UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2017

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission file number 1-5667

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 **Boston, Massachusetts** **(Address of principal executive offices)**	**02210-2019** **(Zip Code)**

Registrant's telephone number, including area code: (617) 345-0100

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

62,475,249 shares of common stock, $1.00 par value per share, outstanding as of May 4, 2017

CABOT CORPORATION

INDEX

Part I.	Financial Information		
	Item 1.	Financial Statements (unaudited)	
		Consolidated Statements of Operations	3
		Consolidated Statements of Comprehensive Income	4
		Consolidated Balance Sheets	5
		Consolidated Statements of Cash Flows	7
		Notes to Consolidated Financial Statements	8
	Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	27
	Item 3.	Quantitative and Qualitative Disclosures About Market Risk	39
	Item 4.	Controls and Procedures	39
Part II.	Other Information		
	Item 1.	Legal Proceedings	40
	Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	41
	Item 6.	Exhibits	41

Part I. Financial Information

Item 1. Financial Statements

CABOT CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
UNAUDITED

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions, except per share amounts)			
Net sales and other operating revenues	$ 678	$ 568	$ 1,289	$ 1,171
Cost of sales	509	418	963	922
Gross profit	169	150	326	249
Selling and administrative expenses	65	62	128	133
Research and technical expenses	14	11	26	27
Income (loss) from operations	90	77	172	89
Interest and dividend income	2	2	4	3
Interest expense	(13)	(14)	(26)	(27)
Other income (expense)	(1)	(3)	1	(11)
Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies	78	62	151	54
(Provision) benefit for income taxes	1	(11)	(16)	(6)
Equity in earnings of affiliated companies, net of tax	1	1	3	1
Net income (loss)	80	52	138	49
Net income (loss) attributable to noncontrolling interests, net of tax	6	4	10	8
Net income (loss) attributable to Cabot Corporation	$ 74	$ 48	$ 128	$ 41
Weighted-average common shares outstanding:				
Basic	62.4	62.4	62.3	62.4
Diluted	62.8	62.8	62.8	62.9
Earnings per common share:				
Basic	$ 1.19	$ 0.76	$ 2.04	$ 0.65
Diluted	$ 1.18	$ 0.76	$ 2.03	$ 0.65
Dividends per common share	$ 0.30	$ 0.22	$ 0.60	$ 0.44

The accompanying notes are an integral part of these consolidated financial statements.

CABOT CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
UNAUDITED

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Net income (loss)	$ 80	$ 52	$ 138	$ 49
Other comprehensive income (loss), net of tax				
Foreign currency translation adjustment (net of tax provision of $1, $—, $3 and $—)	56	65	(69)	18
Pension and other postretirement benefit liability adjustments				
Pension and other postretirement benefit liability adjustments arising during the period, net of tax	—	—	—	(1)
Amortization of net loss and prior service credit included in net periodic benefit cost, net of tax	1	1	2	1
Other comprehensive income (loss)	57	66	(67)	18
Comprehensive income (loss)	137	118	71	67
Net income (loss) attributable to noncontrolling interests, net of tax	6	4	10	8
Noncontrolling interests foreign currency translation adjustment, net of tax	1	1	(3)	(2)
Comprehensive income (loss) attributable to noncontrolling interests, net of tax	7	5	7	6
Comprehensive income (loss) attributable to Cabot Corporation	$ 130	$ 113	$ 64	$ 61

The accompanying notes are an integral part of these consolidated financial statements.

CABOT CORPORATION
CONSOLIDATED BALANCE SHEETS
ASSETS
UNAUDITED

	March 31, 2017	September 30, 2016
	(In millions)	
Current assets:		
Cash and cash equivalents	$ 133	$ 200
Accounts and notes receivable, net of reserve for doubtful accounts of $10 and $8	520	456
Inventories:		
Raw materials	88	66
Work in process	2	1
Finished goods	265	237
Other	40	38
Total inventories	395	342
Prepaid expenses and other current assets	56	49
Total current assets	1,104	1,047
Property, plant and equipment, net	1,237	1,290
Goodwill	151	152
Equity affiliates	54	53
Intangible assets, net	134	140
Assets held for rent	101	97
Deferred income taxes	254	216
Other assets	46	40
Total assets	$ 3,081	$ 3,035

The accompanying notes are an integral part of these consolidated financial statements.

CABOT CORPORATION
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND STOCKHOLDERS' EQUITY
UNAUDITED

	March 31, 2017	September 30, 2016
	(In millions, except share and per share amounts)	
Current liabilities:		
Notes payable	$ 15	$ 7
Accounts payable and accrued liabilities	377	364
Income taxes payable	32	25
Current portion of long-term debt	251	1
Total current liabilities	675	397
Long-term debt	664	914
Deferred income taxes	47	41
Other liabilities	270	285
Redeemable preferred stock	27	26
Commitments and contingencies (Note G)		
Stockholders' equity:		
Preferred stock:		
Authorized: 2,000,000 shares of $1 par value	—	—
Issued and Outstanding : None and none		
Common stock:		
Authorized: 200,000,000 shares of $1 par value		
Issued: 62,675,606 and 62,449,425 shares		
Outstanding: 62,470,543 and 62,210,711 shares	63	62
Less cost of 205,063 and 238,714 shares of common treasury stock	(7)	(7)
Additional paid-in capital	—	—
Retained earnings	1,638	1,544
Accumulated other comprehensive income (loss)	(389)	(325)
Total Cabot Corporation stockholders' equity	1,305	1,274
Noncontrolling interests	93	98
Total stockholders' equity	1,398	1,372
Total liabilities and stockholders' equity	$ 3,081	$ 3,035

The accompanying notes are an integral part of these consolidated financial statements.

CABOT CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
UNAUDITED

	Six Months Ended March 31,	
	2017	2016
	(In millions)	
Cash Flows from Operating Activities:		
Net income (loss)	$ 138	$ 49
Adjustments to reconcile net income (loss) to cash provided by operating activities:		
Depreciation and amortization	76	82
Long-lived asset impairment charge	—	23
Deferred tax benefit	(27)	(3)
Equity in net income of affiliated companies	(3)	(1)
Non-cash compensation	6	6
Tax benefit from stock based compensation awards	(7)	(1)
Other non-cash (income) expense	—	3
Changes in assets and liabilities:		
Accounts and notes receivable	(78)	71
Inventories	(63)	49
Prepaid expenses and other current assets	(9)	(3)
Accounts payable and accrued liabilities	23	(52)
Income taxes payable	7	(18)
Other liabilities	(18)	(22)
Cash dividends received from equity affiliates	6	5
Cash provided by operating activities	51	188
Cash Flows from Investing Activities:		
Additions to property, plant and equipment	(45)	(52)
Proceeds from the sale of land	—	16
Change in assets held for rent	(4)	(5)
Other	2	—
Cash used in investing activities	(47)	(41)
Cash Flows from Financing Activities:		
Repayments under financing arrangements	(4)	(3)
Increase in notes payable, net	8	—
Proceeds from (repayments of) issuance of commercial paper, net	4	(11)
Repayments of long-term debt	(1)	(1)
Purchases of common stock	(30)	(19)
Proceeds from sales of common stock	21	3
Tax benefit from stock based compensation awards	7	1
Cash dividends paid to noncontrolling interests	(2)	(3)
Cash dividends paid to common stockholders	(38)	(28)
Cash used in financing activities	(35)	(61)
Effects of exchange rate changes on cash	(36)	15
Increase (decrease) in cash and cash equivalents	(67)	101
Cash and cash equivalents at beginning of period	200	77
Cash and cash equivalents at end of period	$ 133	$ 178

The accompanying notes are an integral part of these consolidated financial statements.

A. Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting policies generally accepted in the United States (U.S.) and include the accounts of Cabot Corporation ("Cabot" or the "Company") and its wholly owned subsidiaries and majority-owned and controlled U.S. and non-U.S. subsidiaries. Additionally, Cabot considers consolidation of entities over which control is achieved through means other than voting rights. Intercompany transactions have been eliminated in consolidation.

The unaudited consolidated financial statements have been prepared in accordance with the requirements of Form 10-Q and consequently do not include all disclosures required by Form 10-K. Additional information may be obtained by referring to Cabot's Annual Report on Form 10-K for the fiscal year ended September 30, 2016 ("2016 10-K").

The financial information submitted herewith is unaudited and reflects all adjustments which are, in the opinion of management, necessary to provide a fair statement of the results for the interim periods ended March 31, 2017 and 2016. All such adjustments are of a normal recurring nature. The results for interim periods are not necessarily indicative of the results to be expected for the fiscal year.

Effective October 1, 2016, the Company adopted a new accounting standard simplifying the presentation of debt issuance costs by presenting debt issuance costs as a reduction of the corresponding debt liability. In addition, the Company early adopted a new accounting standard that simplifies the presentation of deferred income taxes by classifying all deferred taxes as noncurrent assets or liabilities. These new standards were applied retrospectively. The retrospective application of the standard that simplifies the presentation of debt issuance costs resulted in the reclassification of $1 million and $3 million of unamortized debt issuance costs from Prepaid expenses and other current assets and Other assets, respectively, to Long-term debt within the Consolidated Balance Sheets as of September 30, 2016. The retrospective application of the standard that simplifies the presentation of deferred income taxes resulted in the reclassification of $41 million of current deferred tax assets and $1 million of current deferred tax liabilities to noncurrent deferred tax accounts within the Consolidated Balance Sheets as of September 30, 2016.

B. Significant Accounting Policies

Revenue Recognition and Accounts Receivable

Cabot recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Cabot generally is able to ensure that products meet customer specifications prior to shipment. If the Company is unable to determine that the product has met the specified objective criteria prior to shipment or if title has not transferred because of sales terms, the revenue is considered "unearned" and is deferred until the revenue recognition criteria are met.

Shipping and handling charges related to sales transactions are recorded as sales revenue when billed to customers or included in the sales price. Taxes collected on sales to customers are excluded from revenues.

The following table shows the relative size of the revenue recognized in each of the Company's reportable segments.

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
Reinforcement Materials	54%	48%	52%	49%
Performance Chemicals	35%	39%	35%	38%
Purification Solutions	10%	12%	11%	12%
Specialty Fluids	1%	1%	2%	1%

Cabot derives the substantial majority of its revenues from the sale of products in the Reinforcement Materials, Performance Chemicals, and Purification Solutions segments. Revenue from these products is typically recognized when the product is shipped and title and risk of loss have passed to the customer. The Company offers certain of its customers cash discounts and volume rebates as sales incentives. The discounts and volume rebates are recorded as a reduction in sales at the time revenue is recognized and are estimated based on historical experience and contractual obligations. Cabot periodically reviews the assumptions underlying its estimates of discounts and volume rebates and adjusts its revenues accordingly.

For major activated carbon injection systems projects in Purification Solutions, revenue is recognized using the percentage-of-completion method.

Revenue in Specialty Fluids arises primarily from the rental of cesium formate. This revenue is recognized throughout the rental period based on the contracted rental terms. Customers are also billed and revenue is recognized, typically at the end of the job, for cesium formate product that is not returned. The Company also generates revenues from cesium formate sold outside of a rental process and the sale of fine cesium chemicals in which revenue is recognized upon delivery of the product.

Cabot maintains allowances for doubtful accounts based on an assessment of the collectability of specific customer accounts, the aging of accounts receivable and other economic information on both a historical and prospective basis. Customer account balances are charged against the allowance when it is probable the receivable will not be recovered. There were no material changes in the allowance for any of the years presented. There is no material off-balance sheet credit exposure related to customer receivable balances.

Intangible Assets and Goodwill Impairment

The Company records tangible and intangible assets acquired and liabilities assumed in business combinations under the acquisition method of accounting. Amounts paid for an acquisition are allocated to the assets acquired and liabilities assumed based on their fair values at the date of acquisition. Goodwill is comprised of the purchase price of business acquisitions in excess of the fair value assigned to the net tangible and identifiable intangible assets acquired. Goodwill is not amortized, but is reviewed for impairment annually as of May 31, or when events or changes in the business environment indicate that the carrying value of the reporting unit may exceed its fair value. A reporting unit, for the purpose of the impairment test, is at or below the operating segment level, and constitutes a business for which discrete financial information is available and regularly reviewed by segment management. The reporting units with goodwill balances are Reinforcement Materials, Purification Solutions, and Fumed Metal Oxides. The separate businesses included within Performance Chemicals are considered separate reporting units. As such, the goodwill balance relative to Performance Chemicals is recorded in the Fumed Metal Oxides reporting unit.

For the purpose of the goodwill impairment test, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If an initial qualitative assessment identifies that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, an additional quantitative evaluation is performed. Alternatively, the Company may elect to proceed directly to the quantitative goodwill impairment test. If based on the quantitative evaluation the fair value of the reporting unit is less than its carrying amount, a goodwill impairment loss would result. The goodwill impairment loss would be the amount by which the carrying value of the reporting unit, including goodwill, exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit. The fair value of a reporting unit is based on discounted estimated future cash flows. The fair value is also benchmarked against a market approach using the guideline public companies method. The assumptions used to estimate fair value include management's best estimates of future growth rates, operating cash flows, capital expenditures and discount rates over an estimate of the remaining operating period at the reporting unit level.

Based on the Company's most recent annual goodwill impairment test performed as of May 31, 2016, the fair values of the Reinforcement Materials and Fumed Metal Oxides reporting units were substantially in excess of their carrying values. The fair value of the Purification Solutions reporting unit exceeded its carrying amount by 9%. The fair value of the Purification Solutions reporting unit includes certain growth assumptions that are primarily dependent on: (1) further growth in the mercury removal related portion of the business, which is largely dependent on the amount of coal-based power generation used in the United States and the continued regulation of those utilities under the U.S. Mercury and Air Toxics Standards regulation ("MATS") and (2) growth in demand for Cabot's activated carbon products in other applications, while meeting the Company's margin expectations. Realizing these assumptions is generally driven by the macroeconomic environment, environmental regulations, and global and regional competition.

In April 2017, the U.S. Environmental Protection Agency (EPA) indicated that it intends to review the cost benefit analysis previously prepared by the EPA in support of MATS to determine if the EPA should reconsider MATS or some part of it. Depending upon what the EPA ultimately concludes and the actions taken, if any, those actions could have a negative impact on the financial results of the Purification Solutions reporting unit and the fair value of that unit.

The Company uses assumptions and estimates in determining the fair value of assets acquired and liabilities assumed in a business combination. The determination of the fair value of intangible assets requires the use of significant judgment with regard to assumptions used in the valuation model. The Company estimates the fair value of identifiable acquisition-related intangible assets principally based on projections of cash flows that will arise from these assets. The projected cash flows are discounted to determine the fair value of the assets at the dates of acquisition.

Definite-lived intangible assets, which are comprised of trademarks, customer relationships and developed technologies, are amortized over their estimated useful lives and are reviewed for impairment when indication of potential impairment exists, such as a significant reduction in cash flows associated with the assets.

Long-lived Assets Impairment

The Company's long-lived assets primarily include property, plant and equipment, intangible assets, long-term investments and assets held for rent. The carrying values of long-lived assets are reviewed for impairment whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be recoverable.

To test for impairment of assets, the Company generally uses a probability-weighted estimate of the future undiscounted net cash flows of the assets over their remaining lives to determine if the value of the asset is recoverable. Long-lived assets are grouped with other assets and liabilities at the lowest level for which independent identifiable cash flows are determinable.

An asset impairment is recognized when the carrying value of the asset is not recoverable based on the analysis described above, in which case the asset is written down to its fair value. If the asset does not have a readily determinable market value, a discounted cash flow model may be used to determine the fair value of the asset. In circumstances when an asset does not have separate identifiable cash flows, an impairment charge is recorded when the Company no longer intends to use the asset.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation of property, plant and equipment is calculated using the straight-line method over the estimated useful lives. The depreciable lives for buildings, machinery and equipment, and other fixed assets are twenty to twenty-five years, ten to twenty-five years, and three to twenty-five years, respectively. The cost and accumulated depreciation for property, plant and equipment sold, retired, or otherwise disposed of are removed from the Consolidated Balance Sheets and resulting gains or losses are included in earnings in the Consolidated Statements of Operations. Expenditures for repairs and maintenance are charged to expenses as incurred. Expenditures for major renewals and betterments, which significantly extend the useful lives of existing plant and equipment, are capitalized and depreciated.

