FILED BY MARTIN MARIETTA MATERIALS, INC.
PURSUANT TO RULE 425 UNDER THE SECURITIES ACT OF 1933
AND DEEMED FILED PURSUANT TO RULE 14a-12
UNDER THE SECURITIES EXCHANGE ACT OF 1934

SUBJECT COMPANY: VULCAN MATERIALS COMPANY
COMMISSION FILE NO. 001-33841

On December 12, 2011, in connection with the proposed business combination with Vulcan Materials Company, Martin Marietta Materials, Inc. sent the following communication to all of its employees:

December 12, 2011

Team,

I want to tell you about a significant development at Martin Marietta that we believe will bring meaningful long-term value to our shareholders and growth opportunities to our employees. A few minutes ago, we publicly announced a proposal and commenced an exchange offer to combine our business with Vulcan Materials Company, a leading producer of construction aggregates, in a stock-for-stock transaction.

We believe this is a tremendous opportunity to bring together Martin Marietta and Vulcan to create a U.S.-based company that is the global leader in construction aggregates. This will result in a combined company that can deliver enhanced product offerings and service to our customers. Importantly, Martin Marietta employees will have a bright future as part of the combined company, with new opportunities for advancement and growth.

Both Martin Marietta and Vulcan provide essential products required by the U.S. economy, and our assets and geographic footprints are highly complementary with relatively little overlap.

Together, we will have greater scale and efficiencies, and better opportunities to grow our businesses and enhance our competitiveness for the benefit of both companies' shareholders, employees, customers and the communities we serve.

The proposal contemplates that the combined company would be headquartered in Raleigh, North Carolina, with a major presence in Vulcan's home town of Birmingham, Alabama. I will serve as President and CEO and we have offered Don James, Vulcan's Chairman and CEO, the position of Chairman of the combined company's Board of Directors.

With the full support of our Board, and after pursuing private discussions with Vulcan, we decided to take the proposal directly to Vulcan shareholders. We are prepared to discuss the compelling rationale for our offer in an open and transparent manner. The exchange offer will give Vulcan shareholders the ability to make their own decision to support the offer and send a strong message to their Board that they should seriously consider the merits of this proposed transaction. We are also taking a number of legal actions that we believe will help advance our proposed transaction and ensure that it is fairly and objectively considered. That said, there is no guarantee that this proposed transaction will be completed.

We will keep you updated as there are significant developments in this process. We have also set up a website at www.aggregatesleader.com, where you can get periodic updates.

I would also encourage each of you working at our Raleigh headquarters to attend an employee town hall meeting that I'll be hosting this morning at 12:00 pm EST in our main lobby and on the second floor balcony. For those of you working outside of Raleigh, I will host a company-wide conference call this morning at 11:30 am EST. To access the conference call, simply dial 800-435-1261 and enter 91052391 when prompted for a passcode.

If you receive an inquiry from the media or members of the investment community, as is Martin Marietta's longstanding policy, please direct the call to Anne Lloyd, EVP and Chief Financial Officer.

Needless to say, the strength of our company is derived from the collective efforts of each of you. The operational excellence you demonstrate daily in executing against our strategic plan continually delivers results to our shareholders. Your performance is the very foundation supporting this strategic move. While we work through this process, I ask that you stay focused on working safely and on continuing to do a great job for Martin Marietta and our customers.

Thank you for your continued service and support.

Best Regards,

Ward Nye

Cautionary Note Regarding Forward-Looking Statements

This letter may include "forward-looking statements" in connection with future events or future operating or financial performance. Forward-looking statements are often identified by words such as "anticipate," "expect," "should be," "believe," "will," and other words of similar meaning. These forward-looking statements are subject to a number of risks and uncertainties (including those described in Martin Marietta's and Vulcan's filings with the SEC) which could cause actual results to differ materially from such statements. Except to the extent required by applicable law, we undertake no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

Important Additional Information

This letter relates to the Exchange Offer by Martin Marietta to exchange each issued and outstanding share of common stock of Vulcan for 0.50 shares of Martin Marietta common stock. This letter is for informational purposes only and does not constitute an offer to exchange, or a solicitation of an offer to exchange, shares of Vulcan common stock, nor is it a substitute for the Tender Offer Statement on Schedule TO or the preliminary prospectus/offer to exchange included in the Registration Statement on Form S-4 (the "Registration Statement") (including the letter of transmittal and related documents and as amended and supplemented from time to time, the "Exchange Offer Documents") filed by Martin Marietta on December 12, 2011 with the SEC. The Registration Statement has not yet become effective. The Exchange Offer will be made only through the Exchange Offer Documents. Investors and security holders are urged to read the Exchange Offer Documents and all other relevant documents that Martin Marietta has filed or may file with the SEC if and when they become available because they contain or will contain important information.

Martin Marietta may file a proxy statement on Schedule 14A and other relevant documents with the SEC in connection with the solicitation of proxies (the "Vulcan Meeting Proxy Statement") for the 2012 annual meeting of Vulcan shareholders (the "Vulcan Meeting"). Martin Marietta may also file a proxy statement on Schedule 14A and other relevant documents with the SEC in connection with its solicitation of proxies for a meeting of Martin Marietta shareholders (the "Martin Marietta Meeting") to approve, among other things, the issuance of shares of Martin Marietta common stock pursuant to the Exchange Offer (the "Martin Marietta Meeting Proxy Statement"). Investors and security holders are urged to read the Vulcan Meeting Proxy Statement and the Martin Marietta Meeting Proxy Statement and other relevant materials if and when they become available because they will contain important information.

All documents referred to above, if filed, will be available free of charge at the SEC's website (www.sec.gov) or by directing a request to Morrow & Co., LLC at (877) 757-5404 (banks and brokers may call (800) 662-5200).

Martin Marietta, certain of its directors and officers and the individuals expected to be nominated by Martin Marietta for election to Vulcan's Board of Directors may be deemed participants in any solicitation of proxies from Vulcan shareholders for the Vulcan Meeting or any adjournment or postponement thereof. Martin Marietta and certain of its directors and officers may be deemed participants in any solicitation of proxies from Martin Marietta shareholders for the Martin Marietta Meeting or any adjournment or postponement thereof. Information about Martin Marietta and Martin Marietta's directors and officers, including a description of their direct and indirect interests, by security holdings or otherwise, is available in the proxy statement for Martin Marietta's 2011 annual meeting of shareholders, filed with the SEC on April 8, 2011, and the Registration Statement. Information about any other participants, including a description of their direct and indirect interests, by security holdings or otherwise, will be included in the Vulcan Meeting Proxy Statement, the Martin Marietta Meeting Proxy Statement or other relevant solicitation materials that Martin Marietta may file with the SEC in connection the foregoing matters, as applicable.