



## MONTANA RENEWABLES™

Montana Renewables, LLC  
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May 10, 2024

Via electronic submission to: <https://ww2.arb.ca.gov/public-comments/low-carbon-fuel-standard-workshop-april-10-2024>

Dr. Steven Cliff  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: Proposed Low Carbon Fuel Standard Amendments

Dear Dr. Cliff,

Montana Renewables, LLC (“MRL” or “the Company”) appreciates the opportunity to comment on proposed amendments to the California Low Carbon Fuel Standard (“LCFS”). MRL previously provided comments on the proposed amendments in our letter dated February 20, 2024, a copy of which is included as Attachment “A” and which is reincorporated herein without change. Our present comments focus specifically on several points raised during the California Air Resources Board’s (“CARB”) April 10<sup>th</sup> workshop on the proposed amendments, including information provided in the staff presentation and other supporting materials released in connection with the workshop.

### **Balance Increasing Stringency with Preserving Opportunities for Sustainable Aviation Fuels**

During the workshop, staff presented scenarios examining a 7% versus a 9% “stepdown” in 2025, both steeper than CARB originally proposed in the amendments package posted in December. Staff also presented a potential scenario featuring a 5% stepdown coupled with two “automatic adjustment mechanism” (“AAM”) triggers. All of these scenarios were presented in the context of a 30% emission reduction goal by 2030.

MRL appreciates CARB’s continued efforts to find a balance between achievable near-term emission reductions and long-term sustainable growth in the low carbon fuel sector. As noted in our February 20<sup>th</sup> comment letter, MRL is supportive of measures to increase the stringency of the annual standards. We are alarmed, however, with the modeling inputs that CARB released with other workshop materials – specifically, the LCFS benchmarks indicating that CARB intends to apply the same annual emission reduction targets to diesel and jet fuel. (See, for example, the LCFS benchmarks tab of the “Updated Proposed Scenario with 5% step-down”, located here: [https://ww2.arb.ca.gov/sites/default/files/2024-04/scenario\\_inputs\\_15Day\\_Proposed\\_5percent%20step%20down.xlsx](https://ww2.arb.ca.gov/sites/default/files/2024-04/scenario_inputs_15Day_Proposed_5percent%20step%20down.xlsx).)

The LCFS annual benchmarks have historically applied equally to both non-exempt fossil fuels and their renewable equivalents. As examined further below, if CARB continues this approach and finalizes the benchmarks as reflected in the modeling inputs, the amendments will dramatically shift incentives away from sustainable aviation fuel (“SAF”) at a time when they are critically needed.

Table 1 below shows the current standards and the proposed “new” standards from the above-cited modeling inputs:

**Table 1: LCFS Benchmarks, 5% Stepdown Scenario**

	Gasoline Existing	New Gasoline	Diesel	New Diesel	Jet	New Jet
2020	91.98	91.98	92.92	92.92	89.37	89.37
2021	90.74	90.74	91.66	91.66	89.37	89.37
2022	89.5	89.5	90.41	90.41	89.37	89.37
2023	88.25	88.25	89.15	89.15	89.15	89.15
2024	87.01	87.01	87.89	87.89	87.89	87.89
2025	85.77	80.56	86.64	85.93	86.64	72.66
2026	84.52	78.33	85.38	83.55	85.38	70.65
2027	83.28	76.10	84.13	81.17	84.13	68.64
2028	82.04	73.87	82.87	78.79	82.87	66.63
2029	80.8	71.64	81.62	76.41	81.62	64.61
2030	79.55	69.41	80.36	74.03	80.36	62.60
2031	79.55	64.94	80.36	69.27	80.36	58.58
2032	79.55	60.48	80.36	64.51	80.36	54.55
2033	79.55	56.02	80.36	59.75	80.36	50.53
2034	79.55	51.56	80.36	55.00	80.36	46.50
2035	79.55	47.10	80.36	50.24	80.36	42.48
2036	79.55	42.63	80.36	45.48	80.36	38.45
2037	79.55	38.17	80.36	40.72	80.36	34.43
2038	79.55	33.71	80.36	35.96	80.36	30.41
2039	79.55	29.25	80.36	31.20	80.36	26.38
2040	79.55	24.79	80.36	26.44	80.36	22.36
2041	79.55	21.81	80.36	23.27	80.36	19.67
2042	79.55	18.84	80.36	20.09	80.36	16.99
2043	79.55	15.86	80.36	16.92	80.36	14.31
2044	79.55	12.89	80.36	13.75	80.36	11.63
2045	79.55	9.91	80.36	10.58	80.36	8.94
2046	79.55	9.91	80.36	10.58	80.36	8.94

