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Subject: The California Cement Industry's Comments on 15-Day Proposed Amendments

The Coalition for Sustainable Cement Manufacturing & Environment ("CSCME") offers these comments on the April 14, 2026, California Air Resources Board's ("CARB") proposed amendments ("15-Day Amendments") to both the Cap-and-Invest Regulation ("C&I") and the Mandatory Greenhouse Gas Reporting Regulation ("MRR").[1,2]

<u>As a general matter and despite some substantive concerns, CSCME supports the timely adoption of amended C&I and MRR regulations at the next Board meeting.</u>

CSCME appreciates CARB's continued efforts to refine the C&I program to meet the state's climate objectives while remaining responsive to changing economic conditions, abrupt shifts in federal policy, and the evolving needs of hard-to-decarbonize industries. We also recognize that CARB must balance a wide range of competing objectives, including the difficult task of allocating scarce allowance value in a manner that both advances climate policy goals and mitigates the program's adverse economic impacts on California consumers and businesses.

The consequences of that balancing act are critically important for the California cement industry, which CARB has repeatedly and explicitly recognized as both high leakage risk and hard-to-decarbonize. Failure to provide adequate leakage protection or unlock decarbonization pathways for the cement industry does not merely exact an economic cost. It results in plant closures and the relocation of GHG emissions to other jurisdictions, which undermines the very climate objectives that the program aims to achieve.

These are not abstract concerns. They are the real-world consequences of design choices that CARB has an opportunity to get right during this regulatory cycle. As documented in our comments to the initial package of Proposed Amendments ("45-Day Amendments"), the California cement industry is in a critical condition, struggling under the weight of ever higher regulatory costs and increasing competition from unregulated imports. There were eleven cement plants in California when AB 32 was passed in 2006. Only seven plants are operational today. At the same time, cement imports have grown from virtually zero at the start of the C&I program in 2013 to more than a quarter of the market in 2025.[3] And less than a month ago,

CalPortland announced a significant reduction in the workforce at its Redding plant. That decision was driven in part by increased energy and environmental costs that place it at a competitive disadvantage to imports in northern California, which is particularly noteworthy given that Redding is the only cement plant located in the northern California market. The choices that CARB makes during this regulatory cycle will determine whether this unfortunate event proves to be a temporary, isolated incident or signals the continuing decline of California's capability to produce the cement necessary for its own housing and critical infrastructure.

These industry trends were driven in no small part by the regulatory costs that the C&I program imposes on domestic producers but not on their foreign competitors. That cost asymmetry is not incidental to the program's design. It is a deep structural flaw that will only intensify as allowance allocations decline, carbon prices rise, and imports remain unregulated. It is compounded by the fact that roughly two-thirds of the industry's direct GHG emissions are due to the unavoidable chemical reaction required to produce clinker, which severely limits the industry's ability to cost-effectively decarbonize through fuel switching or electrification alone. And it has been amplified by the recent onset of broad-based economic uncertainty, rapid increases in energy prices, and the loss of federal funding for decarbonization investments. The C&I program cannot solve all of the industry's current challenges, but it can and should avoid making them even worse.

The stakes of getting it right extend well beyond the cement industry. Cement is an essential ingredient to virtually every type of California construction: housing, roads, water systems, schools, and the climate-resilient infrastructure in which the state is actively investing to meet its long-term resilience and affordability goals. The cost of cement flows directly into the cost of those projects, and therefore, the availability of affordable cement is a matter of significant public interest. Any measures that further exacerbate the significantly higher regulatory cost burden faced by California manufacturers actively thwart that interest by shifting demand to more carbon-intensive imports without materially reducing costs for consumers. AB 1207 directs CARB to take affordability seriously. Doing so requires maintaining a competitive California cement industry — not merely tolerating and overseeing its decline.

From a cement industry perspective, the Proposed Amendments must be viewed against this backdrop of declining production, increasing imports, elevated energy prices, and escalating compliance costs. Time is of the essence, and positive policy changes are needed now. Economic and emissions leakage is happening today, and further delay will only exacerbate it. We believe that, on balance, the Proposed Amendments meaningfully move the needle in a positive direction for the cement industry, especially the updated definition of cement output and the creation of the Manufacturing Decarbonization Incentive ("MDI"). Accordingly, CSCME supports timely adoption, and we urge the Board to approve a package of amended C&I and MRR regulations at its next meeting.

