

Dwayne H. Phillips Director Hydrogen/Syngas On-Sites

March 7, 2014

Mary Nichols California Air Resources Board 1001 I Street Post Office Box 2815 Sacramento, California 95812

Re: Cap-and-Trade Regulation: Proposed Benchmarks for Refineries and Related Industries

Dear Ms. Nichols:

I am writing on behalf of Air Liquide Large Industries U.S. LP ("Air Liquide") regarding CARB's Proposed Benchmarks for Refineries and Related Industries, dated February 26, 2014, and specifically regarding the benchmark for hydrogen.

Air Liquide and its affiliated companies operate twenty facilities and employ more than 500 people in California. Air Liquide operates two hydrogen production facilities in California that supply hydrogen and steam to refineries. These hydrogen production facilities are co-located with the refineries they serve and are among the six non-refinery-owned, "merchant" hydrogen production facilities that are subject to the Cap-and-Trade Regulation. In addition to these six merchant hydrogen production facilities, there are approximately twenty refinery-owned hydrogen production facilities in California.

During the first compliance period, allowances for the refinery-owned facilities have been allocated to refiners as part of the allocation for each covered refinery; the refinery-owned facilities are treated as units of each covered refinery. By contrast, merchant hydrogen production facilities have been subject to a separate benchmark of 8.85 allowances/MT H_2 , derived from European Union emissions data, that applies only to those separately owned facilities.

Air Liquide appreciates CARB staff's engagement on this issue and strongly supports CARB's proposal to amend the Cap-and-Trade Regulation to create a single hydrogen benchmark that applies to both merchant and refinery-owned hydrogen production facilities, based on California emissions data and CARB's standard "90% or best-in-class" methodology. As we explained in our October 14, 2013 and February 14, 2014 letters to CARB, both merchant and refinery-owned hydrogen plants serve the same market. Hydrogen production facilities should be subject to the same "90% or best-in-class" methodology that applies to other



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industries. A uniform benchmark is necessary to avoid creating distortions in the market that would lead refiners to prefer hydrogen produced from less efficient refinery-owned facilities.

The proposed benchmark of 8.94 allowances/MT H_2 appropriately reflects a broader scope of emissions data from both merchant and refinery-owned California hydrogen facilities. We understand that CARB intends this benchmark to apply to future compliance periods and retroactively to the first compliance period, and will provide merchant hydrogen plant operators with an allowance "true-up" to ensure fair allocation of allowances to those entities during the first compliance period.

Thank you for your consideration of these comments. We appreciate the diligence and engagement that CARB staff has shown throughout this benchmark development process. We look forward to continuing to work with CARB as it implements proposed amendments to the hydrogen production benchmark, as well as other aspects of the Cap-and-Trade Regulation.

Very truly yours,

/s/Dwayne Phillips

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