

Air Products and Chemicals, Inc. 7201 Hamilton Boulevard Allentown, PA 18195-1501 Telephone (610) 481-4911

April 28, 2017

Clerk of the Board California Air Resources Board 1001 I Street Sacramento, CA 95814

RE: Comments regarding the Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms as described in the "Second Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information", released April 13, 2017

Submitted electronically via:

https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=capandtrade16&comm_period=2

Air Resources Board:

Air Products is a world-leading industrial gases company, in operation for over 75 years. The company's core industrial gases business provides atmospheric and process gases and related equipment to manufacturing markets, including refining and petrochemical, metals, electronics, food and beverage and healthcare. Air Products is also the world's leading supplier of liquefied natural gas process technology and equipment. Approximately 16,000 employees are making Air Products the world's safest and best performing industrial gases company, providing sustainable offerings and excellent service to all customers. The company has over 250 employees and 15 locations in California, including atmospheric gases (oxygen/nitrogen/argon) and hydrogen production facilities. In addition, Air Products has designed, installed, and supplies a fleet of hydrogen fueling stations across California, facilitating the transition to carbon-free transportation.

Air Products welcomes the opportunity to submit comments regarding the proposed amendments to the cap and trade regulations. Over the course of the last several years, Air Products has worked very constructively with ARB staff and are pleased with the consideration given our concerns and recommendations. We look forward to a continued working partnership with ARB staff to ensure the effective development of future program changes.

April 28, 2017 Page 2

DISCUSSION of COMMENTS:

- 1. Providing Certainty for Allowance Allocations Post-2020 [§95871(d), §95890(a), §95891(a)]
 - The second Proposed 15-Day Amendments strike all references to post-2020 industrial assistance allowance allocation.
 - While we acknowledge more work (technical and communication) is needed to propose the Assistance Factors that effectively protect EITE sectors from leakage risk after 2010, completely sticking Section 95871(d) and Table 8-3 creates the risk of no allocations post-2020 unless ARB makes the necessary amendments in the future. We acknowledge that the "Second Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information" indicates the intentions of ARB to propose post-2020 assistance factors in the future, Air Products would prefer to see such intentions explicitly noted in the current amendments.
 - o Similarly, striking the references to Table 8-3 in sections 95890(a) and 95891(a) reduces the certainty that industrial assistance allowance allocation will, indeed, be provided to partially offset the material compliance costs imposed on EITE industries and guard against emission leakage. Air Products recommends ARB indicate the intention to provide post-2020 allowance allocations consistent with their clarity that a compliance obligation will, in fact, also be imposed post-2020.
- 2. ARB Should Consider Retaining and Expanding "Non-Standard" Cap Adjustment Factors for Industrial Sectors with High Levels of Process Emissions [§95891 - Table 9-2]
 - Air Products encourages ARB to consider continued use of non-standard cap adjustment factors, post-2020, for industrial sectors that have a significant portion of their total GHG emissions derived from the inherent process chemistry (i.e. "process emissions"). The industry sectors afforded such consideration should include all those with process emissions representing more than 50% of total emissions such as hydrogen production (Industrial Gas Manufacturing NAICS code 325120). The increased Cap Adjustment Factors will afford greater protection to this subset of the EITE industry sectors that are particularly vulnerable to leakage.
- 3. Consignment of Allowances Allocated to Publicly Owned Utilities (POUs)
 - The "Second Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information" indicates ARB staff is considering future rulemaking to require POUs to consign their allocated allowances like Investor Owned Utilities (IOUs) and return the value to designated ratepayers. Air Products cautions ARB in making this change, as the POUs serving our facilities have been successful in managing the imposed cost of compliance for their self-produced power

April 28, 2017 Page 3

by retaining and using their allowance allocation. This method has provided the most certain and direct means of cost control; relying upon the process to return the value of allocated allowances consigned to the allowance auctions is s slower, less transparent, and less certain means to this same end. While not specifically included as a proposed change in the current Proposed 15-Day Amendments, Air Products is raising this concern with ARB now, since it was discussed in the Notice document.

4. Including Indirect Emissions from Purchased Electricity in EITE Benchmarks

- Air Products generally supports the addition of the indirect emissions from purchased electricity in the allowance allocation benchmarks for EITE sectors. Such an approach would more directly mitigate the overall compliance costs and address leakage risks for these sectors. In order for such an approach to be effective and fair:
 - Allowanced reallocated to the EITE entities must be on a 1:1 basis

 not discounted by the steeper decline imposed upon the Cap
 Adjustment Factors and Leakage Assistance Factors applied to the industrial sectors versus the electricity sector allocations.
 - EITE designations must be expanded to those industries that are EITE solely due to the indirect emissions of their purchased electricity. There are sectors which have little to no direct GHG emissions (e.g. <25,000 mt CO2/yr) that were not historically evaluated by ARB under the industrial assistance program. Where such sectors have indirect emissions that exceed this threshold, they must be provided an allocation benchmark indicative of their compliance cost pass-through for the electricity consumed.

Air Products appreciates the diligent efforts by ARB staff and we stand ready to provide further information to support board's refinement of the cap and trade program. Please feel free to contact me by phone (610-909-7313) or email adamskb@airproducts.com).

Respectfully,

Keith Adams, P.E.

Keith Adams, P.E.

Environmental Manager – Climate Change Programs

c: Eric Guter, Peter Snyder, Raymond Bailey, Steven Pastore, Andre Shoup – Air Products