At the same time, CSCME recognizes that no regulation emerges without open questions, and this one is no exception. As detailed in this comment letter, there are substantive issues in the

Proposed Amendments that are problematic from the cement industry's perspective. But we do not believe that they justify delay, and we look forward to working with CARB to resolve them at the earliest possible opportunity though staff implementation and subsequent regulatory actions.

Specifically:

- CARB proposes to update the definition of cement output, which will recognize and incentivize investments by California cement plants to reduce GHG emissions through increased SCM blending. CSCME strongly supports the updated definition of cement output, though we also request technical revisions to resolve potential ambiguities and ensure that it is implemented efficiently and as intended.
- CARB proposes several revisions to the MDI that will significantly improve its accessibility and usability from the cement industry's perspective. CSCME strongly supports the adoption of the MDI in light of those changes, and we urge CARB to implement it in a timely fashion so that it can begin catalyzing large-scale decarbonization projects in the cement industry without any undue delay.
- CARB proposes to continue to reduce the industry's leakage protection in the face of increasing allowance prices and in the absence of a level playing field. CSCME urges CARB to consider, as part of a future rulemaking, pausing alternative CAFs for the cement industry until it is able to level the playing field with imports.
- CARB proposes to provide industrial allowance allocations to SCM producers that divert their limited supply to concrete plants, despite the fact that SCM producers are not exposed to leakage risk and warnings that the approach will undermine SCM blending within the cement industry. CSCME urges CARB to remove SCM producers from the list of activities eligible for leakage assistance until it has conducted analysis that demonstrates that: (a) SCM production is a leakage-exposed activity as defined by the analytical framework CARB applies to all other industries that receive industrial allocations and (b) providing allowance allocations to SCM producers will not undermine the cement industry's ability to decarbonize.
- CARB proposes to adopt a reporting framework for cement imports that is unlikely to result in reliable and insightful data and will only serve to delay the design and implementation of a mechanism to level the playing field between domestic and imported cement. CSCME urges CARB to strengthen the reporting framework by requiring clinker-based GHG intensity calculations, adopting a more analytically defensible default factor, and requiring importers to report the country or U.S. state of origin.

The following sections elaborate on each of these issues.

Section 1: Updated Definition of Cement Output

The Proposed Amendments update the definition of cement output to include a wide range of SCMs, including fly ash, ground granulated blast furnace slag, silica fume, natural pozzolan,

calcined clay, and glass pozzolan.[4,5] These alternative materials can be blended with clinker to produce lower-carbon cement while maintaining or even enhancing product performance. CSCME fully supports this update, and we appreciate CARB's efforts to begin unlocking this essential decarbonization pathway for the California cement industry.

That said, the implementing language in both the C&I and MRR regulations is imprecise and ambiguous in certain respects, and we encourage CARB to resolve those technical issues to ensure this critical update is implemented as intended and as efficiently as possible. For instance, the Proposed Amendments to the MRR regulation appear to require cement producers to only report SCMs purchased from in-state producers who have opted into the C&I program, as opposed to all SCMs blended.[6] If the MRR system does not capture data on all SCMs blended by a California cement plant, the allocation formula cannot function as intended and the incentive to produce lower-carbon blended cement will be substantially undermined.

Accordingly, CSCME requests that CARB make the following technical correction to the reporting of SCMs under MRR Section 95110(d):

> Annual quantity of SCMs consumed for blending (short tons) ~~**that is received from SCM manufacturers that are opt-in or covered entities in the Cap-and-Invest Program**~~, by SCM type (e.g., fly ash, ground granulated blast furnace slag, silica fume)**,** ~~**and**~~ SCM manufacturer**, and whether the SCM manufacturer is an opt-in or covered entity in the Cap-and-Invest Program.**

Alternatively, in the event that the Proposed Amendments are advanced to the Board without revisions, we urge CARB to ensure that California cement manufacturers have the option to report third-party verified data on SCM use through the MRR system so that CARB may use that data to properly calculate allowance allocations and fully account for associated GHG reductions.

Section 2: MDI Refinements

CSCME's initial comment letter raised significant concerns about the MDI.[7] Those concerns centered on the program's accessibility, usability, and the counterintuitive decision to direct weaker modifier support toward the industries that CARB has identified as hard to decarbonize.

