

Poling Gregory E
Form 4
February 15, 2011

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
Poling Gregory E

2. Issuer Name and Ticker or Trading Symbol
W R GRACE & CO [GRA]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
C/O W. R. GRACE & CO., 7500 GRACE DRIVE

3. Date of Earliest Transaction (Month/Day/Year)
02/14/2011

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
Vice President

(Street)
COLUMBIA, MD 21044

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
____ Form filed by More than One Reporting Person

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|--------------------------------------|--|--------------------------------|---|---|--|---|
| Common Stock, par value \$0.01 per share ⁽¹⁾ | 02/14/2011 | | M | (A) Amount \$ 2.4 | 16,500 | D | |
| Common Stock, par value \$0.01 per share ⁽¹⁾ | | | | (D) Amount 38.4666 | 18,000 | I | By Trust |
| Common Stock, par | 02/14/2011 | | S | (D) Amount 0 | 0 | D | |

value
\$0.01 per
share ⁽¹⁾

Common
Stock, par
value
\$0.01 per
share ⁽¹⁾

18,000 I By Trust

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

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(9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|
| | | | | Code | V (A) (D) | Date Exercisable Expiration Date | Title Amount or Number of Shares |
| Employee Stock Options (rights to buy) | \$ 2.4 | 02/14/2011 | | M | 16,500 ⁽²⁾ | 03/08/2004 03/07/2011 | Common Stock 16,500 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|----------------|-------|
| | Director | 10% Owner | Officer | Other |
| Poling Gregory E C/O W. R. GRACE & CO. 7500 GRACE DRIVE COLUMBIA, MD 21044 | | | Vice President | |

Signatures

Michael W. Conron,
Attorney-in-Fact 02/15/2011

__Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Each share of Common stock also represents one Preferred Share Purchase Right. Each such Right entitles the holder to purchase Preferred Stock or other securities or property upon the occurrence of certain events and subject to certain conditions.
- (2) Exercise and sale pursuant to Rule 10b5-1 Trading Plan for options granted March 8, 2001 and expiring March 7, 2011.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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