

From: Greenizan, Bill (MEI) [Bill.Greenizan@ontario.ca]
Sent: Wednesday, August 05, 2009 1:03 PM
To: Ingram, Wes@ARB
Subject: Guidelines for new pathways - Aug 5 Workshop
Hi Wes:

I would anticipate that some fuels may enter the California market periodically (i.e. less than 10 million gge per year) that would not necessarily have a carbon intensity assigned to them.

For instance, biodiesel produced from western Canadian canola could enter the California market on occasion. Without a CA-GREET "canola biodiesel" pathway nor an indirect land use change factor (as determined by the CARB board) for this feedstock, how will CARB determine the carbon intensity of this fuel? Will the supplier in this case simply use the carbon intensity value for "generic biodiesel" in the Look-up Table?

I suspect this issue may be relevant for other biofuels (e.g. non Brazilian sugarcane, ethanol from non-corn sources (wheat, sweet potatoes)).

Thanks for the clarification.

Cheers,

BILL GREENIZAN
Senior Advisor, Oil
Ontario Ministry of Energy & Infrastructure
416-326-0548



September 9, 2009

John Courtis
California Air Resources Board
1001 I Street
Sacramento, CA 95812

Re: Draft Guidance to Regulated Parties on Establishing New Fuel Pathways and Sub-Pathways

Dear Mr. Courtis:

Thank you for the opportunity to comment on the California Air Resources Board's (CARB) Draft Guidance to Regulated Parties on Establishing New Fuel Pathways and Sub-Pathways. Friends of the Earth supports the checks put into place to ensure that new pathways – under both methods 2A and 2B – are scientifically documented and sufficiently investigated. We also support CARB's requirement that indirect land use analysis be performed by CARB. Below we offer suggestions regarding compliance auditing, the substantiality requirement, differentiation of new fuel pathways, and the trade secrets issue.

1) **Spot-checks for pathway accuracy.**

Although the procedures put in place to establish sub-pathways and new pathways are fairly rigorous, we are concerned that the system could be gamed or simply break down as a result of poor tracing and record keeping when credit is given based on changes that do not involve permanent capital investments. As an example, biodiesel producers are assumed in the ARB default analysis to use petroleum diesel fuel in the transport and production of soy feedstock and resultant fuel, but a sub-pathway might be created for producers using biodiesel rather than petroleum in transport and farming activities.¹ We are concerned that there is currently too little documentation about whether producers are consistently meeting the requirements of this pathway. If the economics of fuel use change – for example because the LCFS drives the value

¹ According to CARB figures, if petroleum diesel used for shipment is augmented with biodiesel in a 50% blend, (possible in most modern diesel engines with little to no modification), about 2gCO₂e/MJ savings results. Where a similar blend is used in tractors for feedstock cultivation, the 5gCO₂e/MJ substantiality requirement would easily be met.

of the B50 blend much higher than that of a conventional diesel blend – companies would have a strong incentive to switch back to conventional fuels in their fleets. They would not, however, have an incentive or even perhaps knowledge that it was necessary to inform CARB of the shift.

Friends of the Earth recognizes that it is not possible to audit in detail every producer in every year, but we recommend that a spot-check audit system be put into place wherein a producer is required to provide documentation of feedstock purchases, process energy purchases, and other inputs after the fact. The possibility of a penalty would encourage appropriate recordkeeping and reporting while removing any incentive to report best practices that may not be uniformly enacted.

2) Method 2A “substantiality requirement.”

We are concerned that the 10 million gallon per year substantiality requirement under Method 2A will exclude a great many innovative efficiency initiatives that should be supported.

As stated in the draft document, one of the goals of the LCFS “is to incentivize the development of lower carbon fuels for the California transportation market.” We are concerned, however, that a pathway that is being used to produce 10 million or more gallons of gasoline equivalent fuel annually is not actually “in development” – it has been commercially deployed. We appreciate that CARB has recognized and addressed this dynamic in not requiring that the substantiality requirements be met for new fuel applications under method 2B. However, many important gains, such as improved feedstock production efficiency, reduced travel distance, altered process fuels, and countless others can be made to existing fuel pathways. It is important that these actions be encouraged, even though they may be piloted at less than 10 million gallons.

We recognize that there is a managerial efficiency constraint to contend with and that CARB should not be expected to create pathways for every minor improvement. In order to accommodate this managerial constraint, as well as the goal of incentivizing improvement, we propose that the 10 million gallon minimum be lowered to actual production of 1 million gallons annually or a similar number that allows smaller producers to innovate, while ensuring that CARB can process applications thoroughly. Alternatively, CARB could lower the minimum requirement to 1 million gallons so long as lower volume producers provide a business plan demonstrating that the facility in question is a pilot for a planned larger operation. A third alternative would be to provide producers with a “pre-certification” option allowing producers to provide data to CARB to evaluate whether their improvement activities would be sufficient to meet the 2A substantiality requirement. While this would not substitute for the actual certification of the lifecycle pathway, it would provide valuable information for alternative producers in the pre-production stages.

3) Increase in number and variety of fuel pathways in lookup table.

For many established pathways, CARB has developed default values from what are deemed industry average practices. This use of averages means that actual emissions will probably be greater than those reported because less efficient producers will take the default “score” while more efficient producers will apply for sub-pathways. Method 2B could exacerbate this problem

by basing a new fuel pathway upon a single “high-performing” producer rather than conservative industry averages. For example:

A producer of biodiesel from palm oil approaches ARB to certify a new pathway under method 2B. This producer is a member of the Roundtable on Sustainable Palm Oil, and as such has implemented numerous efficiency measures in its production system. The producer’s feedstock is grown exclusively on degraded and abandoned land, causing less indirect land-use change and sequestering carbon in the soil. Process energy is provided through solar, wind, and on-site biomass electricity, and transportation is conducted using 100% biodiesel.

Under this scenario, once this pathway has been set, other palm-oil biodiesel producers, in the language of the draft regulation, are instructed to “use the carbon intensity value that most closely corresponds to the production process used to produce the regulated party’s fuel.” Thus, the carbon intensity value that most closely corresponds to all other palm oil producers will be the pathway described in the above example. Although many other palm oil producers may not be implementing the efficiency measures put in place by the original applicant, under the current structure of the regulation they would receive credit as if they were. This would be akin to CARB developing a default value for sugarcane ethanol based on one producer’s use of mechanical harvesting and bagasse co-firing and then allowing other producers – whatever their practices – to come in under the pathway.

The creation of defaults from highly efficient cases will reduce the incentive to innovate, because efficiency gains will be attributed to non-deserving competitors, reducing the competitiveness of the best performers. Such an outcome would perversely reward bad actors by giving them an advantage against competitors whose efficient practices create added expense.

