W R GRACE & CO Form S-8 POS September 10, 2010

As filed with the Securities and Exchange Commission on September 10, 2010

Registration No. 333-49511

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1

TO

FORM S-8

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

W. R. Grace & Co.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) **65-0773649** (I.R.S. Employer Identification No.)

7500 Grace Drive

Columbia, Maryland 21044-4098

(Address of Principal Executive Offices including zip code)

W. R. Grace & Co. 1994 Stock Incentive Plan

(Full Title of the Plan)

Mark A. Shelnitz

Vice President, General Counsel and Secretary

W. R. Grace & Co.

7500 Grace Drive

Columbia, Maryland 21044

410/531-4000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large-accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer x

Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company)

Smaller reporting company o

DEREGISTRATION

In accordance with the undertakings contained in Part II of this Registration Statement and Item 512 of Regulation S-K, W. R. Grace & Co. (the
Corporation) has filed this Post-Effective Amendment No. 1 to remove from registration the shares of Corporation Common Stock, par value
\$0.01 per share, (the Common Stock) registered by the Corporation in this Registration Statement for issuance pursuant to the W. R. Grace &
Co. 1994 Stock Incentive Plan (the Plan).

ITEM 8. EXHIBITS.

The following exhibits have been filed with this Registration Statement:

Exhibit No. Exhibit Title

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Corporation certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to the Corporation s Registration Statement on Form S-8 (Registration No. 333-49511) to be signed on its behalf by the undersigned, thereunto duly authorized, in Columbia, Maryland on this 10th day of September 2010.

W. R. GRACE & CO.

By: /s/Alfred E. Festa

Alfred E. Festa President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Corporation s Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the date indicated.

	Signature	Title	Date
/s/ Alfred E. Festa Alfred E. Festa		Chief Executive Officer (Principal Executive Officer)	September 10, 2010
/s/ Hudson La Force III Hudson La Force III		Chief Financial Officer (Principal Financial and Accounting Officer)	September 10, 2010
John F. Akers		Director	
H. Furlong Baldwin		Director	
Ronald C. Cambre		Director	
Alfred E. Festa		Director	
Marye Anne Fox		Director	
John J. Murphy		Director	
Christopher J. Steffen		Director	
Mark E. Tomkins		Director	
Thomas A. Vanderslice		Director	
Ву:	/s/ Mark A. Shelnitz Mark A. Shelnitz Attorney-in-Fact		September 10, 2010

EXHIBIT INDEX

Exhibit No. Exhibit Title

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