Coalition for Sustainable Cement Manufacturing & Environment
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November 21, 2016

Ms. Mary Nichols
Chairman
California Air Resources Board
1001 "I" Street
Post Office Box 2815
Sacramento, California 95812

Subject: **Comments on the November 7, 2016 Public Workshop on the 2030 Target Scoping Plan**

Dear Ms. Nichols:

The Coalition for Sustainable Cement Manufacturing and Environment ("CSCME"), a coalition of all five cement manufacturers in California,[1] provides these comments on the California Air Resources Board's ("CARB's") November 7, 2016 public workshop on the 2030 Target Scoping Plan, including the staff's workshop presentation (the "Presentation").

I. LOCAL GOVERNMENT ACTIONS CAN CONTRIBUTE TO GHG REDUCTIONS FOR THE CEMENT INDUSTRY

In its Presentation, CARB states that "{l}ocal governments are critical partners in State strategy" and that local governments "{i}nfluence activities that emit GHGs and air pollutants (e.g. industrial permitting, land use and transportation planning, zoning, implementing building codes)."[2] CARB also emphasizes taking a "{h}olistic look at local strategies to support State target."[3] In this context, CSCME encourages CARB to include in the Scoping Plan a direction to state and local government agencies to assess ways to amend and harmonize codes and standards applicable to cement and concrete use and to explore integrating a full life cycle GHG emissions assessment when making decisions on sourcing of materials.

For example, in other countries, cement and concrete codes and standards permit a higher percentage of limestone blending, which decreases the GHG emissions per ton of cement by the corresponding

[1] The Coalition includes CalPortland Company, Cemex, Inc., Lehigh Southwest Cement Company, Mitsubishi Cement Corporation, and National Cement Company of California Inc. There are ten cement plants located in California, eight of which are currently operating.

[2] Presentation at 10.

[3] Presentation at 12.

increase in the percentage of limestone. In California, as a result of differing codes and standards, the commercial reality is that blending of limestone is limited to 5 percent. Like these other countries, California state agencies and local governments should recognize that a higher limestone percentage (up to 15 percent) can be used for a wide variety of cement and concrete end-uses and should implement/harmonize standards and codes that permit such higher blending in appropriate applications.

II. A REQUIREMENT UNDER "ALTERNATIVE 1" TO REDUCE INDUSTRIAL SECTOR GHG EMISSIONS BY 25 PERCENT BY 2030 WOULD BE CATASTROPHIC FOR THE CALIFORNIA CEMENT INDUSTRY AND ACCELERATE EMISSIONS LEAKAGE

Under Alternative 1 (No Cap-and-Trade), CARB is evaluating a new measure that would require a 25 percent GHG reduction by 2030 for the industrial sector.[4] Such a reduction would be catastrophic for the California cement industry and would violate CARB's mandate under AB 32 to minimize emissions leakage.

Specifically, the California cement industry's ability to cost-effectively reduce its GHG emissions is severely limited by two factors. First, all operating cement plants in California already utilize the most energy efficient kiln technology available.[5] Second, almost 70 percent of GHG emissions from the California cement industry are an unalterable consequence of the chemical process of manufacturing the product (i.e., process emissions). These two factors alone suggest that a requirement to reduce absolute GHG emissions by 25 percent would be both technically and economically infeasible for the cement industry.

Consequently, the requirement laid out in the Presentation's first alternative would not only threaten the survival of the California cement industry, but also lead to a shift of California cement consumption to imported cement, with a higher associated GHG footprint. In other words, a command-and-control mandate would necessarily result in significant economic and emissions leakage, and thus undermine achieving a net reduction in global GHG emissions.

In fact, CARB stated: "Minimizing leakage: each industrial sector measure would need to be designed to address unique sector concerns."[6] Thus, CARB recognizes that certain industries face unique circumstances that must be addressed in minimizing leakage. CSCME urges CARB to acknowledge the unique and fundamental constraints faced by the cement industry in reducing its GHG emissions, as CARB continues to evaluate the alternatives identified in the 2030 Target Scoping Plan Concept Paper.

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[4] Presentation at 21.

[5] Because of the industry's high energy intensity, California cement producers are commercially incentivized to implement the most energy efficient technology. For example, all of the cement plants in California operate kilns using preheater and precalciner technology, which is the most advanced and energy efficient kiln technology available.

[6] Presentation at 36.