Income Tax in Interim Periods

The Company records its tax provision or benefit on an interim basis using an estimated annual effective tax rate. This rate is applied to the current period ordinary income or loss to determine the income tax provision or benefit allocated to the interim period. Losses from jurisdictions for which no benefit can be recognized and the income tax effects of unusual or infrequent items are excluded from the estimated annual effective tax rate and are recognized in the impacted interim period.

Valuation allowances are provided against the future tax benefits that arise from the deferred tax assets in jurisdictions for which no benefit can be recognized. The estimated annual effective tax rate may be significantly impacted by nondeductible expenses and the Company's projected earnings mix by tax jurisdiction. Adjustments to the estimated annual effective income tax rate are recognized in the period when such estimates are revised.

Inventory Valuation

Inventories are stated at the lower of cost or market. The cost of all carbon black inventories in the U.S. is determined using the last-in, first-out ("LIFO") method. Had the Company used the first-in, first-out ("FIFO") method instead of the LIFO method for such inventories, the value of those inventories would have been $29 million and $27 million higher as of March 31, 2017 and September 30, 2016, respectively. The cost of Specialty Fluids inventories that are classified as assets held for rent is determined using the average cost method. The cost of other U.S. and non-U.S. inventories is determined using the first-in, first-out ("FIFO") method.

Cabot reviews inventory for both potential obsolescence and potential declines in anticipated selling prices. In this review, the Company makes assumptions about the future demand for and market value of the inventory, and based on these assumptions estimates the amount of any obsolete, unmarketable, slow moving, or overvalued inventory. Cabot writes down the value of these inventories by an amount equal to the difference between the cost of the inventory and its estimated net realizable value.

Pensions and Other Postretirement Benefits

The Company recognizes the funded status of defined benefit pension and other postretirement benefit plans as an asset or liability. This amount is defined as the difference between the fair value of plan assets and the benefit obligation. The Company is required to recognize as a component of other comprehensive income (loss), net of tax, the actuarial gains/losses and prior service costs/credits that arise but were not previously required to be recognized as components of net periodic benefit cost. Other comprehensive income (loss) is adjusted as these amounts are later recognized in income as components of net periodic benefit cost.

Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income (loss) ("AOCI"), which is included as a component of stockholders' equity, includes unrealized gains or losses on available-for-sale marketable securities and derivative instruments, currency translation adjustments in foreign subsidiaries, translation adjustments on foreign equity securities and minimum pension liability adjustments.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued a new standard, "Revenue from Contracts with Customers", which amends the existing accounting standards for revenue recognition. The standard requires entities to recognize revenue when they transfer promised goods or services to customers in an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services. This standard is applicable for fiscal years beginning after December 15, 2017 and for interim periods within those years, and early adoption is permitted for the fiscal years beginning after December 15, 2016. The Company expects to adopt this standard on October 1, 2018. The Company is currently evaluating the impact the adoption of this standard may have on its consolidated financial statements.

In February 2016, the FASB issued a new standard for the accounting for leases. This new standard requires lessees to recognize assets and liabilities for most leases, but recognize expenses on their income statements in a manner that is similar to the current accounting treatment for leases. The standard is applicable for fiscal years beginning after December 15, 2018 and for interim periods within those years, and early adoption is permitted. The Company expects to adopt the standard on October 1, 2019. The Company is currently evaluating the impact of the adoption of this standard on its consolidated financial statements.

In March 2016, the FASB issued a new standard that amends the accounting standard for stock compensation by simplifying several aspects of the accounting for employee share-based payment transactions, including the related accounting for income taxes, forfeitures, and the withholding of shares to satisfy the employer's tax withholding requirements, as well as classification in the statements of cash flows. The new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within those years, and early adoption is permitted. The Company is evaluating this standard and the timing of its adoption. The adoption of this standard is not expected to materially impact the Company's consolidated financial statements.

In August 2016, the FASB issued final amendments to clarify how entities should classify certain cash receipts and cash payments on the statement of cash flows such as distributions received from equity method investees, proceeds from settlement of insurance claims, and proceeds from the settlement of corporate-owned life insurance policies. The new standard is effective for fiscal years beginning after December 15, 2017, including interim periods within those years, and early adoption is permitted. The

Company is evaluating this standard and the timing of its adoption. The adoption of this standard is not expected to materially impact the Company's consolidated financial statements.

In January 2017, the FASB issued a new standard that amends and simplifies the accounting standard for goodwill impairment. The new standard removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit. The new standard is effective for annual and any interim impairment tests for periods beginning after December 15, 2019, and early adoption is permitted for any impairment tests performed after January 1, 2017. The Company adopted this standard on January 1, 2017. The adoption of this standard did not have any impact on the Company's consolidated financial statements.

In March 2017, the FASB issued a new standard that amends the requirements on the presentation of net periodic pension and postretirement benefit cost. Currently, net benefit costs are reported as employee costs within operating income. The new standard requires the service cost component to be presented with other employee compensation costs. The other components will be reported separately outside of operations. The new standard is effective for fiscal years beginning after December 15, 2017, including interim periods within those years, and early adoption is permitted as of the beginning of any annual period for which an entity's financial statements (interim or annual) have not been issued. The adoption of this standard is not expected to materially impact the Company's consolidated financial statements.

C. Employee Benefit Plans

Net periodic defined benefit pension and other postretirement benefit costs include the following:

	Three Months Ended March 31,							
	2017		2016		2017		2016	
	Pension Benefits				Postretirement Benefits			
	U.S.	Foreign	U.S.	Foreign	U.S.	Foreign	U.S.	Foreign
	(In millions)							
Service cost	$ —	$ 3	$ —	$ 2	$ —	$ —	$ —	$ —
Interest cost	1	2	2	2	—	—	—	—
Expected return on plan assets	(2)	(4)	(3)	(4)	—	—	—	—
Amortization of prior service credit	—	—	—	—	(1)	—	(1)	—
Amortization of actuarial loss	—	2	—	1	—	—	—	—
Settlement and curtailment cost (credit)	—	—	—	—	—	—	—	—
Net periodic benefit (credit) cost	$ (1)	$ 3	$ (1)	$ 1	$ (1)	$ —	$ (1)	$ —

	Six Months Ended March 31,							
	2017		2016		2017		2016	
	Pension Benefits				Postretirement Benefits			
	U.S.	Foreign	U.S.	Foreign	U.S.	Foreign	U.S.	Foreign
	(In millions)							
Service cost	$ —	$ 5	$ —	$ 4	$ —	$ —	$ —	$ —
Interest cost	2	3	3	4	—	—	—	—
Expected return on plan assets	(5)	(7)	(6)	(7)	—	—	—	—
Amortization of prior service credit	—	—	—	—	(1)	—	(2)	—
Amortization of actuarial loss	—	3	—	2	—	—	—	—
Settlement and curtailment cost (credit)	—	—	—	—	—	—	(1)	—
Net periodic benefit (credit) cost	$ (3)	$ 4	$ (3)	$ 3	$ (1)	$ —	$ (3)	$ —

D. Goodwill and Intangible Assets

Cabot had goodwill balances of $151 million and $152 million at March 31, 2017 and September 30, 2016, respectively. The carrying amount of goodwill attributable to each reportable segment with goodwill balances and the changes in those balances during the six month period ended March 31, 2017 are as follows:

	Reinforcement Materials	Performance Chemicals	Purification Solutions	Total
		(In millions)		
Balance at September 30, 2016	$ 52	$ 9	$ 91	$ 152
Foreign currency impact	—	—	(1)	(1)
Balance at March 31, 2017	$ 52	$ 9	$ 90	$ 151

The following table provides information regarding the Company's intangible assets:

	March 31, 2017			September 30, 2016		
	Gross Carrying Value	Accumulated Amortization	Net Intangible Assets	Gross Carrying Value	Accumulated Amortization	Net Intangible Assets
			(In millions)			
Intangible assets with finite lives						
Developed technologies	$ 47	$ (5)	$ 42	$ 48	$ (4)	$ 44
Trademarks	14	(1)	13	16	(1)	15
Customer relationships	91	(12)	79	90	(9)	81
Total intangible assets	$ 152	$ (18)	$ 134	$ 154	$ (14)	$ 140

Intangible assets are amortized over their estimated useful lives, which range from fourteen to twenty-five years, with a weighted average amortization period of approximately nineteen years. Amortization expense for both three month periods ended March 31, 2017 and 2016 was $2 million, and is included in Cost of sales and Selling and administrative expenses in the Consolidated Statements of Operations. Amortization expense for both six month periods ended March 31, 2017 and 2016 was $4 million, and is included in the Cost of sales and Selling and administrative expenses in the Consolidated Statements of Operations. Total amortization expense is estimated to be approximately $7 million each year for the next five fiscal years.

E. Stockholders' Equity

In January 2015, the Board of Directors authorized Cabot to repurchase up to five million shares of its common stock in the open market or in privately negotiated transactions. Cabot has repurchased 2,684,176 shares of its common stock under this authorization. As of March 31, 2017, 2,315,824 shares remain available for repurchase under the current authorization. The Company retired the repurchased shares and recorded the excess of the purchase price over par value to additional paid-in capital until such amount was reduced to zero and then charged the remainder against retained earnings.

During the first six months of fiscal 2017 and 2016, Cabot paid cash dividends in the aggregate amount of $0.60 and $0.44, respectively, per share of common stock, with a total cost of $38 million and $28 million, respectively.

Noncontrolling interest

The following table illustrates the noncontrolling interest activity for the periods presented:

	2017	2016
	(In millions)	
Balance at September 30	$ 98	$ 104
Net income (loss) attributable to noncontrolling interests	10	8
Noncontrolling interest foreign currency translation adjustment	(3)	(2)
Noncontrolling interest dividends declared	(14)	(16)
Contribution from noncontrolling interest	2	—
Balance at March 31	$ 93	$ 94

During the six months ended March 31, 2017, $14 million of dividends were declared to noncontrolling interests, $2 million of which were paid during the period. During the six months ended March 31, 2016, $16 million of dividends were declared to noncontrolling interests, of which $3 million were paid during the period.

F. Accumulated Other Comprehensive Income (Loss)

Comprehensive income combines net income (loss) and other comprehensive income items, which are reported as components of stockholders' equity in the accompanying Consolidated Balance Sheets.

Changes in each component of AOCI, net of tax, were as follows:

	Currency Translation Adjustment	Unrealized Gains on Investments	Pension and Other Postretirement Benefit Liability Adjustments	Total
	(In millions)			
Balance at September 30, 2016, attributable to Cabot Corporation	$ (227)	$ 2	$ (100)	$ (325)
Other comprehensive income (loss)	(125)	—	1	(124)
Net other comprehensive items	(352)	2	(99)	(449)
Less: Noncontrolling interest	(4)	—	—	(4)
Balance at December 31, 2016, attributable to Cabot Corporation	(348)	2	(99)	(445)
Other comprehensive income (loss)	56	—	1	57
Net other comprehensive items	(292)	2	(98)	(388)
Less: Noncontrolling interest	1	—	—	1
Balance at March 31, 2017, attributable to Cabot Corporation	$ (293)	$ 2	$ (98)	$ (389)

The amounts reclassified out of AOCI and into the Consolidated Statements of Operations in the three and six months ended March 31, 2017 and 2016 were as follows:

	Affected Line Item in the Consolidated Statements of Operations	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016	Six Months Ended March 31, 2017	Six Months Ended March 31, 2016
		(In millions)			
Pension and other postretirement benefit liability adjustment					
Amortization of actuarial losses	Net Periodic Benefit Cost - see Note C for details	$ 2	$ 1	$ 3	$ 2
Amortization of prior service credit	Net Periodic Benefit Cost - see Note C for details	(1)	(1)	(1)	(2)
Settlement and curtailment (credit) cost	Net Periodic Benefit Cost - see Note C for details	—	—	—	(1)
Total before tax		1	—	2	(1)
Tax impact	Provision (benefit) for income taxes	—	1	—	1
Total after tax		$ 1	$ 1	$ 2	$ —

G. Commitments and Contingencies

Purchase Commitments

Cabot has entered into long-term purchase agreements primarily for the purchase of raw materials. Under certain of these agreements the quantity of material being purchased is fixed, but the price paid changes as market prices change. For those commitments, the amounts included in the table below are based on market prices at March 31, 2017.

	Payments Due by Fiscal Year						
	Remainder of Fiscal 2017	2018	2019	2020	2021	Thereafter	Total
				(In millions)			
Reinforcement Materials	$ 109	$ 210	$ 206	$ 133	$ 100	$ 1,435	$ 2,193
Performance Chemicals	24	44	31	23	22	109	253
Purification Solutions	6	8	6	6	—	—	26
Total	$ 139	$ 262	$ 243	$ 162	$ 122	$ 1,544	$ 2,472

Guarantee Agreements

Cabot has provided certain indemnities pursuant to which it may be required to make payments to an indemnified party in connection with certain transactions and agreements. In connection with certain acquisitions and divestitures, Cabot has provided routine indemnities with respect to such matters as environmental, tax, insurance, product and employee liabilities. In connection with various other agreements, including service and supply agreements with customers, Cabot has provided indemnities for certain contingencies and routine warranties. Cabot is unable to estimate the maximum potential liability for these types of indemnities as a maximum obligation is not explicitly stated in most cases and the amounts, if any, are dependent upon the outcome of future contingent events, the nature and likelihood of which cannot be reasonably estimated. The duration of the indemnities vary, and in many cases are indefinite. Cabot has not recorded any liability for these indemnities in the consolidated financial statements, except as otherwise disclosed.

Contingencies

Cabot is a defendant, or potentially responsible party, in various lawsuits and environmental proceedings wherein substantial amounts are claimed or at issue.

Environmental Matters

As of March 31, 2017 and September 30, 2016, Cabot had $13 million and $14 million, respectively, reserved for environmental matters. These environmental matters mainly relate to former operations. These reserves represent Cabot's best estimates of the probable costs to be incurred at those sites where costs are reasonably estimable based on the Company's analysis of the extent of clean up required, alternative clean-up methods available, abilities of other responsible parties to contribute and its interpretation of laws and regulations applicable to each site. Cash payments related to these environmental matters were less than $1 million and $1 million in the first six months of fiscal 2017 and fiscal 2016, respectively. Cabot reviews the adequacy of the reserves as circumstances change at individual sites and adjusts the reserves as appropriate. Almost all of Cabot's environmental issues relate to sites that are mature and have been investigated and studied and, in many cases, are subject to agreed upon remediation plans. However, depending on the results of future testing, changes in risk assessment practices, remediation techniques and regulatory requirements, newly discovered conditions, and other factors, it is reasonably possible that the Company could incur additional costs in excess of environmental reserves currently recorded. Management estimates, based on the latest available information, that any such future environmental remediation costs that are reasonably possible to be in excess of amounts already recorded would be immaterial to the Company's consolidated financial statements.

Other Matters

Respirator Liabilities

Cabot has exposure in connection with a safety respiratory products business that a subsidiary acquired from American Optical Corporation ("AO") in an April 1990 asset purchase transaction. The subsidiary manufactured respirators under the AO brand and disposed of that business in July 1995. In connection with its acquisition of the business, the subsidiary agreed, in certain circumstances, to assume a portion of AO's liabilities, including costs of legal fees together with amounts paid in settlements and judgments, allocable to AO respiratory products used prior to the 1990 purchase by the Cabot subsidiary. In exchange for the subsidiary's assumption of certain of AO's respirator liabilities, AO agreed to provide to the subsidiary the benefits of: (i) AO's insurance coverage for the period prior to the 1990 acquisition and (ii) a former owner's indemnity of AO holding it harmless from any liability allocable to AO respiratory products used prior to May 1982. As more fully described in the 2016 10-K, the respirator liabilities generally involve claims for personal injury, including asbestosis, silicosis and coal worker's pneumoconiosis, allegedly resulting from the use of respirators that are alleged to have been negligently designed and/or labeled. Neither Cabot, nor its past or present subsidiaries, at any time manufactured asbestos or asbestos-containing products. At no time did this respiratory product line represent a significant portion of the respirator market.

As of March 31, 2017 and September 30, 2016 there were approximately 37,000 and 38,000 claimants, respectively, in pending cases asserting claims against AO in connection with respiratory products. Cabot has a reserve to cover its expected share of liability for existing and future respirator liability claims. At March 31, 2017 and September 30, 2016, the reserve was $19 million and $21 million, respectively. Cash payments related to this liability were approximately $2 million in the first six months of both fiscal 2017 and 2016.

