as carbon neutral.

Offset credits are awarded for emission reductions or sequestration beyond a business as usual baseline. The manure digester offset project earns offset credits because it captures methane (a very potent greenhouse gas) and transforms it through combustion to CO_2 , a less potent greenhouse gas. (See Step A below.) The digester will receive the same quantity of offset credits whether it flares the methane or puts it to productive use in generating electricity, because the offset credits are awarded solely for the conversation of methane to CO_2 .

The compliance exemption is entirely separate. The compliance exemption (like Renewable Energy Credits) is awarded for the generation of electricity from carbon neutral sources. (See Step B below.) If the methane from the digester is put to productive use generating electricity, it should be given the same compliance exemption as every other biogenic source listed in § 95852.2, because the biogas is carbon neutral. If the regulations do not provide a compliance exemption, the program runs the risk of encouraging livestock manure digester operators simply to flare methane instead of putting the gas to productive use through electricity generation. This is particularly important where there are significant costs associated with installing a generator or the transport of biogas or electricity. CERP strongly urges ARB to avoid this perverse incentive structure, and to apply the compliance exemption equitably, including to biogas from manure digester offset projects.



Step A: Methane is captured from manure lagoons.¹ The methane can be flared, added to a pipeline, or combusted to generate electricity. The reduction of methane CO₂e below baseline levels is awarded offset credits.



Step B: Methane is combusted to generate carbon-neutral electricity.² The generation of carbon-neutral electricity is given a compliance exemption.

Manure digester projects are an important component of California's projected offset supply. Yet despite their many environmental benefits, these projects are difficult to finance and often only barely financially viable. They should not be further discouraged with the assignment of a compliance obligation for carbon neutral emissions.

If ARB is concerned that the CO₂ emissions that result from methane digester biogas combustion are not being taken into account if a digester project receives offset credits for the full CO₂e value of the methane combusted *and* the use of the biogas receives a downstream compliance exemption,then,CERP urges ARB to *change the methane digester protocol rather than withhold the compliance exemption*.

 $\underline{digest.com/labels/Alternative \%20 Energy \%20 Resources.html}.$

¹ Image credit: http://cafoinfo.blogspot.com/2010_05_01_archive.html.

² Image credit: http://www.eu-



In the context of a cap-and-trade program, the quantity of credits earned by a livestock manure digester project should be the difference between the (baseline) CO_2e value of the methane that would be emitted under a business-as-usual scenario and the (actual) CO_2 that is emitted due to the combustion of captured methane. Under this proposal, the number of offset credits received by a livestock methane digester project that supplies biogas to a "capped" energy sector would be reduced by the quantity of CO_2 that is emitted by methane combustion.

If the protocol was so changed, there would be no justification for imposing a compliance obligation on livestock manure digester biogas downstream. The biogas is carbon neutral, and is as deserving of the compliance exemption as the other exempted sources.

Imposing a downstream compliance obligation on methane digester biogas projects is highly problematic. To be sure, one way to view the current approach is that it simply awards offset credits at the project and then requires submission of an equivalent number of compliance instruments downstream. However, the equivalency is more apparent than real. For the electricity user on the downstream side, 92% of its compliance instruments would have to be allowances (because of the 8% usage limit on offsets), and allowances will carry a higher price tag than any "extra" offset credits awarded upstream at the project. Put another way, the offset credits would not pay for the allowances.

The fact that the gas carries a compliance obligation also will make it less attractive to buyers, and more difficult to market. The biogas from a methane digester would also have to be tracked separately from all other biogas, complicating implementation of the cap-and-trade program.

Accordingly, the current approach is more punitive than an approach in which the project does not receive the extra offset credits, but also can forgo the downstream compliance obligation.

These problems could be avoided by reducing the quantity of offset credits awarded upstream to account for the CO₂ emissions generated by the methane combustion and applying the biogas compliance exemption to biogas from methane digester offset projects.