To prevent this problem from occurring, we suggest that when a new fuel pathway is being established pursuant to Method 2B, CARB create differential pathways based on different possible lifecycle factors, so that available pathways more accurately characterize a range of producer practices. Corn ethanol is a case where this has already been put into practice. The CARB lookup table has been populated with 12 pathways, characterizing the variety in production methods from cultivation location to process energy use and refining technique.

This could be done in a number of ways. Sensitivity analysis could be used to identify those few parameters that have significant impact on the final score. Individual producers could then be required to report on those critical parameters (e.g. process energy source, cultivation practices) with the remainder of values scored using mostly default values. Alternately, pathways could be developed for the bounding cases of each of these critical parameters in a manner similar to what CARB has done in the cases of corn and sugarcane ethanol.

Alternately, we recommend that CARB study the processes proposed under a method 2B application and develop not only the pathway established by the applicant, but also a worst-case emission scenario for that fuel type (e.g. coal-fired process electricity, crop displacement, heavy agricultural use) and a best case scenario. Other producers intending to use the same fuel type would then default to the pathway that best represents their practices.

4) Trade Secrets

We support CARB’s statement that “[n]ew sub-pathways can be approved only if enough information is available publicly to justify that approval.” This is important since, as identified by CARB, once a sub-pathway is approved and added to the lookup table, other regulated parties will use the new pathway to the extent they can demonstrate that the new pathway best describes their processes.

It is also critical that the process by which credit values are set be as transparent as possible to the public. If a significant amount of information in a pathway is designated as trade secret, the public will be unable to participate meaningfully in the process of establishing credit values. We have seen a recent trend of industry designating more and more information as trade secret, effectively shutting the public out of meaningful participation in the regulatory process. We support CARB staff’s effort to recognize and protect as confidential truly trade secret information, while requiring that the vast majority of information be made public so that meaningful stakeholder participation can occur. The CARB Board has been very clear that transparency is critical to the process and we appreciate CARB staff acknowledging this goal.

5) Workshopping Pathway Development

Finally, we request that CARB’s guidance document specifically include direction for the inclusion of stakeholder input through public workshops as part of the Method 2A and 2B pathway development process. Workshopping provides an opportunity for meaningful stakeholder comment prior to official submission of a proposed rulemaking, after which point it is difficult to make substantive changes.

Thank you for your consideration of these comments.

Sincerely,



Danielle R. Fugere
Friends of the Earth



John Shears
Center for Energy Efficiency and Renewable Technologies



Simon Mui
Natural Resources Defense Council



Shankar Prasad
Coalition for Clean Air



Bonnie Holmes-Gen
American Lung Association in California



Remy Garderet
Energy Independence Now Coalition



Patricia Monahan
Union of Concerned Scientists

August 28, 2009

Mary D. Nichols, Chair
California Air Resources Board
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1001 I Street, P.O. Box 2815
Sacramento, CA 95812

Re: Request for Comments on Establishing New Fuel Pathways and Proposal for an Expert Workgroup

Dear Ms. Nichols:

We welcome the opportunity to comment on California Air Resources Board (CARB) staff proposals regarding the creation of a Low Carbon Fuel Standard (LCFS) Expert Workgroup (August 3, 2009) and on Procedures and Guidelines for Regulated Parties to Establish New Fuel Pathways (August 4, 2009). We applaud the public process that CARB is utilizing to review the process for new pathway development and for the selection of Expert Workgroup members. Only with this type of identification of the expertise needed, and a public selection process to ensure all appropriate qualified candidates are identified, can a group be established that can deliver a work product with the scientific quality and integrity expected of the CARB.

Establishing an Expert Workgroup

We agree wholeheartedly with the Board's decision to establish an Expert Workgroup to provide the necessary expertise to address import unresolved issues which cloud adoption of the proposed LCFS. We are hopeful that the charge to an Expert Workgroup will include suggested improvements that were provided to CARB during the initial public comment period ending April 22, 2009 and the subsequent public hearings ending April 23-24, 2009. Because of the wide divergence of scientific opinion concerning indirect land use value determinations, it is imperative that the Expert Workgroup be allowed to complete its work before the ILUC component of the CI value determination is implemented. In short, we believe that the work of the Expert Workgroup needs to be structured in such a manner as to address the requirements outlined in CARB Resolution 09-31 and to ensure that the LCFS pathways identified by CARB are an accurate reflection of current Carbon Intensity (CI) values:

Priority One: Harmonization of Indirect Land Use Efforts

Most important, the group must harmonize its efforts with other studies to study and establish the effects of indirect land use. CARB specifically indicated that CARB staff is to "coordinate this effort with similar efforts by the U.S. EPA, European Union and other agencies pursuing a low carbon fuel standard." With international and federal experts suggesting that additional time and scientific rigor are required to provide the appropriate framework and accurate data for indirect land use determinations, California should seize this opportunity to coordinate its studies with theirs, rather than pursue its own separate and abbreviated path. As we have previously indicated to CARB, at a minimum, inaccurate assumptions have been made regarding yield, yield changes over time, intensification, US versus rest of world yields, land resolution, and co-product credits that significantly impact the indirect land use contribution. Broader scientific agreement on the framework and boundaries of indirect land use and

the appropriate treatment of emission factors, elasticity, and time accounting are all important to ensuring quality science leading to quality decisions for the public good.

Priority Two: Address Current Direct CI Pathway Value Errors and a Means for Keeping Data Current.

The group must update the current direct components of the pathways in the proposed LCFS model. The model should reflect current and accurate data with provision for annual updates. The use of inaccurate or dated information in the determination of CI values falsely represents the relative benefits of various fuels, processes and technologies. Accuracy is critical to incent the correct behavior and to achieve the desired global warming reductions. This applies, at a minimum, to the following areas: fertilizer use, water use, co-product treatment, crop yields, ethanol plant production values (e.g. energy and yield) and on farm fuel use.

Establishing New Fuel Pathways

To encourage continued optimization and innovation, it is critical that current pathways be updated annually, as mentioned above, to reflect current industry practice. Second, new pathways will serve to lower barriers to entry. Provision must also be made to assure the confidentiality of proprietary technology developments and for proposals by parties other than regulated parties for the addition of new pathways. Finally, indirect land use changes that are demonstrable via direct land use reduction, should not require Board review.

Priority One: Current pathways must be updated annually. Continued progress will occur in the reduction of fertilizer use, the reduction of on farm fuel, the increase in crop yields per acre, the retention of on farm biomass, and the efficiency of ethanol plant production processes. The beneficial adoption of technical innovation must be fostered by means of annual updates to the pathways. This also assures CARB staff of its ability to quantify CI reductions reflective of the current state of renewable fuel production. This also raises the importance of national generation of this information on an annual basis, reinforcing the importance of CARB working with federal agencies to ensure an efficient and effective process is developed for generating and providing this information.

Priority Two: New pathways which reflect indirect land use changes that are demonstrable via direct land use reduction should not require Board approval, as has been proposed. Applicants who are able to demonstrate that direct and measurable reductions in required crop production land resulting from their proposed pathway or pathway modification should not be subjected to a delayed review process requiring board versus staff involvement. Examples of technologies that would provide this ready demonstration of reduced land use are: front end fractionation to food grade corn oil and ethanol yield per bushel increases.