The 15-Day Amendments address those concerns in a meaningful and substantive way. By replacing the differentiated and front-loaded modifier schedule with a flat modifier of 0.8 applied consistently across all eligible sectors and all budget years, CARB has substantially increased the total MDI value available to hard-to-decarbonize industries like cement. The shift to a flat modifier; the expansion of eligible expenditures to include biomass capital costs, SCM-related capital costs, and Carbon Capture, Utilization, and Storage ("CCUS") investments; and the extension of the usability window to two compliance periods represent genuine and material improvements in the program's potential to support decarbonization investment in the cement sector. We appreciate CARB's responsiveness to the industry's concerns, and we believe that the

proposed modifications achieve the goal of making the program substantially more accessible and usable for the cement industry and other potential participants.

That said, we offer two refinements that would further improve the program's effectiveness.

2.1 The Usability Window

The 15-Day Amendments extend the spending window to the end of two compliance periods following the compliance period of the MDI allowance budget year — a practical timeline of six to seven years depending on compliance period length.[8] This is a meaningful improvement over the five-year deadline in the 45-Day Amendments. However, six to seven years is still likely to be insufficient to support the cement industry's most consequential decarbonization investments (e.g., CCUS or other investments that may be encumbered by permitting delays).

As documented in CSCME's initial comment letter and in the record developed under SB 596, CCUS projects at cement facilities require a minimum of eight to ten years from initial planning through permitting, financing, construction, and commissioning before the first ton of CO_2 is captured. A facility that applies for MDI allocation in the first compliance period and immediately begins project development may still face project timelines that exceed the spending window due to permitting delays or other matters that are well outside its control.

In addition, the section on spending deadlines and the return of unused allowances includes new language that suggests that facilities must "achieve" GHG emission reductions by the relevant deadline.[9] On the one hand, CSCME understands CARB's interest in ensuring that MDI allowances are used to create meaningful GHG reductions. On the other hand, we caution that language requiring emissions reductions before an arbitrary regulatory deadline could inadvertently discourage the use of MDI allowance value to make the long-term systemic reductions necessary to meet net carbon neutrality targets. CCUS projects offer obvious examples, but even shorter-term projects could be deterred if there is any uncertainty about whether they will be operational and generating GHG reductions before the applicable deadline.

Accordingly, CSCME urges CARB to: (1) extend the spending window to three compliance periods so that it better aligns the actual investment timelines of the projects it is designed to support and (2) modify the language to avoid deterring investments that will clearly achieve meaningful GHG emission reductions, as determined by CARB, even if they are expected to be completed after the applicable deadline.

2.2 Treatment of Partially Biogenic Fuels

The 15-Day Amendments cap biomass operating expense eligibility at 50% and exclude fuels that are only partially biogenic from the eligible expenditure category entirely.[10] CSCME views the 50% cap on fuel expenditures as a reasonable alternative to the previously proposed approach of

establishing an updating biomass fuel baseline, and we appreciate CARB's efforts to reduce the penalty for early adopters while still providing an incentive for expanding future use.

However, the 15-Day Amendments introduce a new condition under which expenditures for partially biogenic fuels cannot be credited against the 50% cap.[11] This creates an artificial and arbitrary cliff effect that is difficult to justify on environmental grounds. Many of the alternative fuels most accessible to California cement kilns are engineered fuels and blended fuel streams that are partially biogenic. These fuels still meaningfully reduce net GHG emissions relative to fully fossil alternatives, and the extent of that reduction is directly proportional to their biogenic content. To use an extreme example, under CARB's proposed approach, a fuel that is 100% biogenic will receive full credit while a fuel that is 99% biogenic will receive none — an outcome that is neither analytically defensible nor consistent with the program's stated goal of incentivizing emissions reductions.

CSCME urges CARB to credit biogenic fuel operating expenses in proportion to actual biogenic content. This approach would preserve the cost-sharing logic of the 50% cap, while eliminating the cliff effect and more accurately reflecting the GHG benefit of partially biogenic fuels.

Section 3: Reduced Leakage Protection

The Cap Adjustment Factor ("CAF") is the single most important variable in the allowance allocation framework. It determines the rate at which the cement industry's free allocations decline over time and, therefore, determines the pace at which leakage protection is withdrawn. In the absence of a mechanism to level the playing field with imported cement, a declining allowance allocation rate combined with increasing allowance prices will, by construction, result in increased leakage risk in the California cement industry.

In our initial comment letter, CSCME requested that CARB pause the decline in the alternate CAFs to prevent this inevitable erosion of leakage protection.[12] Specifically, we recommended that CARB pause the CAF decline until it is able to implement a mechanism to level the carbon playing field, at which point the CAF decline would resume on a trajectory that gradually converges with the schedule contemplated under the Proposed Amendments. The rationale is straightforward: if CARB is unable to provide the cement industry with the long-term regulatory clarity it needs to justify the capital-intensive investments required for deep decarbonization, CARB can at least provide a general assurance that the level of leakage protection will not continue to diminish before imports are held to a comparable standard.

