FILED BY MARTIN MARIETTA MATERIALS, INC. PURSUANT TO RULE 425 UNDER THE SECURITIES ACT OF 1933

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

On May 7, 2012, Martin Marietta Materials, Inc. sent the following communication to all of its employees:

To My Fellow Martin Marietta Materials Employees:

As you probably know by now, on Friday, the Delaware Court of Chancery issued its opinion on the lawsuit we brought on December 12, 2011 against Vulcan Materials Company in conjunction with our proposal to combine with Vulcan.

We strongly disagree with the decision and after carefully considering our options, we have determined to pursue an appeal and to seek a stay of the Court's ruling pending the outcome of the appeal.

If we are successful in the appeal process, we expect that the independent candidates nominated by Martin Marietta will stand for election at the Vulcan annual meeting and that we will continue to pursue our exchange offer for Vulcan shares.

If we are not successful in the appeal process, we may be required by the terms of the Delaware order to suspend our activities with respect to the proposed business combination with Vulcan for four months, including pursuing the election of our four independent nominees to the Vulcan board and our exchange offer.

We continue to believe in the undeniable strategic merits of a business combination with Vulcan and that the combination is in the best interests of both Martin Marietta and Vulcan shareholders, customers, employees and the communities we serve. This was a compelling shareholder value enhancing concept when it was first considered and it is just as logical and exciting now.

We presently intend to continue our efforts to combine with Vulcan, including pursuing our exchange offer, as soon as we are permitted to do so. We will, of course, make decisions as to how to proceed based on relevant circumstances.

At Martin Marietta we take justifiable pride in the fact that we are focused on creating shareholder value, serving our customers and continuing to prosper for the benefit of our employees and the communities we serve. In that regard, I want to thank you again for the incredible jobs you are doing every day and for remaining focused on your responsibilities and safety. We will continue to update you on developments regarding the case, but ask that you remain focused on Martin Marietta and serving our customers.

Sincerely,

Ward Nye

Cautionary Note Regarding Forward-Looking Statements

This letter may include "forward-looking statements." Statements that include words such as "anticipate," "expect," "should be," "believe," "will," and other words of similar meaning in connection with future events or future operating or financial performance are often used to identify forward-looking statements. All statements in this letter, other than those relating to historical information or current conditions, are forward-looking statements. These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond Martin Marietta's control, which could cause actual results to differ materially from such statements. Risks and uncertainties relating to the proposed transaction with Vulcan include, but are not limited to: Vulcan's willingness to accept Martin Marietta's proposal and enter into a definitive transaction agreement reasonably satisfactory to the parties; Martin Marietta's ability to obtain shareholder, antitrust and other approvals on the proposed terms and schedule; uncertainty as to the actual premium that will be realized by Vulcan shareholders in connection with the proposed transaction; uncertainty of the expected financial performance of the combined company following completion of the proposed transaction; Martin Marietta's ability to achieve the cost-savings and synergies contemplated by the proposed transaction within the expected time frame; Martin Marietta's ability to promptly and effectively integrate the businesses of Vulcan and Martin Marietta; the combined company's ability to pay dividends in the amounts anticipated; a downgrade of the credit rating of Vulcan's indebtedness, which could give rise to an obligation to redeem Vulcan's existing indebtedness; the potential implications of alternative transaction structures with respect to Vulcan, Martin Marietta and/or the combined company, including potentially requiring an offer to repurchase certain of Martin Marietta's existing debt; the implications of the proposed transaction on certain of Martin Marietta's and Vulcan's employee benefit plans; and disruption from the proposed transaction making it more difficult to maintain relationships with customers, employees or suppliers. Additional risks and uncertainties include, but are not limited to: the performance of the United States economy; decline in aggregates pricing; the inability of the U.S. Congress to pass a successor federal highway bill; the discontinuance of the federal gasoline tax or other revenue related to infrastructure construction; the level and timing of federal and state transportation funding, including federal stimulus projects; the ability of states and/or other entities to finance approved projects either with tax revenues or alternative financing structures; levels of construction spending in the markets that Martin Marietta and Vulcan serve; a decline in the commercial component of the nonresidential construction market, notably office and retail space; a slowdown in residential construction recovery; unfavorable weather conditions, particularly Atlantic Ocean hurricane activity, the late start to spring or the early onset of winter and the impact of a drought or excessive rainfall in the markets served by Martin Marietta and Vulcan; the volatility of fuel costs, particularly diesel fuel, and the impact on the cost of other consumables, namely steel, explosives, tires and conveyor belts; continued increases in the cost of other repair and supply parts; transportation availability, notably barge availability on the Mississippi River system and the availability of railcars and locomotive power to move trains to supply Martin Marietta's and Vulcan's long haul distribution markets; increased transportation costs, including increases from higher passed-through energy and other costs to comply with tightening regulations as well as higher volumes of rail and water shipments; availability and cost of construction equipment in the United States; weakening in the steel industry markets served by Martin Marietta's dolomitic lime products; inflation and its effect on both production and interest costs; Martin Marietta's ability to successfully integrate acquisitions and business combinations quickly and in a cost-effective manner and achieve anticipated profitability to maintain compliance with Martin Marietta's leverage ratio debt covenants; changes in tax laws, the interpretation of such laws and/or administrative practices that would increase Martin Marietta's and/or Vulcan's tax rate; violation of Martin Marietta's debt covenant if price and/or volumes return to previous levels of instability; a potential downgrade in the rating of Martin Marietta's or Vulcan's indebtedness; downward pressure on Martin Marietta's or Vulcan's common stock price and its impact on goodwill impairment evaluations; the highly competitive nature of the construction materials industry; the impact of future regulatory or legislative actions; the outcome of pending legal proceedings; healthcare costs; the amount of long-term debt and interest expense; changes

in interest rates; volatility in pension plan asset values which may require cash contributions to pension plans; the impact of environmental clean-up costs and liabilities relating to previously divested businesses; the ability to secure and permit aggregates reserves in strategically located areas; exposure to residential construction markets; and the impact on the combined company (after giving effect to the proposed transaction with Vulcan) of any of the foregoing risks, as well as other risk factors listed from time to time in Martin Marietta's and Vulcan's filings with the SEC.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included elsewhere, including the Risk Factors section of the Registration Statement and our most recent report on Form 10-K, and any other documents of Martin Marietta and Vulcan filed with the SEC. Any forward-looking statements made in this letter are qualified in their entirety by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. 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") initially 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 WHEN THEY BECOME AVAILABLE BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION.

In connection with the solicitation of proxies for Vulcan's 2012 annual meeting of shareholders (the "Vulcan Meeting"), Martin Marietta filed a definitive proxy statement on April 25, 2012 (as supplemented, the "Vulcan Meeting Definitive Proxy Statement") with the SEC. The Vulcan Meeting Definitive Proxy Statement and accompanying proxy card were mailed to the shareholders of Vulcan. Martin Marietta also intends to 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 DEFINITIVE PROXY STATEMENT, THE MARTIN MARIETTA MEETING PROXY STATEMENT AND OTHER RELEVANT MATERIALS AS 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 (203) 658-9400).

Martin Marietta, its directors and executive officers and the individuals nominated by Martin Marietta for election to Vulcan's Board of Directors are participants in any solicitation of proxies from Vulcan shareholders for the Vulcan Meeting or any adjournment or postponement thereof. Martin Marietta, its directors and executive officers are participants in any solicitation of proxies from Martin Marietta shareholders for the Martin Marietta Meeting or any adjournment or postponement thereof. Information about the participants, including a description of their direct and indirect interests, by security holdings or otherwise, is available in the Registration Statement, the proxy statement for Martin Marietta's 2012 annual meeting of shareholders, filed with the SEC on April 18, 2012, and the Vulcan Meeting Definitive Proxy Statement, or will be available in the Martin Marietta Meeting Proxy Statement, as applicable.