Priority Three: Pro-active establishment of new pathways must be encouraged. Non-regulated parties should be allowed to propose new pathways, and the confidentiality of proprietary technology must be protected. Incenting CI value reduction via technology innovation is critical for California to achieve its CI intensity reduction goals. Adoption of new technologies is accelerated when the CI benefits are made evident. By pre-approving a number of additional pathways which could be recommended as a group, the work of CARB staff is minimized.

The opportunity for non-regulated parties to submit new and/or improved pathways will further ensure a rapid pace of innovation and will again allow for a pathway to be submitted, reviewed and approved that could be applicable to multiple producers. These parties are better able to have the expertise and

resources to develop the raw data and quantification of data required by CARB staff. Finally, however, there must be a means of protecting data that is proprietary in nature. If data transparency is required, innovations will be both narrowed to those which are patentable and delayed by the requirement for a patent process. A means by which outside independent technology consultants could be used to provide independent assessments of the technology, similar to the process utilized by banks in financing determinations, would provide an alternative means of obtaining necessary information without disclosing proprietary data.

Thank you for the opportunity to submit these comments. We stand ready to work with CARB staff in the further development of these proposals, and to nominate individuals who are well-qualified to serve on the Expert Workgroup. We believe that thoughtful deliberation by the Workgroup on these topics, and the adoption of an accessible protocol for the recognition of new pathways will contribute significantly to achievement of the Board's LCFS objectives.

Sincerely,



John S. Hickman, Ph.D., Director, Biorenewable Energy and Life Sciences, Deere & Company



Neal Jakel, Delta-T Corporation



Frank Magazine, Business Manager, Emerald Foam Control



Rob Elliot, President, Illinois Corn Growers Association



Raymond E. Defenbaugh, President, Illinois Renewable Fuels Association



Gary Edwards, President, Iowa Corn Growers Association



Craig Pilgrim, Global Marketing and Product Development Manager, Lallernand Ethanol Technology



Martha A. Schlicher, Ph.D., Vice-President Technology, Bioenergy, Monsanto Corporation



John Caupert, Director, National Corn to Ethanol Research Center



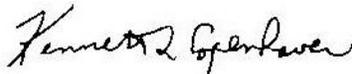
Alan Tiemann, Chairman, Nebraska Corn Board



Michael S. Grats, President, NewBio E Systems Inc.



Adam Monroe, President, Novozymes North America



Kenneth Copenhaver, Ph.D., University of Illinois-Chicago



Steffan Mueller, Ph.D., University of Illinois-Chicago



Rita Mumm, Director, Illinois Plant Breeding Center, University of Illinois Urbana Champaign



Hans Stein, Ph.D., University of Illinois Urbana Champaign

Cc: Dr. Daniel Sperling
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August 18, 2009

Mr. John Courtis
Air Resources Board
1001 I Street
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Sacramento, CA 95812

SUBJECT: Low Carbon Fuel Regulation – Renewable Diesel from Tallow Pathway
Comments

Dear Mr. Courtis:

Kern Oil & Refining Co. (Kern) is one of the only two remaining small refiners producing transportation fuels, gasoline and diesel, in California. Kern is the only small refiner producing CARB reformulated gasoline and Ultra Low Sulfur Diesel. It is important to note that Kern is the only refinery between the Bay Area and Los Angeles that is producing gasoline and diesel. Without Kern in the Central Valley, transportation fuels need to be trucked into the San Joaquin Valley from the Bay Area or South Coast. This would create an emissions increase of not only GHG emissions but also of NOx, VOC and PM. In addition, Kern is a less complex refinery than those in the Bay Area and South Coast since Kern does not operate catalytic crackers, hydrocrackers or cokers. Kern also uses less energy than many of the major refineries since Kern's crude feed is light, sweet, and local crude transported to the refinery via pipeline.

Kern is on record with the Board, and continues to advocate for consideration for small refiners. Small refiners are clearly being disproportionately and negatively impacted economically by this new fuel standard. In developing fuel standards in the past, CARB has recognized and thoughtfully considered the significance of the financial impacts to California's small refiners, and CARB has also recognized the important role small refiners provide while stabilizing the market and delivering transportation fuels to rural markets often ignored by the major refiners.

Kern believes the regulatory development process for the LCFS is moving much too quickly and needs to be slowed down. It appears the regulations are being developed before the science is well understood and confirmed. An example of how this regulation

is being “fast-tracked” is apparent from the Board’s adoption of the regulation even though it was incomplete at the time and still a work in progress.

Kern is committed to a continuing dialog with Staff and with the Board in an effort to advocate due fairness to small refiners within this regulatory process. And as follow up to the information presented at the August 5, 2009 public workshop, Kern is providing the following comments for the record.

Kern requests Staff provide all of the data inputs used in establishing the basis for the Renewable Diesel Tallow Pathway. It is not clear how the carbon intensity (CI) for this pathway could have effectively doubled from the prior excel spreadsheet on CARB’s LCFS website. Full transparency of data needs to be provided so stakeholders can properly evaluate the accuracy of the data and the validity of the assumptions used.

Kern agrees with Staff that the Tallow Pathway land-use component should be zero since tallow is generated from a waste product. However, Kern takes issue with the GREET default value for transporting the tallow in railcars to California from the Midwest. Kern recommends another and different default value be considered for tallow produced in California, a potentially significant tallow supply source. Transportation of renewable diesel is also skewed high for small refiners and other biorefiners that may distribute locally. Nearly all of the small refiners fuel products are transported directly to retailers and are not supplied to bulk terminals. In CARB’s calculation, transportation to bulk terminals accounts for approximately 30% of the renewable diesel transport and distribution GHG emissions. Small refiners that distribute products locally should not be disproportionately penalized for the average mix of transportation and distribution that large oil companies operate under.

On Table 1.01, Rendering Energy for Production of Tallow (Ref. Preliminary Draft Distributed for Public Comment, Version 1.0, dated July 20, 2009), Kern requests clarification as to why the thermal and electrical energy for Plants 6 and 7 are nearly double that of Plants 1 through 5. The average of these seven data points are skewed significantly higher by use of the two high data points. These two potential “outliers” appear to be aligned with the Nelson and Schrock data that may allocate all rendering energy to fat and none to meat and bone meal. The four other study reports cited are not only lower than the average energy calculated by CARB, but are lower than each individual plant used in the CARB calculation. Kern also requests further discussion regarding the fact that data used in this analysis is provided by only one biodiesel manufacturer source, rather than multiple tallow manufacturing sources.

