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September 12, 2016

Mr. Jimmy Fleming
Vulcan Materials Company
800 Mt. Vernon Highway
Suite 200
Atlanta, GA 30328

Re: Seismicity and the Lexington Quarry

Dear Mr. Fleming,

It has been alleged in several citizen comments that the Lexington Quarry might result in earthquakes. The fault in question lies approximately one mile from the proposed quarry. It should be noted that there are hundreds of quarries that operate everyday within one mile or less of a fault zone. There is no history of blasting from aggregate quarries creating sufficient strength to create earthquakes. Additionally, in the Southeastern United States there has been no documented evidence correlating the activities of quarry blasting with any earthquake events. Seismic instruments monitor these quarries, and there is no history of any earthquakes occurring as a result of aggregate mining activities. Simply put, there is insufficient energy in the sort of blasting performed in quarry operations to initiate an earthquake. It is a standard practice in mining permits to limit the energy of a blast to avoid damage to the most fragile parts of structures. These blasting limits are insufficient to create the sort of scenarios suggested in citizen comments. This facility is required to have a seismograph on site to measure that strength of any blasting that might occur and at a distance of one mile the seismic levels will be so low that they may not be measurable.

There have been no faults identified in the quarry footprint, and the faults in the area are no longer active. The site is not seismically active and is ranked as a relatively low risk by the US Geological Survey for seismic hazards. The Modoc Fault Zone (MFZ) is a series of shears in the shallow crust with an approximate width of 5km wide running from Columbia, SC to Ocmulgee River in Central Georgia. The date of movement of these faults is dated to approximately 315-300 million years ago. To put this timeline into perspective, the Modoc fault zone was active in Pennsylvanian time when North American was joined to Gondwanaland (North Africa and South America). Simply stated, the activity associated with the Lexington Quarry will not be a factor in triggering any modern seismic activity in the area.

Vibra-Tech appreciates the opportunity to provide our professional opinion for this project. If you have any questions, please feel free to contact our office.

Respectfully submitted,

VIBRA-TECH[®] INC

A handwritten signature in black ink that reads "Matthew J. Pilz".

Matthew J. Pilz
Vice President