



September 30, 2008

Ms. Mary Nichols
Chair
California Air Resources Board
1001 I street
Sacramento, CA 95814

RE: Draft Scoping Plan, Industry, Cement/Concrete proposals

CalCIMA appreciates the opportunity to comment on the draft AB 32 Scoping Plan and its appendices ("Plan"). CalCIMA is the statewide association for the ready mixed concrete, aggregate, and industrial minerals industries representing over 100 companies with over 500 facilities within the state. Our comments focus on the impacts to ready mixed concrete producers, which are addressed within the industrial sector of the Plan.

As the statewide association that represents the ready mixed concrete industry, we provide a series of comments to the Plan related to the challenges for our industry. We understand that the scoping plan is more of a regulatory blueprint subject to further analysis, however prior to the Board's adoption of such a document, we feel it is appropriate the Board understand some of the challenges this document may place upon the industry we represent.

Ready Mixed Concrete Industry

It is perhaps helpful to recognize the various external forces and constraints the ready mix industry faces in attempting to address the mechanisms under consideration in the Plan related to CO₂ emissions reductions for concrete. We as an industry mix cement with sand, gravel, water and at times Supplemental Cementitious Materials (SCM's), based on the specifications of the architects/engineers for the project.

At the same time there appears to be a perception that the addition of SCM's to concrete can be readily applied to virtually all projects. This is not the case as concrete involves chemical reactions between all of the ingredients to get the desired performance characteristics that ensure a safe durable end result. This represents the aspect of blending under the CARB proposal where developing mixes with high SCM concentrations that meet the end users desired physical strengths and properties will require research, testing and possibly new technology.

Incentives:

As a whole, and particularly in regard to ready mix batch plants, there is a lack of incentives in the scoping plan. Instead the discussion seems to have become focused on penalties through a command and control structure. We encourage CARB to find ways to encourage, incentivize and ease the implementation of the command and control regulatory structures being considered, particularly with respect to the concrete industry which directly emits very limited amounts of CO₂.

The following is a list of possible measures that we believe deserve consideration, which could incentivize and speed reductions;

- The general incentive based concepts applied to the ready mixed concrete industry expressed in the September 8th, 2008 CSCME Tradable Performance Standards policy document are a good example of market mechanisms that would foster and reward innovation in the concrete industry while creating a system that ensures reductions in CO₂ from cement. Such a system is important for any source of indirect emissions of CO₂ associated with cement use. How the credits are applied will be dependent on how SCM and other credit generating measures are constructed.
- Set achievable standards with rewards for those able to exceed the standards.
- Further study and analysis of the availability, technical suitability and economics associated with the use of SCM's.
- Provide tax incentives for GHG research, investment in GHG technology and capital equipment purchases.
- Permit Streamlining for existing facilities modifying to meet AB 32 mandates.
- Permit Streamlining for facilities making unmandated modifications resulting in GHG reductions above a developed threshold.
- Encourage local governments to adopt consistency language in their general plans for existing facilities making modifications consistent with the AB 32 mandates.

Waste Reduction from Returned Concrete

We believe this section should be removed from the Plan. First the measures the Board is already considering for cement/concrete would get a substantial reduction if implemented in regulation. We will also note the proposed reduction amounts of 0.5 to 1 MMTCO₂ would not be available at the assumed 5%-8% returned concrete level. We also believe that assumption of returned concrete is high. Industry already takes significant steps to reuse and recycle that material.

If one did assume there was indeed 5%-8% returned concrete, the total CO₂ emissions from that concrete would be 0.6-0.896 MMTCO₂ at current emission factors unadjusted for the other rules under consideration. This emission number would of course be reduced substantially by the other proposed cement and concrete measures before any regulation of returned concrete would be able to reduce it any further. In effect double counting and over counting are occurring. Over counting, as the Plan number seems to assume the ready mix concrete industry uses 100% of cement consumed in the state. Double counting, in that the reductions for returned concrete measures do not appear to

first factor in the upstream measures anticipated on cement/concrete inflating the amount of carbon in the concrete that will be available for reduction upon rule implementation.

Our industry already takes many steps to reduce reuse and recycle returned concrete. One measure of the success of our efforts is the lack of concrete wastes entering the waste management stream. The 5%-8% waste number would assume between 4 and 6 million cubic yards of concrete waste was being generated each year. However, if we assume a dry concrete weight of approximately 1.5 tons per cubic yard of concrete this would mean between 6 and 9 million tons of waste generated annually. In 2004 the Integrated Waste Management Boards 2004 Waste Characterization Study shows that 966,704 tons of concrete Construction & Demolition waste was disposed of in landfills in 2003^[1]. This number represents waste suitable for recycling. While most of this is clearly demolition debris the total weight does show that extremely large quantities of new concrete are not entering our state's landfills. There is a reason for this.

Our industry already works to reduce reuse and recycle returned concrete. We supported AB 574 (Wiggins) which allows the use of recycled concrete materials with notification to the consumer provided that consumer isn't CalTrans or the Department of General Services which are legally barred from accepting this material. Some do pour concrete blocks, others turn the material into recycled aggregate for road base. Some operate reclaimers breaking down the returned concrete into constituent parts. Many operate a combination of strategies. In addition to existing measures being undertaken, the waste diversion portions of LEED encourage contractors to reduce and manage/reuse waste. This will further reduce waste concrete return as contractors refine their processes to reduce waste and get LEED credits.

We strongly encourage the Board to remove this proposal from the Plan. The reductions contemplated exceed the total emissions from the activity even if one assumes 5%-8% returned concrete. The contemplated reductions fail to account for reductions in intensity which would decrease any concrete waste emissions post rule adoptions, and existing and new waste management practices are already successfully dealing with the excess materials.

Safe Harbors

As noted previously, ready mix batch plants control neither the supply of SCM's that will be available nor the concrete specification set by the end user. With regard to uncertainties of SCM supply we believe that the Board should direct staff to include safe harbors for our industry from the failure of the coal fly ash and other SCM suppliers to provide suitable quality and supply of SCM's to the California market. The Board has adopted such safe harbors for industries as recently as the Board's In Use Off Road Diesel regulations which provide an equipment owner will not be out of compliance with the rule should they have ordered the necessary technology four months prior to the compliance date. In this case the technology is SCM's and there are valid concerns as to

^[1] <http://www.ciwmb.ca.gov/Publications/LocalAsst/34004005.pdf> Page 14

whether the supply will be available, usable and when it will arrive. We believe this format could easily be modified to protect our industry from a failure or inability of the SCM industry to provide adequate usable SCM's to the marketplace.

Such a system would provide security for our members as they would not be penalized if the promised supply does not materialize, or even, if over time with broader implementation of GHG regulations nationwide that supply should dry up or be utilized closer to its production location. Likewise, it would prevent the Board from having to provide such relief through an additional regulatory proceeding. The creation of a safe harbor is therefore, in our estimation, a prudent way to ensure that this question is dealt with as part of the regulation.

We appreciate the opportunity to continue working with the Board on these activities. Should you have any questions please do not hesitate to contact me at (916) 554-1000 Ext. 102.

Respectfully,

A handwritten signature in black ink, appearing to read "Adam Harper", is written over the printed name.

Adam Harper
Director of Policy Analysis
CalCIMA