When renewable diesel and SAF are produced from the same feedstocks and production processes at a facility, CARB’s GREET model assigns both products the same carbon intensity (“CI”) score. For example, in MRL’s case, our U.S. tallow-based renewable diesel and SAF are both scored at 37.33 gCO<sub>2</sub>e/MJ. Comparing this singular score against the “new diesel” and “new jet” standards above, the impact should be immediately evident – SAF would have a significantly lower crediting opportunity compared to renewable diesel, potentially as early as next year. These standards would also hasten the timeframe for certain SAF feedstock pathways to flip from credit-generating to deficit-generating, which will disincentivize deployment in California and instead encourage producers to seek alternative markets.

We understand CARB’s intent in applying the same percentage emission reduction targets to all obligated fuels. However, given that RD and SAF are functionally equivalent enough that they are assigned the same CI scores for their LCFS pathways, we recommend that CARB clarify its rulemaking and allow the “new diesel” standards – regardless of the stepdown scenario that CARB ultimately chooses – to be the applicable benchmark against which both RD and SAF are evaluated for crediting purposes. Alternatively, CARB could choose to publish a standalone SAF benchmark, or roll out the “new jet” standards at a slower pace to preserve SAF’s crediting opportunities. In any case, CARB should not adopt standards that so heavily tilt against SAF, especially given its proven air quality benefits and the key role it has to play in decarbonizing the aviation sector.

**Crop-Based Feedstock Sustainability Requirements Should Open the Door to New Benefits**

CARB’s presentation included several points of clarification and additional information that elaborated on the sustainability requirements included in its December proposal. We appreciate this information, in particular CARB’s acknowledgement that the new requirements will leverage existing certification programs (such as ISCC, RSB, etc.). While such programs are gaining in familiarity and adoption in the feedstock supply chain, we reiterate the request from our February 20<sup>th</sup> letter in asking CARB to ensure that sufficient lead time is given to allow for widespread adoption of certification regimes in advance of CARB’s effective date for their implementation. We also ask again for CARB to consider national-level exemptions for lower-risk U.S. and Canadian crop feedstocks.

The staff presentation also included discussion on a possible re-evaluation of Land Use Change (“LUC”) emission factors for regions outside of those that were part of the CARB’s 2015 analysis areas, and discussion on a mechanism for assigning higher LUC scores for higher-risk crop-based feedstocks. Without directly commenting on such measures, we ask CARB to be open to considering *lower* LUC scores for lower-risk crop feedstocks and/or crop-growing areas (such as the U.S. and Canada). Recognizing the maturity and sophistication of the U.S. and Canadian agricultural sectors should unlock the carbon reducing benefits of crop management practices and second-season/cover crops, such as camelina, in future CI scores for renewable diesel and SAF.

\* \* \*

Thank you for considering these comments. We look forward to working collaboratively with CARB throughout this rulemaking process. Please do not hesitate to contact us with any questions.

Regards,



Greg Staiti  
Compliance Director, MRL

Attachment: February 20<sup>th</sup> Comments of Montana Renewables, LLC

**Attachment A: Copy of MRL's February 20th Comments**



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February 20, 2024

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Dr. Steven Cliff  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: Proposed Low Carbon Fuel Standard Amendments

Dear Dr. Cliff,

Montana Renewables, LLC (“MRL” or “the Company”) appreciates the opportunity to comment on proposed amendments to the California Low Carbon Fuel Standard (“LCFS”). Since beginning commercial production little more than a year ago, MRL has established itself as a significant contributor of renewable diesel to California markets. Moreover, with sustainable aviation fuel (“SAF”) production capacity amongst the largest in the nation, MRL is positioned to be a leading producer of this emerging and critically important low carbon fuel.