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In section 2, Renewable Diesel Production (Ref. Preliminary Draft Distributed for Public Comment, Version 1.0, dated July 20, 2009), it is not clear where the co-process inputs originated for feedstock pre-heating, distillation and hydrotreating. Since there is currently not a single biorefinery in operation in the United States producing renewable diesel as a co-product or stand alone fuel, CARB's energy use data is likely extrapolated from research and development data or from existing petroleum refineries. In either case, the data needs to be further examined and developed to correlate closely with future biorefiners.

In summary, Kern suggests this regulatory process be slowed down so that stakeholders and staff have adequate time for review. Kern requests more transparency and more timely sharing of data and assumptions used to determine GREET defaults and pathway CI values. Kern recommends a GREET default be developed for the transportation component of tallow produced in California. Kern also recommends that CARB further assess energy use and transportation assumptions for biorefineries to match closely with the typical unit processes and geographic areas supplied.

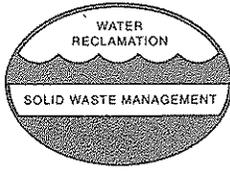
Kern appreciates this opportunity to provide comment, and we are committed to working with Staff throughout this regulatory process.

Sincerely,

COPY

Robert H. Richards
EHS Manager

cc: Dean Simeroth, Chief Criteria Pollutants Branch
Renee Littaua, Manager, Fuels Section
Floyd Vergara, Manager, Industrial Section



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STEPHEN R. MAGUIN
Chief Engineer and General Manager

October 20, 2009
File No.: 31-220.10

Messrs. John Curtis and Wes Ingram
California Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, California 95814

Gentlemen:

Comments on Establishing New Fuel Pathways under the Low Carbon Fuel Standard Procedures and Guidelines for Regulated Parties

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate this opportunity to comment on the preliminary draft Establishing New Fuel Pathways under the California Low Carbon Fuels Standard Procedures and Guidelines for Regulated Parties (Draft Guidelines), dated August 4, 2009.

The Sanitation Districts have previously submitted four comments letters regarding the Low Carbon Fuels Standard (LCFS) regulation and also provided testimony at the adoption hearing for the incentivization of waste-derived fuels within the LCFS. In our most recent comment letter regarding the Modified Regulation Order, dated August 19, 2009, we opposed adopting the Lookup Tables into the LCFS regulation due to the technical rigor and time requirements of the statutory process to amend an adopted regulation. As stated in our last comment letter, this cumbersome process of amending the Lookup Tables for every modified or new fuel pathway could impede the progress of emerging renewable fuel industries such as the waste-derived fuel industry, attempting to enter the California transportation fuel market. We continue to believe that the Lookup Tables should remain only as a reference to the regulated parties, and allow for modified and new fuel pathways to be added with more flexibility than the statutory process to amend an adopted regulation.

The Draft Guidelines have affirmed our concerns, detailing the length of time required to complete the process to add new fuel pathways and sub-pathways using either Method 2A or 2B in the LCFS regulation. The time requirement between application submittal and approval could range from 120 to 180 calendar days assuming things go smoothly¹. If there are complications

¹ Presentation slide number 18, Low Carbon Fuel Standard Workshop, Draft Guidance to Regulated Parties on Establishing New Fuel Pathways and Sub-Pathways, August 5, 2009.

toward the end of the process, an additional 120 days is added for CARB and the applicant to correct any problems identified by the Office of Administrative Law (OAL). In other words, the entire procedure could take up to four to ten months to get a new pathway or sub-pathway added to the Lookup Tables.

The timeframe above does not include the additional time required for the applicant to meet some of the specific requirements prior to initiating this process. For example, the scientific defensibility for both Method 2A and 2B requires publication of the pathway in a major, well-established, peer-reviewed scientific journal. Assuming first that the pathway is even considered for publication, depending on the scientific journal, this process could take months on end. The Draft Guidelines allow for a second option to meet the scientific defensibility criteria, where CARB will review the applicant's supporting documents for the new fuel pathway and make the determination if the pathway is scientifically defensible. This second option is better than the first, but it may not be realistic in the 15-day timeframe allotted for CARB to review the massive amount of information to make a decisive and fair determination. Due to the nature of the stringent process to amend an adopted rule, we again suggest CARB not adopt the Lookup Tables in the LCFS regulation, and work with stakeholders to simplify the process of adding new pathways and sub-pathways.

Method 2A has a "substantiality" requirement in which an applicant must demonstrate (1) the ability or willingness to produce more than 10 million gasoline gallon equivalents per year of the fuel with the new sub-pathway and (2) the proposed new sub-pathway will yield a carbon intensity improvement of a least 5 gCO₂e/MJ over the existing primary pathway. The numbers set for the volume requirement and the reduction carbon intensity are both arbitrary and do not incentivize companies to produce lower carbon fuels. In fact, it could stymie smaller companies trying to break into the competitive fuels market. The goal of LCFS regulation is to decrease the carbon intensity of transportation fuels in California as a whole by 10 percent by 2020. It does not make sense to restrict potential production of lower carbon fuels. Accordingly, we recommend the substantiality requirement for Method 2A be removed from the Draft Guidelines.

Table 1 in the Draft Guidelines lists fuels expected to have no or inherently negligible land use effects on carbon intensity. However, for biodiesel and Fischer-Tropsch diesel fuel, waste-derived feedstocks such as biosolids are not listed in the table. In the four comment letters we submitted CARB regarding the LCFS regulation, we have identified biosolids as a potential feedstock to produce biodiesel or Fischer-Tropsch diesel. We request biosolids be added to Table 1 for biodiesel and Fischer-Tropsch diesel. Similarly, CNG/LNG fuels are not listed in Table 1 for sewage digester gas, which we have identified in our comment letters. We again request that sewage digester gas be included in Table 1 for CNG/LNG and electricity.

The Sanitation Districts hope CARB will continue to encourage the use of waste-derived alternative fuels and not place burdensome requirements that stagnate the emerging industry from contributing to the transportation fuel market in California. To reiterate, the Sanitation

Districts strongly recommend the Lookup Tables remain as references for regulated parties to utilize as a guide, as intended in the original regulation language.

If you have any questions regarding this transmittal, please do not hesitate to contact me at (562) 908-4288, extension 2113.

Very truly yours,
Stephen R. Maguin



Gregory M. Adams
Assistant Departmental Engineer
Air Quality Engineering Section
Technical Services Department

GMA:DLR:ML:bb

cc: Mr. Bob Fletcher - CARB
Mr. Floyd Vergara - CARB



Shell Oil Company
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Via Email

August 28, 2009

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Email: wingram@arb.ca.gov

RE: Comments On The Preliminary Draft of Procedures and Guidelines for Regulated Parties for Establishing New Fuel Pathways Under The California Low Carbon Fuel Standards

Dear Mr. Ingram:

Shell Oil Company appreciates this opportunity to provide comments on the preliminary draft of Procedures and Guidelines for Regulated Parties for Establishing New Fuel Pathways Under the California Low Carbon Fuels Standards. Our comments focus on four aspects of the draft. First, we suggest that CARB simplify the process by using the same process regardless of whether or not the proposed fuel pathway potentially results in indirect emissions. Second, we suggest that CARB simplify the process to enable expedited decision-making. Third, we suggest that CARB clarify the process to ensure that a process is available for parties to demonstrate that their pathway avoids or significantly reduces indirect emissions relative to the default indirect emission values. And, lastly, we offer some specific comments on the proposed procedures and guidelines.

