



Heidelberg Materials North America

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Senator Brian Feldman
Chair, Education, Energy, and the Environment Committee
Miller Senate Office Building
11 Bladen Street
Annapolis, MD 21401

February 27, 2025

RE: Senate Bill 882 - Coal Transportation Fee and Fossil Fuel Mitigation Fund (Coal Dust Cleanup and Asthma Remediation Act)

Position: UNFAVORABLE

Dear Chair Feldman:

Heidelberg Materials **opposes** Senate Bill 882, which establishes a new transportation tax on carriers of coal in Maryland. As introduced, Senate Bill 882 would serve to increase manufacturing costs in the cement and construction material industries in our state and ultimately frustrate progress made towards decarbonization in the cement industry.

Heidelberg Materials is a leading supplier of construction materials in North America. Our core activities include the production of **cement** and aggregates, as well as ready-mixed concrete, asphalt, and other downstream cement products. The Union Bridge, MD plant dates to 1909, and Heidelberg Materials has supplied the cement supporting Maryland's critical infrastructure needs for nearly 120 years. The Union Bridge plant employs approximately 165 people year-round, and **the facility supplies roughly 65 percent of the cement used throughout Maryland.**

The Cement Making Process

Cement is the primary ingredient in concrete, the world's most consumed building material and additionally most consumed consumer product by volume, only behind water. Despite this, many are not familiar with the process of making cement. Cement is created through an energy-intensive process by which **extreme heat** (approx. 2,500 – 2,700 degrees Fahrenheit) is used to convert limestone and other raw materials into clinker. This material is combined with gypsum, limestone and other materials that are ground, mixed, and blended to ultimately comprise cement. This reactive material is chemically and physically similar to that used in the Roman era. Because of the **significant amounts of thermal energy** needed to produce the physical and chemical conditions required, the process of making cement is not presently a feasible candidate for electrification.

Without a reliable supply of coal as traditionally used, or the addition of natural gas, which can be used to produce cement with a lower CO2 output, coal remains today as our plant's only economically viable provider of the thermal energy required by the cement making process.

Negative Effect on Greenhouse Gas Reduction Goals

Recognizing the role of cement production in global greenhouse gas emissions, Heidelberg Materials began implementation of a carbon roadmap that commits to carbon neutral concrete by 2050 at latest. From 1990 to 2021, Heidelberg Materials reduced our global specific net CO2 emissions by 25% to 565 kg CO2 per tonne of cementitious material. In May 2022, we again substantially tightened our emission reduction target. By 2030, our goal is to reduce specific net CO2 emissions to 400 kg/t of cementitious material. Compared to the base year 1990, this corresponds to a reduction of almost 50 percent. Since 2000 **for the Union Bridge facility**, CO2 emissions have **reduced** from over 800 kg/t to **less than 650 kg/t** showing great progress but also underscoring the opportunity at hand for further reduction.

Heidelberg Materials is committed to supporting Maryland's carbon emissions reduction targets in Maryland's Climate Pollution Reduction Plan. **We have already begun the process of navigating the financial and regulatory challenges of replacing the use of coal with natural gas at our Union Bridge plant.** The State's 2023 Climate Pollution Reduction Plan pointed out that the cement industry in Maryland has already made strides towards decarbonization and has already factored this project's impact into the state's prospective emissions reductions¹. On completion, **conversion to natural gas would immediately reduce annual CO2 emissions in the state by approximately 335,000 tons per year** representing a 20% decrease in site specific emissions.

Additionally, further efforts related to lower CO2 **alternative fuels** (including biomass) and incorporation of supplementary cementitious materials to further lower CO2 intensity are underway but will require further support to gain widespread acceptance as important drivers of reduced emissions.

Competitive Impact on Maryland Industry

Provisions of Senate Bill 882 would impose a tax of \$13 per short ton of coal transported in Maryland. This new tax would result in a **significant financial impact on production costs at the Union Bridge plant**. Preliminary economic analyses indicate that two key production inputs for our process would be impacted by this fee – both electricity and fuel. As a result, this production cost impact would translate into substantial revisions to planned state expenditures in transportation, infrastructure, and aspects of the construction market, including commercial non-residential as well as residential construction. Based on the **state's consumption of 1.16 million short tons** of cement in 2023, SB 882 would have caused more than **\$30,000,000 in total increased construction costs** in our state across all suppliers during that year. Those fiscal impacts would only grow in impact to both the Maryland economy and taxpayers in the coming years

¹ "Within the industrial fuel use sector, emissions were evenly split between coal, oil, and natural gas in 2020. Practically all of the coal used in the industrial sector is used by two cement manufacturing plants while almost all of the oil and gas is consumed by non-cement industries. Switching industry to cleaner fuels or electricity is an important part of decarbonizing this sector. The largest of the two cement manufacturing plants in Maryland is currently working to replace coal with natural gas while the other plant is considering a replacement of coal with refuse-derived fuel. These two fuel-switching projects are included in the emissions modeling for this sector." Page 44, [Maryland's Climate Pollution Reduction Plan - Final - Dec 28 2023.pdf](#)

Given the highly competitive demand for cement on a global scale, increases in production costs of product manufactured in Maryland may lead to increased demand for cement produced in other countries, which do not have a similar fee structure in place. Furthermore, Senate Bill 882 may ultimately result in the unintended consequence of construction in **Maryland contributing to increased global CO2 emissions**, as construction projects **would likely be driven to source cement from cheaper and less-regulated production processes in other states and countries**.

We are focused on reducing our carbon emissions and are committed to working with the State of Maryland to accomplish this substantial task. The transportation tax established by Senate Bill 882 provides significant financial and economic uncertainty for our industry, resulting in diverted demand away from cement produced in Maryland, frustrating the steps that our industry has undertaken to reduce carbon emissions in this state.

As previously stated, we believe that imposing a coal transportation tax in Maryland could adversely impact progress (especially near-term) in decarbonization of the cement industry in Maryland. Both facilities in Maryland produce essential construction material supporting the economy of the state, and we reiterate the importance of supporting our transition to decarbonization.

We request that these concerns be considered and appreciate the opportunity to offer any follow-up you may require. We remain willing to work with this committee on any efforts to reduce carbon emissions in the production process of cement.

Sincerely,



Walter Smith
Plant Manager, Union Bridge
Heidelberg Materials North America