To be clear, by suggesting a pause in alternative CAFs, CSCME is not suggesting that CARB abandon the concept of CAF declines or that the cement industry should be permanently insulated from the cost of carbon. What we are suggesting is that the cement industry's level of leakage protection should account for both rising allowance prices and the continuing absence of any mechanism to hold imports to a comparable standard. As allocation declines and carbon prices

rise, the net compliance cost imposed on California cement producers relative to their unregulated foreign competitors will increase each year — a structural dynamic that CARB's own leakage risk framework implicitly recognizes but that the proposed CAF schedule fails to address.

With those considerations in mind, as part of a future rulemaking, CSCME urges CARB to pause alternative CAFs for the cement industry until it is able to level the playing field with imports. The rationale behind such an approach has only been strengthened by CARB's proposal to only specify CAFs out to 2030, which provides little long-term clarity regarding the industry's allowance allocation rate and, therefore, the financial and competitive impacts associated with investing in decarbonization projects. A contingent pause in alternative CAFs will provide cement and other hard-to-decarbonize industries with assurances that any such investments will not simply be undermined and devalued by imports that do not bear similar costs.

Section 4: Extending Leakage Assistance to SCM Producers

CARB proposes to provide industrial allowance allocations to SCM producers for output that is sold directly to concrete plants that mix it with finished cement to produce concrete. In our initial comment letter, CSCME raised two key concerns about the proposed approach.[13]

(1) It is fundamentally inconsistent with the purpose of the industrial allowance allocation system as documented across almost two decades of rulemakings, which is to reduce leakage risk.

(2) It affirmatively undermines the basic rationale behind and potential impact of updating the definition of cement output, as it disincentivizes SCM producers from selling their products to cement manufacturers to produce blended cement.

The 15-Day Amendments fail to address either of these concerns. CARB's sole revision was to clarify that out-of-state SCM producers are not eligible to receive leakage assistance, which seemed self-evident and was not the crux of CSCME's concerns.

4.1 SCM Producers Do not Merit Leakage Protection

According to CARB, industrial allowance allocation exists for the sole purpose of mitigating leakage risk. This policy rationale is clearly documented in almost two decades of rulemakings, including workshops, regulations, and scoping plans. As just one of many examples, the Initial Statement of Reasons ("ISOR") for this rulemaking, CARB clear states that:

> *"Product-based industrial allocation within the Regulation is designed to minimize the risk of emissions leakage, per AB 32 and AB 398."*[14]

Elsewhere in the ISOR, CARB provides a more elaborate description of the drivers of emissions leakage and how the industrial allowance allocation system is designed to minimize it:

> *"The carbon price imparted by the Program is California's primary policy tool to incentivize decarbonization of in-state industrial facilities. However, the carbon price imparted by the Program may also increase the risk of emissions leakage, defined by AB 32 as a decrease*

in GHG emissions in-state that is offset by an increase in out-of-state GHG emissions. Emissions leakage can occur when compliance costs faced by regulated businesses are not shared by competitors outside the regulated jurisdiction. Pursuant to AB 32 and AB 1207, CARB is mandated to minimize emissions leakage risk and designed output-based allowance allocation to industrial entities to minimize leakage risk by creating an incentive for emissions-efficient instate production."[15]

The implications are clear: (a) industrial allowance allocation is intended to minimize leakage risk and (b) leakage risk is ultimately a function of the increased costs associated with exposure to the carbon price. Put differently, if an entity is not exposed to material carbon costs, it is not at risk of leakage and, therefore, should not receive industrial allowance allocations.

In proposing to provide industrial allowance allocations to SCM producers, CARB has defied its own program logic and undermined its long-standing policy rationale. SCM producers do not make carbon-intensive products, which is the value in using them to reduce the GHG emissions associated with cement. In fact, the Proposed Amendments require SCM producers to opt-in to the program to receive allowance allocations, as their GHG footprints are so small that they do not automatically qualify as a covered entity.

Simply put, SCM producers do not have a material exposure to the carbon price imparted by the C&I program and, therefore, do not merit leakage protection. SCMs are either carbon-intensive products that potentially merit leakage protection, or they are not carbon-intensive products that have the potential to reduce the GHG emissions associated with cement production and consumption. But they cannot be both.

