August 31, 2012

VIA ELECTRONIC FILING

Cory-Ann Wind
Oregon Department of Environmental Quality
Air Quality Division
811 SW Sixth Avenue
Portland, OR 97204-1390

ATTN: Oregon Clean Fuels Program

RE: Notice of Proposed Rulemaking Concerning Oregon’s Clean Fuels Program for Fuel Suppliers and Producers of Transportation Fuels (July 19, 2012)

Dear Ms. Wind,

The Renewable Fuels Association (RFA) is pleased to submit these comments regarding the Oregon Department of Environmental Quality’s (DEQ) proposed rule for the Oregon Clean Fuels Program (CFP), formerly referred to as the Oregon Low Carbon Fuel Standard (LCFS).

RFA is the leading national trade association for America’s ethanol industry. Its mission is to drive expanded production and use of American-made ethanol and co-products by raising awareness about the benefits of renewable fuels. Founded in 1981, our membership includes ethanol producers and suppliers, gasoline marketers, agricultural organizations, state agencies and others dedicated to the continued expansion and promotion of fuel ethanol. RFA’s 300-plus members are working to help America become cleaner, safer, energy independent and economically secure.

We have carefully followed the Oregon LCFS Advisory Committee process that began in 2009, as well as other public meetings and document releases that have preceded this proposed rulemaking. We applaud Oregon DEQ for conducting an open and transparent deliberative process that included a broad array of stakeholder perspectives. Further, in light of the significant uncertainty around technology development, assessment of indirect GHG effects, and other key issues, Oregon DEQ should be commended for the careful approach that is being proposed for implementation of the program. The two-phase approach to promulgation and
periodic re-evaluations of key program elements help to ensure smooth implementation without significant economic effects for regulated parties and the state’s consumers.

While Oregon DEQ’s process to date has been laudable, it is important to note that a very similar California regulation was recently struck down by a U.S. District Court as violative of the Commerce Clause of the U.S. Constitution.¹ That District Court decision was subsequently appealed in a process that is ongoing, with the last legal brief due to be filed in September 2012 and oral argument scheduled for October 2012. Because the California litigation raises special concerns for Oregon’s proposed rule, we encourage Oregon DEQ to closely monitor the status of the litigation and revise the program to conform to the Court’s ruling on the Commerce Clause and adopt changes to the CFP proposed rule necessary to ensure that Oregon avoids the pitfalls that plague California’s regulations.

After thoroughly reviewing the proposed rule, RFA offers the following comments.

I. **Given the similarities between the Oregon CFP proposed rule and the California LCFS, Oregon DEQ should be mindful of the 2011 ruling issued by the U.S. District Court for the Eastern District of California that the California LCFS is unlawful because it violates the Commerce Clause of the U.S. Constitution.**

In December 2009, a number of organizations representing fuel producers and farmers filed lawsuits against the California Air Resources Board (CARB) in the U.S. District Court for the Eastern District of California. The plaintiffs sought a judgment declaring the LCFS invalid (as well as a preliminary injunction preventing the LCFS from being enforced during the pendency of the litigation) based on the grounds that the program discriminates against interstate commerce and impermissibly regulates conduct occurring wholly outside the borders of the state of California, both in violation of the Constitution.

In December 2011, the Court ruled that the LCFS unlawfully sought to regulate commerce occurring outside the state and discriminated against ethanol produced outside of the state. The Court specifically noted that CARB “cannot take ‘legal and political responsibility’ of commerce occurring outside of California, even if the products of that commerce ultimately are sold in California.” CARB subsequently appealed the District Court’s ruling to the U.S. Court of Appeals for the Ninth Circuit, where the appeal is currently pending.

Because the Oregon CFP proposed rule is structured similarly to the California LCFS, Oregon must ensure that its program does not violate fundamental constitutional principles in the manner that California’s LCFS does. Oregon DEQ should revise the proposed CFP to address

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¹ RFA is a party to the challenge to the LCFS.
the constitutional (and statutory) shortcomings of the California program so that it does not run afoul of these constitutional and statutory prohibitions. The following comments are meant to offer RFA’s policy perspective on Oregon’s proposed rule, and should not be construed, and are not intended, as a concession of any of the issues being litigated in the LCFS challenge.

While the proposed Oregon CFP is similar in many ways to the California LCFS, one highly encouraging difference is the decision to defer the inclusion of indirect emissions penalties in the carbon intensity (CI) scores for various fuel pathways. Further, we appreciate Oregon DEQ’s commitment to evaluating indirect effects for all fuel pathways.