MRL is one of the true success stories of the LCFS program. Our parent corporation, Calumet Specialty Products Partners, L.P., (“Calumet”) has operated a conventional oil refinery in Great Falls, Montana, for over a decade and in that time has provided high quality fuels and other products within its predominantly Montana/Upper Rockies service area. Thanks in large part to the incentives offered and demand created by the LCFS program and others like it, Calumet embarked on a bold plan to convert part of the Great Falls refinery to produce fuels from 100% renewable biomass, announcing the formation of MRL in November 2021. The result is a 15,000 bpd capacity renewable plant producing fuels from a wide range feedstocks (including animal fats, distiller’s corn oil and canola) whose products are now sold by our offtakers in California, Oregon, Washington and British Columbia. The Company is not content to have merely joined the growing contingent of refiners that have announced plans to convert assets to produce renewable fuels; we have put our plans into action in near-record development time and have innovated along the way, including:

- steam methane reformer upgrades completed in March 2023 that have allowed MRL to become fully self-sufficient in its hydrogen needs;
- the installation of SAF assets in April 2023, allowing co-production of SAF with renewable diesel;
- the addition of on-site feedstock pretreatment capabilities in May 2023 using first-of-its-kind technology that should reduce energy consumption compared to traditional pretreatment processes; and,
- the first receipt of camelina oil in September 2023, which has great future promise to produce low carbon fuels from a sustainable feedstock that does not compete with traditional food crops.

We appreciate the efforts of the California Air Resources Board (“CARB”) staff in engaging in a thorough stakeholder outreach program last year and recognize the significant commitment of time and resources that have gone into preparing the proposed amendments. The thrust of our comments today focus on expanding opportunities for SAF, as well as several other targeted regulatory measures to enhance incentives, increase transparency, and lower compliance burdens.

### **Expanding Opportunities for Sustainable Aviation Fuel**

CARB's amendments propose to eliminate a long-standing exemption for conventional jet fuel, beginning in 2028, used for intrastate flights (meaning flights taking off and landing in California). We recognize that jurisdictional constraints may limit CARB's authority to impose new obligations on conventional fuels used in other flights. However, even within these limits, we respectfully believe that CARB could go further and faster to improve the incentive structure for SAF.

To start, we believe it is unnecessary to delay obligations for three years after the expected effective date of the amendments (January 1, 2025). For comparison, the original LCFS regulations – imposing entirely new and unfamiliar requirements throughout the fuel supply chain and for renewable fuel producers outside of California – were originally adopted in 2010 and obligations became effective January 1<sup>st</sup> of the following year. Against this backdrop, a three-year lead-in for jet fuel only if used in intrastate flights, within the context of a well-established program, seems unnecessary. We request that CARB reconsider whether a two- or even a one-year delay in implementation would better serve the state of California's overarching objective of reducing the carbon emissions from the aviation sector while still providing sufficient time for new and existing regulated parties to adjust to their obligations.

Besides the timing for implementation, we believe there are more targeted measures that CARB could take to support the rapid development and deployment of SAF. The proposed changes would, at best, only create indirect demand for SAF. Regulated parties for non-exempt conventional jet fuel would be under no compulsion to actually buy or blend SAF; they could simply purchase LCFS credits generated for wholly unrelated fuels to satisfy their newly created annual deficit obligations. Spurring investment and making a market for an emergent fuel requires policies with concrete obligations. The European Union and British Columbia have both recognized this in their respective renewable and low carbon fuel programs, each recently adopting a form of direct blending mandate for SAF. Consequently, we have over the last few months begun seeing a tremendous push from our offtakers and other market participants to ensure that SAF will be eligible in each jurisdiction. If California is to compete on even terms with these programs over the long term, CARB must keep the LCFS incentives structure on par. Even if CARB is unable to directly adopt a blending mandate within its current legal framework, it could achieve similar results by requiring regulated parties for conventional jet fuel to satisfy a percentage of their annual deficits via LCFS credits generated for SAF.

Beyond new incentives for blending SAF into the California aviation pool, CARB should review and align aspects of the LCFS regulatory framework to better allow producers to optimize the production of SAF (and therefore help defray its higher production cost on average compared to renewable diesel). To this end, we believe that CARB's final rule should address the allocation of commingled feedstocks to multiple product outputs from a production facility. The existing LCFS regulations begin to tackle this issue in Sections 95488.4(d) (setting forth the general rules for commingled feedstock allocation) and 95491(d)(1)(C) (providing an allocation formula to be applied each calendar quarter). These rules are a reasonable accommodation to the reality that fuel producers rarely can segregate and batch-run individual feedstocks. The rules and CARB's related interpretive guidance (see LCFS Guidance 19-08) further allow producers to optimize the feedstock-to-fuel allocations for shipments to California, as long as a quarterly material balance is maintained. However, neither the existing rules nor guidance directly address situations like MRL's and many other renewable distillate producers, where more than one fuel product is produced in a quarter.