CARB's decision to extend leakage assistance to SCM producers is also procedurally deficient in a way that has no precedent in the program's history. CARB has effectively declared SCMs as high leakage risk without conducting any documented analysis of GHG emissions intensity and trade exposure, which is a methodology that dates to the program's original design and serves as the analytical foundation on which the program's leakage classifications rest. As a result, CARB has not demonstrated that in-state SCM producers are likely to experience material compliance cost burdens that will place them at a disadvantage to out-of-state producers. It has simply added SCM producers to Table 8-1. That is not a defensible basis for allocating scarce allowance value, and it is precisely the kind of procedural shortcut that, if left uncorrected, will erode the credibility of CARB's approach to leakage minimization in general.

The addition of SCM producers to Table 8-1 suggests that CARB views SCMs as sufficiently similar to cement to merit comparable leakage protection, but that view is also misguided. Cement and SCMs are not functionally equivalent — technically or economically. The word "supplemental" is not incidental: SCMs are, by definition, a supplement to cement, not a substitute for it. A contractor cannot build a structure with pozzolan, fly ash, or slag alone. SCMs derive their value almost entirely from their use in combination with cement, and they have little or no independent

utility in its absence. Concrete cannot be made without cement, but it can be made without SCMs and is done so regularly.

To be clear, CSCME understands CARB's desire to incentivize SCM use in general, and we support that goal. More can and should be done to encourage the demand for lower-carbon cement. But industrial allocation is an inappropriate instrument for doing so, and it opens the door to using scarce allowance value to subsidize a wide range of industrial activities that have no clear nexus to leakage risk. Accordingly, CARB should explore other policy tools for stimulating the market.

4.2 SCM Producer Allocation Undermines Blending Incentives

The expanded definition of cement output is designed to encourage cement producers to blend SCMs into their finished product by crediting that blending in the allocation formula. However, when SCM producers receive their own leakage assistance allocation tied to supplying concrete producers, they have a significantly reduced incentive to sell their product to cement producers. Instead, they are encouraged to sell directly to concrete plants, capture their own allowance allocation, and leave cement producers without the local SCM supply needed to take full advantage of the expanded output definition. The result is that two provisions of the same regulation are at cross-purpose with each other: one creates an incentive for cement producers to blend SCMs, while the other diminishes the supply of SCMs available for that blending.

The proposed amendments are internally contradictory in ways that are difficult to reconcile with any coherent policy rationale.[16] In Table 9-1, CARB proposes to include the in-state mining of SCMs and the manufacturing of SCMs as activities associated with cement manufacturing and assign them benchmark values associated with producing "finished cement", which would serve as the basis of industrial allocation if an SCM producer sells their product to a concrete plant. But SCM producers do not actually make finished cement — they make SCMs. And concrete plants also do not make finished cement — they make concrete. To produce a finished cement that includes SCMs, an entity must inter-grind the SCM with clinker, gypsum, limestone, and other materials. It is the inter-grinding process that creates a blended cement product that meets certain specifications, such as those cited in the definition of "cement" in the C&I regulation.[17]

This is not merely a distinction without a difference. There are legitimate technical and economic reasons to prefer that SCMs be inter-ground with cement at a small number of cement plants rather than batched and mixed across hundreds of concrete plants. For instance, inter-grinding produces a homogeneous blended cement that results in consistent particle size distribution, reactivity, and performance characteristics that batching at a concrete plant cannot reliably replicate. In addition, the rapid scaling up of SCM usage will require significant capital investment in dedicated storage silos, material handling systems, and related infrastructure — investments that cement plants are far better positioned to make given their site infrastructure, operational expertise, permitting capacity, and access to capital. Finally, if SCMs are primarily channeled downstream to concrete plants, their use remains a "batch-by-batch" decision. But if they are

primarily blended upstream at cement plants, they are automatically incorporated into every downstream job and, therefore, deliver greater and more broad-based GHG emission reductions.

The implication is straightforward. If CARB wants to accelerate the adoption of blended cement in California, it should direct its incentive structure toward the entities best positioned to produce blended cement at scale, not away from them. The expanded definition of cement output represents a meaningful step forward, but providing allowances to SCM producers represents two steps back. CARB cannot incentivize cement producers to blend SCMs while also incentivizing SCM producers to sell their products elsewhere, and it certainly should not fund that incentive using scarce allowance value. The net effect is to dilute the very blending incentive that CARB has worked to create. Accordingly, CSCME reiterates its recommendation that CARB remove SCM producer allocation from the program and allow the expanded definition of cement output to function as intended.

