



CHESAPEAKE BAY FOUNDATION

*Environmental Protection and Restoration
Environmental Education*

House Bill 1244

State Procurement - Concrete - Preference

Date: March 31, 2021

To: Senate Education, Health and Environmental
Affairs Committee

Position: Support

From: Robin Jessica Clark, Maryland Staff Attorney

Chesapeake Bay Foundation (CBF) **SUPPORTS** HB 1244 which would require state government agencies to apply a procurement preference for concrete that is developed through processes less damaging to the environment. This preference could support the Chesapeake Bay clean-up through lowering local greenhouse gas emissions.

Purchasing low emissions concrete is a viable and reasonable way to reduce greenhouse gas emissions. The concrete industry is one of the largest emitters of CO₂.¹ On a worldwide basis, it is second only to agricultural in greenhouse gas emissions.² The use of use of blended cements are one way of increasing the sustainability of concrete by reducing the quantity of new cement production. Specifically, the addition of fly ash and slag cement, as described in the legislation, increase the sustainability of concrete.³ These additives can also provide economy, improved workability, enhanced long-term strength and durability.⁴

The Federal Highway Administration's Office of Pavement Technology suggests the use of blended cement, a mix of cement with fly ash, natural pozzolans, or slag cement, to State highway agencies seeking to reduce their environmental footprint and notes the major barrier to increased use as better education regarding these alternatives.⁵

Reducing greenhouse gas emissions helps confront climate change and its negative effects on the Bay. As described by the Maryland Department of Environment, "slowing the rate of sea level rise can have a positive impact on the living resources of the Bay by reducing sediment loads and improving habitat quality."⁶ Thousands of acres of environmentally critical tidal wetlands and shorelines are threatened by sea level rise.

¹ Mittelman, Elisheva, [The Cement Industry, One of the World's Largest CO₂ Emitters, Pledges to Cut Greenhouse Gases](#), Yale Environment 360, December 2018.

² *Id.*

³ US Department of Transportation, Federal Highway Administration, [Tech Brief: Blended and Performance Cements](#), January 2011.

⁴ *Id.*

⁵ *Id.*

⁶ Maryland Department of Environment, Climate Change Maryland, [Chesapeake Bay restoration benefits](#), last visited Jan. 28, 2021.

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Climate change also leads to increased water temperature. Warmer waters have a lower capacity to hold dissolved oxygen, exacerbating the Bay's fish-killing dead zones and contributing to algal blooms. Rising water temperatures are stressing fish from the Bay's iconic striped bass to Pennsylvania's beloved brook trout. Temperature-sensitive species are at risk, like eel grass, a food source for migratory waterfowl and important habitat for blue crabs. Significant changes in water temperature displace Bay species and threatening the ecosystem that is the foundation of the Bay's recovery.

CBF urges the Committee's FAVORABLE report on HB 1244. For more information, contact Robin Jessica Clark, Maryland Staff Attorney, at rclark@cbf.org or 443.995.8753.