Archer Daniels Midland Company
4666 Faries Parkway
Decatur, IL 62526
T 217.424.5200

December 16, 2008

Ms. Manisha Singh
California Air Resources Board
1001 "I" Street
Sacramento, CA 95812

Via Email

Re: *Draft* California Low Carbon Fuel Standard – December 2008
Archer Daniels Midland Company Comments

Dear Ms. Singh:

Archer Daniels Midland (ADM) Company respectfully submits the attached comments in response to the California Air Resources Board's workshop held December 2, 2008.

Comment 1: ADM recommends defining *proponent-regulated* party in the California LCFS regulation. This term is first used in Section 95426, Page 37.

A regulated party is defined on page 15 but CARB then states that a proponent regulated party in Method 2A may request approval for customizing look-up table values. A clear definition of proponent regulated party is needed to ensure clarity.

Comment 2 (Section 95426, Page 37): CARB states that "Input variables that are identified as invariant input parameters in GREET may not be modified…" in Method 2A, Paragraph A, but does not detail what is considered an invariant or variant variable. Additionally, the *Detailed California-Modified GREET Pathway for Denatured Corn Ethanol* – Version 1 nor the *Supporting Documentation for the Draft Regulation for the California Low Carbon Fuel Standard* specifically identify which input variables are considered invariant.

ADM supports CARB's customized lookup table method to account for the significant differences that can exist between plants and which encourages innovation and improvement in the industry. ADM recommends that the table in Appendix B of the Denatured Corn Ethanol Pathway document be modified to include a column identifying which input values are considered variant variables. At a minimum ADM suggests that the values under the headings of Co-Product Credit, EtOH Production (specifically EtOH yield, energy use, fuel mix, and purchased electricity) and EtOH T & D be considered variant variables and as such subject to modification in Method 2A. ADM believes that all these values can be collected with relative ease and they are verifiable on a facility specific basis.

Comment 3 (Section 95426, Page 37): There are various processes that may be employed at a facility which would not be accounted for through the variant variables in Method 2A and would not represent a new pathway whereby Method 2B could be used to accurately determine its carbon intensity. In these situations it is not clear how a facility will get approval for a representative carbon intensity value. Since the standard look-up tables do not include much detail, many of the variations will necessitate new inputs which would be prohibited by Paragraph C of Method 2A. For example, a dry mill ethanol facility may have a germ separation process creating an additional co-product for the facility which could result in a lower carbon intensity value. In the current draft this facility does not appear to be able to use Method 2A to determine the carbon intensity value, since the new co-product would be a new input. A second example is where a facility employs geological sequestration for the carbon dioxide generated from ethanol fermentation, significantly lowering the carbon intensity value but also requiring a new input. Both of these examples would require new inputs preventing the use of Method 2A, yet the changes are not significant enough to be considered a new pathway.

ADM recommends CARB include a provision allowing for approval of new inputs for unique changes that would meet the "10-10" substantiality requirement but not constitute a new pathway.

Comment 4: GTAP values will vary depending on the customized look-up table values created using Method 2A and Method 2B.

Utilizing Method 2A and differentiating an ethanol facility from that in the standard look-up table will yield a separate GTAP value than that of the constant value listed. GTAP should be dynamic enough to account for such variables as co-product differences and carbon sequestration. A standard value placed in CA-GREET 1.8b for a process will not describe the uniqueness of a customized carbon intensity value. GTAP will also need to have the capacity to evaluate new pathways that are generated using Method 2B.

Comment 5 (Section 95426, Page 38): ADM recommends defining which Level (I, II, III, or IV) in the carbon intensity look-up table the 10% reduction is determined from in the "10-10" Substantiality Requirement.

CARB states, "Method 2A yields an overall blendstock carbon intensity that is lower than the value calculated using Method 1 by more than 10%..." in the "10-10" Substantiality Requirement. ADM believes it is appropriate for this determination to be based on the Level 2 values and recommends this be made explicit in the regulation.

Comment 6:
In evaluating the CA-GREET 1.7, it appears the allocation method for ethanol is displacement, but the allocation method for biodiesel is energy content. When allocating for ethanol using the displacement method, DGS displaces soybeans and feed corn. The energy and emissions associated with soybeans has to be calculated in order to know the

emission credits for DGS. The calculation for the soybean emissions is done using displacement in the Biodiesel pathway for the ethanol LCA. So, in a sense these two pathways are connected. On one hand, the biodiesel carbon intensity is calculated using energy content, but when the ethanol co-product credits are being calculated for the ethanol pathway, the soybean value is being calculated using displacement. The methods are not consistent.

ADM requests that CARB explain the logic used to conclude that displacement allocation be used for ethanol while energy content allocation be used for biodiesel.

If you have any questions regarding these comments please contact Mark Calmes at 217-451-7456 or myself at 217-451-6330.

Sincerely,

Dean Frommelt
Divisional Manager – Environmental
Corn Processing & BioProducts

cc: John Courtis, CARB
Mark Calmes, ADM
Alison Brady, ADM