Summary

CARB can resolve the complications and contradictions identified above with a simple step: remove SCMs from the list of activities eligible for leakage assistance unless and until it has conducted sufficient analysis to determine that SCM production is a leakage exposed activity independent of cement manufacturing. Such action will preserve the intent of the regulatory changes to the definition of cement and provide the necessary incentives for cement producers to expand SCM usage.

Section 5: Cement Import Reporting Requirements

The 15-Day Amendments include two changes to the import reporting framework that CSCME acknowledges as improvements. First, the revised definition of "cement importer", including the clarification that majority owned or controlled importing entities should be aggregated for reporting purposes, provides greater clarity and closes gaps that could have allowed importers to structure their supply chains to avoid reporting obligations. Second, the new requirement to report cement and clinker that is subsequently re-exported provides visibility over cement flows that was previously absent. These are sensible refinements, but CSCME has further comments on the definition of “cement importer” and on the overall import reporting framework.

5.1 Definition of “Importer of Cement” or “Cement Importer”

CSCME requests that CARB clarify the definition of “importer of cement” or “cement importer” under MRR Section 95102(a). In the 15-Day Proposed Amendments, CARB refines the definition and incorporates language to ensure that all entities that are majority owned or controlled are aggregated for purposes of assessing whether reporting obligations apply. CSCME recommends the following:

- Move the language regarding aggregate ownership or control to the end of the definition to clarify that all entities are subject to the aggregation provisions, whether defined as the importer of record under federal customs law or whether defined based on being the first entity that owns and receives the imported cement or clinker; and
- Revise the language applicable to instances where the terminal owner or operator does not own the imported cement or where the imported cement is not subject to federal customs law. This proposed change will ensure that importers of cement that is sourced from production in other U.S. states or that is diverted to the California market from ports of entry in U.S. states outside California are covered under the definition.

The proposed revised definition would be the following:

> *"Importer of cement" or "cement importer" means the owner or operator who is the importer of record under federal customs law of a cement terminal receiving imported cement or clinker if the terminal owner/operator owns the imported cement or clinker being received. ~~If the terminal owner or operator does not own the imported cement or clinker~~Any entity which owns a majority interest in, or exercises operational control over, ~~two or more importers must aggregate the cement imported by those importers, and such entity shall be considered, or shall designate one of the importers as, the "importer of cement" of, and the single reporting entity for, such aggregated quantity of cement for purposes of section 95101(a)(1)(H).~~ If the terminal owner or operator does not own the imported cement or clinker being received* ***or if the cement or clinker is not subject to federal customs law****, then the importer of cement is the first entity that owns and receives the imported cement or clinker in California ~~who is the importer of record under federal customs law~~, such as the owner of ~~the~~a concrete batch plant purchasing the imported cement or clinker for consumption.* ***Any entity which owns a majority interest in, or exercises operational control over, two or more importers must aggregate the cement imported by those importers, and such entity shall be considered, or shall designate one of the importers as, the "importer of cement" of, and the single reporting entity for, such aggregated quantity of cement for purposes of section 95101(a)(1)(H).***

Alternatively, CSCME supports adopting a similar definition that is used to define "Enterer", as supplemented with the aggregation provision, as follows:

> ***"Importer of Cement" or "Cement Importer" means an entity that imports into California clinker or cement and who is the importer of record under federal customs law or the owner of the clinker or cement upon import into California if the clinker or cement is not subject to federal customs law. Any entity which owns a majority interest in, or exercises operational control over, two or more importers must aggregate the cement imported by those importers, and such entity shall be considered, or shall designate one of the importers as, the "importer of cement" of, and the single reporting entity for, such aggregated quantity of cement for purposes of section 95101(a)(1)(H).***

5.2 Import Reporting Framework

The overall framework for import reporting remains fundamentally deficient in ways that CSCME raised in its initial comment letter and that the 15-Day Amendments do not address. These deficiencies are not minor technical quibbles — they go to the heart of whether the data collected under this framework will be useful for the purpose for which it is ostensibly being gathered: providing the foundation for a data-driven mechanism to level the carbon playing field with imported cement.

CSCME raises these concerns now, while there is still an opportunity to correct them, because the cost of inaction is not merely a suboptimal first year of data. It is a multi-year delay in leveling the playing field that California cement producers and the state's climate goals cannot afford. Importers will first report 2027 data in calendar year 2028. By the time that CARB has collected, reviewed, and extracted meaningful insights from that data, it will likely be 2029. And if that data does not provide reliable or actionable insights because the reporting structure was not set up correctly, CARB will then need to refine the reporting requirements, amend the regulation, and initiate another full cycle of collection, analysis, and interpretation before it has the reliable and actionable data needed to support the design and implementation of a mechanism to level the playing field, which will likely take several more years.

