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April 28, 2017

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

RE: Comments regarding the Proposed Second 15-Day Modification to “Proposed Amendments to Regulation for the Mandatory Reporting of Greenhouse Gas Emissions”, released April 13, 2017

Submitted electronically via:

https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=ghg2016&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 mandatory greenhouse gas emission reporting rule. 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.

DISCUSSION of COMMENTS:

1. Deadline for Verification of Emissions and Covered Product Data Reports Beginning 2018 [§95103(h)]

- *Air Products appreciates the modest extension (August 1st to August 10th) to the verification deadline. While an additional nine calendar days is moving in the right direction, Air Products still advocates for retention of the September 1st deadline for verification. We are often challenged in*

meeting the existing September 1st deadline, even with a verifier who has performed verification for our facility in previous years and is familiar with our operations and reporting approaches. Air Products recommends retaining the September 1st verification deadline and looking for ways to streamline the subsequent ARB review, based on some priority process (e.g. similar to criteria used for tax audits) to afford the additional time needed to align the verification process with the allowance allocation process.

2. *Allowing Extended Inspection Frequencies for Hydrogen Plant Pressure Differential Flow Meters [§95103(k)(6)(A)(1)]*

- *Air Products strongly supports the inclusion of hydrogen plants in the extension of the pressure differential flow meter inspection frequency to once every six years, to preclude the unnecessary shutdown of continuously operating facilities. ARB recognized the importance of such flexibility in the first 15-day Proposed Modifications to §95103(k)(6)(A)(1), providing the option of extending flow meter inspections to a six-year frequency when such devices are used in a refinery. Air Products recommended, and appreciates the inclusion of, this flexibility to hydrogen plants, as well. Hydrogen plants are integrally linked with refineries, operate continuously, and infrequently have maintenance outages. In fact, our hydrogen plant outages are closely coordinated with our refinery customers to coincide with their outages to minimize operating interruptions (and the negative environmental impacts of an un-needed shut-down/start-up cycle).*

3. *Increased Flexibility in Product Data Reporting for Hydrogen [§95114(j)]*

- *Air Products supported the revisions to the hydrogen product sales reporting requirements included in the first Proposed 15-Day Modifications, narrowing the required sales reporting to just those end uses – petroleum refining and vehicle fueling – which will inform ARB’s Low Carbon Fuel Standard. These changes will reduce the reporting burden and afford better protection to confidential business information.*
- *Air Products further supports the minor revision included in the Proposed Second 15-Day Modifications which allows the option of reporting products sales at the entity-level, when appropriate. This is more practical when hydrogen sales to vehicle fueling stations are made to an entity deploying that product to multiple fueling stations.*
- *Ideally, we believe ARB’s need for data regarding sales to vehicle fueling stations would be equally served by allowing hydrogen producers to report an aggregate value for all such sales, rather than require the greater granularity of sales data at the facility or entity level. Air Products again encourages ARB to consider the adequacy of an aggregated sales value to simplify the required reporting and provide further protection to confidential business information.*

4. Clarification of the Methods Required for Feedstock Characterization for Hydrogen [§95114(e)]

- *Air Products seeks (recommends) agency clarification of the revised language regarding feedstock characterization for hydrogen plants that was offered in the first Proposed 15-Day Modifications.*
 - *First, there is confusion about whether changes proposed in the first 15-Day Modification were actually intended, since the summary of proposed changes in the “First Notice of Public Availability of Modified Text and Availability of Additional Document”, issued December 23, 2016 states:*

“1. Modifications to Section 95114. Hydrogen Production. Staff is not proposing changes to this section”

...while, in fact, there are changes shown in the Proposed 15-day Modifications. So, were changes proposed? Were the changes accepted?

- *Second, no portion of section 95114(e) in the Second Proposed 15-Day Modification is shown to indicate subsequent changes... because the first proposed changes were accepted, no changes to the entire section (e) were intended, or the decision to make changes to section (e) was reversed?*
- *If ARB did intend to change the language of §95114(e), as shown in the first Proposed 15-Day Modifications, we seek the clarification regarding the intent and effect of the proposed changes. Specifically:*
 - *The text that was stricken [§95114(e)(1)] describing the operator’s obligation to report feedstock characterization included the wording:*

“Carbon, atomic hydrogen, and molecular hydrogen content for each feedstock using engineering estimates based on measured data as specified below.”

...which further proceeds to describe for gaseous feedstocks the requirement to make such a characterization based on at least monthly analyses. [§95114(e)(1)(A)]

Air Products has historically satisfied that requirement by integrating the data from on-line mass spectrometers and/or gas chromatograph analyzers, which may perform multiple analyses per hour, more than meeting the “one or more” analyses per month requirement.

- *Despite considerable similarity, the new language in the first Proposed 15-Day Modifications does not include the words “engineering estimates” raising uncertainty to any implied requirement for some more specific analysis methods, and*

potentially not accepting our historical reliance on the on-line analysis methods we currently employ.

- *Further, the new language proposed under section 95114(e)(2)(B) specifies daily sampling for nonstandard (feedstock) materials, such as refinery fuel gas. Again, we seek the clarification that the on-line methods currently employed more than satisfy the “daily” sampling/analysis requirement.*

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

Respectfully,



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Environmental Manager – Climate Change Programs

c: Eric Guter, Peter Snyder, Raymond Bailey, Scot Govert, James Reebel – Air Products