Cabot's current estimate of the cost of its share of existing and future respirator liability claims is based on facts and circumstances existing at this time. Developments that could affect the Company's estimate include, but are not limited to, (i) significant changes in the number of future claims, (ii) changes in the rate of dismissals without payment of pending claims, (iii) significant changes in the average cost of resolving claims, (iv) significant changes in the legal costs of defending these claims, (v) changes in the nature of claims received, (vi) changes in the law and procedure applicable to these claims, (vii) the financial viability of other parties which contribute to the settlement of respirator claims, (viii) a change in the availability of insurance coverage maintained by certain of the other parties which contribute to the settlement of respirator claims, or the indemnity provided by a former owner of the business, (ix) changes in the allocation of costs among the various parties paying legal and settlement costs, and (x) a determination that the assumptions that were used to estimate Cabot's share of liability are no longer reasonable. The Company cannot determine the impact of these potential developments on its current estimate of its share of liability for existing and future claims. Accordingly, the actual amount of these liabilities for existing and future claims could be different than the reserved amount.

Other

The Company has various other lawsuits, claims and contingent liabilities arising in the ordinary course of its business and with respect to the Company's divested businesses. The Company does not believe that any of these matters will have a material adverse effect on its financial position; however, litigation is inherently unpredictable. Cabot could incur judgments, enter into settlements

or revise its expectations regarding the outcome of certain matters, and such developments could have a material impact on its results of operations in the period in which the amounts are accrued or its cash flows in the period in which the amounts are paid.

H. Income Tax

Effective Tax Rate

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(Dollars in millions)			
Provision (benefit) for income taxes	$ (1)	$ 11	$ 16	$ 6
Effective tax rate	(1)%	20%	11%	12%

During the three and six months ended March 31, 2017, the Company recorded a tax provision (benefit) of $(1) million and $16 million, respectively, resulting in effective tax rates of (1)% and 11%, respectively. For both the three and six months ended March 31, 2017, these amounts included a net discrete tax benefit of $20 million, primarily comprised of a tax benefit associated with the generation of excess foreign tax credits upon repatriation of previously taxed foreign earnings. During the three and six months ended March 31, 2016, the Company recorded tax provisions of $11 million and $6 million, respectively, resulting in effective tax rates of 20% and 12%, respectively. For both the three and six months ended March 31, 2016, these amounts included a net discrete tax expense of $1 million and a net discrete tax benefit of $5 million, respectively, primarily comprised of the net tax benefit from certain foreign exchange gains and losses, the renewal of the U.S. Research and Experimentation credit and releases of reserves for uncertain tax positions.

Uncertainties

Cabot and certain subsidiaries are under audit in a number of jurisdictions. In addition, certain statutes of limitations are scheduled to expire in the near future. It is reasonably possible that a further change in the unrecognized tax benefits may also occur within the next twelve months related to the settlement of one or more of these audits or the lapse of applicable statutes of limitations. However, an estimated range of the impact on the unrecognized tax benefits cannot be quantified at this time.

Cabot files U.S. federal and state and non-U.S. income tax returns in jurisdictions with varying statutes of limitations. The 2012 through 2014 tax years generally remain subject to examination by the United States Internal Revenue Service and various tax years from 2005 through 2014 remain subject to examination by the respective state tax authorities. In significant non-U.S. jurisdictions, various tax years from 2002 through 2015 remain subject to examination by their respective tax authorities. As of March 31, 2017, Cabot’s significant non-U.S. jurisdictions include Canada, China, France, Germany, Italy, Japan, and the Netherlands.

During the three and six months ended March 31, 2017, Cabot released uncertain tax positions of $1 million and $3 million, respectively, due to the expirations of statutes of limitations in various jurisdictions. During the three and six months ended March 31, 2016, Cabot released uncertain tax positions of $1 million and $3 million, respectively, due to the expirations of statutes of limitations in various jurisdictions.

I. Earnings Per Share

The following tables summarize the components of the basic and diluted earnings per common share (EPS) computations:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions, except per share amounts)			
Basic EPS:				
Net income (loss) attributable to Cabot Corporation	$ 74	$ 48	$ 128	$ 41
Less: Undistributed earnings allocated to participating securities[1]	1	—	1	—
Earnings (loss) allocated to common shareholders (numerator)	$ 73	$ 48	$ 127	$ 41
Weighted average common shares and participating securities outstanding	62.9	62.9	62.8	62.9
Less: Participating securities[1]	0.5	0.5	0.5	0.5
Adjusted weighted average common shares (denominator)	62.4	62.4	62.3	62.4
Earnings per common share - basic:	$ 1.19	$ 0.76	$ 2.04	$ 0.65
Diluted EPS:				
Earnings (loss) allocated to common shareholders	$ 73	$ 48	$ 127	$ 41
Plus: Earnings (loss) allocated to participating securities	1	—	1	—
Less: Adjusted earnings allocated to participating securities[2]	1	—	1	—
Earnings (loss) allocated to common shareholders (numerator)	$ 73	$ 48	$ 127	$ 41
Adjusted weighted average common shares outstanding	62.4	62.4	62.3	62.4
Effect of dilutive securities:				
Common shares issuable[3]	0.4	0.4	0.5	0.5
Adjusted weighted average common shares (denominator)	62.8	62.8	62.8	62.9
Earnings per common share - diluted:	$ 1.18	$ 0.76	$ 2.03	$ 0.65

(1) Participating securities consist of shares of unvested time-based restricted stock units.

Undistributed earnings are the earnings which remain after dividends declared during the period are assumed to be distributed to the common and participating shareholders. Undistributed earnings are allocated to common and participating shareholders on the same basis as dividend distributions. The calculation of undistributed earnings is as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Calculation of undistributed earnings (loss):				
Net income (loss) attributable to Cabot Corporation	$ 74	$ 48	$ 128	$ 41
Less: Dividends declared on common stock	19	14	38	28
Undistributed earnings (loss)	$ 55	$ 34	$ 90	$ 13
Allocation of undistributed earnings (loss):				
Undistributed earnings (loss) allocated to common shareholders	$ 54	$ 34	$ 89	$ 13
Undistributed earnings (loss) allocated to participating shareholders	1	—	1	—
Undistributed earnings (loss)	$ 55	$ 34	$ 90	$ 13

(2) Undistributed earnings are adjusted for the assumed distribution of dividends to the dilutive securities, which are described in (3) below, and then reallocated to participating securities.

(3) Represents incremental shares of common stock from the (i) assumed exercise of stock options issued under Cabot’s equity incentive plans; (ii) assumed issuance of shares to employees pursuant to the Company’s Supplemental 401(K) Plan; and (iii) assumed issuance of shares under outstanding performance-based restricted stock unit awards issued under Cabot’s equity incentive plans. For the three and six months ended March 31, 2017, 272,588 and 224,266 incremental shares of common stock, respectively, were excluded from the calculation of diluted earnings per share because the inclusion of these shares would have been antidilutive. For the three and six months ended March 31, 2016, 792,753 and 710,236 incremental shares of common stock, respectively, were excluded from the calculation of diluted earnings per share because the inclusion of these shares would have been antidilutive.

J. Restructuring

Cabot’s restructuring activities were recorded in the Consolidated Statements of Operations in the three and six months ended March 31, 2017 and 2016 as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Cost of sales	$ 2	$ (6)	$ 2	$ 31
Selling and administrative expenses	—	1	—	8
Research and technical expenses	—	—	—	4
Total	$ 2	$ (5)	$ 2	$ 43

Details of all restructuring activities and the related reserves during the three months ended March 31, 2017 were as follows:

	Severance and Employee Benefits	Environmental Remediation	Other	Total
	(In millions)			
Reserve at December 31, 2016	$ 2	$ 2	$ —	$ 4
Charges	1	—	1	2
Cash paid	(1)	—	(1)	(2)
Reserve at March 31, 2017	$ 2	$ 2	$ —	$ 4

Details of all restructuring activities during the six months ended March 31, 2017 were as follows:

	Severance and Employee Benefits	Environmental Remediation	Other	Total
	(In millions)			
Reserve at September 30, 2016	$ 3	$ 2	$ —	$ 5
Charges	1	—	1	2
Cash paid	(2)	—	(1)	(3)
Reserve at March 31, 2017	$ 2	$ 2	$ —	$ 4

2016 Plan

In October 2015, in response to challenging macroeconomic conditions, the Company announced its intention to restructure its operations subject to local consultation requirements and processes in certain locations. Cabot’s plan resulted in the termination of employment for approximately 300 employees across the Company’s global locations.

Total charges related to these actions are expected to be $30 million, of which approximately $29 million was recorded in fiscal 2016. The Company recorded pre-tax charges of approximately $1 million in the first six months of fiscal 2017, most of which was recorded in the second quarter, and expects to record less than $1 million through the rest of fiscal 2017 related to these actions. The Company recorded pre-tax charges of approximately $26 million in the first six months of fiscal 2016, and pre-tax charges of $2 million for the three months ended March 31, 2016 related to these actions. The charges recorded and anticipated are comprised of severance, employee benefits and other transition costs.

Cumulative net cash outlays related to these actions are expected to be approximately $30 million, comprised of severance, employee benefits and other transition costs. Through March 31, 2017, the Company has made $29 million in cash payments related to this plan, of which $27 million was paid in fiscal 2016. The Company expects to make $1 million in cash payments through the remainder of fiscal 2017.

As of March 31, 2017, Cabot has $1 million of accrued severance charges in the Consolidated Balance Sheet related to these actions.

Additionally, in fiscal 2016 Cabot closed its carbon black manufacturing facility in Merak, Indonesia to consolidate production in Asia using the Company’s Cilegon, Indonesia and other Asian and global carbon black production sites to meet regional demand. The decision was driven by the financial performance at the Merak facility in the past several years. Manufacturing operations ceased at the end of January 2016.

Total charges related to the Merak closure are expected to be $27 million, of which $25 million was recorded in fiscal 2016. The Company has recorded net charges of less than $1 million in the six months ended March 31, 2017 and charges of $25 million in the six months ended March 31, 2016 related to this closure. The charges in the first six months of fiscal 2016 were comprised of $23 million of asset impairments and accelerated depreciation and $2 million of severance and employee benefits. Pre-tax charges related to this plan were less than $1 million and $1 million in the three months ended March 31, 2017 and 2016, respectively.

Future anticipated site closure costs for the Merak facility, comprised mainly of site demolition, clearing and environmental remediation charges, and other miscellaneous costs, are expected to total approximately $2 million in the remainder of fiscal 2017 and thereafter.

Total net cash outlays related to this closure are expected to be approximately $6 million, comprised of $3 million of severance payments, and $3 million of site demolition, clearing, environmental and other costs. Through March 31, 2017, the Company has made $3 million in cash payments related to this plan, mainly for severance, and expects to pay approximately $3 million through the remainder of fiscal 2017 and thereafter mainly for site demolition, clearing and environmental remediation costs.

As of March 31, 2017, Cabot has approximately $1 million of accrued severance costs in the Consolidated Balance Sheet related to the Merak facility closure.

Other Actions

Cabot has recorded $1 million of severance charges in the second quarter of fiscal 2017, nearly all of which was paid within the quarter.

Additionally, in previous years, the Company has entered into other various restructuring actions that have been substantially completed, other than the sale of assets from certain closed sites that remain to be completed. The Company has recorded a total net charge of less than $1 million related to these plans in the six months ended March 31, 2017 and a net benefit of $8 million in the six months ended March 31, 2016 driven by gains from the sale of certain assets. Pre-tax charges related to these actions were less than $1 million in the three months ended March 31, 2017 as compared to a net benefit of $8 million in the three months ended March 31, 2016.

Cabot expects to pay $3 million related to these actions in the remainder of fiscal 2017 and thereafter mainly for accrued environmental and other closure related costs. As of March 31, 2017, Cabot has approximately $2 million of accrued environmental costs in the Consolidated Balance Sheets related to these activities.

K. Financial Instruments and Fair Value Measurements

The FASB authoritative guidance on fair value measurements defines fair value, provides a framework for measuring fair value in generally accepted accounting principles, and requires certain disclosures about fair value measurements. The disclosures focus on the inputs used to measure fair value. The guidance establishes the following hierarchy for categorizing these inputs:

Level 1 — Quoted market prices in active markets for identical assets or liabilities

Level 2 — Significant other observable inputs (e.g., quoted prices for similar items in active markets, quoted prices for identical or similar items in markets that are not active, inputs other than quoted prices that are observable such as interest rate and yield curves, and market-corroborated inputs)

Level 3 — Significant unobservable inputs

There were no transfers of financial assets or liabilities measured at fair value between Level 1 and Level 2 and there were no Level 3 investments during the first six months of either fiscal 2017 or 2016.

At March 31, 2017 and September 30, 2016, Cabot had derivatives relating to foreign currency risks carried at fair value and included in Prepaid expenses and other current assets and Other assets of $7 million and $1 million, respectively. These derivatives are classified as Level 2 instruments within the fair value hierarchy as the fair value determination was based on observable inputs.

At March 31, 2017 and September 30, 2016, the fair value of guaranteed investment contracts, included in Other assets on the Consolidated Balance Sheets, was $11 million and $12 million, respectively. Guaranteed investment contracts were classified as Level 2 instruments within the fair value hierarchy as the fair value determination was based on other observable inputs.

At March 31, 2017 and September 30, 2016, the fair values of cash and cash equivalents, accounts and notes receivable, accounts payable and accrued liabilities, and notes payable and variable rate debt approximated their carrying values due to the short-term nature of these instruments. The carrying value and fair value of the long-term fixed rate debt were $0.91 billion and $0.94 billion, respectively, as of March 31, 2017 and $0.91 billion and $0.98 billion, respectively, as of September 30, 2016. The fair values of Cabot's fixed rate long-term debt are estimated based on comparable quoted market prices at the respective period ends. The carrying amounts of Cabot's floating rate long-term debt and capital lease obligations approximate their fair values. All such measurements are based on observable inputs and are classified as Level 2 within the fair value hierarchy. The valuation technique used is the discounted cash flow model.

L. Derivatives

Foreign Currency Risk Management

Cabot's international operations are subject to certain risks, including currency exchange rate fluctuations and government actions. Cabot endeavors to match the currency in which debt is issued to the currency of the Company's major, stable cash receipts. In some situations Cabot has issued debt denominated in U.S. dollars and then entered into cross currency swaps that exchange the dollar principal and interest payments into Euro denominated principal and interest payments.

Additionally, the Company has foreign currency exposure arising from its net investments in foreign operations. Cabot may enter into cross-currency swaps to mitigate the impact of currency rate changes on the Company's net investments.

The Company also has foreign currency exposure arising from the denomination of monetary assets and liabilities in foreign currencies other than the functional currency of a given subsidiary as well as the risk that currency fluctuations could affect the dollar value of future cash flows generated in foreign currencies. Accordingly, Cabot uses short-term forward contracts to minimize the exposure to foreign currency risk. In certain situations where the Company has forecasted purchases under a long-term commitment or forecasted sales denominated in a foreign currency, Cabot may enter into appropriate financial instruments in accordance with the Company's risk management policy to hedge future cash flow exposures.

The following table provides details of the derivatives held as of March 31, 2017 and September 30, 2016 to manage foreign currency risk.

		Notional Amount		
Description	**Borrowing**	**March 31, 2017**	**September 30, 2016**	**Hedge Designation**
Cross Currency Swaps	3.4% Notes	USD 250 million swapped to EUR 223 million	USD 250 million swapped to EUR 223 million	Net investment
Forward Foreign Currency Contracts (1)	N/A	USD 2 million	USD 4 million	No designation

(1) Cabot's forward foreign exchange contracts are denominated primarily in the Indonesian rupiah, Czech koruna, and British pound sterling.

Accounting for Derivative Instruments and Hedging Activities

The Company determines the fair value of financial instruments using quoted market prices whenever available. When quoted market prices are not available for various types of financial instruments (such as forwards, options and swaps), the Company uses standard models with market-based inputs, which take into account the present value of estimated future cash flows and the ability of Cabot or the financial counterparty to perform. For interest rate and cross-currency swaps, the significant inputs to these models are interest rate curves for discounting future cash flows and are adjusted for credit risk. For forward foreign currency contracts, the significant inputs are interest rate curves for discounting future cash flows, and exchange rate curves of the foreign currency for translating future cash flows.

