January 6, 2020

GC / Arch / Eng Address 1 Address 2 City, State Zip Code

Re: LEED BPDO Environmental Materials Reporting Form RMC Company Project Name, Location (suggestion to identify project on LEED directory)

Dear Point of Contact,

Please find a summary of RMC Company's listed products and contribution to the referenced LEED project.

Ready-mixed concrete has a distinct advantage over other building materials due to its ease of use, durability, resilience, thermal mass, sculpts to any shape and proximity to project sites. Each attribute can contribute to sustainable design criteria and influence the project's environmental footprint throughout its service life.

The following is a summary table to demonstrate concrete products contribution to LEED criteria for this project.

Product (mix code)	MR: EPD	MR: Sourcing of Raw Materials		MR: Material Ingredients	MR: Regional Material w/in 100 miles	EQ: Low-emitting material - Volatile Organic Compounds	Cost \$	
	IW / Prod Specific (PS)	Supply Chain Certification (Y/N)	RC Post (%)	RC Pre (%)	Inventory to 1000 ppm (Y/N)	Extract. & Mfg. (Y / N)	(VOCs)	
#	IW/PS	Y/N	%	%	Y/N	Y/N	USGBC deems concrete	\$
#							an inherently low	
#							emitting material and	
#							therefore no emission	
#							testing is required.	

Please see additional sections that provide details regarding LEED criteria and concrete products.

**<u>1.0 Environmental Product Declarations</u>:** Life-cycle information is available that discloses environmentally, economically, and socially impacts from manufacturing and transporting concrete products.

Product	Option 1: Environmer	tal Product Declaration	Option 2: Multi-Attribute Optimization	Cost \$
(mix code)	EPD Program Operator	EPD/LCA Type	Type of Reduction	
#	NSF Certification, LLC	IW/generic EPD	* This section is only for those w/ PS EPD. Call to discuss criteria.	\$
#				
#				
#				
#				

Details pertaining to environmental impacts per product/mix code are publicly available, whereas

OPTION A:

RMC Company participated in the National Ready-Mixed Concrete Association's IW-EPD/generic EPD. Below are links to the verified EPD, and a directory of industry plants with RMC Company as a participant:

- IW-EPD: http://info.nsf.org/Certified/Sustain/ProdCert/EPD10294.pdf
- Directory of participants: <a href="https://www.nrmca.org/sustainability/EPDProgram/search/">https://www.nrmca.org/sustainability/EPDProgram/search/</a>

## OPTION B:

Appendix A specifically lists environmental impacts of proposed mix designs for this LEED project.

**2.0 Responsible Souring**: Identifying and managing environmental, social and governance practices of supply chain partners. This includes sustainable supply chain certifications and recycled content. Concrete utilizes waste products from other industries as an important ingredient, such as fly ash and slag. These byproducts are supplementary materials for cement and can reduce the environmental impact (see EPD).

Product (mix	Supply chain certification	Recycled Content (Pre/Post-Consumer %)		Cost \$
code)		RC Post (%)	RC Pre (%)	
#				
#				
#				
#				
#				

**<u>3.0 Material Ingredients</u>**: Selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances.

Product	Option 1: Material Ir	ngredient Reporting	Option 2: Type of Optimization Report	Cost \$
(mix code)	Type of Report (1000 ppm)	3 <sup>rd</sup> Part Verified	Certification Program	
#	C2C, Declare, HPD, etc.	Y/N	* This section is only for those w/ PS health hazard disclosures. Call to discuss criteria.	\$
#				
#				
#				
#				

**<u>4.0 Low-Emitting Materials</u>**: USGBC deems concrete an inherently low emitting material and therefore no emission testing is required. [*Note: If sealers or coatings are used for protecting the concrete, these finishes must report their VOC content in accordance with LEED criteria.*]

**5.0 Regional Material**: Concrete is truly the only local building material due to its raw materials being abundant, proximity to project sites and the need to deliver within a short period of time from batching at the plant.

Product / source	Aggregate	Aggregate	Cement	SCM (FA)	SCM (Slag)	
distance to	City, State	% by weight*				
project site						
Mix code #	x miles					
Mix code #						
Mix code #						
Mix code #						
Mix code #						

\* Note: LEED v4 requires 90% by weight to be consider "entire product."

If you need further clarification or additional assistance, please do not hesitate to contact me.

Best Regards RMC Company Contact

## Appendix A: Environmental Impacts of Concrete Products

**RMC Company** participated in the NRMCA IW-EPD, which was verified by NSF Certification, LLC. Below are applicable links that allows RMC Company to utilize the IW-EPD for this project. Also below is a table corresponding concrete mix codes with references to environmental impacts within the IW-EPD.

- Program Operator, NSF verified IW-EPD report: <u>http://info.nsf.org/Certified/Sustain/ProdCert/EPD10294.pdf</u>
- Directory of IW-EPD industry participants acknowledging RMC Company: https://www.nrmca.org/sustainability/EPDProgram/search/

Product (mix code)	IW-EPD Product (mix code)	Environmental Impacts (IW-EPD referenced page)	
#12345	2501-300-30FA	Page 19	
#			
#			
#			
#			

RMC Company was a participant as identified in a search query of the plant directory:

