

December 19, 2007

VIA EDGAR

Ms. Carmen Moncada-Terry, Attorney Advisor
Division of Corporate Finance
100 F Street, NE
Washington, DC 20549

Re: FMC Technologies Inc.
Definitive Proxy Statement on Schedule 14A
Filed March 30, 2007
File No. 001-16489

Dear Ms. Moncada-Terry:

This is in response to your letter dated December 5, 2007. For your convenience, Comments 1 and 2 included in your letter have been set forth in bold below followed by our responses.

- 1. We reissue prior comment 2 in part. It is unclear why you reference 10 oilfield service companies in the discussion regarding the determination of equity stock awards. We note that on page 23, you state that in making compensation comparisons you use 24 industrial companies or 8 oilfield services companies. Please clarify.**

Response: We use different groups of companies to compare different elements of compensation. For the performance based restricted stock, we use ten oilfield service companies, and for base compensation and non-equity incentive compensation we use either the 24 industrial companies, or the eight oilfield companies, depending on which group we would compete with for talent.

There are two reasons we use the group of ten companies for the performance shares. First, this group most closely resembles the industry in which we participate. The PHLX Oil Service Sector index is composed of 15 companies that provide oil drilling and production services, oil field equipment, support services and geophysical/reservoir services. We have excluded the index's five drilling companies as it is the remaining ten companies who most closely

mirror our core business activities. Second, for the three performance measures used in determining performance based equity awards (EBITDA growth, return on investment and total shareholder return), the information we need to support the performance metrics for these ten companies is public data and therefore are easily attainable benchmarks.

The group of eight is a subset of the group of ten. The Compensation Committee reviews the appropriate peer group for base compensation and non-equity incentive compensation on an annual basis. The current peer group of eight may be increased to ten or more in the future, based on the Compensation Committee's determination for such year. The Compensation Committee plans to expand this peer group in 2007 to ten for all elements of compensation for all NEO's other than Mr. Cannon, as long as reliable compensation data for the other two companies is available. The Compensation Committee will continue to use the group of 24 for Mr. Cannon.

| Peer Group | Purpose | Comments |
|--|---|---|
| Group of 10 - includes group of 8 (Index members of OSX excluding drilling companies) | Performance Based Equity External compensation benchmark | Measure of external industry performance |
| Group of 8 (Data based on availability of outside compensation consultant) | Compensation benchmark Primarily Oilfield experience | One of several criteria used for compensation |
| Group of 24 - includes group of 8 | Compensation benchmark Primarily Non-oilfield experience | One of several criteria used for compensation |

2. **We reissue prior comments 6 and 9. Please provide the information requested for each named executive officer. If you believe the disclosure of the information would result in competitive harm to the company, please provide a detailed analysis discussing the basis for such belief. Instruction 4 to Item 402(b) of Regulation S-K. If you have adequate basis for omitting the information, please discuss how difficult or likely it will be to achieve the omitted targets.**

Response: With regard to comment 6, if appropriate, the Company will provide supplemental disclosure in future filings to include the requested information regarding performance objectives, consistent with Instruction 4 to item 402 (b) of regulation S-K.

We indicated in our prior answer that the executive officers API ratings ranged from 1.3 to 1.7 for the 2006 performance year, with an average rating of 1.47. We agree that listing annual performance objectives established for each officer as well as whether such objectives were achieved can be material to understanding the basis for compensation. We are also comfortable providing the range of API ratings. Conversely, we do not believe providing the exact

API rating for each named executive officer is material to such understanding. Disclosing each individual officer's target bonus and API is essentially disclosing that officer's personal performance review. We do not disclose this kind of detail internally because we consider this information to be private, personal and confidential. Such disclosure could be distracting to the executive team while providing no appreciable value to a shareholder's understanding of our executives' compensation. On average, the API portion of the annual non-equity incentive represents less than 5% of the executive's total compensation included in the Summary Compensation Table. Finally, we do not disclose this information because we believe there are valid privacy, legal and other concerns when disclosing individual performance review evaluations to the public.

With regard to comment 9, our executive officers' objectives are typically stand-alone annual targets. Our NEO's targets for the year 2006 were completely independent from our NEO's 2007 objectives. If in future years this is not the case and our disclosure indicates current or prior year objectives were material to an understanding of a named executive officers' compensation for the last fiscal year (or were otherwise material in the context of our Compensation Discussion and Analysis), then we will provide performance metrics and target levels consistent with Instructions 2 and 4 to Item 402(b) of Regulation S-K.

Please forward a copy of any additional correspondence to Maryann Seaman, Vice President – Administration. Her fax number is 281-591-4102. Ms. Seaman can be reached at 281-591-4080 if you have further questions or comments.

Very truly yours,

FMC Technologies, Inc.

/s/ Peter D. Kinnear

Peter D. Kinnear

President and Chief Executive Officer