Fair Value Hedge

For derivative instruments that are designated and qualify as fair value hedges, the gain or loss on the derivative as well as the offsetting gain or loss on the hedged item attributable to the hedged risk are recognized in current period earnings.

Cash Flow Hedge

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is recorded in Accumulated other comprehensive income (loss) and reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current period earnings.

Net Investment Hedge

For net investment hedges, changes in the fair value of the effective portion of the derivatives' gains or losses are reported as foreign currency translation gains or losses in AOCI while changes in the ineffective portion are reported in earnings. Effectiveness is assessed based on the hypothetical derivative method. There was no ineffectiveness for the six months ended March 31, 2017. The gains or losses on derivative instruments reported in AOCI are reclassified to earnings in the period in which earnings are affected by the underlying item, such as a disposal or substantial liquidations of the entities being hedged.

During the fourth quarter of fiscal 2016, the Company entered into cross currency swaps with a notional amount of $250 million, which are designated as hedges of its net investments in certain Euro denominated subsidiaries. Cash settlements periodically occur for fixed rate interest payments and a cash exchange of the notional currency amount will occur at the end of the term in 2026 under these cross currency swaps. During the second quarter of fiscal 2017, the Company received net cash interest of $2 million. During the three and six months ended March 31, 2017, the Company recognized a gain of $1 million and $8 million, respectively, related to these swaps through Foreign currency translation adjustment in other comprehensive income (loss). As of March 31, 2017 and September 30, 2016, the fair value of these swaps was $7 million and $1 million, respectively, and was included in Prepaid expenses and other current assets and Other assets on the Consolidated Balance Sheets. As of March 31, 2017 and September 30, 2016, cumulative gain included in AOCI was $9 million and $1 million, respectively. There were no gains or losses reclassified from AOCI into earnings during the first six months of fiscal 2017 or fiscal 2016.

Other Derivative Instruments

From time to time, the Company may enter into certain derivative instruments that may not be designated as hedges for accounting purposes, which may include cross currency swaps, foreign currency forward contracts and commodity derivatives. For cross currency swaps and foreign currency forward contracts not designated as hedges, the Company uses standard models with market-based inputs. The significant inputs to these models are interest rate curves for discounting future cash flows, and exchange rate curves of the foreign currency for translating future cash flows. In determining the fair value of the commodity derivatives, the significant inputs to valuation models are quoted market prices of similar instruments in active markets. Although these derivatives do not qualify for hedge accounting, Cabot believes that such instruments are closely correlated with the underlying exposure, thus managing the associated risk. The gains or losses from changes in the fair value of derivative instruments that are not accounted for as hedges are recognized in current period earnings.

At both March 31, 2017 and September 30, 2016, the fair value of derivative instruments not designated as hedges were immaterial and were presented in Prepaid expenses and other current assets on the Consolidated Balance Sheets.

M. Venezuela

Cabot owns 49% of an operating carbon black affiliate in Venezuela, which is accounted for as an equity affiliate, through wholly-owned subsidiaries that carry the investment and receive its dividends. As of March 31, 2017, these subsidiaries carried the operating affiliate investment of $13 million.

During each of the six month periods ended March 31, 2017 and 2016, the Company received dividends in the amounts of $2 million, which were paid in U.S. dollars.

A significant portion of the Company's operating affiliate's sales are exports denominated in U.S. dollars. The Venezuelan government mandates that a certain percentage of the dollars collected from these sales be converted into bolivars. The exchange rate made available to the Company as of March 31, 2017 was 709 bolivars to the U.S. dollar. The operating affiliate and the Company's wholly-owned subsidiaries remeasured their bolivar denominated monetary accounts to reflect the current rate.

The operating entity has generally been profitable. The Company continues to closely monitor developments in Venezuela and their potential impact on the recoverability of its equity affiliate investment. Any future change in the exchange rate made available to the Company or opening of additional parallel markets could cause the Company to change the exchange rate it uses and result in gains or losses on the bolivar denominated assets held by its operating affiliate and wholly-owned subsidiaries.

N. Financial Information by Segment

The Company identifies a business as an operating segment if: i) it engages in business activities from which it may earn revenues and incur expenses; ii) its operating results are regularly reviewed by the Chief Operating Decision Maker (“CODM”), who is Cabot’s President and Chief Executive Officer, to make decisions about resources to be allocated to the segment and assess its performance; and iii) it has available discrete financial information. The Company has determined that all of its businesses are operating segments. The CODM reviews financial information at the operating segment level to allocate resources and to assess the operating results and financial performance for each operating segment. Operating segments are aggregated into a reportable segment if the operating segments are determined to have similar economic characteristics and if the operating segments are similar in the following areas: i) nature of products and services; ii) nature of production processes; iii) type or class of customer for their products and services; iv) methods used to distribute the products or provide services; and v) if applicable, the nature of the regulatory environment.

The Company has four reportable segments: Reinforcement Materials, Performance Chemicals, Purification Solutions and Specialty Fluids.

The Reinforcement Materials segment represents the rubber blacks and elastomer composites product lines.

The Performance Chemicals segment combines the specialty carbons and compounds and inkjet colorants product lines into the Specialty Carbons and Formulations business, and combines the fumed metal oxides and aerogel product lines into the Metal Oxides business. These businesses are similar in terms of economic characteristics, nature of products, processes, customer class and product distribution methods, and, therefore, have been aggregated into one reportable segment. The net sales from each of these businesses for the three and six months ended March 31, 2017 and 2016 were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Specialty Carbons and Formulations	$ 162	$ 145	$ 300	$ 285
Metal Oxides	66	71	133	138
Total Performance Chemicals	$ 228	$ 216	$ 433	$ 423

The Purification Solutions segment represents the Company’s activated carbon business and the Specialty Fluids segment includes cesium formate oil and gas drilling fluids and high-purity fine cesium chemicals product lines.

Income (loss) from continuing operations before income taxes (“Segment EBIT”) is presented for each reportable segment in the table below. Segment EBIT excludes certain items, meaning items management does not consider representative of on-going operating segment results. In addition, Segment EBIT includes Equity in earnings of affiliated companies, net of tax, the full operating results of a contractual joint venture in Purification Solutions, royalties, Net income attributable to noncontrolling interests, net of tax, and discounting charges for certain Notes receivable, but excludes Interest expense, foreign currency transaction gains and losses, interest income, dividend income, unearned revenue, the effects of LIFO accounting for inventory, general unallocated expense and unallocated corporate costs.

Financial information by reportable segment is as follows:

	Reinforcement Materials	Performance Chemicals	Purification Solutions	Specialty Fluids	Segment Total	Unallocated and Other[1]	Consolidated Total
				(In millions)			
Three Months Ended March 31, 2017							
Revenues from external customers[2]	$ 352	$ 228	$ 67	$ 7	$ 654	$ 24	$ 678
Income (loss) from continuing operations before income taxes[3]	$ 54	$ 51	$ 2	$ —	$ 107	$ (29)	$ 78
Three Months Ended March 31, 2016							
Revenues from external customers[2]	$ 261	$ 216	$ 67	$ 6	$ 550	$ 18	$ 568
Income (loss) from continuing operations before income taxes[3]	$ 34	$ 58	$ (2)	$ (2)	$ 88	$ (26)	$ 62
Six Months Ended March 31, 2017							
Revenues from external customers[2]	$ 647	$ 433	$ 136	$ 18	$ 1,234	$ 55	$ 1,289
Income (loss) from continuing operations before income taxes[3]	$ 94	$ 100	$ 6	$ 2	$ 202	$ (51)	$ 151
Six Months Ended March 31, 2016							
Revenues from external customers[2]	$ 549	$ 423	$ 133	$ 13	$ 1,118	$ 53	$ 1,171
Income (loss) from continuing operations before income taxes[3]	$ 60	$ 108	$ (7)	$ (2)	$ 159	$ (105)	$ 54

(1) Unallocated and Other includes certain items and eliminations necessary to reflect management's reporting of operating segment results. These items are reflective of the segment reporting presented to the CODM.

(2) Consolidated Total Revenues from external customers reconciles to Net sales and other operating revenues on the Consolidated Statement of Operations. Revenues from external customers that are categorized as Unallocated and Other reflects royalties, other operating revenues, external shipping and handling fees, the impact of unearned revenue, the removal of 100% of the sales of an equity method affiliate and discounting charges for certain Notes receivable. Details are provided in the table below:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Royalties, other operating revenues, the impact of unearned revenue, the removal of 100% of the sales of an equity method affiliate and discounting charges for certain notes receivable	$ (6)	$ (9)	$ (2)	$ —
Shipping and handling fees	30	27	57	53
Total	$ 24	$ 18	$ 55	$ 53

(3) Consolidated Total Income (loss) from continuing operations before income taxes reconciles to Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies on the Consolidated Statement of Operations. Income (loss) from continuing operations before income taxes that are categorized as Unallocated and Other includes:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Interest expense	$ (13)	$ (14)	$ (26)	$ (27)
Total certain items, pre-tax[a]	—	1	—	(57)
Unallocated corporate costs[b]	(14)	(12)	(26)	(25)
General unallocated income (expense)[c]	(1)	—	4	5
Less: Equity in earnings of affiliated companies, net of tax[d]	(1)	(1)	(3)	(1)
Total	$ (29)	$ (26)	$ (51)	$ (105)

(a) Certain items are items of expense and income that management does not consider representative of the Company's fundamental on-going segment results and they are, therefore, excluded from Segment EBIT. Certain items, pre-tax, for both the three and six months ended March 31, 2017 included a charge of $2 million related to global restructuring activities and a benefit of $2 million related to legal and environmental matters and reserves. Certain items, pre-tax, for the three months ended March 31, 2016 included a $5 million benefit related to global restructuring activities, $3 million related to foreign currency loss on the devaluation of the Argentine peso, and $1 million related to legal and environmental matters and reserves. Certain items, pre-tax, for the six months ended March 31, 2016 included $43 million related to global restructuring activities, $11 million related to foreign currency loss on the devaluation of the Argentine peso, and $3 million related to legal and environmental matters and reserves.

(b) Unallocated corporate costs are costs that are not controlled by the segments and primarily benefit corporate interests.

(c) General unallocated income (expense) consists of gains (losses) arising from foreign currency transactions, net of other foreign currency risk management activities, the impact of accounting for certain inventory on a LIFO basis, the profit or loss related to the corporate adjustment for unearned revenue, and the impact of including the full operating results of an equity affiliate in Purification Solutions Segment EBIT.

(d) Equity in earnings of affiliated companies, net of tax, is included in Segment EBIT and is removed in Unallocated and other to reconcile to income (loss) from operations before income taxes and equity in earnings from affiliated companies.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies

The preparation of our financial statements is in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of our financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses and related disclosure of contingent assets and liabilities. We consider an accounting estimate to be critical to the financial statements if (i) the estimate is complex in nature or requires a high degree of judgment and (ii) different estimates and assumptions were used, the results could have a material impact on the consolidated financial statements. On an ongoing basis, we evaluate our estimates and the application of our policies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Our critical accounting policies have not substantially changed from those described in the 2016 Form 10-K.

Results of Operations

Cabot is organized into four reportable business segments: Reinforcement Materials, Performance Chemicals, Purification Solutions and Specialty Fluids. Cabot is also organized for operational purposes into three geographic regions: the Americas; Europe, Middle East and Africa; and Asia Pacific. The discussions of our results of operations for the periods presented reflect these structures.

Our analysis of our financial condition and operating results should be read with our consolidated financial statements and accompanying notes.

Definition of Terms and Non-GAAP Financial Measures

When discussing our results of operations, we use several terms as described below.

The term "product mix" refers to the mix of types and grades of products sold or the mix of geographic regions where products are sold, and the positive or negative impact this has on the revenue or profitability of the business and/or segment.

The term "LIFO" includes two factors: (i) the impact of current inventory costs being recognized immediately in Cost of sales under a last-in first-out method, compared to the older costs that would have been included in Cost of sales under a first-in first-out method ("Cost of sales impact"); and (ii) the impact of reductions in inventory quantities, causing historical inventory costs to flow through Cost of sales ("liquidation impact").

Our discussion under the heading "Provision (Benefit) for Income Taxes and Reconciliation of Effective Tax Rate to Operating Tax Rate" includes a discussion of our "effective tax rate" and our "operating tax rate" and includes a reconciliation of the two rates. Our operating tax rate is a non-GAAP financial measure and should not be considered as an alternative to our effective tax rate, the most comparable GAAP financial measure. In calculating our operating tax rate, we exclude discrete tax items, which include: i) unusual or infrequent items, such as a significant release or establishment of a valuation allowance, ii) items related to uncertain tax positions, such as the tax impact of audit settlements, interest on tax reserves, and the release of tax reserves from the expiration of statutes of limitations, and iii) other discrete tax items, such as the tax impact of legislative changes and, on a quarterly basis, the timing of losses in certain jurisdictions and the cumulative rate adjustment, if applicable. We also exclude the tax impact of certain items, as defined below in the discussion of Total segment EBIT, on both operating income and the tax provision. Our definition of the operating tax rate may not be comparable to the definition used by other companies. Management believes that this non-GAAP financial measure is useful supplemental information because it helps our investors compare our tax rate year to year on a consistent basis and to understand what our tax rate on current operations would be without the impact of these items.

Our discussion under the heading "Second Quarter and First Six Months of Fiscal 2017 versus Second Quarter and First Six Months of Fiscal 2016—By Business Segment" includes a discussion of Total segment EBIT, which is a non-GAAP financial measure defined as Income (loss) from continuing operations before income taxes and equity in earnings from affiliated companies less certain items and other unallocated items. Our Chief Operating Decision Maker, who is our President and Chief Executive Officer, uses segment EBIT to evaluate the operating results of each segment and to allocate resources to the segments. We believe Total segment EBIT, which reflects the sum of EBIT from our four reportable segments, provides useful supplemental information for our

investors as it is an important indicator of the Company's operational strength and performance, allows investors to see our results through the eyes of management, and provides context for our discussion of individual business segment performance. Total segment EBIT should not be considered an alternative for Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies, which is the most directly comparable GAAP financial measure. A reconciliation of Total segment EBIT to Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies is provided under the heading "Second Quarter and First Six Months of Fiscal 2017 versus Second Quarter and First Six Months of Fiscal 2016—By Business Segment". Investors should consider the limitations associated with this non-GAAP measure, including the potential lack of comparability of this measure from one company to another.

In calculating Total segment EBIT, we exclude from our Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies (i) items of expense and income that management does not consider representative of our fundamental on-going segment results, which we refer to as "certain items", and (ii) items that, because they are not controlled by the business segments and primarily benefit corporate objectives, are not allocated to our business segments, such as interest expense and other corporate costs, which include unallocated corporate overhead expenses such as certain corporate salaries and headquarter expenses, plus costs related to special projects and initiatives, which we refer to as "other unallocated items". Management believes excluding the items identified as certain items facilitates operating performance comparisons from period to period by eliminating differences caused by the existence and timing of certain expense and income items that would not otherwise be apparent on a GAAP basis and also facilitates an evaluation of the Company's operating performance without the impact of these costs or benefits. The items of income and expense that we have excluded from Total segment EBIT, as applicable, but that are included in our GAAP Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies, as applicable, are described below.

- Global restructuring activities, which include costs or benefits associated with cost reduction initiatives or plant closures and are primarily related to (i) employee termination costs, (ii) asset impairment charges associated with restructuring actions, (iii) costs to close facilities, including environmental costs and contract termination penalties and (iv) gains realized on the sale of land or equipment associated with restructured plants or locations.
- Foreign currency loss on devaluation, which represents the impact of controlled currency devaluations on our net monetary assets denominated in that currency. In fiscal 2016, this applied to currency exchange rate changes in Argentina and Venezuela.
- Legal and environmental reserves and matters, which consist of costs or benefits for matters typically related to former businesses or that are otherwise incurred outside of the ordinary course of business.
- Executive transition costs, which include incremental charges, including stock compensation charges, associated with the retirement or termination of employment of senior executives of the Company.
- Asset impairment charges, which primarily include charges associated with an impairment of goodwill or other long-lived assets.
- Acquisition and integration-related charges, which include transaction costs, redundant costs incurred during the period of integration, and costs associated with transitioning certain management and business processes to Cabot's processes.