Furthermore, § 95131(i)(2)(B) of the proposed revised Mandatory Reporting Rule directs a verifier of biomass-derived fuel to determine, when qualifying fuel for the compliance exemption, that "no entity in the chain of custody has applied for or received credit for the use of biomass-derived fuel in offset credits or any other credit for greenhouse gas reductions in another voluntary or regulatory project." In addition to removing the reference to offset credits, CERP asks that this language be clarified to provide that the

³ Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, § 95131(i)(2)(A) at 112 – 113 (October 28, 2010).



phrase "other credits for greenhouse gas reductions" does not refer to renewable energy credits. It is our understanding that this is ARB's intent, but the language as written could be misinterpreted.

B. <u>Equitable exemption application:</u> The biogas compliance exemption should be applied fairly.

Under §§ 95852.1 and 95852.2 of the Proposed Regulations and § 95131(i) of the proposed revised Mandatory Reporting Rule, the compliance exemption for biomass-derived fuel is limited to: (1) fuel production that was obligated under contract to a California operator prior to January 1, 2010; and (2) fuel that is "associated with an increase in the biomass-based fuel producer's capacity."

CERP appreciates that ARB is concerned with the repercussions of merely shifting "clean" energy from other parts of the country to California with no net gain in clean energy nationwide. CERP is concerned, however, that these two categories unintentionally exclude biogas that is equally deserving of the compliance exemption. CERP urges ARB to revise the regulatory language accordingly.

First, the proposed categorization fails to accommodate biomass-derived fuel that was sold into California prior to January 1, 2010 but was not under contract with a California operator. If the owner of a biomass-derived fuel production facility can prove that fuel from the facility was flowing to California prior to January 1, 2010, then that fuel production should be eligible for the compliance exemption.

Second, the proposed language would require fuel producers that have sold biomass-derived fuel to a California operator before 2010 to continue selling to that operator in order to retain the compliance exemption. This gives the operator inappropriate monopoly purchasing power within California with regards to the specific fuel producer, and unnecessarily excludes biomass-derived fuel production capacity that has historically supplied California.

Third, the concept of an "increase" in a fuel producer's capacity is unhelpfully vague. Specifically, this language fails to explicitly establish that the conversion of a flare to beneficial use qualifies as an increase in the biomass-based fuel producer's capacity, such that the fuel derived from the conversion will qualify for the compliance exemption.

CERP urges ARB to also clarify that an increase in the efficiency of the conversion of biomass-derived fuel to productive work similarly qualifies as an increase in capacity. If, for example, a methane capture facility replaces an inefficient generator with a highly efficient generator, the facility will produce more carbon neutral electricity and displace

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⁴ Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, § 95131(i)(2)(A) at 112 – 113 (October 28, 2010).



more "dirty" electricity from the grid. Such efficiency improvements help reduce overall emissions and should be encouraged.

To address these issues, CERP proposes that ARB adopt the below modifications to the proposed language:

Section 95141(i)(2):

- (A) The verification team members shall examine biomass-derived fuel contracts to determine that one of the twohree following conditions has been met:
 - 1. That the contract for purchasing any biomass-derived fuel was in effect prior to January 1, 2010 and remains in effect or has been renegotiated for the same with a California operator within one year of contract expiration;
 - 2. That the fuel being provided under a contract dated after January 1, 2010 is only for an amount of fuel that is associated with an increase in the biomass-based fuel producer's capacity. The conversion of a flare to beneficial use and any increase in the efficiency of beneficial use of biomass-based fuel will constitute such an increase in capacity.
 - 3. That the fuel producer has demonstrated, through the biomassderived fuel contracts and any other relevant evidence, that fuel from the facility was flowing to California prior to January 1, 2010.

If a contract **or biomass-derived fuel sale history** includes both fuel that does and does not meet **one of** thisese conditions, then only the portion of the fuel that does meet this condition will be considered biomass-derived fuel.

We appreciate your consideration of these recommendations.

For more information, please contact:

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