I. CARB Should Simplify the Process by Using the Same Process Regardless of Whether The Proposed Fuel Pathway Results in Indirect Emissions

CARB has proposed a bifurcated process in which pathways that have indirect effects must go before the Board before the pathway can be approved. Rather than adopt this approach, which is likely to result in substantial delays in the approval of new pathways, and which in turn can stifle innovation, we suggest that CARB adopt a single robust process that allows the Executive Officer to make the final decision on all new fuel pathways.

II. CARB Should Simplify The Process To Enable Expedited Decision Making

We are concerned that a lengthy process that requires rulemaking in order to add new fuels pathways will slow the pace of new fuel development. CARB must create a faster process that provides investment certainty for companies considering development of a new fuel pathway and yet still provides the technical assurance that the new pathways are sound. We believe that CARB should be consistent with approaches it has taken in other fuels regulatory programs. For example, although the specifications for CARB diesel aromatics are included in CARB's regulations, CARB allows parties to develop alternative formulations that CARB approves via a petition process rather than through a formal rulemaking process.

Instead of requiring each petition for a new fuel pathway to be approved via a formal rulemaking process, we suggest that CARB revise the regulations to establish a petition process in the regulations that clearly specifies the process, and substantive criteria to be applied when the Executive Officer evaluates a petition for a new fuel pathway. By specifying the process that applies in the regulations, we believe that CARB can then approve new fuel pathways administratively without having to go through a formal rulemaking process, since the process itself would have been approved through the rulemaking process. If the petition process described in the regulations is robust, there should be no need to approve each new pathway through a formal rulemaking process. This approach would be consistent with the approach that CARB took in the CARB diesel program.

III. CARB Should Clarify The Process To Ensure That Options Exist For Parties To Demonstrate That Their Pathway Avoids Or Significantly Reduces Indirect Emissions Relative To The Default Indirect Emission Values

CARB has set forth the process that applies when a proposed pathway will "create significant land use change effects." CARB also lists various biofuels that are deemed to have no or inherently negligible land use effects on carbon intensity. However, CARB's draft does not appear to provide a mechanism for a party to demonstrate that their biofuel has no or a significantly reduced indirect land use change effect compared to the effect established in the default values. To encourage innovation and the production of the most sustainable biofuels, CARB should ensure that the process allows parties to demonstrate that their biofuel is produced from feedstocks that have no or a significantly lower indirect land use change impact than implied by the default indirect land use change factor values for that feedstock pathway.

A suitable process could extend the mechanism for establishing a new fuel sub-pathway to include demonstrated revisions to the indirect land use change modeling alone (as opposed to only basing sub-pathways only on changes to CA-GREET). This is consistent with the CARB view (on p10 of the proposal) that pathways are created using both CA-GREET and GTAP (or equivalent) models as it allows new sub-pathways to be based on revisions to either of these models. Examples of suitable revisions to the

indirect land use change modeling could include factors such as demonstrable changes to the input parameters of the GTAP model, more accurate emission factors or consideration of the agricultural practices listed in section IV of the proposal, which sets out criteria for specific biofuel feedstocks that are expected to have no or inherently negligible land use effects on carbon intensity.

IV. Specific Comments On the Proposed Process

After a party submits an application and supporting information, the current proposed process would allow CARB to find that the new proposed pathway is not warranted. We believe that the process leading to this particular outcome is inconsistent with the overall scheme CARB has proposed. If CARB believes it necessary to go through a formal rulemaking process to approve a petition for a new pathway, then a decision by CARB to reject a new pathway should be subject to the same process. In any event, if CARB decides that a new pathway is not warranted, that decision should be accompanied by a statement of reasons, and an acknowledgement that CARB's decision constitutes a final agency action subject to judicial review.

CARB should provide additional examples, and clarification, as to what constitutes a new pathway versus a modified pathway.

We also suggest that CARB clarify the substantiality criteria under method 2A. As currently drafted, the language states that a party petitioning for a new modified pathway would be required to state "his or her ability and willingness to produce more than 10 million gallons per year." Instead, the substantiality criteria should be based on the pathway having the capability to be scaled by multiple producers to provide 10 million gallons of gasoline equivalent per year.

CARB should more specifically define what information is needed to support a carbon intensity calculation for a pathway. It is not clear, for example, whether CARB would accept emissions projections, or would require actual historical performance data.

We agree that the five basic categories listed in section IV represent a good initial set of criteria for specific biofuel feedstocks that are expected to have no or inherently negligible land use effects on carbon intensity. However, we would recommend that under section IV the first category should be expanded to include the following: 1) fuel feedstock crops grown on land deforested before a certain date (e.g. Roundtable for Sustainable Palm Oil uses 2005, European Renewable Energy Directive uses 2008), and 2) fuel feedstock crops grown on abandoned/underutilized/neglected farmland including pastureland. We also reiterate our earlier point in requesting that a suitable, simple process be defined for reducing or removing the indirect land use change carbon intensity factor for an existing pathway when one of these criteria can be demonstrated for a particular biofuel usage. In particular we suggest examining use of carbon intensity bonuses for the biofuel when one of these criteria can be demonstrated, partially or completely offsetting the default indirect land use change carbon intensity factor. This would enable synergies with the European Renewable Fuels Directive.

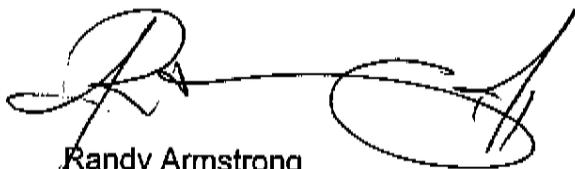
In addition, where CARB specifies 'sustainable' sources of biomass (e.g. sustainably harvested wood and forest residues), we believe it is critical that CARB ensures definitions are cited and consistent with the existing international sustainability standards/certification schemes. For instance, when referring to sustainably harvested wood and forest residues, CARB should ensure consistency and recognize the Forest Stewardship Council (FSC) definition. And, for defining sustainable biomass and specific feedstocks e.g. sustainable sugar, we would urge CARB to recognize and/or use definitions established by sustainable biofuel standards/certification bodies including Better Sugar Initiative, Roundtable for Responsible Soy, Roundtable for Sustainable Biofuels and Roundtable for Sustainable Palm Oil.

On the detail of Table 1, under the Conditions/Restrictions column for Crop Residue, we question how leaving crop residue on the fields impacts indirect land use change. We would suggest that this is an issue for the CA-GREET pathway in terms of fertilizer use and should be taken into account when developing the pathway.

