

---

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

August 30, 2012

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

RE: Comments Regarding Emission Leakage Research and Monitoring Proposals  
(Submitted electronically to <http://www.arb.ca.gov/cc/capandtrade/comments.htm>)

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 reconsideration of the Leakage Assistance Factors for covered industrial sectors. The overall effectiveness of AB32 will be compromised if a manufacturer's compliance burden creates incentives to reduce in-state production and increase product imports. Such an outcome will exacerbate already challenging fiscal and employment challenges experienced by the state.

**KEY CONCERNS:**

- 1. CARB Should Employ a Conservative Approach in Setting the Decline Rate of the Leakage Assistance Factors*** – It is important to consider the potential of leakage that may have already occurred, or may occur in even the early years of the cap and trade program. Until comprehensive research and monitoring programs are in place and results assessed, CARB should employ a conservative approach in decreasing the Leakage Assistance Factors for covered industrial sectors. Once production activities are shut-down and imports positioned to take the place of in-state production, it is very hard to reverse these actions. Because the timeline for completion of the necessary studies on leakage impacts could extend into the second compliance period, CARB should eliminate, or at least reduce, the degree of Leakage Assistance Factor reduction until the conclusions of the research can be incorporated into revised rules. Such a conservative approach will provide an incentive for reinvestment in energy saving and emissions reducing technologies among in-state producers, rather than create incentives for importing products.

2. ***CARB Should Accelerate the Leakage Risk Research and Monitoring Programs*** – Manufacturers in the state are already concerned that leakage has occurred, driven by a variety of known issues (e.g. energy price increases and fees from other AB32 components) and a climate of uncertainty (e.g. electricity rebate formula under CA PUC rules) – so time is of the essence to determine both the previous and anticipated further leakage pressures from the cap and trade program. Air Products encourages CARB to accelerate this research and assessment and supports the necessary data collection to achieve the necessary determinations and program adjustments.
3. ***Liquid Hydrogen Product Should be Designated as Having a High Leakage Risk*** – Where CARB defines an industrial sector as “...an aggregation of industrial entities that produce reasonably homogeneous goods by reasonably homogeneous processes,” we believe CARB must recognize that liquid and gaseous hydrogen are *not* homogeneous products. By its very nature, liquid hydrogen is produced to enable an entirely different supply chain, allowing product distribution within and across state boundaries in a manner (quantity and location) that would not be realistically competitive for gaseous hydrogen. As such, we believe the Trade Exposure of liquid hydrogen is high, and when combined with a medium/high Emissions Intensity, would designate liquid hydrogen’s Leakage Risk as High.
4. **CARB Must Provide Clear Guidance and Definitions for the Facility-Level Economic Data** – Industry experience in reviewing historical U.S. Census Bureau data suggests there is little consistency in the data provided from both facilities within a given company as well as companies with a given sector. In order for the data to lead to effective policy decisions, CARB must provide clear guidance and definitions for the data elements they seek to collect. Air Products believes the existing U.S. Census Bureau’s Annual Survey of Manufacturers definitions are insufficient, given the critical economic implications of the data analysis for leakage monitoring.
5. **CARB Must Provide Flexibility in the Initial Deadlines for Leakage Data Reporting** – The proposed leakage monitoring data set includes data that has not routinely been compiled at the facility level. CARB should allow additional time during initial reporting years for the compilation of this data.

We stand ready to provide further support to CARB staff in this reconsideration of the Leakage Assistance under the cap and trade program. 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](mailto:adamskb@airproducts.com)).

Respectfully,



Keith Adams, P.E.  
Environmental Manager – Climate Change Programs

c: Eric Guter, Stephen Losby, Patrick Murphy, Peter Snyder, Stephen Crowley – Air Products  
Stephen Cliff, Mary Jane Coombs – California Air Resources Board  
Jim Lyons, Jeff Adkins, Alexandra Marcucci – Sierra Research