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California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Subject: Investing Funds from Cap-and-Trade Auctions

We would like to use this letter to share with the California Air Resources Board (CARB) an exciting development in reducing the carbon foot print of ready-mixed concrete. After two years of applied research, Diversified Minerals, Inc. (DMI) in Oxnard, California has developed a ready-mix concrete that uses fly ash from a waste-to-energy (WTE) facility. Importantly, the fly ash reduces the amount of conventional cement normally used to make concrete, thereby reducing the greenhouse gas (GHG) emissions associated with concrete construction. This provides the State of California with a unique tool for reducing our GHG emissions while rebuilding the aging infrastructure in our disadvantaged communities.

Fly Ash in Concrete
As you know, fly ash generated by the combustion of fossil fuels has been used for many years to improve the quality of concrete. Caltrans has been using fly ash in the concrete used to build our freeways for at least twenty years. For a variety of technical reasons, it has not been possible to substitute WTE fly ash for the fossil-fuel fly ash currently used in concrete. Fortunately, DMI is in the business of producing pozzolan mixes for high-performance concretes and has been able to use their experience to find a way to successfully use WTE fly ash in concrete.

Reducing GHG Emissions from Concrete Construction
Based on the “low-carbon” formulations developed by DMI, a cubic yard of concrete made with WTE fly ash avoids approximately 62 pounds of CO2 emissions. If all the fly ash from the three WTE facilities currently operating in California was used to replace conventional (containing no fly ash) concrete with low-carbon concrete, the GHG reduction would be over 21,218 metric tons per year. We hope you agree that this is significant reduction, and we would be pleased to share with you how we developed this data.

Restoring Disadvantaged Communities
The low-carbon concrete developed by DMI could be used to help restore the parks and the sidewalks, median strips and gutters along roads in disadvantaged communities across California. Unfortunately, disadvantaged communities often do not have the funding needed to properly maintain their parks and streets, and they fall into disrepair. Cap-and-trade funds could be used to employ the local workforce in rebuilding their own communities using DMI’s low-carbon concrete. We are hoping that you will agree that restoring our disadvantaged communities, while reducing our GHG emissions is just the type of project envisioned by the program to use cap-and-trade funds.

Improving Sustainability of Waste Management in California

The three, existing WTE facilities in California are used by surrounding communities to manage their municipal waste. The ash from these facilities is currently being used beneficially as daily cover or road base at local landfills. As stated by CalRecycle in their initial report on implementing AB 341, we need to find another way to recycle ash from WTE facilities. Fortuitously, the new concrete formulation developed DMI offers such an alternative reuse of WTE ash, thereby improving the landfill diversion provided by these WTE facilities. With this improvement in the sustainability of WTE facilities, the sustainability of the waste-management programs of those communities which utilize the services of WTE facilities is also improved.

Co-Benefits

Some of the co-benefits of using low-carbon concrete which uses WTE fly ash are as follows:

- The sustainability of our WTE facilities is significantly enhanced because a waste byproduct of these facilities is recycled in a commercial concrete product, rather than being used as daily cover or road base in a land fill, as envisioned under AB 341.
- California would become a leader in reducing GHG emissions from concrete construction, using fly ash generated by thermally recycling municipal waste.
- California cities are actively engaged in implementing sustainable, "zero-waste" programs. A number of cities use a WTE facility to treat waste which cannot be recycled. When the fly ash produced by the WTE facility is used to make low-carbon concrete, the city's waste-management program becomes more sustainable.
- Reducing GHG emissions, while restoring our disadvantaged communities meets Governor Brown's initiative to make California the model for other states to follow in dealing with the challenges of climate change.

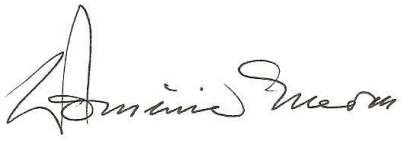
New Concrete is Ready for a Demonstration Project

The new concrete mix developed by DMI, utilizing WTE fly ash is ASTM C595 certified. Further, this concrete passes the state's WET (STLC extraction) test. As a result, the new concrete is now ready to be used on a demonstration project. Until the product has stood the test of time, however, it is good engineering practice to limit its use to non-structural applications, such as sidewalks, gutters and median strips.

Meeting with CARB

We would like to meet with you in the Los Angeles area to discuss using the proceeds from cap-and-trade to fund a demonstration project in a disadvantaged community, using DMI's new low-carbon concrete to reduce our GHG emissions.

Sincerely yours,



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