

October 16, 2024

**Via Email**

Rajinder Sahota, Deputy Executive Officer, Climate Change & Research  
Edie Chang, Deputy Executive Officer, Planning, Freight & Toxics  
Matt Botill, Chief, Industrial Strategies Division  
California Air Resources Board  
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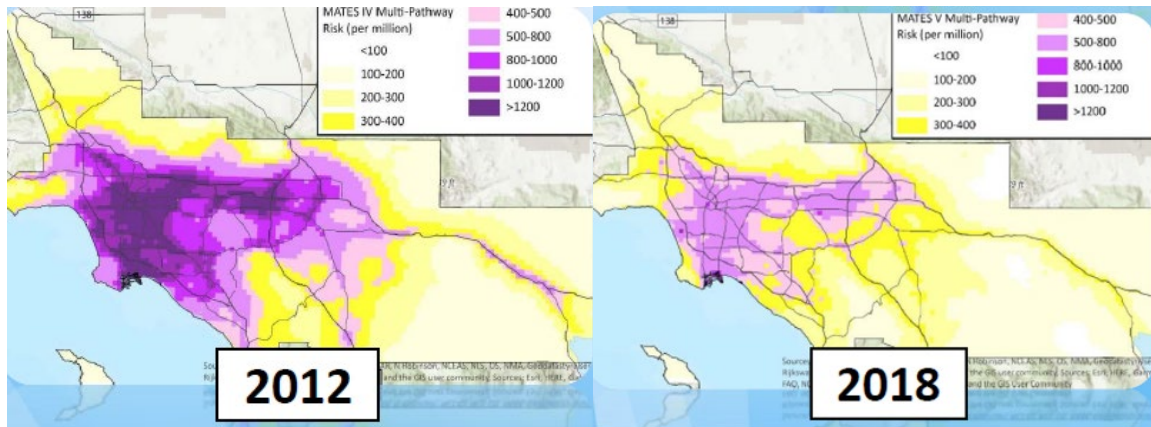
**Re: Methanol as Opt-In Fuel for LCFS**

Dear Ms. Sahota, Ms. Chang, and Mr. Botill:

On behalf of the undersigned representatives of the methanol-as-marine-fuel supply chain, we thank you for convening a meeting with key stakeholders on September 26, 2024, to explore the opportunity methanol presents as a marine fuel in the near term to reduce greenhouse gas emissions and to reduce air toxics and criteria pollutant emissions at California ports and in the areas surrounding the ports. Thanks to you and the other CARB staff present for your thoughtful engagement and questions.

As you know, several parties have been advocating in the most recent rulemaking for the Board to make minor amendments to the LCFS regulatory language that would allow low-carbon intensity (“low-CI”) methanol to generate LCFS credits when used in marine operations. There is interest in this opportunity to decarbonize and reduce emissions in underserved areas because the necessary infrastructure exists currently. In other words, a transition to low-CI marine methanol could be a near-term “plug and play” option that is not available with other potential fuels. And of course, with hundreds of millions of gallons of diesel fuel being used in marine operations in California now, it is important to have as many options available to come online as quickly as possible. While many fuels will have a role in decarbonizing the ports, the need for liquid fuels will continue to exist, and with current air quality challenges, obtaining reductions quickly will benefit the communities that currently live nearby the operations of what is agreed to be a hard-to-decarbonize sector.

During our September 26 meeting, you heard from the full range of the supply chain stakeholders that would be needed to make marine methanol fuel a reality at the Ports of Los Angeles and Long Beach. Specifically, we highlighted that in 2018 over 57,000 barrels per day of marine fuel was sold in these two ports, approximately 80% of which was residual bunker fuel (approximately 46,000 barrels per day). In addition to the heavy air toxics and criteria pollutant loading, this equates to 11.7 million tonnes of greenhouse gases annually. From an air toxics perspective, we shared a recent presentation from the South Coast Air Quality Management District (SCAQMD), which shows dramatic improvements in health risk in the South Coast region from 2012 to 2018, but, while improved, due to diesel emissions, the ports remain challenged.



We understand that the Board is about to complete the currently pending LCFS rulemaking amendments. While CARB staff suggested during the early stages of the current rulemaking that marine methanol was being considered for inclusion as an LCFS opt-in fuel, this change is not included in the proposal under consideration for adoption later this year. As we explained, while it is a proven technology and could essentially operate as a drop in fuel to replace diesel, some investment is required to bring marine methanol and its many benefits to California ports. The economics require incentives from responsible regulatory bodies like CARB. The ability to generate LCFS credits as an opt-in fuel would serve as an important incentive.

The Ports of Los Angeles and Long Beach support this amendment. We urge the staff and the Board to make this a reality. With proper regulatory signals, the ports and the people who live near them could experience health and welfare benefits in the near term and of course, there would be significant emissions reductions from a climate change perspective as well.

In sum, adding regulatory language to the LCFS that allows credit generation for low-CI marine methanol would be consistent with California's first-mover history in policies to accelerate decarbonization, fully align with the Board's environmental justice initiatives to improve air quality right away in and near the ports, support California's efforts and requirements to achieve increasingly stringent national ambient air quality standards for particulate matter and sulfur dioxide, support achieving the Scoping Plan's 85% 2045 greenhouse gas reduction target, and dramatically reduce diesel use in the ports.

We hope that the Board's resolution adopting the currently proposed LCFS amendments will include direction to staff to pursue in short-order methanol as an approved opt-in fuel for the LCFS program under Section 95482. We believe this could be a first step toward broader inclusion of e-fuels, including low-CI methanol. For now, the benefits of low-CI methanol in marine applications, on their own, more than justify a regulatory amendment. Direction from the Board would be helpful in ensuring that staff can devote resources to pursuing this type of amendment and would signal the Board's support for low-CI methanol as a commercially viable alternative to diesel fuel. For example, the Board could include the following type of finding:

“Communities living near ports in California bear a disproportionate impact of emissions from port activities, which include not only on-highway equipment but also ocean going and other port vessels, which have historically been hard to decarbonize due to their operations.

“Low-Carbon Intensity (CI) Methanol has significant potential as a drop-in fuel to alleviate impacts on communities in the near term.

“Low-CI Methanol could largely function as a drop-in fuel at ports.

“Low-CI Methanol requires limited regulatory incentives to accelerate adoption.

“Regulatory amendments providing the ability to generate credits for use of methanol as an opt-in fuel in marine application under the LCFS would promote Low-CI Methanol for the marine vessel sources.

“CARB staff are directed to evaluate and bring to the Board for consideration regulatory amendments that would promote the use of Low-CI Methanol in marine applications.”

We hope the above is helpful to you as you consider the best next steps for reducing emissions at California’s ports and working to decarbonize marine sector transportation. We understand that the Ports of Los Angeles and Long Beach are writing separately on this issue, so that they may speak both to the use of low-CI methanol as a drop-in fuel and their efforts related to the Green Shipping Corridor that they discussed in the meeting. We also understand that Centerline Logistics is preparing a separate letter to address specifics related to the items discussed during the meeting.

If you have any additional questions, please feel free to contact any of the signatories below.

Sincerely,

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