

Air Products and Chemicals, Inc.

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June 10, 2016

Ms. Mary Nichols – Chair, California Air Resources Board 1001 I Street PO Box 2815 Sacramento, CA 95812

RE: Comments Regarding May 18th Emission Leakage Studies Workshop - Submitted electronically to the "CTLEAKAGESTUDIES-WS" docket via:

http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=ctleakagestudies-ws&comm_period=1

Dear Ms. Nichols:

Air Products is a global, Fortune 250 company that supplies atmospheric, process, medical and specialty gases, specialty chemicals and process equipment serving a diverse range of industries, including primary metals, refining, electronics, food and glass sectors, as well as healthcare and many other general manufacturing industries. Air Products has over 400 employees and 30 locations in California, including numerous atmospheric gases (oxygen/nitrogen/argon) and hydrogen production facilities, electronic specialty gases and materials production and electricity generating 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 greenhouse gas emission leakage studies undertaken by ARB to inform future policy development and regulatory changes for the cap and trade program. 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.

SUMMARY COMMENTS:

- 1. Air Products supports continued direct allocation of allowances for prevention of emission leakage and transition assistance for Energy Intensive/Trade Exposed (EITE) industrial sectors.
- 2. Air Products supports the current structure of the industrial assistance program, which has repeatedly committed to equitable treatment of all producers.
- 3. Air Products does not support changes to the Industrial Assistance program in the Third Compliance Period, but recommends any such changes be deferred to the post-2020 period of the program.

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4. Air Products agrees that changes proposed in the leakage risk metrics will yield an improved assessment of leakage risk.

DETAILED DISCUSSION of COMMENTS:

- 1. Air Products supports continued direct allocation of allowances for prevention of emission leakage and transition assistance for Energy Intensive/Trade Exposed (EITE) industrial sectors Air Products strongly endorses continuation of Industrial Assistance under the cap & trade program, particularly for those industrial sectors with the highest levels of leakage risk. We agree that ARB should use conservative approaches as the basis for leakage risk assessment; using the short-term (versus long-term) domestic value-added loss values, and assuming 100% of the loss estimate is attributed to increased production outside of California.
- 2. Air Products supports the current structure of the industrial assistance program, specifically as it relates to hydrogen production, where the existing rule realizes the fundamental equity principles through:
 - a. Consistent Leakage Risk categorization of inherently-interconnected industrial sectors (i.e. linking the Leakage Risk for "Industrial Gas – Gaseous Hydrogen Production" and "Petroleum Refining")
 - b. Consistent Product-Based benchmarks, regardless of ownership structure of the production facility/process "One Product One Benchmark"
 - c. Differentiation between gaseous and liquid hydrogen as distinct products, requiring distinct benchmarks
- 3. Air Products does not support changes to the Industrial Assistance program in the Third Compliance Period, but recommends any such changes be deferred to the post-2020 period of the program – CARB communicated the glide path of the Industrial Assistance Factor early in the cap & trade program development process and covered entities have factor the cost implications of this level of Industrial Assistance support into their financial plans through 2020. Any changes being considered should be effective post-2020. Suggestions that the introduction of carbon pricing in other trading partner jurisdictions will (even partially) equalize the effect of California's carbon price as early as 2018 are unrealistic. The example cited of implementation of the U.S. EPA Clean Power Plan (CPP) in 2022 already reflects a post-2020 change and, based on current litigation of the CPP, is even likely to be delayed beyond 2022. Additionally, the CPP will only manifest itself through indirect emissions versus the large impact of the current California cap & trade program on direct-emitting covered entities. The second example cited of actions following the country-specific, voluntary commitments made in the recently signed Paris Agreement are expected to take many years to materialize in a meaningful way – certainly such impacts in major West Coast trading partners like India and China will extend beyond 2020.
- 4. Air Products agrees that changes proposed in the leakage risk metrics will yield an improved assessment of leakage risk The inclusion of domestic leakage risk within the trade exposure and emission intensity metrics is a more straightforward and comprehensive approach. Air Products still cautions that ARB is correct in applying

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conservative applications of even these improved metrics, since the underlying data sources (U.S. Economic Census Bureau, U.S. Census Bureau, and International Trade Commission) that often blunt (even at 6-digit NAICS code levels there are often multiple products included in the sector data) and inaccurate (little oversight and guidance is provided in the underlying census surveys to ensure consistent boundaries and interpretations in the responses) tools.

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.

Keil Adams, P.E.

Environmental Manager – Climate Change Programs

c: Eric Guter, Andrew Shoup, Peter Snyder, Raymond Bailey – Air Products Mary Jane Coombs, Derek Nixon – California Air Resources Board