

**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**

**CABOT CORPORATION**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**04-2271897**  
(I.R.S. Employer  
Identification No.)

**Two Seaport Lane**  
**Suite 1300**  
**Boston, MA**  
(Address of Principal Executive Offices)

**02210**  
(Zip Code)

**Cabot Retirement Savings Plan**

**Cabot Supplemental Retirement Savings Plan**  
(Full Title of the Plans)

**Brian A. Berube, Esq.**  
**Vice President and General Counsel**  
**Two Seaport Lane**  
**Suite 1300**  
**Boston, MA 02210**  
(Name and Address of Agent For Service)

**617-345-0100**  
(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

Accelerated filer

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

Smaller reporting company

## EXPLANATORY NOTE

This post-effective amendment is being filed to clarify that the registered shares may also be issued under the Cabot Supplemental Retirement Savings Plan as employer matching contributions.

### PART II

#### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

**Item 5. Interests of Named Experts and Counsel**

The validity of the securities has been passed upon by Brian A. Berube, the registrant's Vice President and General Counsel. At the time of rendering his opinion, Mr. Berube had a beneficial ownership interest in 81,897 shares of the registrant's common stock. It is anticipated that additional shares will be issued to Mr. Berube pursuant to the registrant's equity incentive and employee benefit plans.

**Item 8. Exhibits**

The exhibit index immediately preceding the exhibits is incorporated herein by reference.



<hr/> *	Director	January 17, 2012
Juan Enriquez-Cabot		
<hr/> *	Director	January 17, 2012
Gautam S. Kaji		
<hr/> *	Director	January 17, 2012
Roderick C.G. MacLeod		
<hr/> *	Director	January 17, 2012
Henry F. McCance		
<hr/> *	Director	January 17, 2012
John K. McGillicuddy		



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## INDEX TO EXHIBITS

<u>Number</u>	<u>Description</u>
5.1	Opinion of Brian A. Berube as to the legality of the securities.
23.1	Consent of Deloitte & Touche LLP.
23.2	Consent of Brian A. Berube (contained in Exhibit 5.1).
24	Power of attorney (previously filed).

January 17, 2012

Cabot Corporation  
Two Seaport Lane  
Suite 1300  
Boston, MA 02210

Re: Cabot Retirement Savings Plan and Cabot Supplemental Retirement Savings Plan

Ladies and Gentlemen:

I am Vice President and General Counsel of Cabot Corporation, a Delaware corporation (the "Company"), and have represented the Company in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933 (the "Act") of this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 (the "Registration Statement") filed with the Commission on October 5, 2011 relating to the registration of 500,000 shares (the "Shares") of the Company's common stock, par value \$1.00 per share, issuable pursuant to the Cabot Retirement Savings Plan and the Cabot Supplemental Retirement Savings Plan (referred to collectively as the "Plans").

I have examined the Company's Restated Certificate of Incorporation and By-Laws, as amended to date, and originals, or copies certified or otherwise identified to my satisfaction, of corporate records of the Company, including minute books of the Company, certificates of public officials and of representatives of the Company, statutes and other instruments or documents, as a basis for the opinion hereinafter expressed. In making my examination, I have assumed that all signatures on all documents examined by me are genuine, that all documents submitted to me as originals are accurate and complete, that all documents submitted to me as copies are true and correct copies of the originals thereof and that all information submitted to me was accurate and complete.

Based on the foregoing, I am of the opinion that the Shares have been duly and validly authorized for issuance by all necessary corporate action on the part of the Company and, upon delivery thereof and payment therefor in accordance with the Plans and the Registration Statement, will be validly issued, fully paid, and non-assessable.

This opinion is limited to the original issuance of Shares by the Company.

I am a member of the Massachusetts Bar and the opinion set forth above is limited in all respects to the laws of The Commonwealth of Massachusetts and the General Corporation Law of the State of Delaware, including the reported cases interpreting those laws, as in effect on the date hereof.

I hereby consent to the filing of this opinion with the Commission in connection with the Post-Effective Amendment No. 1 to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act. In giving such consent, I do not thereby admit that I am in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Brian A. Berube

Brian A. Berube

Vice President and General Counsel

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Post-Effective Amendment No. 1 to Registration Statement No. 333-177176 on Form S-8 of our reports relating to the financial statements of Cabot Corporation and the effectiveness of Cabot Corporation's internal control over financial reporting dated November 29, 2011, appearing in the Annual Report on Form 10-K of Cabot Corporation for the year ended September 30, 2011, and our report dated June 28, 2011 relating to the financial statements of the Cabot Retirement Savings Plan appearing in the Annual Report on Form 11-K of the Cabot Retirement Savings Plan for the year ended December 31, 2010.

/s/ Deloitte & Touche LLP

Boston, Massachusetts  
January 17, 2012