Overview

During the second quarter of fiscal 2017, income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies increased compared to the second quarter of fiscal 2016 primarily due to higher volumes and favorable unit margins, partially offset by higher fixed costs and the negative impact from foreign currency translation. During the first six months of fiscal 2017, income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies increased compared to the first six months of fiscal 2016 primarily due to higher volumes across all segments and higher unit margins in Reinforcement Materials. In addition, in the first six months of 2016, we recorded charges associated with restructuring plans, including costs associated with the closure of our facility in Merak, Indonesia, which did not reoccur in the first six months of 2017.

Second Quarter of Fiscal 2017 versus Second Quarter of Fiscal 2016—Consolidated

Net Sales and Other Operating Revenues and Gross Profit

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Net sales and other operating revenues	$ 678	$ 568	$ 1,289	$ 1,171
Gross profit	$ 169	$ 150	$ 326	$ 249

The $110 million increase in net sales in the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 was primarily driven by higher volumes ($49 million) across all segments and a more favorable price and product mix ($68 million). The increase in volumes and more favorable price and product mix was partially offset by the unfavorable impact from foreign currency translation ($12 million). For the first six months of fiscal 2017, net sales increased $118 million compared to the first six months of fiscal 2016 primarily due to higher volumes ($69 million) and a more favorable price and product mix ($61 million). These increases were partially offset by the unfavorable impact from foreign currency translation ($15 million).

Gross profit increased by $19 million in the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 primarily due to higher volumes in Performance Chemicals and Reinforcement Materials and higher unit margins in Reinforcement Materials. For the first six months of fiscal 2017, gross profit increased by $77 million primarily due to higher volumes across all segments and higher unit margins in Reinforcement Materials.

Selling and Administrative Expenses

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Selling and administrative expenses	$ 65	$ 62	$ 128	$ 133

Selling and administrative expenses increased by $3 million in the second quarter of fiscal 2017 compared to the same period of fiscal 2016 primarily due to increased spending in support of growth in the business. For the first six months of fiscal 2017, selling and administrative expenses decreased by $5 million compared to the first six months of fiscal 2016 primarily due to charges recorded in fiscal 2016 for restructuring actions taken to reduce fixed costs across the Company.

Research and Technical Expenses

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Research and technical expenses	$ 14	$ 11	$ 26	$ 27

Research and technical expenses increased by $3 million in the second quarter of fiscal 2017 compared to the same period of fiscal 2016 due to higher spending on projects across the segments. For the first six months of fiscal 2017, research and technical

expenses decreased by $1 million compared to the first six months of fiscal 2016 primarily due to charges recorded in fiscal 2016 for restructuring actions taken to reduce fixed costs across the Company.

Interest and Dividend Income, Interest Expense and Other Income (Expense)

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Interest and dividend income	$ 2	$ 2	$ 4	$ 3
Interest expense	$ (13)	$ (14)	$ (26)	$ (27)
Other income (expense)	$ (1)	$ (3)	$ 1	$ (11)

Interest and dividend income was consistent in the second quarter of fiscal 2017 compared to the same period of fiscal 2016. For the first six months of fiscal 2017, interest and dividend income increased by $1 million due to interest earned on higher cash balances.

Interest expense decreased by $1 million in the second quarter of fiscal 2017 and the first six months of fiscal 2017 compared to the same periods in fiscal 2016 primarily due to lower debt balances.

Other income (expense) changed by $2 million in the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 and by $12 million in the first six months of fiscal 2017 compared to the same period of fiscal 2016. The change in both periods is due to a favorable comparison of foreign currency movements, primarily the devaluation of the Argentine peso in fiscal 2016.

Provision (Benefit) for Income Taxes and Reconciliation of Effective Tax Rate to Operating Tax Rate

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(Dollars in millions)			
Provision (benefit) for income taxes	$ (1)	$ 11	$ 16	$ 6
Effective tax rate	(1)%	20%	11%	12%
Impact of discrete tax items(a):				
Unusual or infrequent items	25%	(1)%	12%	1%
Items related to uncertain tax positions	(1)%	—%	1%	3%
Other discrete tax items	1%	1%	—%	1%
Impact of certain items	—%	5%	—%	8%
Operating tax rate	24%	25%	24%	25%

During the three and six months ended March 31, 2017, we recorded a tax benefit of $1 million and a tax provision of $16 million, resulting in effective tax rates of (1%) and 11%, respectively. For both the three and six months ended March 31, 2017, these amounts included a net discrete tax benefit of $20 million. The operating tax rate for both the three and six months ended March 31, 2017 was 24%. During the three and six months ended March 31, 2016, we recorded tax provisions of $11 million and $6 million, resulting in effective tax rates of 20% and 12%, respectively. For the three and six months ended March 31, 2016, these amounts included a net discrete tax expense of less than $1 million and a net discrete tax benefit of $3 million, respectively. The operating tax rate for both the three and six months ended March 31, 2016 was 25%.

(a) The nature of the discrete tax items for the periods ended March 31, 2017 and 2016 were as follows:

(i) Unusual or infrequent items during the three and six months ended March 31, 2017 included a tax benefit associated with the generation of excess foreign tax credits upon repatriation of previously taxed foreign earnings, partially offset by charges for the accrual of U.S. tax on certain foreign earnings of prior years and the tax impact of nontaxable foreign exchange losses in certain jurisdictions. Unusual or infrequent items during the three and six months ended March 31, 2016 included tax benefits from the renewal of the U.S. Research and Experimentation

credit and extraordinary dividends from subsidiaries, partially offset by a charge for the tax impact of excludible foreign exchange gains and losses in certain jurisdictions;

(ii) Items related to uncertain tax positions included tax benefits during the three and six months ended March 31, 2017 and 2016 from the reversal of accruals for uncertain tax positions due to the expiration of statutes of limitations and the settlement of tax audits (fiscal 2016 only), partially offset by charges for the accrual of interest on uncertain tax positions and accrual of a prior year uncertain tax position (fiscal 2017 only), and;

(iii) Other discrete tax items included tax benefits during the three and six months ended March 31, 2017 for various return to provision true ups related to tax return filings. Other discrete tax items during the three and six months ended March 31, 2016 included tax charges for a change in valuation allowance on beginning of year tax balances, partially offset by tax benefits for changes in tax laws.

For fiscal 2017, we expect our effective tax rate to be 17% and our operating tax rate to be 24%. Our expected operating tax rate is reconciled to our expected effective tax rate in the table below.

	Forecast 2017
Effective tax rate	17%
Impact of discrete tax items:	
Unusual or infrequent items	6%
Items related to uncertain tax positions	1%
Other discrete tax items	—%
Impact of certain items	—%
Operating tax rate	24%

Cabot files U.S. federal and state and non-U.S. income tax returns in jurisdictions with varying statutes of limitations. The 2012 through 2014 tax years generally remain subject to examination by the IRS and various tax years from 2005 through 2014 remain subject to examination by the respective state tax authorities. In significant non-U.S. jurisdictions, various tax years from 2002 through 2015 remain subject to examination by their respective tax authorities. As of March 31, 2017, Cabot's significant non-U.S. jurisdictions include Canada, China, France, Germany, Italy, Japan, and the Netherlands.

Equity in Earnings of Affiliated Companies and Net Income Attributable to Noncontrolling Interests

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Equity in earnings of affiliated companies, net of tax	$ 1	$ 1	$ 3	$ 1
Net income (loss) attributable to noncontrolling interests, net of tax	$ 6	$ 4	$ 10	$ 8

Equity in earnings of affiliated companies, net of tax, remained consistent in the second quarter fiscal 2017 compared to the same period in fiscal 2016. Equity in earnings of affiliated companies, net of tax, increased $2 million in the first six months of fiscal 2017 compared to the same period of fiscal 2016 primarily due to higher earnings from our Venezuelan equity affiliate.

Net income attributable to noncontrolling interests, net of tax, increased $2 million in the second quarter of fiscal 2017 and the first six months of fiscal 2017 as compared to the same periods in fiscal 2016 due to the higher profitability of our China joint ventures.

Net Income Attributable to Cabot Corporation

In the second quarter and first six months of fiscal 2017, we reported net income (loss) attributable to Cabot Corporation of $74 million and $128 million, respectively ($1.18 and $2.03 per diluted common share, respectively). This is compared to net income

(loss) attributable to Cabot Corporation of $48 million and $41 million, respectively ($0.76 and $0.65 per diluted common share, respectively) in the second quarter and first six months of fiscal 2016.

Second Quarter and First Six Months of Fiscal 2017 versus Second Quarter and First Six Months of Fiscal 2016—By Business Segment

Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies, certain items, other unallocated items, and Total segment EBIT for the three and six months ended March 31, 2017 and 2016 are set forth in the table below. The details of certain items and other unallocated items are shown below and in Note N of our consolidated financial statements.

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies	$ 78	$ 62	$ 151	$ 54
Less: Certain items	—	1	—	(57)
Less: Other unallocated items	(29)	(27)	(51)	(48)
Total segment EBIT	$ 107	$ 88	$ 202	$ 159

In the second quarter of fiscal 2017, Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies increased by $16 million and total segment EBIT increased by $19 million when compared to the same period of fiscal 2016. The increases were primarily driven by higher volumes ($30 million) across all segments, the favorable impact of increasing inventory levels ($3 million), and higher unit margins ($4 million), partially offset by higher fixed costs ($15 million) and the unfavorable impact of foreign currency translation ($5 million).

In the first six months of fiscal 2017, Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies increased by $97 million and total segment EBIT increased by $43 when compared to the same period of fiscal 2016. The increases were primarily driven by higher volumes ($43 million) across all segments, higher unit margins ($9 million), and the favorable impact from inventory comparison ($12 million) partially offset by higher fixed costs ($20 million) and the unfavorable impact of foreign currency translation ($2 million). In addition, Income (loss) from continuing operations before income taxes and equity in earnings of affiliated companies increased due to lower spending on global restructuring activities ($41 million) and net foreign currency losses on devaluations ($11 million) in the first six months of 2016 that did not reoccur in the first six months of 2017.

Certain Items

Details of the certain items for the second quarter and first six months of fiscal 2017 and 2016 are as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Global restructuring activities	$ (2)	$ 5	$ (2)	$ (43)
Net foreign currency loss on devaluations	—	(3)	—	(11)
Legal and environmental matters and reserves	2	(1)	2	(3)
Total certain items, pre-tax	—	1	—	(57)
Tax-related certain items:				
Tax impact of certain items	—	4	—	19
Discrete tax items	20	—	20	3
Total tax-related certain items	20	4	20	22
Total certain items, after tax	$ 20	$ 5	$ 20	$ (35)

Certain items for the second quarter and first six months of fiscal 2017 were primarily comprised of a discrete tax benefit associated with the generation of foreign tax credits upon repatriation of previously taxed foreign earnings. Details of restructuring activities are included in Note J of the consolidated financial statements.

Certain items for the second quarter and first six months of fiscal 2016 include charges primarily related to restructuring activities, tax-related certain items, legal and environmental matters and reserves, and a net foreign currency loss from the devaluation of the Argentine peso, partially offset by a gain on the devaluation of the Venezuelan bolivar. Details of restructuring activities are included in Note J of the consolidated financial statements. Tax-related certain items included discrete tax items, which are unusual and infrequent, and the tax impact of certain foreign exchange losses.

The tax impact of certain items is determined by (1) starting with the current and deferred income tax expense or benefit included in Net income (loss) attributable to Cabot Corporation, and (2) subtracting the tax expense or benefit on “adjusted earnings”. Adjusted earnings is defined as the pre-tax income attributable to Cabot Corporation excluding certain items. The tax expense or benefit on adjusted earnings is calculated by applying the operating tax rate, as defined under the section Definition of Terms and Non-GAAP Financial Measures, to adjusted earnings.

Other Unallocated Items

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Interest expense	$ (13)	$ (14)	$ (26)	$ (27)
Unallocated corporate costs	(14)	(12)	(26)	(25)
General unallocated income (expense)	(1)	—	4	5
Less: Equity in earnings of affiliated companies, net of tax	1	1	3	1
Total other unallocated items	$ (29)	$ (27)	$ (51)	$ (48)

A discussion of items that we refer to as “other unallocated items” can be found under the heading “Definition of Terms and Non-GAAP Financial Measures”. The balances of unallocated corporate costs are primarily comprised of expenditures related to managing a public company that are not allocated to the segments and corporate business development costs related to new technology efforts. The balances of General unallocated income (expense) consist of gains (losses) arising from foreign currency transactions, net of other foreign currency risk management activities, the impact of accounting for certain inventory on a LIFO basis, the profit or loss related to the corporate adjustment for unearned revenue, and the impact of including the full operating results of an equity affiliate in Purification Solutions Segment EBIT.

Costs from Total other unallocated items changed by $2 million in the second quarter of fiscal 2017 as compared to the same period in fiscal 2016 primarily due to increased costs in support of business growth.

Costs from Total other unallocated items changed by $3 million in the first six months of fiscal 2017 as compared to the same period in fiscal 2016 primarily due to an increase in earnings from our Venezuelan equity affiliate, which are adjusted out of the calculation of other unallocated items.

Reinforcement Materials

Sales and EBIT for Reinforcement Materials for the second quarter and first six months of fiscal 2017 and fiscal 2016 were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Reinforcement Materials Sales	$ 352	$ 261	$ 647	$ 549
Reinforcement Materials EBIT	$ 54	$ 34	$ 94	$ 60

In the second quarter of fiscal 2017, sales in Reinforcement Materials increased by $91 million when compared to the second quarter of fiscal 2016. The increase was principally driven by a more favorable price and product mix (combined $83 million) and higher volumes ($15 million). The favorable price and product mix impact was primarily due to higher selling prices in the quarter from price adjustments to customers for increases in raw material costs and higher contract and spot prices. The increases were partially offset by the unfavorable impact of foreign currency translation ($6 million).

In the first six months of fiscal 2017, sales in Reinforcement Materials increased by $98 million when compared to the first six months of fiscal 2016. The increase was principally driven by a more favorable price and product mix (combined $88 million) and higher volumes ($16 million), partially offset by the unfavorable impact of foreign currency translation ($6 million). The more favorable price and product mix impact was primarily due to higher selling prices in the quarter from price adjustments to customers for increases in raw material costs and higher contract and spot prices.

EBIT in Reinforcement Materials increased by $20 million in the second quarter of fiscal 2017 compared to the same period of fiscal 2016. The increase was principally driven by higher unit margins ($20 million) and higher volumes ($7 million), partially offset by higher fixed costs ($5 million) and the unfavorable impact of foreign currency translation ($4 million). Higher unit margins were driven by price improvements in calendar year 2017 customer agreements, spot pricing in China and energy center revenues.

EBIT in Reinforcement Materials increased by $34 million in the first six months of fiscal 2017 compared to the same period of fiscal 2016. The increase was principally driven by higher unit margins ($31 million), higher volumes ($8 million) and the favorable impact of inventory comparison ($4 million), partially offset by higher fixed costs ($6 million) and the unfavorable impact of foreign currency translation ($2 million). Higher unit margins were driven by price improvements in calendar year 2017 customer agreements and spot pricing in China.

Performance Chemicals

Sales and EBIT for Performance Chemicals for the second quarter and first six months of fiscal 2017 and fiscal 2016 were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Specialty Carbons and Formulations Sales	$ 162	$ 145	$ 300	$ 285
Metal Oxides Sales	66	71	133	138
Performance Chemicals Sales	$ 228	$ 216	$ 433	$ 423
Performance Chemicals EBIT	$ 51	$ 58	$ 100	$ 108

In the second quarter of fiscal 2017, sales in Performance Chemicals increased by $12 million when compared to the second quarter of fiscal 2016. The increase was due to higher volumes ($25 million), partially offset by a less favorable price and product mix (combined $8 million) and the unfavorable impact of foreign currency translation ($5 million). Higher volumes were primarily related to the Specialty Carbons and Formulations business in both Europe and China. The price and product mix impact was primarily driven by an unfavorable mix of sales by application, with lower Metal Oxides sales into electronics.

In the first six months of fiscal 2017, sales in Performance Chemicals increased by $10 million when compared to the same period of fiscal 2016. The increase was primarily due to a higher volumes ($30 million), partially offset by a less favorable price and product mix (combined $13 million) and the unfavorable impact of foreign currency translation ($8 million). Higher volumes were primarily related to the Specialty Carbons and Formulations business in both Europe and China.