Two types of feedstock allocation methodologies addressing multiple product outputs have emerged under other programs. The “proportional allocation” methodology requires allocation of each feedstock used in the same proportions as products produced in a given quarter; Table 1 below provides an illustrative example for a generic producer of renewable diesel (RD), SAF and renewable naphtha (RN)<sup>1</sup>:

**Table 1: Proportional Allocation Methodology Example**

Feedstock Type	Feedstock Qty (gal)	RD Volume (80% Yield)	SAF Volume (15% Yield)	RN Volume (5% Yield)
Soy	35,000	28,000	5,250	1,750
Canola	40,000	32,000	6,000	2,000
Tallow	25,000	20,000	3,750	1,250

In the above scenario, the producer would be limited to allocating only 3,750 gallons out of 25,000 gallons worth of tallow – the best performing feedstock from a carbon intensity perspective – to SAF production. Compare this outcome with a “free allocation” methodology, which still requires a producer to fully account for all feedstocks used in a quarter but gives the producer greater flexibility to assign those feedstocks to product output, as depicted in Table 2 below:

**Table 2: Free Allocation Methodology Example**

Feedstock Type	Feedstock Qty (gal)	RD Volume (80% Yield)	SAF Volume (15% Yield)	RN Volume (5% Yield)
Soy	35,000	35,000	0	
Canola	40,000	35,000	0	5,000
Tallow	25,000	10,000	<b>15,000</b>	0

The benefits to the producer under free allocation should be obvious. But so, too, should the benefits to California if the state truly wishes to incentivize more SAF production and consumption. By allowing the allocation of the lowest-carbon feedstocks to SAF, producers will be better able to cover the higher average cost of production and would be better incentivized to expand SAF production capacity. Neither allocation methodology would alter a producer’s overall feedstock mix nor impact calculation of CI in the GREET model; the methodologies are simply about how to assign feedstocks from the mix to different product outputs. Feedstock usage still would remain subject to annual verification to ensure quarterly material balances are maintained. And in many ways, adopting a free allocation methodology would harmonize California’s approach with other jurisdictions and programs (such as the ISCC CORSIA and PLUS protocols and the emerging Canadian Clean Fuels Regulation) that in meaningful ways are competitors for nascent SAF supply. We urge CARB to take the opportunity afforded by this amendment process to build on the existing LCFS regulatory framework and adopt the free allocation methodology described above for producers of multiple transportation fuels.

<sup>1</sup> For the sake of simplicity, the examples in Tables 1 and 2 above assume 100% conversion of feedstocks to the three listed products. In reality, a small percentage of feedstock yield loss and/or use in producing other co-products (such as renewable LPGs) would be expected and must be accounted for by producers.

### **Comments on Other Proposed Changes and LCFS Policy**

We address below several other issues raised by or otherwise germane to CARB's proposed LCFS amendments.

#### **Credit True Up After Annual Verification**

MRL strongly supports the proposed amendment to 17 CCR 95488.10(b), which would authorize the Executive Officer to perform a credit true-up for a fuel pathway that has a lower verified operational CI, as evidenced in its annual fuel pathway report, than the CI for which the fuel pathway was previously approved. We believe this amendment properly rewards producers that invest in emission reduction improvements or are otherwise able to "overcomply" with their registered pathways. In addition, the proposed amendment should encourage producers to conservatively calculate and assign margins of safety to their CI scores during the pathway registration process, since the benefits of overcomplying would be returned to the producer in the credit true-up rather than being lost to the LCFS buffer account (as is the case in the current regulations). We request that CARB make the credit true up provisions effective immediately, meaning that the first opportunity for such true up would occur after the submission of Annual Fuel Pathway reports in March 2025 (for calendar year 2023/2024 data).