* * *

Shell appreciates this opportunity to comment on the preliminary draft of Procedures and Guidelines for Regulated Parties for Establishing New Fuel Pathways Under the California Low Carbon Fuels Standards. Should you have any questions concerning these comments please call me, or Clay Calkin at 925-313-3321.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Randy Armstrong', with a large, stylized flourish at the end.

Randy Armstrong
Environmental Issues Director



Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Catherine H. Reheis-Boyd
Executive Vice President and COO

August 28, 2009

B. Fletcher, D. Simeroth, F. Vergara, J. Curtis, W. Ingram, M. Singh, J. Duffy, R. Littaua, C. Zhang-Tillman, G. O'Brien, C. Lozo, S. Solarz, J. Yuan, K. Sideco, L. Mitchell
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814
Via electronic mail to addressees

Dear ARB Staff:

Re. Western States Petroleum Association's Comments on the California Air Resources Board's Request for Additional Comments at August 5, 2009 LCFS Workshop

This letter contains comments by the Western States Petroleum Association (WSPA) on information provided to the public during ARB staff's LCFS workshop held August 5. WSPA is a non-profit trade organization representing twenty-eight companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy products in California and five other western states.

ARB staff requested comments on several presentations made during the workshop that provided additional concepts on some of the outstanding program components. Unfortunately, the presentations and subsequent Q&A periods did not provide sufficient details in many cases for us to respond in a definitive fashion. This continues to concern our companies since there is still a lack of demonstrable program feasibility. We are hopeful that additional workshops and meetings will be held in a timely fashion to continue working on this extremely complex regulation, although we still question the overall LCFS viability.

WSPA has provided in the attached, comments on:

- Confidentiality provisions,
- Compliance and reporting tool,
- New fuel pathways – procedures and guidelines,
- Future certification program,
- Credits for off-road electric transportation,
- Electricity – regulated party definition and credits,
- Credit trading issues, and,
- Fee schedule provisions.

Please let me know if you have any comments or questions, or contact my staff Gina Grey at 480-595-7121.

Sincerely,



Western States Petroleum Association's Comments on August 5 LCFS Workshop Issues

Confidentiality Provisions

ARB's treatment of data submitted through the LCFS reporting procedures raises concerns relating to possible disclosure of trade secrets and other confidential business information. Current regulatory language contains no provision for the designation of confidential information submitted to ARB in quarterly and annual reports, and only includes limited protection of confidential data submitted to ARB relating to development of new fuel pathways. It is critical that the LCFS regulation address protection of trade secret and confidential business information submitted to ARB by regulated parties.

"Trade secret" in the proposed LCFS regulation is defined in the same manner as the California Public Records Act ("CPRA"). *See* § 95486(e)(3)(C). The CPRA defines "trade secrets" as including, but not limited to "any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article or trade or a service having commercial value and which gives its users an opportunity to obtain a business advantage over competitors who do not know or use it." Gov't Code § 6254.7.

Much of the information to be submitted to ARB in quarterly and annual reports, as well as data submitted to ARB in applications for new fuel pathways, clearly qualifies as "trade secret" under the CPRA. In addition, ARB regulations directly address how the agency must handle confidential business information submitted by regulated parties. *See* 17 CCR §§ 91010, 91011.

ARB regulations contain specific provisions relating to the treatment of confidential business information. While emissions data submitted to ARB is considered public information, the regulations specify that any person submitting information to ARB may designate information that is not emission data as confidential "trade secret." 17 CCR §§ 91010, 91011. ARB regulations also state that the State Board shall not disclose any such data submitted as confidential "trade secret". 17 CCR § 91011.

Protecting confidential business information, such as the data required to be submitted to ARB under the LCFS, is critical to protecting competitively sensitive business information that is unique to each regulated party, and that is known only to certain individuals in each company. Accordingly, WSPA recommends specific changes to the regulatory language, in order to safeguard the proprietary interests of the regulated parties, and to meet the legal requirements of the California Public Records Act and ARB regulations.

Competitive Information -- Quarterly and Annual Reporting

Much of the data required to be submitted to ARB in quarterly and annual reports is sensitive confidential business information that should be protected from public disclosure. For example, Table 3 on page A-32 of the Proposed LCFS Regulation Order requires regulated parties to submit sensitive information not generally known outside each individual company. This includes the amount of fuel or blendstock produced, the Carbon Intensity (CI) of the fuel or blendstock, and credits and deficits generated each quarter and each year.

The public release of this information would effectively disclose confidential business information to competitors of the regulated parties under the LCFS. The amounts of credits and deficits held by each company are considered extremely sensitive pieces of information in the fuel industry, and public disclosure could affect the credit and fuels markets in California. Even if the total amount of credits and deficits were not disclosed, the disclosure of the total volume of fuels and blendstocks in combination with the CI of each fuel or blendstock would reveal the amounts of credits or deficits held by each company.

Another concern with the quarterly and annual reporting is the use of the Compliance and Reporting Tool (CRT) to report compliance with the LCFS. In ARB's August 5, 2009 slides, the key features of the CRT include possible mass data uploads, and automated credit and deficit calculations, banking and tracking. These features raise concerns about the lack of any ability to mark data as confidential or trade secret in the CRT program, leading to inadvertent disclosures.

It is understandable that some of this information may be necessary for ARB to ascertain the effectiveness of the program. Clearly, ARB is trying to address the need to balance governmental transparency with the need for competitiveness in the fuel industry, as ARB discussed in the LCFS Credit Trading Issues slide presentation on August 5, 2009.

Therefore, WSPA recommends that any public disclosure of the data submitted to ARB in quarterly and annual reports aggregate all data and de-identify the regulated parties, so as to protect confidential information contained in the reports. This is standard practice in the industry and in public reports prepared by the California Energy Commission (the "CEC"). See 20 CCR § 1370 (requiring all unaggregated data collected by the CEC through Petroleum Information Reports to be held in confidence). Also, the CRT program should allow for a user to designate sensitive information as confidential trade secrets in a contemporaneous and effective manner.

Accordingly, we suggest the following language be added to Reporting Requirements section 95484(c), as 95484(c)(6):

(6) *Treatment of Trade Secret Information*

(A) *A regulated party that submits data in quarterly and annual compliance reports, as specified in sections 95484(c)(3) and 95484(c)(4) should identify any confidential data submitted as trade secret, and all such data shall not be considered public records; "trade secret" has the same meaning as defined in Government Code section 6254.7.*

(B) *ARB will aggregate all data gathered from the quarterly and annual compliance reports prior to public disclosure, so as to protect confidentiality of reporting parties. All regulated parties will be de-identified prior to public disclosure of any such data.*

New Fuel Pathways -- Protection of Method 2A and 2B Data Submittals

Another area of concern is the limited protections for confidential business information submitted to ARB in applications for new fuel pathways. Section 95486(f)(2)(A) provides some protection of information identified as trade secret that is submitted in support of a proposed Method 2A or 2B fuel pathway.