EBIT in Performance Chemicals decreased by $7 million in the second quarter of fiscal 2017 when compared to the same quarter of fiscal 2016 principally due to lower unit margins ($14 million), higher fixed costs ($6 million) and the unfavorable impact of foreign currency translation ($2 million), partially offset by higher volumes ($15 million). Lower unit margins were primarily due to higher raw material costs in Specialty Carbons and Formulations.

EBIT in Performance Chemicals decreased by $8 million in the first six months of fiscal 2017 when compared to the same period of fiscal 2016 principally due to lower unit margins ($16 million), higher fixed costs ($11 million) and the unfavorable impact of foreign currency translation ($1 million), partially offset by higher volumes ($19 million). Lower unit margins were primarily due to higher raw material costs in Specialty Carbons and Formulations. Higher fixed costs were primarily due to increased maintenance costs from plant turnarounds.

Purification Solutions

Sales and EBIT for Purification Solutions for the second quarter and the first six months of fiscal 2017 and fiscal 2016 were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Purification Solutions Sales	$ 67	$ 67	$ 136	$ 133
Purification Solutions EBIT	$ 2	$ (2)	$ 6	$ (7)

Sales in Purification Solutions remained consistent in the second quarter of fiscal 2017 compared to the same period of fiscal 2016. Sales in Purification Solutions increased by $3 million in the first six months of fiscal 2017 when compared to the same period of fiscal 2016 due to higher volumes ($14 million), partially offset by a less favorable price and product mix (combined $11 million). Higher volumes were driven by higher demand for activated carbon in gas and air applications as coal fired utilities were required to be in compliance with MATS by April 2016. This increase in MATS-related volumes also drove the less favorable price and product mix.

EBIT in Purification Solutions increased by $4 million in the second quarter of fiscal 2017 when compared to the same quarter of fiscal 2016 due to the favorable impact from higher volumes ($4 million) and an increase in inventory levels this year compared to a reduction in inventory levels last year ($2 million), partially offset by higher fixed costs ($2 million). EBIT in Purification Solutions increased by $13 million in the first six months of fiscal 2017 when compared to the same period of fiscal 2016 due to higher volumes ($9 million), the favorable impact of inventory comparisons ($8 million) and the favorable impact of foreign currency translation ($1 million), partially offset by lower unit margins ($4 million) and higher fixed costs ($2 million).

Specialty Fluids

Sales and EBIT for Specialty Fluids for the second quarter and the first six months of fiscal 2017 and 2016 were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2017	2016	2017	2016
	(In millions)			
Specialty Fluids Sales	$ 7	$ 6	$ 18	$ 13
Specialty Fluid EBIT	$ —	$ (2)	$ 2	$ (2)

Sales in Specialty Fluids increased by $1 million in the second quarter of fiscal 2017 when compared to the same period of fiscal 2016, primarily due to higher volumes ($4 million), partially offset by a less favorable price and product mix (combined $2 million). Sales in Specialty Fluids increased by $5 million in the first six months of fiscal 2017 when compared to the same period of fiscal 2016, primarily due to higher volumes ($8 million), partially offset by a less favorable price and product mix (combined $3 million). The increase in volumes for both comparative periods was driven by stronger demand for fine cesium chemicals.

EBIT in Specialty Fluids increased by $2 million in the second quarter of fiscal 2017 compared to the same period of fiscal 2016. The increase was due to higher volumes ($4 million), partially offset by lower unit margins ($1 million). EBIT in Specialty Fluids increased by $4 million in the first six months of fiscal 2017 when compared to the same period of fiscal 2016 due to higher volumes ($7 million) partially offset by lower unit margins ($2 million).

Outlook

We expect Reinforcement Materials volumes in the third quarter to be consistent with the second quarter. The segment's fixed costs are expected to be higher in the third quarter in light of a higher level of planned maintenance activity. While we expect demand in our Performance Chemicals end markets to remain robust, the segment will likely continue to see some year-over-year impact from higher feedstock costs. Further, we expect Purification Solutions will benefit from volume growth in the third quarter, but that this will be offset by the effect of expected inventory drawdowns and expected higher fixed costs associated with planned turnaround activities during the period.

Cash Flows and Liquidity

Overview

Our liquidity position, as measured by cash and cash equivalents plus borrowing availability, decreased by $71 million during the first six months of fiscal 2017 which was primarily attributable to a lower cash balance at March 31, 2017. As of March 31, 2017, we had cash and cash equivalents of $133 million and borrowing availability under our revolving credit agreement of $996 million. Borrowings under our revolving credit agreement may be used for working capital, letters of credit and other general corporate purposes. Our outstanding balance of commercial paper was $4 million as of March 31, 2017. At March 31, 2017, we were in compliance with all covenants under our revolving credit facility, including the total consolidated debt to consolidated EBITDA (earnings before interest, taxes, depreciation and amortization) covenant.

We generally manage our cash and debt on a global basis to provide for working capital requirements as needed by region or site. Cash and debt are generally denominated in the local currency of the subsidiary holding the assets or liabilities, except where there are operational cash flow reasons to hold non-functional currency or debt. The vast majority of our cash and cash equivalent holdings tend to be held outside the U.S., as excess cash balances in the U.S. are generally used to repay commercial paper issued during the period.

We anticipate sufficient liquidity from (i) cash on hand; (ii) cash flows from operating activities; and (iii) cash available from our revolving credit agreement and our commercial paper program to meet our operational and capital investment needs and financial obligations for the foreseeable future. The liquidity we derive from cash flows from operations is, to a large degree, predicated on our ability to collect our receivables in a timely manner, the cost of our raw materials, and our ability to manage inventory levels.

We issued $250 million of 2.55% fixed rate debt in fiscal 2012 that matures on January 15, 2018. Our intention is to refinance these securities prior to their maturity.

The following discussion of the changes in our cash balance refers to the various sections of our Consolidated Statements of Cash Flows.

Cash Flows from Operating Activities

Cash provided by operating activities, which consists of net income adjusted for the various non-cash items included in income, changes in working capital and changes in certain other balance sheet accounts, totaled $51 million in the first six months of fiscal 2017 compared to $188 million during the same period of fiscal 2016.

Cash provided by operating activities in the first six months of fiscal 2017 was driven primarily by net income, excluding the non-cash impact of depreciation and amortization of $76 million. In addition, there was an increase in accounts payable and accrued liabilities. Partially offsetting these cash inflows was an increase in accounts and notes receivable, inventories, and deferred tax benefits.

Cash provided by operating activities in the first six months of fiscal 2016 was driven primarily by net income excluding the non-cash impact of certain long-lived asset write-offs of $23 million and depreciation and amortization of $82 million. In addition, there was a decrease in accounts receivable and inventories, largely driven by lower raw material costs and associated price reductions as well as overall lower volumes. Partially offsetting these cash inflows were lower accounts payable and accrued liabilities.

Cash Flows from Investing Activities

In the six months ended March 31, 2017, investing activities consumed $47 million of cash, which was primarily driven by capital expenditures of $45 million. These capital expenditures were primarily for sustaining and compliance capital projects at our operating facilities. In the six months ended March 31, 2016, investing activities consumed $41 million of cash, which was primarily driven by capital expenditures of $52 million, offset by $16 million of proceeds from the sale of land.

Capital expenditures for fiscal 2017 are expected to be approximately $150 million. Our planned capital spending program for fiscal 2017 is primarily for sustaining, compliance, and improvement capital projects at our operating facilities.

Cash Flows from Financing Activities

Financing activities consumed $35 million of cash in the first six months of fiscal 2017 compared to $61 million of cash consumed in the first six months of fiscal 2016. In the first six months of fiscal 2017, we used our cash for share repurchases and dividend distributions. In the first six months of fiscal 2016, we used our cash for share repurchases, dividend distributions and to repay debt.

Purchase Commitments

We have entered into long-term purchase agreements primarily for the purchase of raw materials. Under certain of these agreements the quantity of material being purchased is fixed, but the price paid changes as market prices change. For those commitments, the amounts included in the table below are based on market prices at March 31, 2017.

	Payments Due by Fiscal Year						
	Remainder of Fiscal 2017	2018	2019	2020	2021	Thereafter	Total
	(In millions)						
Reinforcement Materials	$ 109	$ 210	$ 206	$ 133	$ 100	$ 1,435	$ 2,193
Performance Chemicals	24	44	31	23	22	109	253
Purification Solutions	6	8	6	6	—	—	26
Total	$ 139	$ 262	$ 243	$ 162	$ 122	$ 1,544	$ 2,472

Off-balance sheet arrangements

We have no material transactions that meet the definition of an off-balance sheet arrangement.

Forward-Looking Information

This report on Form 10-Q contains “forward-looking statements” under the Federal securities laws. These forward-looking statements address expectations or projections about the future, including our expectations for future financial performance; demand for our products and our overall expectations for segment results in the third quarter of fiscal 2017; the amount and timing of the charge to earnings we will record and the cash outlays we will make in connection with the closing of certain manufacturing facilities and restructuring initiatives; our estimated future amortization expenses for our intangible assets; the sufficiency of our cash on hand, cash provided from operations and cash available under our credit facilities to fund our cash requirements; our plans to refinance our 2.55% fixed rate debt prior to its maturity; uses of available cash including anticipated capital spending and future cash outlays associated with long-term contractual obligations; our expected tax rate for fiscal 2017; and the possible outcome of legal and environmental proceedings. From time to time, we also provide forward-looking statements in other materials we release to the public and in oral statements made by authorized officers.

Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, potentially inaccurate assumptions, and other factors, some of which are beyond our control or difficult to predict. If known or unknown risks materialize, our actual results could differ materially from those expressed in the forward-looking statements.

In addition to factors described elsewhere in this report, the following are some of the factors that could cause our actual results to differ materially from those expressed in the forward-looking statements: changes in raw material costs; lower than expected demand for our products; changes in environmental requirements in the U.S.; the loss of one or more of our important customers; our inability to complete capacity expansions or other development projects; the availability of raw materials; our failure to develop new products or to keep pace with technological developments; fluctuations in currency exchange rates; patent rights of others; stock and credit market conditions; the timely commercialization of products under development (which may be disrupted or delayed by technical difficulties, market acceptance, competitors' new products, as well as difficulties in moving from the experimental stage to the production stage); demand for our customers' products; competitors' reactions to market conditions; delays in the successful integration of structural changes, including acquisitions or joint ventures; severe weather events that cause business interruptions, including plant and power outages or disruptions in supplier or customer operations; the accuracy of the assumptions we used in establishing reserves for environmental matters and for our share of liability for respirator claims; and the outcome of pending litigation. Other factors and risks are discussed in our 2016 10-K.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued a new standard, the "Revenue from Contracts with Customers", which amends the existing accounting standards for revenue recognition. The standard requires entities to recognize revenue when they transfer promised goods or services to customers in an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services. This standard is applicable for fiscal years beginning after December 15, 2017 and for interim periods within those years, and early adoption is permitted for the fiscal years beginning after December 15, 2016. We expect to adopt this standard on October 1, 2018. We are currently evaluating the impact the adoption of this standard may have on our consolidated financial statements.

In February 2016, the FASB issued a new standard for the accounting for leases. This new standard requires lessees to recognize assets and liabilities for most leases, but recognize expenses on their income statements in a manner that is similar to the current accounting treatment for leases. The standard is applicable for fiscal years beginning after December 15, 2018 and for interim periods within those years, and early adoption is permitted. We expect to adopt the standard on October 1, 2019. We are currently evaluating the impact of the adoption of this standard on our consolidated financial statements.

In March 2016, the FASB issued a new standard that amends the accounting standard for stock compensation by simplifying several aspects of the accounting for employee share-based payment transactions, including the related accounting for income taxes, forfeitures, and the withholding of shares to satisfy the employer's tax withholding requirements, as well as classification in the statements of cash flows. The new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within those years, and early adoption is permitted. We are evaluating this standard and the timing of its adoption. The adoption of this standard is not expected to materially impact our consolidated financial statements.

In August 2016, the FASB issued final amendments to clarify how entities should classify certain cash receipts and cash payments on the statement of cash flows such as distributions received from equity method investees, proceeds from settlement of insurance claims, and proceeds from the settlement of corporate-owned life insurance policies. The new standard is effective for fiscal years beginning after December 15, 2017, including interim periods within those years, and early adoption is permitted. The Company is evaluating this standard and the timing of its adoption. The adoption of this standard is not expected to materially impact the Company's consolidated financial statements.

In January 2017, the FASB issued a new standard that amends and simplifies the accounting standard for goodwill impairment. The new standard removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit. The new standard is effective for annual and any interim impairment tests for periods beginning after December 15, 2019, and early adoption is permitted for any impairment tests performed after January 1, 2017. We adopted this standard on January 1, 2017. The adoption of this standard did not have any impact on our consolidated financial statements.

In March 2017, the FASB issued a new standard that amends the requirements on the presentation of net periodic pension and postretirement benefit cost. Currently, net benefit costs are reported as employee costs within operating income. The new standard requires the service cost component to be presented with other employee compensation costs. The other components will be reported separately outside of operations. The new standard is effective for fiscal years beginning after December 15, 2017, including interim periods within those years, and early adoption is permitted as of the beginning of any annual period for which an entity's financial statements (interim or annual) have not been issued. The adoption of this standard is not expected to materially impact our consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Information about market risks for the period ended March 31, 2017 does not differ materially from that discussed under Item 7A of our 2016 10-K.

Item 4. Controls and Procedures

As of March 31, 2017, we carried out an evaluation, under the supervision and with the participation of our management, including our Principal Executive Officer and our Executive Vice President and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based upon that evaluation, our Principal Executive Officer and our Executive Vice President and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of that date.

There were no changes in our internal control over financial reporting that occurred during our fiscal quarter ended March 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II. Other Information

Item I. Legal Proceedings

Respirator Liabilities

We have exposure in connection with a safety respiratory products business that a subsidiary acquired from American Optical Corporation ("AO") in an April 1990 asset purchase transaction. The subsidiary manufactured respirators under the AO brand and disposed of that business in July 1995. In connection with its acquisition of the business, the subsidiary agreed, in certain circumstances, to assume a portion of AO's liabilities, including costs of legal fees together with amounts paid in settlements and judgments, allocable to AO respiratory products used prior to the 1990 purchase by the Cabot subsidiary. In exchange for the subsidiary's assumption of certain of AO's respirator liabilities, AO agreed to provide to the subsidiary the benefits of: (i) AO's insurance coverage for the period prior to the 1990 acquisition and (ii) a former owner's indemnity of AO holding it harmless from any liability allocable to AO respiratory products used prior to May 1982. As more fully described in our 2016 10-K, the respirator liabilities generally involve claims for personal injury, including asbestosis, silicosis and coal worker's pneumoconiosis, allegedly resulting from the use of respirators that are alleged to have been negligently designed and/or labeled. Neither Cabot, nor its past or present subsidiaries, at any time manufactured asbestos or asbestos-containing products. At no time did this respiratory product line represent a significant portion of the respirator market.

As of March 31, 2017 and September 30, 2016, there were approximately 37,000 and 38,000 claimants, respectively, in pending cases asserting claims against AO in connection with respiratory products. We have a reserve to cover our expected share of liability for existing and future respirator liability claims. At March 31, 2017 and September 30, 2016, the reserve was $19 million and $21 million, respectively. Cash payments related to this liability were approximately $2 million in the first six months of both fiscal 2017 and 2016.

Our current estimate of the cost of our share of existing and future respirator liability claims is based on facts and circumstances existing at this time. Developments that could affect our estimate include, but are not limited to, (i) significant changes in the number of future claims, (ii) changes in the rate of dismissals without payment of pending claims, (iii) significant changes in the average cost of resolving claims, (iv) significant changes in the legal costs of defending these claims, (v) changes in the nature of claims received, (vi) changes in the law and procedure applicable to these claims, (vii) the financial viability of other parties which contribute to the settlement of respirator claims, (viii) a change in the availability of insurance coverage maintained by certain of the other parties which contribute to the settlement of respirator claims, or the indemnity provided by a former owner of the business, (ix) changes in the allocation of costs among the various parties paying legal and settlement costs, and (x) a determination that the assumptions that were used to estimate our share of liability are no longer reasonable. We cannot determine the impact of these potential developments on our current estimate of our share of liability for existing and future claims. Accordingly, the actual amount of these liabilities for existing and future claims could be different than the reserved amount.