#### **Deficit Calculation for Verified CI Exceedance**

CARB has proposed amendments to 17 CCR 95486.1(g) that would subject non-provisional pathway holders to a calculated obligation of four times the number of deficits in the event of a verified CI exceedance. MRL agrees with the importance of maintaining compliance with fuel pathways; however, we believe that the proposed amendment as written could be unnecessarily punitive. There are reasonable, no-fault circumstances that may trigger a CI exceedance in a given fuel pathway reporting year (e.g., an unexpected asset or facility outage; feedstock supply disruptions leading to sourcing from more distant locations; undetected meter reading errors; etc.). We recognize that the proposed credit true-up language described above should incentivize conservative calculations and margins of safety, but the possibility of CI exceedance still exists even with these safeguards. If the "four times penalty" is included in the final amendments, we request that CARB adopt an additional condition that the penalty would not apply if, in the year following the exceedance, the fuel pathway holder is able to both fully comply with its registered CI *and* make up the difference in the exceedance based on the reported CI score in its annual fuel pathway report. This approach would be very similar to the "deficit carryover" concept that exists under the current U.S. Renewable Fuel Standard program, wherein an obligated party would not be penalized for falling short of its renewable volume obligations in year 1 as long as such shortfall and all other obligations are met in year 2. We believe this would be a reasonable compromise to help avoid triggering a punishment for what may be an atypical (and in many cases unpreventable) CI exceedance in a given year.

#### **Sustainability Requirements for Crop-Based Feedstocks**

CARB has proposed amendments at 17 CCR 95488.9(g) that would impose new sustainability obligations for crop-based feedstocks. MRL is supportive of sustainable production. We ask that CARB provide specific examples of existing third party certification systems, if any, that would satisfy the prescribed criteria proposed in Section 95488.9(g)(1)(B). We also believe that CARB should engage in a collaborative process with all stakeholders in the development and approval of consensus-based sustainability certification systems, and should tie the effective date of these new requirements to the adoption of these consensus standards.

To facilitate a smooth transition to the new sustainability obligations, we urge CARB to consider nation-level exemptions or to at least temporarily delay the effective date of these requirements for crop-based feedstocks originating in the U.S. and Canada. Such nation-level exemptions are common concepts that have been embraced under the U.S. Renewable Fuel Standard and Canadian Clean Fuels Regulation. U.S. and Canadian crops do not raise the same degree of sustainability concerns that undoubtedly have motivated the proposed new requirements. For these reasons, we believe nation-level exemption or implementation delays for U.S. and Canadian crops would be a reasonable addition to the sustainability amendments if finalized.

*Changes to Annual Standards, Near-Term Step Down, and Automatic Acceleration Mechanism*

CARB has proposed a variety of changes aimed at increasing the stringency of the program and, correspondingly, the demand for LCFS credits. These changes are a reflection of the overwhelming success of the program in incentivizing low carbon fuel production and consumption in California to-date. We note, however, that the proposed 5% reduction in the CI benchmarks in 2025 (referred to as the “near-term step down”) could have unintended consequences for existing renewable fuel producers. Each of the aforementioned measures attempt to head off a growing credit surplus that could stifle prices and deter future investments. If credit prices do not rise at the speed or to the degree CARB forecasts in its rulemaking analysis, the near-term step down could end up doing more harm than good for existing producers; credit generation would be curtailed by the sharp decline in the 2025 benchmark without a corresponding rise in prices to help offset these losses. We ask CARB to carefully consider the credit availability and pricing analyses of other stakeholders in their comments in evaluating the necessity of the near-term step down versus a more gradual approach to achieving the proposed 30% CI reduction target by 2030. CARB should also consider whether de-coupling the proposed CI benchmarks for diesel substitutes and fossil jet fuel substitutes, allowing the latter to progress at a slower pace, would more appropriately reflect the current state of the industry and afford greater credit generation potential (and incentivizes) for SAF produced from existing feedstocks and production technologies.

*Streamlining Verification Requirements*

MRL is currently or expects to soon be subject to annual verification or audit obligations under LCFS or LCFS-like programs in the states/provinces of California, Oregon, Washington, British Columbia, and Alberta, as well as the U.S. Renewable Fuel Standard, the Canadian Clean Fuels Regulation and the ISCC. We recognize and support the need for independent review to facilitate regulatory oversight and market confidence in the validity of emission reductions represented by credits. We ask CARB simply to consider where there may be opportunities to reduce redundancies and streamline verification obligations for consistency with equivalent programs, and to remain open to alignment on these requirements in the future.

\* \* \*



Public Comments of Montana Renewables, LLC  
California LCFS Amendments  
February 20, 2024

Thank you for considering these comments. We look forward to working collaboratively with CARB throughout this rulemaking process. Please do not hesitate to contact us with any questions.

Regards,

A handwritten signature in black ink that reads "Greg Staiti". The signature is written in a cursive, flowing style.

Greg Staiti  
Compliance Director, MRL