

Poling Gregory E
 Form 4
 May 07, 2012

FORM 4

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

OMB APPROVAL

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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)
 05/07/2012

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

(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

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⁾	05/07/2012		M	(A) 53,270 ₍₂₎	\$ 19.71 53,270	D	
Common Stock, par value \$0.01 per share ⁽¹⁾					18,000	I	By Trust
Common Stock, par	05/07/2012		S	(D) 53,270 ₍₂₎	\$ 0 58.3638	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.

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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)	\$ 19.71	05/07/2012		M	53,270 ⁽²⁾	09/11/2010 09/11/2013	Common Stock 53,270

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			President & COO	

Signatures

Michael W. Conron,
Attorney-in-Fact 05/07/2012

__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 September 11, 2008 and expiring on September 11, 2013

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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