Other Matters

We are subject to various other lawsuits, claims and contingent liabilities arising in the ordinary course of our business and with respect to our divested businesses. We do not believe that any of these matters will have a material adverse effect on our financial position; however, litigation is inherently unpredictable. We could incur judgments, enter into settlements or revise our expectations regarding the outcome of certain matters, and such developments could have a material impact on our results of operations in the period in which the amounts are accrued or our cash flows in the period in which the amounts are paid.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The table below sets forth information regarding Cabot's purchases of its equity securities during the quarter ended March 31, 2017:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased(1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs(1)
January 1, 2017 - January 31, 2017	—	$ —	—	2,570,824
February 1, 2017 - February 28, 2017	105,000	$ 58.05	105,000	2,465,824
March 1, 2017 - March 31, 2017	150,000	$ 58.53	150,000	2,315,824
Total	255,000		255,000	

(1) On January 13, 2015, the Company announced that the Board of Directors authorized us to repurchase up to five million shares of our common stock on the open market or in privately negotiated transactions. This authorization does not have a set expiration date.

Item 6. Exhibits

The following Exhibits are filed herewith:

Exhibit No.	Description
Exhibit 3.1	Restated Certificate of Incorporation of Cabot Corporation effective January 9, 2009 (incorporated herein by reference to Exhibit 3.1 of Cabot's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2008, file reference 1-5667, filed with the SEC on February 9, 2009).
Exhibit 3.2	The By-laws of Cabot Corporation as amended January 8, 2016 (incorporated herein by reference to Exhibit 3.1 of Cabot Corporation's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2015, file reference 1-5667, filed with the SEC on February 5, 2016).
Exhibit 10.1*†	2017 Long-Term Incentive Plan.
Exhibit 10.2*†	Amendment, dated February 28, 2017, to the Assignment Letter between Nicholas Stewart Cross and Cabot Corporation, effective May 15, 2015, modifying the Employment Agreement between Nicholas Stewart Cross and Cabot Switzerland GmbH effective April 1, 2010.
Exhibit 31.1*	Certification of Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
Exhibit 31.2*	Certification of Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
Exhibit 32**	Certifications of the Principal Executive Officer and the Principal Financial Officer pursuant to 18 U.S.C. Section 1350.
Exhibit 101.INS*	XBRL Instance Document.
Exhibit 101.SCH*	XBRL Taxonomy Extension Schema Document.
Exhibit 101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
Exhibit 101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
Exhibit 101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
Exhibit 101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.

* Filed herewith.

** Furnished herewith.

† Management contract or compensatory plan or arrangement.

Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Statements of Operations for the three and six months ended March 31, 2017 and 2016; (ii) the Consolidated Statements of Comprehensive Income for the three and six months ended March 31, 2017 and 2016; (iii) the Consolidated Balance Sheets as of March 31, 2017 and September 30, 2016; (iv) the Consolidated Statements of Cash Flows for the six months ended March 31, 2017 and 2016; and (v) Notes to Consolidated Financial Statements, March 31, 2017.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Cabot Corporation

Date: May 8, 2017

By: /s/ Eduardo E. Cordeiro

Eduardo E. Cordeiro
Executive Vice President and Chief Financial Officer
(Duly Authorized Officer)

Date: May 8, 2017

By: /s/ James P. Kelly

James P. Kelly
Vice President and Controller
(Chief Accounting Officer)

Exhibit Index

Exhibit No.	Description
Exhibit 3.1	Restated Certificate of Incorporation of Cabot Corporation effective January 9, 2009 (incorporated herein by reference to Exhibit 3.1 of Cabot's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2008, file reference 1-5667, filed with the SEC on February 9, 2009).
Exhibit 3.2	The By-laws of Cabot Corporation as amended January 8, 2016 (incorporated herein by reference to Exhibit 3.1 of Cabot Corporation's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2015, file reference 1-5667, filed with the SEC on February 5, 2016).
Exhibit 10.1*†	2017 Long-Term Incentive Plan.
Exhibit 10.2*†	Amendment, dated February 28, 2017, to the Assignment Letter between Nicholas Stewart Cross and Cabot Corporation, effective May 15, 2015, modifying the Employment Agreement between Nicholas Stewart Cross and Cabot Switzerland GmbH effective April 1, 2010.
Exhibit 31.1*	Certification of Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
Exhibit 31.2*	Certification of Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
Exhibit 32**	Certifications of the Principal Executive Officer and the Principal Financial Officer pursuant to 18 U.S.C. Section 1350.
Exhibit 101.INS*	XBRL Instance Document.
Exhibit 101.SCH*	XBRL Taxonomy Extension Schema Document.
Exhibit 101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
Exhibit 101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
Exhibit 101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
Exhibit 101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.

* Filed herewith.

** Furnished herewith.

† Management contract or compensatory plan or arrangement.

Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Statements of Operations for the three and six months ended March 31, 2017 and 2016; (ii) the Consolidated Statements of Comprehensive Income for the three and six months ended March 31, 2017 and 2016; (iii) the Consolidated Balance Sheets as of March 31, 2017 and September 30, 2016; (iv) the Consolidated Statements of Cash Flows for the six months ended March 31, 2017 and 2016; and (v) Notes to Consolidated Financial Statements, March 31, 2017.

Exhibit 10.1

Cabot Corporation

2017 LONG-TERM INCENTIVE PLAN
(effective March 9, 2017)

1. DEFINED TERMS

Exhibit A, which is incorporated by reference, defines the terms used in the Plan and sets forth certain operational rules related to those terms.

2. PURPOSE

The Plan has been established to advance the interests of the Company and its stockholders by providing for the grant to Participants of Stock-based and other incentive Awards to (i) enhance the Company's ability to attract and retain employees, consultants, advisors and others who are in a position to make significant contributions to the success of the Company and its subsidiaries and (ii) encourage Participants to take into account the long-term interests of the Company and its stockholders through ownership of shares of Stock.

3. ADMINISTRATION

The Administrator has discretionary authority, subject only to the express provisions of the Plan, to interpret the Plan; determine eligibility for and grant Awards; determine, modify or waive the terms and conditions of any Award; determine the form of settlement of Awards (whether in cash, shares of Stock or other property); prescribe forms, rules and procedures under the Plan and for Awards; and otherwise do all things necessary to carry out the purposes of the Plan. Determinations of the Administrator made under the Plan will be conclusive and will bind all parties.

4. LIMITS ON AWARDS UNDER THE PLAN

(a) Number of Shares. Subject to the provisions of Section 7(b), the maximum number of shares of Stock that may be delivered in satisfaction of Awards under the Plan shall be 5,375,000, plus the number of shares of Stock that as of the effective date of the Plan are subject to awards under the Company's 2009 Long-Term Incentive Plan (the "2009 Plan") (which shall not exceed 2,769,538 shares) and that on or after the effective date of the Plan expire or are terminated, surrendered or canceled without the delivery of any shares of Stock, or are forfeited or reacquired by the Company, in accordance with the terms of such plan. Up to 5,375,000 shares of Stock set forth in the preceding sentence may be issued in satisfaction of ISOs, but nothing in this Section 4(a) will be construed as requiring that any, or any fixed number of, ISOs be awarded under the Plan. For purposes of this Section 4(a), the number of shares of Stock delivered in satisfaction of Equity Awards will be determined (i) by including shares of Stock withheld by the Company in payment of the exercise price or purchase price of the Award or an award granted under the 2009 Plan or in satisfaction of tax withholding requirements with respect to the Award or an award granted under the 2009 Plan, (ii) by including the full number of shares covered by a SAR any portion of which is settled in Stock (and not only the number of shares of Stock delivered in settlement of such Award), and (iii) by excluding any shares of Stock underlying Awards settled in cash or that otherwise expire or become unexercisable without having been exercised or that terminate or are forfeited to or repurchased by the Company due to failure to vest. For the avoidance of doubt, the number of shares of Stock available for delivery under the Plan will not be increased by any shares of Stock subject to Equity Awards that are withheld by the Company in payment of the exercise price or purchase price of the Award or in satisfaction of tax withholding requirements with respect to the Award, any shares of Stock covered by a SAR any portion of which is settled in stock, or any shares of Stock that have been delivered under the Plan and that are subsequently repurchased using proceeds directly attributable to Stock Option exercises. The limits set forth in this Section 4(a) shall be construed to comply with Section 422. To the extent consistent with the requirements of Section 422 and the regulations thereunder, and other

applicable legal requirements (including applicable stock exchange requirements), Stock issued under Substitute Awards will not reduce the number of shares available for Awards under the Plan. The number of shares of Stock that may be delivered under Substitute Awards will be in addition to the limitations set forth in this Section 4(a) on the number of shares available for issuance under the Plan, and such Substitute Awards will not be subject to the per-Participant Award limits described in Section 4(c) below.

(b) **Fungible Share Plan**. Each share of Stock subject to an Award consisting of Stock Options and/or SARs shall be counted against the limits set forth in Section 4(a) as one share. Each share of Stock subject to any other Award to be settled in Stock shall be counted against the limits set forth in Section 4(a) as 2.4 shares.

(c) **Type of Shares**. Stock delivered by the Company under the Plan may be authorized but unissued Stock or previously issued Stock acquired by the Company. No fractional shares of Stock will be delivered under the Plan.

(d) **Individual Limits**. The following additional limits will apply to Awards of the specified type granted or, in the case of Cash Awards, payable to any person in any fiscal year:

(1) Stock Options: 500,000 shares of Stock.

(2) SARS: 500,000 shares of Stock.

(3) Awards other than Stock Options, SARS or Cash Awards: 500,000 shares of Stock.

(4) Cash Awards: $10 million.

In applying the foregoing limits, (i) all Awards of the specified type granted to the same person in the same fiscal year will be aggregated and made subject to one limit; (ii) the limits applicable to Stock Options and SARs refer to the number of shares of Stock underlying such Awards; (iii) the share limit under clause (3) refers to the maximum number of shares of Stock (determined without regard to Section 4(b)) that may be delivered, or the value of which could be paid in cash or other property, under an Equity Award or Awards of the type specified in clause (3) assuming a maximum payout; (iv) Awards other than Cash Awards that are settled in cash will count against the applicable share limit under clause (1), (2) or (3) and not against the dollar limit under clause (4); and (v) the dollar limit under clause (4) refers to the maximum dollar amount payable under an Award or Awards of the type specified in clause (4) assuming a maximum payout. The foregoing provisions will be construed in a manner consistent with Section 162(m), including, without limitation, where applicable, the rules under Section 162(m) pertaining to permissible deferrals of exempt awards.

5. ELIGIBILITY AND PARTICIPATION

The Administrator will select Participants from among those key Employees, consultants and advisors to the Company or its Affiliates who, in the opinion of the Administrator, are in a position to make a significant contribution to the success of the Company and its Affiliates, or to other individuals who would otherwise meet the eligibility conditions set forth above in this Section 5 but for the fact that they are not yet an Employee, consultant or advisor if the Company reasonably anticipates that such individuals will begin providing direct services to the Company or its Affiliates within twelve (12) months after the date of grant of the Award to such individual (and such individuals do in fact begin providing such services within that time period); *provided*, that for so long as the Company's 2015 Directors' Stock Compensation Plan (or any successor plan) (the "**Directors' Plan**") is in effect, non-employee members of the Board shall not be eligible to participate in this Plan and instead shall participate in the Directors' Plan. Eligibility for ISOs is limited to employees of the Company or of a "parent corporation" or "subsidiary corporation" of the Company as those terms are defined in Section 424 of the Code.

6. RULES APPLICABLE TO AWARDS

(a) **All Awards**

(1) **Award Provisions**. The Administrator will determine the terms of all Awards, subject to the limitations provided herein. By accepting (or, under such rules as the Administrator may prescribe, being deemed to have accepted) an Award, the Participant agrees to the terms of the Award and the Plan. Notwithstanding any provision of this Plan to the contrary, Substitute Awards may contain terms and conditions that are inconsistent with the terms and conditions specified herein, as determined by the Administrator.

(2) **Term of Plan**. No Awards may be made after the tenth anniversary of the date the Plan is approved by the Company's stockholders, but previously granted Awards may continue beyond that date in accordance with their terms.

(3) **Transferability**. Neither ISOs nor, except as the Administrator otherwise expressly provides in accordance with the second sentence of this Section 6(a)(3), other Awards may be transferred other than by will or by the laws of descent and distribution, and during a Participant's lifetime ISOs (and, except as the Administrator otherwise expressly provides in accordance with the second sentence of this Section 6(a)(3), other Awards requiring exercise) may be exercised only by the Participant. The Administrator may permit Awards other than ISOs to be transferred by gift, subject to applicable securities and other laws and such limitations as the Administrator may impose.

(4) **Vesting; Termination of Employment**. The Administrator may determine the time or times at which an Award will vest or become exercisable, the terms on which an Award requiring exercise will remain exercisable and the effect of a termination of a Participant's Employment on Awards then held by the Participant. Without limiting the foregoing, the Administrator may at any time accelerate the vesting or exercisability of an Award, regardless of any adverse or potentially adverse tax consequences resulting from such acceleration. Unless the Administrator expressly provides otherwise, however, the following rules will apply: immediately upon the cessation of the Participant's Employment, each Award requiring exercise that is then held by the Participant or by the Participant's permitted transferees, if any, that is then not vested and/or exercisable will terminate, and all other Awards that are then held by the Participant or by the Participant's permitted transferees, if any, to the extent not already vested will be forfeited.

(5) **Taxes**. The Administrator will make such provision for the withholding of taxes as it deems necessary. The Administrator may, but need not, hold back shares of Stock from an Award (but not in excess of the maximum withholding amount consistent with the Award being subject to equity accounting treatment under applicable accounting rules (including FASB ASC Topic 718 (or any successor provision))) or permit a Participant to tender previously owned shares of Stock in satisfaction of tax withholding requirements, in each case, to the extent and in such amounts as determined by the Administrator.

(6) **Dividend Equivalents, Etc**. The Administrator may provide for the payment of amounts (on terms and subject to conditions established by the Administrator) in lieu of cash dividends or other cash distributions with respect to Stock subject to an Award whether or not the holder of such Award is otherwise entitled to share in the actual dividend or distribution in respect of such Award. Any entitlement to dividend equivalents or similar entitlements will be established and administered either consistent with an exemption from, or in compliance with, the requirements of Section 409A. Dividends or dividend equivalent amounts payable in respect of Awards that are subject to restrictions may be subject to such limits or restrictions as the Administrator may impose.

(7) **Rights Limited**. Nothing in the Plan will be construed as giving any person the right to continued employment or service with the Company or its Affiliates, or any rights as a stockholder except as to shares of Stock actually issued under the Plan. The loss of existing or potential profit in Awards will not constitute an element of damages in the event of termination of Employment for any reason, even if the termination is in violation of an obligation of the Company or any Affiliate to the Participant.

(8) **Section 162(m)**. This Section 6(a)(8) applies to any Performance Award intended to qualify as performance-based for the purposes of Section 162(m) other than a Stock Option or SAR. In the case of any Performance Award to which this Section 6(a)(8) applies, the Plan and such Award shall be construed and administered in a manner consistent with the exemption of such Award as performance-based compensation under Section 162(m). With respect to such Performance Awards, the Administrator will establish, in writing, one or more specific Performance Criteria no later than 90 days after the commencement of the period of service to which the performance relates (or at such earlier time as is required to qualify the Award as performance-based under Section 162(m)). Prior to grant, vesting or payment of the Performance Award, as the case may be, the Administrator shall take such steps as are sufficient to satisfy the certification requirement of the regulations under Section 162(m) as to whether and to what extent, if at all, the Performance Criterion or Criteria applicable to such Performance Award have been satisfied. The Administrator shall then determine the actual payment, if any, under each Performance Award. Notwithstanding the foregoing, the

Administrator may, subject to the other terms of the Plan, amend a previously granted Performance Award or take any other action that disqualifies such Award from the performance-based compensation exception under Section 162(m).

(9) Coordination with Other Plans. Awards under the Plan may be granted in tandem with, or in satisfaction of or substitution for, other Awards under the Plan or awards made under other compensatory plans or programs of the Company or its Affiliates. For example, but without limiting the generality of the foregoing, awards under other compensatory plans or programs of the Company or its Affiliates may be settled in Stock (including, without limitation, Unrestricted Stock) if the Administrator so determines, in which case the shares delivered shall be treated as awarded under the Plan (and shall reduce the number of shares thereafter available under the Plan in accordance with the rules set forth in Section 4). In any case where an award is made under another plan or program of the Company or its Affiliates and such award is intended to qualify for the performance-based compensation exception under Section 162(m), and such award is settled by the delivery of Stock or another Award under the Plan, the applicable Section 162(m) limitations under both the other plan or program and under the Plan shall be applied to the Plan as necessary (as determined by the Administrator) to preserve the availability of the Section 162(m) performance-based compensation exception with respect thereto.