It is important to note that RFA has indicated its support for a national fuels program with the overall goal of reducing greenhouse gases. We are, however, opposed to implementation of such programs at the state level. Due to the aforementioned issues regarding interstate commerce and the fact that fuels are highly fungible commodities, we believe discussions of a CFP or LCFS should be undertaken at the national level. To that end, we believe the Oregon CFP proposal is a good starting point for discussions of a national program focused on reducing the emissions associated with transportation fuels.

II. Notwithstanding the abovementioned legal and policy concerns, and assuming Oregon DEQ moves forward with this rulemaking as scheduled, we offer the following comments regarding the programmatic elements of the proposed CFP.

Our comments regarding the technical elements of the program should not be interpreted as an endorsement of the program’s implementation at the state level.

A. The proposal’s two-phase approach to implementation is appropriate given the uncertainty surrounding credit generation, carbon intensity scoring, indirect effect estimation methods, vehicle technology development, advanced biofuel development and other key factors.

We support Oregon DEQ’s proposed two-phase approach to implementation of the CFP. As recognized by Oregon DEQ, significant uncertainty surrounds the future development and availability of advanced low carbon fuels, alternative fuel vehicle technology, lifecycle GHG accounting methods (including assessment of indirect effects), the capacity of Oregon DEQ to administer the program, and other key factors.

The proposed Phase 1 allows regulated parties time to familiarize themselves with reporting and recordkeeping requirements, while simultaneously allowing Oregon DEQ to gather additional information about the practicality of enforcing the proposed program and its economic effects on regulated parties and the state’s consumers. Phase 1 will hopefully allow sufficient time for Oregon DEQ and affected stakeholders to resolve some of the key
uncertainties that make immediate application and enforcement of CI standards infeasible. In particular, we urge Oregon DEQ to continue to examine the latest developments in lifecycle analysis (LCA), including new and improved methods for estimating indirect emissions from various energy sources. Further, RFA supports the proposal that initiation of Phase 2 be contingent on future rulemaking activity approved by the Environmental Quality Commission.

B. Oregon DEQ’s decision to defer inclusion of indirect GHG emissions in CI scoring is reasonable, appropriate, and necessary given the high levels of uncertainty associated with estimating these emissions.

RFA recognizes that Oregon DEQ and the Advisory Committee took a more careful and deliberate approach to the treatment of indirect GHG emissions than did California. As recognized by Oregon DEQ, its technical contractors, and the Advisory Committee, estimation of the indirect emissions associated with various fuel production pathways is highly uncertain and assumption-driven. Because CI scores are the “engine” that drives LCFS-type programs, it is imperative that CI scoring is conducted fairly and accurately.

Appendix G to the final Advisory Committee report (a technical assessment of existing indirect land use change estimates conducted by TIAx, LLC) properly characterizes the state of the science regarding indirect land use change (ILUC) and the high levels of uncertainty associated with ILUC modeling. The TIAx report shows a range of ILUC estimates for corn ethanol from 10.8 g/MJ (RFA, based on EPA) to 30 g/MJ (CARB). Subsequent analyses have shown estimates for corn ethanol ILUC below 10 g/MJ. Clearly, this range is indicative of the immaturity of ILUC estimation methods and the wide variation in input data and assumptions.

We strongly support the following findings and conclusions from the TIAx report:

- “With the wide variations in analysis methodologies and results, it is difficult to determine which set of values is the most representative of actual ILUC emissions.”

- “The CARB [ILUC] analysis has serious limitations.”

- “None of the analyses (except RFA’s reinterpretation of EPA’s results) consider simultaneous increases in a variety of biofuels – each [is] estimated in a vacuum.”

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• “Given this changing landscape, it is difficult to recommend specific ILUC GHG values that will not be dated in a year.”

• “The [ILUC] values for all biofuels have extreme variation. Although CARB and EPA have similar values for corn ethanol, this appears to be a coincidence. The methodologies for determining the amount and type of land use change (and the subsequent results) and land use conversion factors are so different that this can be the only conclusion.”

We recommend that Oregon DEQ schedule a series of public workshops during Phase 1 to discuss advancements in LCA, with a particular focus on estimating indirect GHG effects for all regulated fuel pathways. Further, we recommend Oregon DEQ consider contracting with TIAX, LLC again to conduct an updated assessment/literature review of relevant work on indirect GHG emissions that has occurred since the last report.