However, the current protection of trade secrets in the LCFS regulation is inadequate, as section 95486(f)(2)(B) provides that once an application is approved, the CI values, associated parameters, and other fuel pathway-related information will be incorporated into the Lookup Table and made

public. This provision lacks any clear protections of trade secret and confidential business information that could be made public by incorporation into the Lookup Table.

As ARB is aware and the record of the LCFS rulemaking demonstrates, the development of new fuel pathways is a highly competitive field, where innovation and competition between producers of new fuels is closely linked to maintaining confidential business information. Indeed, one of the main objectives of the LCFS program is to provide strong incentives for innovation in the development of new fuels, which will require ARB to evaluate and approve new fuels pathways.

Based on past ARB programs with similar goals to promote innovation, it is ARB's intent to encourage innovators to disclose proprietary information to ARB on a confidential basis as early as possible in the development of new fuels and their associated production, transportation, storage and distribution technologies. Some of these fuels will be inextricably linked to the development of new vehicles capable of using the fuels, and information about the new vehicle techniques should be eligible for confidential treatment by ARB.

ARB recognizes this need. ARB's LCFS Credit Trading Issues slide presentation on August 5, 2009, noted that a major issue relating to disclosure of data is the need to protect the competitiveness among fuel producers in order to foster innovation that will lead to new fuel pathways. Data relating to new fuel pathways clearly qualifies as "trade secret" under the CPRA definition, as a formula, process, procedure, or production data "known only to certain individuals within a commercial concern." Gov't Code 6254.7(d). *See generally Masonite Corp. v. County of Mendocino Air Quality Management District*, 42 Cal. App. 4th 436, 446 (1996) (holding that information that would reveal "production data" qualifies as a trade secret under Govt. Code § 6254.7(d).).

It is critical that the provisions relating to the development of new fuel pathways assure the non-disclosure of confidential "trade secrets."

Therefore, WSPA suggests the following changes to the language in section 95486(f)(2), to assure that confidential data related to development of new pathways to compliance are properly treated as trade secrets:

- (B) If the application is approved by the Executive Officer, the carbon intensity values, associated parameters, and other fuel pathway-related information obtained or derived from the application *not designated as confidential trade secret* will be incorporated into the Method 1 Lookup Table for use on a free, unlimited license, and otherwise unrestricted basis by any person.
- (C) *All information submitted to support a Method 2A or Method 2B pathway shall be aggregated and applicants will be de-identified, to protect confidentiality.*

Compliance and Reporting Tool

WSPA is concerned about the timing of the availability of the "compliance and reporting tool". Reporting requirements begin in January 2010, and based on the current state of the tool, it appears there will not be a well-vetted product available for our use in time. Further, we want to emphasize that the tool should be simple, should have sufficient confidentiality protections built in, and should be just an accounting tool that aggregates quarterly data. In other words, companies should be able to use the tool as an accounting assist if they so desire, but there should be no requirement that any intermediate entries be made in between the required quarterly reports.

New Fuel Pathways - Procedures and Guidelines for Regulated Parties

Comments on Method 2A Application Process:

- The application should include sufficient data to allow staff to perform an uncertainty analysis (also applies to Method 2B).
- The application should include information on whether or not the proposed changes result in any compositional changes to the fuel and whether or not any such changes impact either greenhouse gas or criteria pollutant emissions when the fuel is burned.
- The document should specify that the energy content of the fuel should be based on lower heating value (pg. 5).
- The removal of the volume-based substantiality requirement for Method 2A modifications to fuels that are produced in total quantities less than 10 million gallons per year is a good idea. This will enable Method 2A changes for new fuels while they are still at the pilot scale, thereby encouraging innovation (pg. 6).
- The scientific defensibility requirement for Method 2A changes should be based specifically on only those CA GREET inputs being modified (pg. 6).
- CARB should reserve the right to determine the acceptability of journals for the purpose of establishing Scientific defensibility (also applies to Method 2B).
- The language of the last bullet on page 7 is not consistent with the regulations as currently written. It should be made clear that any use of the modified value before written approval is a violation. This includes PTD documentation and quarterly reports, not just the annual report (also applies to Method 2B).

Comments on Method 2B Application Process:

- The type of feedstock and feedstock production process should be added to the list of required descriptions (pg. 9).
- The application should include an assessment of the impact of scale on the pathway analysis. Staff should take scale differences into consideration in the determination of the appropriate carbon intensity value so as not to penalize commercial scale projects based on pilot or demonstration scale data. Staff should consider binning new pathways by production rate (e.g., 10-50 Mgpy, 51-100 Mgpy, and 101+ Mgpy).

Comments on Sections III and IV on Indirect Effects:

- It should be specifically recognized that diversion of a feedstock from its current use to the production of a fuel can create an indirect effect due to its replacement by some substitute. In addition, the substitute could possibly have a land use change impact associated with it.

➤ Table 1 contains a number of inaccuracies, including:

1. Fossil CNG and LNG have no land use effects on carbon intensity.
2. Fossil electricity has no land use effects on carbon intensity.
3. Nuclear electricity has no land use effects on carbon intensity.
4. Electricity derived from old solar, wind, and hydro has no land use effects on carbon intensity.
5. Biomass electricity can have land use effects on carbon intensity.
6. Hydrogen produced from fossil fuels has no land use effects on carbon intensity.
7. Hydrogen produced via electrolysis has no land use effects on carbon intensity regardless of the source of electricity.

Future Certification Program

WSPA agrees that streamlining the process for making Method 2A and 2B changes will be beneficial to the program. However, such streamlining should involve enhancements to the procedures as outlined in the guidelines document, rather than eventual replacement of the guidelines document with some other process.

Under no circumstances should adoption of a certification program include the removal of the lookup table carbon intensity values from the LCFS regulations, as was suggested by staff at the August 5, 2009 Workshop. WSPA believes that the lookup table carbon intensity values must be an integral part of the regulations. The carbon intensity values of fuels and fuel components are the currency of the LCFS: all compliance determinations are based on these values. Investment decisions will be made based on these values, and changes to them will create the risk of stranded capital. Therefore, these values should be explicitly included in the regulation, the same way that the Predictive Model equations are included in the CaRFG regulations. Any permanent changes to these values should only be possible through a public rulemaking process.

In furtherance of the technology innovation goals of the LCFS, it is also important to recognize the need for flexibility, especially in the determination of carbon intensity values for novel fuel pathways that are critical to the success of the program. Such cases could perhaps be accommodated by either an expedited rulemaking process or a provision to grant temporary approval until the rulemaking process can be completed.

