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July 10, 2013

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

RE: Comments Regarding Potential Updates to the Mandatory Reporting of Greenhouse Gas Emissions Regulation.

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 serves a fleet of hydrogen fueling stations across the state, facilitating the transition to carbon-free transportation.

Air Products welcomes the opportunity to submit comments regarding the potential revisions to the Mandatory Reporting Regulation (MRR) discussed during the ARB workshop on June 26, 2013. We currently report GHG emissions and associated production data for five hydrogen plants in California (and twenty more plants outside California under the US EPA MRR). From this perspective of multiple years of reporting under these programs, we offer the following comments and concerns regarding the potential changes to the CA MRR program.

ISSUES & CONCERNS:

- 1. Air Products supports clarification of reporting responsibility by referencing the original “operational control” definition for the “common control” definition used for applicability determination under the US EPA MRR – ARB staff is aware of historical reporting relationships where operational control is shared by entities and the determination of reporting responsibility is based on which entity holds the enabling air permit. This concern arose because US EPA MRR applicability language can result in a contrary determination of which entity holds reporting responsibility. ARB staff has verbally stated the intent (and anticipated language) of the definition clarifications proposed is to strengthen the historical determination of reporting responsibility.*

2. ***Air Products does not support adding a requirement for hydrogen producers to provide carbon and hydrogen content for all feedstocks*** – Adding this requirement will significantly increase the cost of compliance for facilities that use multiple, mixed-fuel and feedstock types. Where the current compliance approach allows characterization of a combined fuel/feedstock stream, the proposed change would require significant, redundant analytical costs to determine the carbon and hydrogen content separately of each discrete fuel/feedstock type. To the extent such more detailed breakdowns require enhanced monitoring equipment and expectations of high accuracy, these requirements could result in significant added costs.

Further, if a facility has chosen to determine their GHG emissions using a CO₂ CEMS on their principle emission source(s), such characterization is not required at all, and the tradeoff between the ongoing operating and analytical costs for the mass balance-based calculations versus the capital and operating costs for a CEMS was an irrevocable decision made at the onset of the program – and this change could reverse the economics of this decision

Air Products questions the ARB’s need for this level of information. There has not been a nexus established between the needs of the cap & trade program and these additional reporting requirements and costs. If the ARB needs such data to validate allowance allocation data, it should seek such information through a one-time data request, not establish an ongoing characterization requirement with high, ongoing costs.

3. ***Air Products does not support adding a requirement to break-out the fuel and feedstock emissions by fuel/feedstock type*** – Most importantly, since fuel/feedstock-specific emission data would generally be considered “emission data”, and therefore could not be claimed as confidential business information. Adding this requirement will allow the back-calculation from the fuel/feedstock-specific emissions to reveal the quantities of each specific fuel and feedstock employed, disclosing process cost and efficiency information generally considered confidential. Further, as stated above, separately determining the emissions of each fuel/feedstock type in a mixed stream adds undue costs, and is inconsistent with sources that chose to determine their emissions using a CO₂ CEMS.
4. ***Air Products supports reporting separately the “added by-product” versus “on-purpose” hydrogen production from hydrogen plants*** – Where ARB seeks to award allowance allocations based on hydrogen production, it is important to differentiate between hydrogen produced in a manner consistent with the development of the allocation benchmark versus coincidentally produced by-product hydrogen. The application of this approach should extend to all hydrogen production, both that which occurs within petroleum refineries and that which occurs within merchant hydrogen facilities.

In order to effectively implement this provision, ARB will need to clarify their designation of hydrogen recycle streams and transfers of hydrogen between entities. Air Products recommends ARB engages hydrogen producers with experience with the various process configurations to ensure the regulatory language is consistent with the ARB’s intent.

5. ***Air Products supports reporting the primary electricity account identifier for electricity purchases, but encourages ARB to broaden this to include purchases from Investor Owned Utilities and Publicly Owned Utilities*** – The cap & trade rules indicate an intent that the value of allowances freely allocated to electricity utilities be returned to the ratepayers, regardless of whether the electricity distribution utility is an Investor-owned Utility (IOU) or a Publically-owned Utility (POU). While the PUC only has authority to establish procedures for the distribution of the allowance auction revenues from IOUs, the ARB has accountability to ensure comparable use of the allowance value given to POUs occurs. ARB should track the primary electricity account identifier for all covered facilities, regardless of whether that account is with an IOU or a POU.

6. ***Air Products supports revision to report when natural gas received from a supplier has been “passed through” to a separate entity... but suggest ARB should also seek information when natural gas consumed by a reporting facility has been received from a separate entity*** – ARB must also recognize that there are commercial arrangements where natural gas is provided to one entity that may not have direct emissions sufficient to trigger reporting applicability under the CA MRR, yet is the initial purchaser of natural gas from a distribution utility and then subsequently “passes through” (some or all of) the natural gas to an entity covered under the reporting rule. This may cause confusion when the natural gas utilities must determine where the gas consumption is by a cap & trade covered entity and should not have a redundant CO₂ compliance obligation added to that gas. Since, in this instance, the initial natural gas purchaser might not be subject to either the reporting or cap & trade rules, the ARB must obtain this information from those entities that the MRR does apply to – direct emitters exceeding the reporting threshold and covered entities under the cap & trade program.

7. ***Air Products asks ARB to clarify the intent and applicability for reporting emissions from producing hydrogen for fuel cells – confirming this requirement is only for electricity generating or cogeneration units, not hydrogen production facilities*** – The workshop slides only discuss this proposed change under the heading of “Electricity Generating & Cogeneration Units” – suggesting the intent is to understand that portion of hydrogen production that is directly used to produce electricity using a fuel cell. It will be important to clarify the intent, and draft the proposed change language accordingly, to preclude the unintended creation of a requirement to discretely identify and report the emissions from the production of hydrogen which may subsequently be used by another entity to power a fuel cell – either as a transportation fuel, material handling equipment fuel, or a remote power source.

8. ***Air Products asks ARB to clarify the intent and applicability for reporting a more detailed breakdown of the thermal energy flows when cogeneration facilities supply cooling or process water to a third party*** – It is unclear what the nexus is between the needs of the cap & trade program and these additional reporting requirements and costs to provide a more detailed breakdown of the energy flows associated with cooling and process/distilled water exchanged between supporting facilities. To the extent such more detailed breakdowns require enhanced monitoring equipment and

expectations of high accuracy; this could require significant added costs. Further, ARB should exclude transfers of water from the “cold-end” of a cogeneration facility.

- 9. *Air Products does not support moving the verification and reporting deadlines forward*** – Covered entities have a very busy environmental reporting schedule from March through July... including local air district criteria pollutant reporting, California and US EPA GHG reporting and TRI reporting. Accelerating the CA MRR reporting and verification deadlines only further exacerbates this resource demanding season. Entities that need verification of their emissions in order to have confidence in auction transaction decisions, can, at their option, complete their reporting and verification on an accelerated schedule, but this should not become the requirement for all subject entities.

Air Products hopes that the above comments on the potential MRR revisions illustrate our critical interest and support of CARB’s efforts. If you have any questions or need additional information to support Air Products position on these matters, please contact me by phone (610-909-7313) or email (adamskb@airproducts.com).

Respectfully,



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Environmental Manager – Climate Change Programs

c: Eric Guter, Patrick Murphy, Peter Snyder, Stephen Crowley – Air Products
David Edwards, Joelle Howe, Richard Bode – California Air Resources Board
Jim Lyons, Jeff Adkins, Alexandra Marcucci – Sierra Research