Additionally, Oregon DEQ appropriately recognized that, “[i]n addition to the indirect land use change effect, there are other indirect effects that occur as a result of increased fuel production.” We encourage Oregon DEQ to continue to investigate methodologies for estimating the indirect GHG effects associated with all fuel pathways, such as military emissions related to U.S. oil consumption and land use changes related to oil and natural gas exploration and production.

Moreover, we encourage Oregon DEQ to resist the calls from some stakeholders to include indirect emissions penalties in Tables 3 and 4 at this time. Based on the immaturity of the science and the lack of consensus on appropriate estimation methods, the agency has rationally and logically justified the decision to defer inclusion of indirect effects.

Finally, we urge Oregon DEQ to exercise caution and sound judgment in its use of LCA as a regulatory tool. While LCA can serve as a valuable asset for instructing policy and regulatory development, its use as a rigid tool for regulatory enforcement remains the subject of lively debate. Whereas the U.S. Environmental Protection Agency used LCA more qualitatively to determine whether certain renewable fuels are likely to meet required GHG reduction thresholds for the RFS2, CARB’s LCFS program uses LCA to assign single-point g/MJ estimates that carry the weight and penalty of the law.

Unfortunately, existing LCA models and tools simply are not capable of producing results that rise to the level of confidence, accuracy, and precision demanded by a program where every 1 g/MJ has important economic implications for fuel producers, regulated parties, and consumers. As such, we encourage Oregon DEQ to explicitly recognize the uncertainty associated with LCA and remain circumspect in interpreting modeling results and applying them to regulated fuels. As eloquently stated by University of California, Berkeley, Professor
Thomas McKone, “LCAs should be viewed as tools for building scenarios from which one can learn, rather than truth-generating-machines.”

C. The proposal is unclear regarding the ability of out-of-state biofuel producers and marketers to voluntarily “opt in” to the program to retain the compliance obligation and ability to generate credits.

Section 340-253-0310(2) of the proposed rule identifies initial regulated parties for gasoline and ethanol as “the Oregon producer, large Oregon importer or small Oregon importer of the fuel.” Section 340-253-0310(4) then explains the conditions under which the initial regulated party’s compliance obligation can be transferred or maintained. It appears from these passages of the proposal that out-of-state fuel producers and marketers do not have the capability to “opt in” to the program and retain the compliance obligation and ability to generate credits. If this is the case, Oregon DEQ should explicitly clarify that only in-state entities can qualify as regulated or opt-in parties.

If our interpretation is correct, Oregon DEQ may want to consider provisions allowing out-of-state entities to voluntarily opt in to the program as regulated parties. Based on input from stakeholders, the California LCFS regulation was eventually amended to allow out-of-state producers and marketers to voluntarily opt in to the program to retain the ability to generate, hold, and trade credits. Notwithstanding the other infirmities in the California program, the California LCFS provisions allowing out-of-state entities to opt in could serve as a model for the Oregon proposal.

D. Several administrative aspects of the proposed program need further development and better harmonization with existing commercial practices.

We are concerned that several elements of the proposal governing the transfer of fuels and compliance obligations conflict with existing commercial practices and create new administrative burdens for fuel producers and regulated parties. Specifically, the requirement that a recipient of fuel must notify the transferor in advance of the transfer as to whether the recipient is an “Oregon producer” or “Oregon importer” under the CFP is impractical and would necessitate creation of entirely new communication mechanisms for buyers and sellers and fuel.

Further, there are other existing commercial practices that may be frustrated by the requirements of the proposed rule. These include credit/rebill procedures, accepted practices

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for product transfer documents (PTDs), accepted practices for bills of lading (BOLs), and other issues. We encourage Oregon DEQ to engage in discussions with commercial entities involved in the day-to-day business of producing, transporting, storing, and marketing transportation fuels to ensure the requirements of the CFP are as harmonized as possible with existing commercial practices.

**E. The proposed process for applying for individual carbon intensity values is appropriate and straightforward.**

Oregon DEQ’s proposal correctly recognizes that there are a variety of methods and production pathways for manufacturing different fuels. Accordingly, the proposed rule includes provisions allowing regulated and opt-in parties to obtain individualized carbon intensity scores for their fuels if they are not adequately represented in Tables 3 and 4 of 340-253-3030 and -3040. We believe the proposed process for applying for individualized CI values is straightforward and appropriate. Further, the proposed timeline for review and approval of individualized CI petitions is appropriate.

