



October 16, 2024

The Honorable Liane Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

**Re: Comments on Second 15-day Language to Amend the
Low Carbon Fuel Standard**

Dear Chair Randolph:

I am writing on behalf of the Bioenergy Association of California to comment on the second 15-day language to amend the LCFS. These comments focus on two issues in the new 15-day language that should be corrected before the Board adopts the final changes. First, the different definitions of forest waste biomass are confusing, exclude some types of waste biomass, and may slow the beneficial use of forest waste to produce low carbon fuels. And second, the regulations should include linear generators in addition to fuel cells or other non-combustion technologies. BAC continues to have serious concerns about the phaseout of avoided methane credits and the ongoing use of Book and Claim for undelivered biomethane, but we addressed those issues in our August 27 comments.

BAC represents about 100 members that are converting organic waste to energy to meet the state's clean energy, climate change, wildfire reduction, landfill reduction, and clean economy goals. BAC's public sector members include cities and counties, Tribes, air quality and environmental agencies, waste and wastewater agencies, public research institutions, environmental and community groups, and a publicly owned utility. BAC's private sector members include energy and technology companies, waste haulers, agriculture and food processing companies, investors and consulting firms, and an investor-owned utility.

BAC's comments on the second 15-day language are below.

1. Proposed Definitions of Forest Biomass Waste

The second 15-day language appears to include broader and more inclusive definitions of forest biomass waste, but the revised definitions may still exclude or cause

uncertainty for several types of forest biomass waste, which in turn will slow efforts to convert that waste to low carbon fuels. BAC urges CARB to make two additional changes that would remove contradictions and uncertainty without weakening any of the sustainability criteria in the definitions.

A. Section 95481(a) - Definitions

The definition of “Forest Biomass Waste” in this section excludes biomass that does “not meet regional minimum marketable standards for processing into wood products.” The problem is that “wood products” is not defined in the regulations and could be interpreted to include anything made from wood, which would include biochar, mulch and wood chips. Virtually all forest waste can be converted to biochar and most of it can be converted to mulch and wood chips, so the exclusion of biomass that can be converted to other wood products effectively excludes all forest biomass waste.

This can be corrected by either 1) putting a semicolon after the word “branches” instead of a comma or 2) changing the “and” after the word “branches” to “or” so that the wood products exclusion only applies to whole logs.

B. Section 95488.8(g)(1)(A)

BAC strongly supports the additional language in this section that specifies that forest biomass waste is biomass that is removed for “wildfire fuel reduction, to reduce the risk to public safety or infrastructure, to create defensible space, or for forest restoration.” However, the next clause of this same section undermines these specified goals by excluding clearcutting in all cases, even though that is often the method needed to create defensible space or fire breaks to stop catastrophic fires.

This can easily be corrected by either 1) changing the “and” at the beginning of the second clause to an “or” or 2) by clarifying that clearcutting is only allowed when necessary for wildfire mitigation or forest health.

These two changes will help to remove contradictions and uncertainty that will otherwise slow efforts to convert forest biomass waste to low carbon fuels.

2. Need to Include Linear Generators as a Non-Combustion Technology

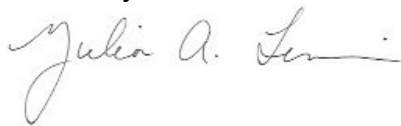
BAC is also very concerned that the second 15-day language explicitly includes fuel cells in at least two places, but does not include linear generators. Like fuel cells, linear generators can provide non-combustion conversion of renewable gas – biomethane, biogas or hydrogen – to electricity with virtually no emissions. Linear generators using renewable fuels are now RPS eligible pursuant to AB 1921 (Pappan, 2024) and should be included in the LCFS as well.

BAC urges the Air Board to add linear generators to the two sections that specifically mention fuel cells or to replace the term “fuel cells” with “non-combustion conversion technologies such as fuel cells or linear generators.” This change should be made to the two sections below and anywhere else that lists fuel cells as an eligible technology.

- A. 95488.8(i)(2) - “staff proposes to allow for book-and-claim accounting of biomethane to produce electricity for electric vehicle charging, provided the electricity is generated using a fuel cell, **linear generator, or other non-combustion technology.**”
- B. 95488.9(b) - “staff proposes to add a new temporary CI for low-CI electricity produced by fuel **cell or linear generator** from biomethane from dairy and swine manure, based on existing program data.”

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in cursive script, reading "Julia A. Levin".

Julia A. Levin
Executive Director