



November 30, 2018

California Air Resources Board
1001 I Street
Sacramento, California 95814
Via electronic submission

RE: Proposed Amendments to California Cap-and-Trade Regulations

Dear California Air Resources Board,

Lhoist North America of Arizona, Inc. (Lhoist) welcomes the opportunity to comment on the California Air Resources Board (CARB) proposed November 15, 2018 amendments to the Greenhouse Gas (GHG) Cap-and-Trade Regulations, 17 Cal. Code Regs. § 95800 *et seq.* (Regulations). On October 22, 2018 Lhoist provided comments to the September 4, 2018 Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation. We want to take this opportunity to restate our primary concern with these amendments.

With the proposed inclusion of high calcium lime production in the Regulation, a separate benchmark needs to be established in Table 9-1 for this manufacturing process. This difference is based on the stoichiometric differences in the raw materials used to manufacture each product, which results in higher process emissions for dolime vs hi cal lime. This distinction has been recognized by Environment Climate Change Canada (ECCC) in the proposed federal GHG cap and trade program for Canada, and as a result they have developed separate benchmarks.

Utilizing one benchmark for both dolime and lime does not reflect the actual chemical reaction difference that impact CO₂ process emissions. Therefore, Lhoist requests that CARB consider a separate benchmark for lime manufacturing.

Lhoist supports CARB's ongoing efforts to engage with industry in the development of its proposed Regulations. Please contact me at Justin.andrews@lhoist.com if you have any questions or if you wish to provide any feedback.

Sincerely,

A handwritten signature in black ink, appearing to read 'Justin Andrews', written over a white background.

Justin Andrews
Regional Environmental Manager (West)

Attachments: 2010 Cap and Trade Regulations, Appendix J, Allowance Allocation, Lime Manufacturing
September 21, 2018 ECCC Proposed Benchmarks for Lime Manufacturing

is assigned a distinct NAICS code. All Californian glass manufacturers expected to be included in cap-and-trade produce only one product type (i.e., either flat, container or fiberglass).

Lime Manufacturing (NAICS 327420) / Lime Manufacturing (EPA Subpart S)

Lime is derived by calcining limestone. Limestone is a naturally occurring and abundant sedimentary rock consisting of high levels of calcium and/or magnesium carbonate. If the ratio of magnesium carbonate relative to calcium carbonate is high, it is called *dolomite*. Dolomite-derived product is called *dolime*.

Currently only one lime manufacturing plant operates in California. This facility processes dolomite to produce dolime. In 2008 this facility produced less than 0.1 percent of total GHG emissions from the industrial sector that will be covered by the cap-and-trade program (Table J-4).

Reporting of process emissions from calcinations was not required for the reporting year 2008 and 2009 under ARB MRR but is required under the U.S. EPA MRR starting from the reporting year 2010.

Staff identified two potential product output metrics in lime manufacturing:

- Ton of lime produced from limestone
- Ton of dolime produced from dolomite

Since there is only one facility in this sector in California, and that facility processes dolomite, staff proposes to establish a benchmark using a dolime output metric.

U.S. EPA MRR requires lime manufacturers to report monthly or annual amount of lime produced (or sold + unsold, tons) by lime type.⁵²

Paper and Paperboard Mills (NAICS 322121 and 322130) / Pulp and Paper Manufacturing (EPA Subpart AA)

Paper is a thin material mainly used for writing or packaging that is produced by pressing together moist fibers such as cellulose pulp derived from wood. A variety of paper products are produced, depending on the quality of input (pulp) and the end use: newsprint, uncoated fine paper, coated fine paper, tissue, container board, carton board, and so forth.

⁵² U.S. EPA MRR requirements for lime manufacturers are specified in Subpart S. See: <http://www.epa.gov/climatechange/emissions/subpart/s.html> (accessed 10/10/10).

ECCC Proposal for Lime

- Emission Intensity (EI) = annual sector total GHG emission / annual Lime production. Using data provided by industry.
- Sector Average EI = Average production-weighted EI (2014-2016)
- Proposed OBS Standard EI = 90% Sector Average EI
 - OBS for high calcium lime
 - OBS for dolomitic and specialty lime

	OBS Standard EI * (t CO ₂ e/t lime)
High Calcium	1.1
Dolomitic and specialty	1.4

*Based on the results of the Phase 1 and 2 competitiveness analysis (90% of the weighted average)
Phase 3 not yet finalized