However, as discussed later in these comments, we believe Oregon DEQ should update OR-GREET to reflect the latest version of the Argonne National Laboratory GREET model. Updating the OR-GREET model (and making corresponding changes to the default CI values in Tables 3 and 4) would not only improve the scientific soundness of the proposed rule, but it would also decrease the administrative burden on Oregon DEQ by reducing the number of applications for individualized CI scores (i.e., if a producer’s CI score is accurately reflected in Table 3 or 4, he will be less likely to petition the agency for an individualized CI score that captures the same improvements implicit in the new Argonne version of GREET).

**F. The version of GREET used by Oregon DEQ and its contractors to estimate default carbon intensity for common pathways is now obsolete. Oregon DEQ should revise the CI values in Table 3 using the newest version of GREET.**

Oregon DEQ and TIAx used Argonne National Laboratory’s GREET version 1.8c as the basis for the OR-GREET model. OR-GREET was then used to derive the default CI values shown in Tables 3 and 4 of the proposed rule. It should be noted that Argonne has released four improved versions of the GREET model since the creation of the OR-GREET model. Thus, the version of the Argonne GREET model (1.8c) upon which OR-GREET is based is now obsolete.

GREET 1.8d was released in July 2010, GREET1_2011 was released in October 2011, GREET1_2012 was released in June 2012, and GREET1_2012 rev1 was released in July 2012. These updates include important improvements to several production variables for key
pathways, including corn ethanol, sugarcane ethanol, cellulosic ethanol, electricity, algae-based renewable fuels, and others. Many of these model improvements result in changes to CI values for common fuel pathways that rise to, or surpass, Oregon DEQ's threshold of significance (i.e., 5 g/MJ or 10% of total CI). We strongly encourage Oregon DEQ to modify OR-GREET and revise its default CI values in Tables 3 and 4 using GREET1_2012 rev1, which is the very latest version of GREET.

Revising the default values in Tables 3 and 4 would significantly decrease the administrative burden on Oregon DEQ associated with reviewing and approving petitions for individualized CI scores. Conversely, a failure to update the default values likely would result in an increased number of submissions for individualized CI scores from producers who do not believe the exiting default CI scores in Tables 3 and 4 accurately represent their processes.

In addition to using the updated GREET model as the basis for revisions to OR-GREET, Oregon DEQ should consider inclusion of following significant direct emissions in its analysis of baseline petroleum: methane emissions from oil tailing ponds created during oil sands production; fugitive methane emissions during production of tight oil and shale gas; and CO2 emissions from flaring during crude oil extraction.

Oregon DEQ should also consider the effect of the proposed CFP on “fuel shuffling” and other emissions leakages. That is, the program may encourage unnatural movements of heavier sources of crude oil and higher CI biofuels to other areas of the U.S. or world market. These market realignments can result in economic inefficiencies and additive GHG emissions from transportation. These potential effects need to be recognized by policymakers and regulators in order to understand the full range of the CFP’s possible impacts.

As stated above, while GREET is a useful tool for enhancing the understanding of a fuel’s lifecycle GHG impacts, results should be interpreted with caution and applied carefully. To again quote Prof. McKone, “Effective LCA can guide and inform decisions, but it cannot replace the wisdom, balance, and responsibility exhibited by effective decision-makers.”

G. For its credit/deficit generation calculations, Oregon DEQ is proposing to use an energy density value for undenatured anhydrous ethanol, when it should be using an energy density value for denatured ethanol.

Table 5 of section 340-253-3050 displays the energy density values for various regulated fuels that Oregon DEQ proposes to use for calculations of CI credits and deficits. The agency

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proposes to use a value of 77.53 MJ/gallon for “anhydrous ethanol.” Presumably, this is synonymous with undenatured ethanol. It is incorrect to use this value, however, because undenatured ethanol does not enter commerce (with the exception of small quantities of undenatured ethanol that are exported). Because fuel ethanol sold for use in the United States is always denatured with 2-2.49% hydrocarbon denaturant before being shipped from the ethanol production facility, Oregon DEQ should correct the energy density value to account for the denaturant. For example, CARB uses a value of 80.53 MJ/gallon for denatured ethanol. We recommend that Oregon DEQ use the same or a similar value.

III. Conclusion

RFA appreciates the opportunity to comment on the proposed rule for the Oregon Clean Fuels Program. Please contact Geoff Cooper at gcooper@ethanolrfa.org or 636.594.2284 if you have any questions.

Sincerely,

Bob Dinneen
President & CEO