In short, a material "misfire" in this first data collection cycle could easily result in unnecessarily delaying the implementation of a mechanism to level the playing field for several years. With that in mind, CSCME urges CARB to consider the following concerns.

5.2.1 Accurately Calculating the GHG Intensity of Imported Cement

MRR Section 95126(b) requires importers to calculate and report the GHG emissions associated with imported cement based on a manufacturing facility's annual average GHG intensity of cement produced at that facility.

This approach is fundamentally flawed in that it effectively assumes that the GHG intensity of the cement that a plant exports to California is similar to the GHG intensity of all of the cement that it produces over the course of a year. This assumption is unlikely to hold for plants that serve different markets with very different building standards. For instance, the same plant might export a high-quality cement with a 90-95% clinker ratio (i.e., Ordinary Portland Cement) to the California market while also producing a lower-quality cement with a 75% clinker ratio for a different market that has much lower building standards than California. In that instance, averaging across the plant's full product mix will substantially and systematically understate the GHG intensity of the higher-clinker product imported into the state.

Fortunately, this issue is easily corrected by slightly shifting the basis of reporting. Specifically, CARB should require importers to report the plant's annual GHG intensity per unit of clinker (not cement) produced and then adjusting it to account for the actual clinker content of the imported product, which should be readily known by the importer. This approach is more accurate, more

consistent with how California producers report their own emissions under the MRR, and better suited to capturing the actual GHG intensity of products entering the California market.

With those considerations in mind, CSCME recommends that CARB amend the equation in MRR Section 95126(b)(1) to include a term for the clinker ratio of the imported product and the equation in 95126(b)(2) to measure a plant's annual GHG intensity on a clinker basis.

5.2.2 The Proposed Default Factor

For importers who do not provide facility-specific data, CARB proposes to apply a default factor of 0.758 MT CO2 per short ton ("ST") of cement. This approach is problematic for several reasons.

As a threshold matter, there are several reasons to conclude that the proposed default factor is likely to be substantially lower than the GHG intensity of cement imported into California, which would only disincentivize importers from collecting and reporting actual data. For instance, the European Union Emissions Trading System ("EU ETS"), which has invested considerable analytical effort in establishing defensible default factors to support the implementation of its Carbon Border Adjustment Mechanism ("CBAM") for cement, recently published default factors by country — all of which are considerably higher than the default factor proposed by CARB.[18]

In addition, CARB's proposed default is based on data from the Global Cement and Concrete Association ("GCCA") database. That data does not align with CARB's emissions calculation methodology, is voluntarily reported by GCCA members, is not independently verified, and is not necessarily representative of global production as a whole. The dataset covers a small minority of global clinker production, and that coverage is heavily skewed toward large, sophisticated, Western producers that have the systems and incentives to report.[19] Accordingly, using GCCA data as the basis for default values, especially without extensive testing for self-selection bias and representativeness, is an analytically unsound approach that undermines the credibility of the reporting framework.

Even if the GCCA data accurately reflected average global production, that average is unlikely to be representative of the cement imported into California. As documented in CSCME's initial comment letter, the vast majority of cement imported into California over the past decade originated in Vietnam and China, which are not included in the GCCA data.[20] The inability to scope the GCCA data to align with the most likely sources of imports into California only further undermines the credibility of the proposed default factor and the reporting framework in general.

Ultimately, however, there is no need to rely on voluntarily reported, unverified, and under-scoped data to establish a credible default GHG intensity factor. As outlined in CSCME's initial comment letter, a components-based approach that is grounded in physical chemistry, established engineering parameters, and publicly available data can produce a more reliable and defensible default factor without significantly expanding reporting requirements.[21]

5.2.3 Cement Country/State of Origin

Finally, CSCME requests that CARB revise Section 95126 to require importers to provide country or U.S. state where the cement or clinker was produced. This is basic information that is readily available to importers and would enhance the scope of data available to CARB in developing its level the playing field measures. For example, CARB could revise Section 95126(c)(4) as follows:

> ***(4) The cement importer must report the country or U.S. state of cement or clinker production.*** *If known, the cement importer must report the name and address of the facility where the imported cement or clinker was produced.*

Conclusion

CSCME remains committed to working constructively with CARB to advance California's climate goals while maintaining a viable and competitive cement industry. The recommendations in this letter are specific, actionable, and in several cases directly analogous to approaches that CARB has already proposed for other industries and other program elements. They ask that CARB apply its own analytical frameworks consistently, correct internal contradictions before they become entrenched, and lay the groundwork for an import reporting framework that will ultimately be needed to level the carbon playing field. These changes are essential to creating a regulatory environment that supports the capital-intensive, long-lived investment that will be required to achieve deep decarbonization in the cement industry. We urge CARB to adopt amended C&I and MRR regulations at the next Board meeting, and we look forward to continuing to engage on the path ahead.