III. A CARBON TAX UNDER "ALTERNATIVE 2" WOULD CAUSE SIGNIFICANT LEAKAGE IN THE CEMENT INDUSTRY, ABSENT AN EXEMPTION OR BORDER ADJUSTMENT

Regarding Alternative 2 (Carbon Tax), CARB appears to recognize that the imposition of a carbon tax has the potential to cause significant emissions leakage. CSCME confirms that the significant and direct compliance costs imposed by a carbon tax – in the absence of sufficient exemptions – will likely result in a severe risk of leakage in the cement industry. Given its fungible nature, cement is sold almost exclusively based on price, and a carbon tax would send a clear signal to foreign producers that they can enter the California market with a significant and permanent price advantage over California-produced cement. As CARB notes, one option to minimize leakage would be to exempt certain trade exposed sectors.[7] Such an exemption, or a border adjustment imposing a similar cost burden on imports, would be critical to avoiding the irreversible adverse impacts of a carbon tax on the California cement industry, and the environmentally unsustainable impacts of increasing GHG emissions associated with foreign cement production.

IV. THE DRAFT SCOPING PLAN SCENARIO MUST MINIMIZE LEAKAGE THROUGH AN EFFECTIVE ALLOWANCE ALLOCATION METHODOLOGY

CSCME urges CARB to recognize that an allowance allocation methodology that fails to minimize leakage for highly energy and emissions intensive industries will not only undermine AB 32, but also inflict lasting damage on leakage-exposed industries and the California economy. Further, CSCME urges CARB not to operate under the mistaken assumption that the goal of minimizing leakage is at odds with the goal of reducing GHG emissions.

Under CARB's current framework, the assistance factor adjusts the extent of free allowance allocations based on industries' relative leakage exposure, while the cap adjustment factor is ratcheted down over time in concert with the declining emissions cap. If, in a future cap-and-trade scenario, CARB were to use the assistance factor to force more aggressive GHG emissions reductions, the result would be significant and irreversible economic damage to leakage-exposed industries – including the California cement industry – and increased emissions leakage.

As an industry that produces a fungible commodity product, the cement industry faces a commercial imperative to operate at high capital utilization rates. As a result, any arbitrary adjustment of the assistance factor in a manner that disregards or discounts the cement industry's leakage risk would force it to absorb additional and escalating compliance costs in order to preserve market share. This short term preservation of market share would come at the expense of profitability, propelling the California cement industry toward a tipping point at which substantial disinvestment and plant closures would be inevitable.

[7] Presentation at 37.

V. EMISSIONS LEAKAGE WILL CONTRIBUTE TO ENVIRONMENTAL INEQUITY

Within this context, reduced California cement production would be replaced by imported cement, thus resulting in significant and chronic emissions leakage through multiple channels. A ton of cement produced in California is highly likely to have a lower GHG footprint than a ton of cement produced outside of California, which must be produced using similar (or inferior) technology, transported across the ocean to California ports via cargo ships, and trucked from California ports to demand centers. Thus, a shift from California cement production to imported cement would increase the level of heavy truck traffic in the densely populated neighborhoods and communities surrounding California's ports, resulting in elevated levels of nitrogen oxides (NO_X) and particulate matter (PM) pollution in those disadvantaged areas.

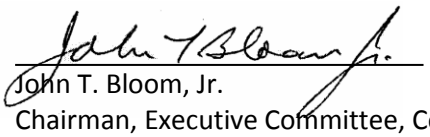
VI. CARB SHOULD CONSIDER A BORDER CARBON ADJUSTMENT TO EFFECTIVELY MINIMIZE LEAKAGE

In light of the implications of failing to sufficiently minimize leakage risk – both in terms of global emissions and local pollutants – CSCME urges CARB to ensure that the Scoping Plan considers all potential policy tools, including several options that are not currently discussed. In particular, CARB should continue to include the option of imposing an incremental border carbon adjustment ("BCA") on cement imports.

A well-designed and adequate allowance allocation framework has the potential to minimize both the risk of leakage relative to imported cement (i.e., intra-industry leakage) and relative to imported substitutes for concrete, such as asphalt or steel (i.e., inter-industry leakage). However, even if the cement industry is assigned the highest assistance factor possible, the risk of both intra-industry and inter-industry leakage will rise as the cap adjustment factor declines over time. Given this feature of the program, an incremental BCA has the potential to minimize the risk of intra-industry leakage by placing a similar "net" compliance obligation on imported cement (i.e., importers incur an obligation for any GHG emissions that exceed the allowance allocation rate for California producers). In short, an incremental BCA can serve as an important and necessary compliment to the allowance allocation framework, especially in the context of a rapidly declining cap adjustment factor and, therefore, allocation rate.

CSCME appreciates the opportunity to provide these comments and recommendations, which are intended to provide constructive and detailed input on CARB's Draft Regulation and ISOR. As in the past, CSCME welcomes the opportunity to work with CARB toward successful implementation of AB 32.

Sincerely yours,



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