Credits for Off-Road Electric Transportation

- There needs to be a rigorous method to quantify electricity usage. The preferred option would be direct metering.
- The regulated party should be required to determine which fuel is being displaced – LPG, gasoline, or diesel. Also, if LPG is being displaced, would the credits estimates be based on the gasoline standard?
- Staff needs to develop appropriate EERs for electricity versus the fuel being displaced. This can have a substantial impact on the credits estimates since diesel engines are inherently more efficient than spark-ignited LPG and gasoline engines.
- There should be a requirement that entities wanting to claim credit identify whether a) they have moved into an alternative fuel due to existing federal, state or local requirements; and b)

whether they received any government funding/incentives (in which case they should not be able to claim credit).

Electricity - Regulated Party and Claiming a Credit

- The point of credit generation requires clarification. Slide 3 from the Workshop suggests that LCFS regulation allows credit generation by the load-serving entity, bundled charging infrastructure provider if applicable, owner of charging equipment if contract with electricity provider, and homeowner if there is a contract with the electricity provider. It is not clear who will decide which entity receives the credit for a kWh delivered as fuel and on what basis this decision will be made. Staff should provide greater details on this point.
- WSPA's members' CHP plants are barred by existing law from being "load serving entities" (LSEs) for this purpose. The ability of any party but the utilities to sell electricity to a party for fuel is barred by AB1X, Water Code section 80260. If the point of credit generation is placed at the LSE level, this barrier must be removed to expand competition.
- As discussed in our 30 day comments, ARB appears to be recommending the utilities be off the hook for direct-metering until 2015. Instead, WSPA believes direct-metering should be required to encourage installation of infrastructure. Since Advance Metering is being deployed by 2012, there's no apparent reason why it can't be deployed with a vehicle submetering option.
- A key issue has always been the generation mix that is assumed to serve the vehicles (e.g., renewable, coal, gas-fired). This issue is important, so ARB staff needs to address this further before the state moves forward.
- Related to 4, it could be argued that ARB may be double counting AB 32 reductions if ARB is relying on renewable generation in the resource mix. The RPS program, up to 33%, already has a Scoping Plan target, and that target is assumed to be separate from the LCFS target. If, however, the load forecast used in developing the GHG savings for the RPS program already assumed increased PEV penetration, there would be double counting. WSPA doesn't know how the forecast was developed, but assumes it was based on a forecast assuming some growth in PEVs. We request that ARB provide us with additional details.

Credit Trading Issues

What should the credit trading provision accomplish?

ARB should develop, through the LCFS regulations, a simple and workable credit market. Our members has read and heard varying versions of what ARB staff is suggesting.

Some have interpreted the existing regulations to indicate that ARB is attempting to do this by allowing credits that are generated in a compliance period to be traded before the end of the compliance period. Others heard at a workshop that credits be "submitted" in the quarterly report before trading.

In addition, some understand ARB wants to provide flexibility and supply of credits by incorporating the ability to buy and sell credits based on the projected credit balances for the compliance period. Others have heard ARB indicate that credits can only be traded after they are "submitted", meaning they can only come from prior compliance periods.

WSPA suggests the regulations should be revised to allow obligated parties to trade credits after a compliance period has ended to meet their obligation for that period. If ARB does not provide for this flexibility, then the supply of credits will always be lagging behind the market demand by one compliance period. This in turn could lead to higher credit prices and increased cost to obligated parties and consumers with no benefits.

What is ARB's Role in the LCFS Credit Market?

WSPA recommends that ARB should look at the U.S. EPA credit trading regulations for RFG Benzene credits, gasoline sulfur credits, motor vehicle diesel fuel sulfur credits, and MSAT II benzene credits when defining its role in the credit market. All of these existing credit markets function well and smoothly with minimal EPA involvement. In these programs, the EPA accounts for compliance by checking the reports submitted by buyers and sellers for consistency. Similarly, WSPA strongly recommends that ARB's role in the LCFS credit market be limited to compliance validation. ARB should not provide clearing services or facilitate trades.

ARB should also review the U.S. EPA credit trading regulations concerning invalid credits. To protect the buyers of credits, EPA regulations require that sellers must use their valid credits to meet their credit sales obligations before meeting their compliance obligation or use for banking (see CFR 80.67 (h)(3)(iii) "Where any credit transferor has in its balance at the conclusion of any averaging period both credits which were properly created and credits which were improperly created, the properly created credits will be applied first to any credit transfers before the transferor may apply any credits to achieve its own compliance"). WSPA also suggests ARB consider regulatory language requiring both obligated and non obligated parties that sell invalid credits to purchase valid credits or incur a deficit in order to replace any invalid credits that they sold to obligated parties.

In summary, ARB's involvement should be limited to:

1. Normal compliance checking of annual compliance reports
2. Normal compliance checking and matching of credit purchases and sales.

What trading data should ARB collect and what data must be protected in order to assure a sound credit trading market?

ARB should limit its trading data collection to annual reporting of:

1. Names of buyers and sellers of LCFS credits along with the number of credits and the vintage of the credits, and the transaction date. WSPA would support ARB's listing of the names and contact information of buyers and sellers (not identified as either) for those parties that voluntary choose to submit this information to CARB for posting.
2. ARB must limit data disclosure to industry aggregated data. Disclosure of LCFS credit market data in total market aggregate and industry aggregated level will provide sufficient information for parties to understand how well the LCFS market and the regulation is functioning. Company specific credit data such as balances, purchases/sales volumes and prices, and transaction partners is confidential business information and disclosure of company specific data could cause competitive issues and risk seriously disrupting the LCFS credit market.

To be clear, WSPA wants to state that there should be no reason for ARB to collect purchase/sell price information and we are opposed to this.

WSPA strongly suggests that ARB establish a working group of regulated parties and key stakeholders to develop clear rules for how to buy and sell LCFS credits at minimum administrative burden and cost. The system should build on existing credit trading programs such as the U.S. EPA Reformulated Gasoline Benzene credit, gasoline sulfur, and motor vehicle diesel fuel credit programs.

Fee Schedule Provisions

Due to the lack of any definitive information from ARB regarding a proposed fee schedule for the LCFS program, WSPA declines to comment on this subject at this time. However, WSPA expressly reserves the right to provide such comments once more information on any proposed fee schedule is forthcoming.

Without prejudice to the foregoing, WSPA notes the ARB Office of Climate Change is developing its own AB 32 administrative fee, currently scheduled for adoption by the Board in September. Before proceeding with a separate fee or charge related to LCFS regulatory work, the LCFS program staff and the Office of Climate Change need to provide clarity and certainty, at a minimum, that PYs and contracts associated with certification of new fuel pathways are not being included in the funding base for both fees.

Further, any fee associated with certification of new fuel pathways would need to comply with basic legal fee requirements, including reasonable nexus between the fee, the fee payer, and the funded regulatory activity, and a fair apportionment of the fee among fee payers.

Finally, it will be helpful to those providing comments on any LCFS fee proposal for the LCFS regulatory staff to provide an estimate of program costs (including PYs, contracts, and other costs) for pathway certification, other LCFS regulatory activity, and LCFS enforcement activity, for the current and any future fiscal years for which estimates are available.