Sincerely,

Steve Coppinger
Chair, Executive Committee
Coalition for Sustainable Cement Manufacturing & Environment

CC:
Honorable Steven S. Cliff, Ph.D., Executive Officer, California Air Resources Board
Rajinder Sahota, Deputy Executive Officer, California Air Resources Board
Edie Chang, Deputy Executive Officer, California Air Resources Board
Mark Sippola, Chief, California Air Resources Board
Rachel Gold, Esq. Supervisor, California Air Resources Board
Mihoyo Fuji, Staff Air Pollution Specialist, California Air Resources Board
Michael Turgeon, Staff Air Pollution Specialist, California Air Resources Board

Endnotes

[1] CSCME is a coalition of all five cement manufacturers in California. The Coalition includes CalPortland Company, Cemex, Inc., Mitsubishi Cement Corporation, National Cement Company of California Inc., and UNACEM North America. There are seven cement plants currently in operation in California with locations in Lebec, Lucerne Valley, Mojave, Oro Grande, Redding, Tehachapi, and Victorville.

[2] *See* State of California, Air Resources Board, *Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information to the Proposed Amendments to the Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms* (April 14, 2026) ("CARB 15-Day C&I Notice"); State of California, Air Resources Board, *Notice of Public Availability of Modified Text to the Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions* (April 14, 2026) ("CARB 15-Day MRR Notice").

[3] *See* Coalition for Sustainable Cement Manufacturing & Environment, *The California Cement Industry's Comments on Proposed Amendments to the California Cap-and-Invest Program* (March 9, 2026) ("CSCME 45-Day C&I Comments") at 16-29 (providing a detailed description of the state of the California cement industry and how it has fared under the C&I program).

[4] *See* CARB 15-Day C&I Notice at Attachment A-1, 161 (§95891(b)).

[5] *See* CARB 15-Day C&I Notice at Attachment A-1, 45 (§95802(a)).

[6] *See* CARB 15-Day MRR Notice at Attachment A-1, 122 (§ 95110(d)(5)).

[7] *Id.* at Section 6.

[8] CARB 15-Day C&I Notice at Attachment A-1, 209 (§95891(g)(8)).

[9] *Id.*

[10] CARB 15-Day C&I Notice at Attachment A-1, 201 (§95891(g)(2)(A)).

[11] *Id.*

[12] *See* CSCME 45-Day C&I Comments at Sections 3 and 5.3.

[13] *See* CSCME 45-Day C&I Comments at Section 7.

[14] California Air Resources Board, Public Hearing to Consider the Proposed Amendments to the Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms, Staff Report: Initial Statement of Reasons ("CARB 45-Day C&I ISOR")(January 20, 2026) at 343.

[15] CARB 45-Day C&I ISOR at 58.

[16] The MRR regulation also suffers from similar issues, which suggests a fundamental misunderstanding of the cement-concrete supply chain. For instance, the 15-Day Amendments suggest striking "finished" from "finished cement" when discussing what SCM producers must report. CARB explains this edit as, "clarification of terminology because cement is finished at cement or concrete plants." CARB 15-Day MRR Notice at 5. CARB's explanation is confusing, as concrete plants do not finish cement — they simply mix finished cement with other materials to produce concrete.

[17] CARB 15-Day C&I Notice at 9.

[18] Commission Implementing Regulation EU 2025/2621, Laying Down Rules for the Application of Regulation (EU) 2023/956 of the European Parliament and the Council as Regards the Establishment of Default Values, Official Journal of the European Union (December 16, 2025).

[19] *See* Global Cement & Concrete Association, GNR 2.0 at gccassociation.org/gnr (login required) and "List of Countries and Regions Covered by GNR" at gccassociation.org/list-of-countries-and-regions-covered-by-gnr.

[20] *Id.*

[21] *See* CSCME 45-Day C&I Comments at Section 8.