



May 11, 2022

VIA E-MAIL

Todd Beyreuther, Technical Advisory Group Chair
Building Code Technical Advisory Group
Washington State Building Code Council
PO Box 41449
Olympia, WA 98504

Re: Comments on Proposed Structural Code Change 21-GP2-096 Greenhouse Gas Emissions Reduction for Concrete

Dear Chair Beyreuther and Members of the TAG:

CalPortland is a construction material supply company providing cement, construction aggregates and concrete in six western states including Western Washington. The Company has a rich history of innovation that extends over 130 years and a leader in sustainability having been the only industrial company in the United States to earn the US EPA Energy Star Partner of the Year – Sustained Excellence Award for the last 18 consecutive years. We supply and encourage the use of supplementary cementitious materials (SCM) where appropriate to reduce the embodied carbon of construction materials.

I am writing to encourage the Technical Advisory Committee to reject Proposed Code Change 21-GP2-096.

Proposed Code Change 21-GP2-096 regarding greenhouse gas emission reduction for concrete products appears to be intended to accomplish some of the same goals that have been sought through the passage of buy clean legislation that has been contemplated by the Washington State Legislature as well as other states legislatures in recent years. We actively participated in these conversations and are not opposed to



legislation that aims to achieve buy clean objectives provided the legislation recognizes certain practical realities within the marketplace and operational and logistical challenges of delivering concrete to the construction industry.

We believe that the legislature is the appropriate venue to consider the concerns of interested stakeholders and develop a buy clean policy that sets realistic standards and minimizes adverse impacts on the economy, the construction industry and the built environment. We see Proposed Code Change 21-GP2-096 as an end-run around the legislative process and encourage you to consider whether the building code is the appropriate mechanism for implementing a buy clean policy.

At a minimum, a plan to address the following specific concerns should be in place before approval of the proposed code change should be considered:

- 1) Revised section 1901.8 would require EPDs for products used in the building to be provided to the AHJ prior to certificate of occupancy.
 - a. If the project does not meet the stated criteria, what is the remedy? Does the building official refuse to issue a certificate of occupancy until the proper documentation is provided or the existing concrete is replaced with concrete that meets the criteria. How would this remedy meet the objective of reducing the embodied carbon of the structure?
 - b. Who will be responsible for verifying the accuracy of the documentation provided?
 - c. Will this put an undue burden on local building officials
- 2) The proposed amendment provides for an exception for concrete for which the nearest supplier with a Type III product-specific EPD is located more than 100 miles from the project site. The 100-mile distance may be too far to allow material to be delivered within 90 minutes to remote areas where travel is required over slow roads or alternative modes of transport (barge for example).
- 3) The CO₂e Limits are arbitrary and may not appreciate performance characteristics beyond compressive strength
 - a. The criteria were not developed based on a comprehensive survey of all produces and in fact, is likely biased because it was based only on information provided from producers providing EPDs. Many of the smaller producers in the more rural parts of the state don't yet have EPDs and could have difficulty meeting the limits.
- 4) In the last line of Item 6 the proposal states, "***The proposed language will encourage the worst 10% of steel product manufacturers to reduce the carbon content of their materials to be more competitive in the market.***" This statement is clearly erroneous and cut and paste from the steel proposal because later under the heading, **GWP Value Methodology**, the proposal says, "***The values presented encourage the worst 25% performing ready mixed concrete mixes to reduce the carbon content of their materials to be more competitive in the marketplace.***" Based on this statement one would assume the



proposed limits would 25% of the existing concrete supply unavailable to covered projects.

- 5) The legislature reviewed proposed buy clean policies in 2018, 2021 and 2022 as stated in the proposal. The Legislature found that the issue was nuanced and complex and required more study, input and coordination with producers before passing legislation proposed by the CLF and other Buy Clean proponents and a budget proviso was passed to perform a pilot study on a limited number of projects on the University of Washington Campus. The study is not complete and a report from the study is not yet available.
- 6) There is nothing presently in the building code preventing project proponents, from using low carbon concrete for their project where appropriate. Therefore, this amendment is not needed to address a unique character of the state as specified in Item 7.
- 7) Item 8 of the proposal indicates that there is no economic impact of the proposal.
 - a. This seems implausible when the proposal clearly indicated that the limits specified are intended to eliminate 25% of the available mixes.
 - b. The lions share if CO₂e embodied in each mix is contributed by cement used to manufacture it. Without a careful evaluation of available sources how could proponents possibly know whether 25% of the market can be replaced with lower carbon options and what the economic impact of using those replacement options might be.
 - c. The fact is that there is only one cement plant operating in Seattle capable of producing approximately 1/3 of satisfying approximately about 1/3 of the regions cement demand. The remainder must be imported from elsewhere and because of the logistical and regulatory considerations and capital required to open a new cement plant, it is unlikely a new facility will be constructed to fulfill that demand anytime soon. The proposed change would create an inherent preference for cement sourced from the local cement plant to be used for projects subject to the code.
 - d. The use of SCM can help reduce embodied carbon, but these materials such as slag and fly ash are limited in supply and often need to be transported over long distances and their cost can vary substantially. This is particularly true for fly ash that is becoming less available as coal-fired power plants are decommissioned.
 - e. The cement and concrete business is complex and carefully regulated to ensure it remains competitive. The proposal is cavalier in its response to the question regarding economics and fails to give it adequate consideration.

The concrete industry in the state was not consulted in the preparation of this proposal and building code is not the appropriate mechanism to implement such a policy. The proposed change would do nothing to improve life safety and health, energy efficiency or the longevity of structures. The proposed change is likely to increase the cost of structures and place an unnecessary burden on the construction industry and the



inspectors and public entities that would be required to collect and track all this information.

Sincerely,

CalPortland

A handwritten signature in black ink, appearing to read 'Pete Stoltz', with a long horizontal flourish extending to the right.

Pete Stoltz
Manager of Permitting and Government Affairs

Enclosure

Cc: Stoyan Bumbalov