(10) Additional Restrictions. The Administrator may cancel, rescind, withhold or otherwise limit or restrict any Award at any time if the Participant is not in compliance with all applicable provisions of the Award agreement and the Plan, or if the Participant breaches any agreement with the Company or its Affiliates with respect to non-competition, non-solicitation, confidentiality or other restrictive covenants. Without limiting the generality of the foregoing, the Administrator may recover Awards made under the Plan and payments or shares of Stock delivered under or gain in respect of any Award in accordance with any applicable Company clawback or recoupment policy, as such policy may be amended and in effect from time to time, or as otherwise required by applicable law or applicable stock exchange listing standards, including, without limitation, Section 10D of the Securities Exchange Act of 1934, as amended.

(b) Awards Requiring Exercise

(1) Time and Manner of Exercise. Unless the Administrator expressly provides otherwise, an Award requiring exercise by the holder will not be deemed to have been exercised until the Administrator receives a notice of exercise (in form acceptable to the Administrator), which may be an electronic notice, signed (including electronic signature in a form acceptable to the Administrator) by the appropriate person and accompanied by any payment required under the Award. Any attempt to exercise a Stock Option or SAR by any person other than the Participant will not be given effect unless the Administrator has received such evidence as it may require that the person exercising the Stock Option or SAR has the right to do so.

(2) Exercise Price. The exercise price (or the base value from which appreciation is to be measured) of each Award requiring exercise shall be 100% (in the case of an ISO granted to a ten-percent shareholder within the meaning of subsection (b)(6) of Section 422, 110%) of the Fair Market Value of the Stock subject to the Award, determined as of the date of grant, or such higher amount as the Administrator may determine in connection with the grant. Except in connection with a corporate transaction involving the Company (including, without limitation, any stock dividend, stock split, extraordinary cash dividend, recapitalization, reorganization, merger, consolidation, split-up, spin-off, combination, or exchange of shares) or as otherwise contemplated by Section 7 below, the Company may not, without obtaining stockholder approval, (A) amend the terms of outstanding Stock Options or SARs to reduce the exercise price or base value of such Stock Options or SARs, (B) cancel outstanding Stock Options or SARs in exchange for Stock Options or SARs with an exercise price or base value that is less than the exercise price or base value of the original Stock Options or SARs, or (C) cancel outstanding Stock Options or SARs that have a per-share exercise price or base value greater than the Fair Market Value of a share of Stock on the date of such cancellation in exchange for cash or other consideration.

(3) Payment of Exercise Price. Where the exercise of an Award is to be accompanied by payment, payment of the exercise price shall be by cash or check acceptable to the Administrator, or, if so permitted by the Administrator and if legally permissible, (i) through the delivery of shares of Stock that have a Fair Market Value equal to the exercise price, (ii) through a broker-assisted exercise program acceptable to the Administrator, (iii) by other means acceptable to the Administrator, or (iv) by any combination of the foregoing permissible forms of payment. The delivery of shares

in payment of the exercise price under clause (i) above may be accomplished either by actual delivery or by constructive delivery through attestation of ownership, subject to such rules as the Administrator may prescribe.

(4) **Maximum Term**. Awards requiring exercise will have a maximum term not to exceed ten (10) years from the date of grant (or five years from the date of grant in the case of an ISO granted to a 10-percent stockholder described in Section 6(b)(2) above).

7. EFFECT OF CERTAIN TRANSACTIONS

(a) **Mergers, Etc.** Except as otherwise provided in an Award or by the Administrator, the following provisions shall apply in the event of a Covered Transaction and Awards may be treated as set forth in subsections (1), (2) and/or (3) below, in the discretion of the Administrator:

(1) **Assumption or Substitution**. If the Covered Transaction is one in which there is an acquiring or surviving entity, the Administrator may provide (A) for the assumption or continuation of some or all outstanding Awards or any portion thereof or (B) for the grant of new awards in substitution therefor by the acquiror or survivor or an affiliate of the acquiror or survivor.

(2) **Cash-Out of Awards**. Subject to Section 7(a)(5), the Administrator may provide for payment (a "**cash-out**"), with respect to some or all Awards or any portion thereof, equal in the case of each affected Award or portion thereof to the excess, if any, of (A) the Fair Market Value of one share of Stock times the number of shares of Stock subject to the Award or such portion, over (B) the aggregate exercise or purchase price, if any, under the Award or such portion (in the case of an SAR, the aggregate base value above which appreciation is measured), in each case on such payment terms (which need not be the same as the terms of payment to holders of Stock) and other terms, and subject to such conditions, as the Administrator determines; it being understood that if the exercise or purchase price (or base value) of an Award is equal to or greater than the Fair Market Value of one share of Stock, the Award may be cancelled with no payment due hereunder in respect of such Award.

(3) **Acceleration of Certain Awards**. Subject to Section 7(a)(5), the Administrator may provide that some or all Awards requiring exercise will become fully exercisable and/or that the delivery of any shares of Stock remaining deliverable under some or all outstanding Awards of Stock Units (including Restricted Stock Units and Performance Awards to the extent consisting of Stock Units) will be accelerated in full and such shares will be delivered, prior to the Covered Transaction, in each case on a basis that gives the holder of the Award a reasonable opportunity, as determined by the Administrator, following exercise of such Award or the delivery of the shares underlying such Award, as the case may be, to participate as a stockholder in the Covered Transaction.

(4) **Termination of Awards Upon Consummation of Covered Transaction**. Each Award will terminate upon consummation of the Covered Transaction, other than the following: (i) Awards assumed pursuant to Section 7(a)(1) above; (ii) outstanding shares of Restricted Stock (which shall be treated in the same manner as other shares of Stock, subject to Section 7(a)(5) below) and (iii) Cash Awards that by their terms, or as a result of action taken by the Administrator, continue following such Covered Transaction.

(5) **Additional Limitations**. Any share of Stock and any cash or other property delivered pursuant to Section 7(a)(2) or Section 7(a) (3) above with respect to an Award may, in the discretion of the Administrator, contain such restrictions, if any, as the Administrator deems appropriate to reflect any performance or other vesting conditions to which the Award was subject and that did not lapse (and were not satisfied) in connection with the Covered Transaction. For purposes of the immediately preceding sentence, a cash-out under Section 7(a)(2) or Section 7(a)(3) will not, in and of itself, be treated as the lapsing (or satisfaction) of a performance or other vesting condition. In the case of Restricted Stock that does not vest in connection with the Covered Transaction, the Administrator may require that any amounts delivered, exchanged or otherwise paid in respect of such Stock in connection with the Covered Transaction be placed in escrow or otherwise made subject to such restrictions as the Administrator deems appropriate to carry out the intent of the Plan.

(b) **Changes in and Distributions With Respect to Stock**

(1) **Basic Adjustment Provisions**. In the event of a stock dividend, stock split or combination of shares (including a reverse stock split), recapitalization or other change in the Company's capital structure that constitutes an equity

restructuring within the meaning of FASB ASC Topic 718 (or any successor provision), the Administrator shall make appropriate adjustments to the maximum number of shares specified in Section 4(a) that may be delivered under the Plan and to the maximum share limits described in Section 4(d), and shall also make appropriate adjustments to the number and kind of shares of stock or securities subject to Awards then outstanding or subsequently granted, any exercise prices relating to Awards and any other provision of Awards affected by such change.

(2) Certain Other Adjustments. The Administrator may also make adjustments of the type described in Section 7(b)(1) above to take into account distributions to stockholders other than those provided for in Section 7(a) and 7(b)(1), or any other event, if the Administrator determines that adjustments are appropriate to avoid distortion in the operation of the Plan and to preserve the value of Awards made hereunder.

(3) Continuing Application of Plan Terms. References in the Plan to shares of Stock will be construed to include any stock or securities resulting from an adjustment pursuant to this Section 7.

8. LEGAL CONDITIONS ON DELIVERY OF STOCK

The Company will not be obligated to deliver any shares of Stock pursuant to the Plan or to remove any restriction from shares of Stock previously delivered under the Plan until: (i) the Company is satisfied that all legal matters in connection with the issuance and delivery of such shares have been addressed and resolved; (ii) if the outstanding Stock is at the time of delivery listed on any stock exchange or national market system, the shares to be delivered have been listed or authorized to be listed on such exchange or system upon official notice of issuance; and (iii) all conditions of the Award have been satisfied or waived. If the sale of Stock has not been registered under the Securities Act of 1933, as amended, the Company may require, as a condition to the exercise or settlement of the Award, such representations or agreements as counsel for the Company may consider appropriate to avoid violation of such Act. The Company may require that certificates evidencing Stock issued under the Plan bear an appropriate legend reflecting any restriction on transfer applicable to such Stock, and the Company may hold the certificates pending lapse of the applicable restrictions.

9. AMENDMENT AND TERMINATION

The Administrator may at any time or times amend the Plan or any outstanding Award for any purpose which may at the time be permitted by law, and may at any time terminate the Plan as to any future grants of Awards; *provided*, that except as otherwise expressly provided in the Plan the Administrator may not, without the Participant's consent, alter the terms of an Award so as to affect materially and adversely the Participant's rights under the Award, unless the Administrator expressly reserved the right to do so at the time of the Award. Any amendments to the Plan shall be conditioned upon stockholder approval only to the extent, if any, such approval is required by law (including the Code and applicable stock exchange requirements), as determined by the Administrator.

10. OTHER COMPENSATION ARRANGEMENTS

The existence of the Plan or the grant of any Award will not in any way affect the Company's right to award a person bonuses or other compensation in addition to Awards under the Plan.

11. MISCELLANEOUS

(a) Waiver of Jury Trial. By accepting an Award under the Plan, each Participant waives any right to a trial by jury in any action, proceeding or counterclaim concerning any rights under the Plan and any Award, or under any amendment, waiver, consent, instrument, document or other agreement delivered or which in the future may be delivered in connection therewith, and agrees that any such action, proceedings or counterclaim shall be tried before a court and not before a jury. By accepting an Award under the Plan, each Participant certifies that no officer, representative, or attorney of the Company has represented, expressly or otherwise, that the Company would not, in the event of any action, proceeding or counterclaim, seek to enforce the foregoing waivers.

(b) Limitation of Liability. Notwithstanding anything to the contrary in the Plan, neither the Company, nor any Affiliate, nor the Administrator, nor any person acting on behalf of the Company, any Affiliate, or the Administrator, shall be liable to any Participant or to the estate or beneficiary of any Participant or to any other holder of an Award by reason of any acceleration of income, or any additional tax, asserted by reason of the failure of an Award to satisfy the requirements of Section 422 or Section 409A or by reason of Section 4999 of the Code.

(c) Section 409A of the Code. The Plan as well as payments and benefits under the Plan are intended either to be exempt from or, to the extent subject thereto, to comply with, the requirements under Section 409A, and, accordingly, to the maximum extent permitted, the Plan shall be interpreted in accordance therewith. Notwithstanding anything contained herein to the contrary, to the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A, the Participant shall not be considered to have terminated employment or service with the Company or any Affiliate for purposes of the Plan until the Participant would be considered to have incurred a "separation from service" from the Company and its Affiliates within the meaning of Section 409A (after giving effect to the presumptions contained therein). Notwithstanding anything to the contrary in the Plan, to the extent that any Awards (or any other amounts payable under any plan, program or arrangement of the Company or any of its Affiliates) are payable upon a separation from service and such payment would result in the imposition of any individual tax and penalty interest charges imposed under Section 409A, the settlement and payment of such Awards (or other amounts) shall instead be made on the first business day after the date that is six (6) months following such separation from service (or death, if earlier). Each amount to be paid or benefit to be provided under the Plan shall be construed as a separate identified payment for purposes of Section 409A and the right to a series of installment payments under the Plan is to be treated as a right to a series of separate payments. The Company makes no representation that any or all of the payments or benefits described in the Plan will be exempt from or comply with Section 409A and makes no undertaking to preclude Section 409A from applying to any such payment. The Participant shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A or any corresponding state or local law.

12. ESTABLISHMENT OF SUB-PLANS

The Administrator may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable blue sky, securities or tax laws of various jurisdictions. The Administrator will establish such sub-plans by adopting supplements to the Plan setting forth (i) such limitations on the Administrator's discretion under the Plan as it deems necessary or desirable and (ii) such additional terms and conditions not otherwise inconsistent with the Plan as it deems necessary or desirable. All supplements so established will be deemed to be part of the Plan, but each supplement will apply only to Participants within the affected jurisdiction (as determined by the Administrator).

13. GOVERNING LAW

(a) Certain Requirements of Corporate Law. Equity Awards shall be granted and administered consistent with the requirements of applicable Delaware law relating to the issuance of stock and the consideration to be received therefor, and with the applicable requirements of the stock exchanges or other trading systems on which the Stock is listed or entered for trading, in each case as determined by the Administrator.

(b) Other Matters. Except as otherwise provided by the express terms of an Award agreement, under a sub-plan described in Section 12 or as provided in Section 13(a) above, the provisions of the Plan and of Awards under the Plan and all claims or disputes arising out of our based upon the Plan or any Award under the Plan or relating to the subject matter hereof or thereof will be governed by and construed in accordance with the domestic substantive laws of the Commonwealth of Massachusetts without giving effect to any choice or conflict of laws provision or rule that would cause the application of the domestic substantive laws of any other jurisdiction.

(c) Jurisdiction. By accepting an Award, each Participant will be deemed to (a) have submitted irrevocably and unconditionally to the jurisdiction of the federal and state courts located within the geographic boundaries of the United States District Court for the District of Massachusetts for the purpose of any suit, action or other proceeding arising out of or based upon the Plan or any Award; (b) agree not to commence any suit, action or other proceeding arising out of or based upon the Plan or an Award, except in the federal and state courts located within the geographic boundaries of the United States District Court for the District of Massachusetts; and (c) waive, and agree not to assert, by way of motion as a defense or otherwise, in any such suit, action or proceeding, any claim that he or she is not subject personally to the jurisdiction of the above-named courts, that his or her property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that the Plan or an Award or the subject matter thereof may not be enforced in or by such court.

EXHIBIT A

Definition of Terms

The following terms, when used in the Plan, will have the meanings and be subject to the provisions set forth below:

"Administrator": The Compensation Committee; *provided*, that the Compensation Committee may delegate (i) to one or more of its members or to one or more members of the Board such of its duties, powers and responsibilities as it may determine; (ii) to one or more officers of the Company the power to grant rights or options to the extent permitted by Section 157(c) of the Delaware General Corporation Law; (iii) to one or more officers of the Company the authority to allocate other Awards among such persons eligible to receive Awards under the Plan as such delegated officer or officers determine consistent with such delegation; *provided*, that with respect to any delegation described in this clause (iii) the Compensation Committee (or a properly delegated member or members of such Committee) shall have specified the class of persons eligible under the Plan to receive such Awards, the number of shares of Stock under such Awards and the consideration, if any, to be paid therefor; and (iv) to such Employees or other persons as it determines such ministerial tasks as it deems appropriate. In the event of any delegation described in the preceding sentence, the term "Administrator" shall include the person or persons so delegated to the extent of such delegation.

"Affiliate": Any corporation or other entity that stands in a relationship to the Company that would result in the Company and such corporation or other entity being treated as a single employer under Sections 414(b) or 414(c) of the Code, except that such Sections shall be applied by substituting "at least 50%" for "at least 80%" wherever applicable; *provided*, *however*, that in determining eligibility for the grant of a Stock Option or SAR by reason of service for an Affiliate, "Affiliate" shall mean any corporation or other entity in a chain of corporations all of which have a controlling interest in another corporation or other entity in the chain, beginning with the parent entity and ending with the entity for which the Award recipient was providing (or was expected to provide, in accordance with Section 5 of the Plan) services on the grant date of the Award (defining the term "controlling interest" based on "at least 50 percent" rather than "at least 80 percent"). The Company may at any time by amendment provide that different ownership thresholds apply (consistent with Section 409A, where applicable).

"Award": Any or a combination of the following:

(i) Stock Options.
(ii) SARs.
(iii) Restricted Stock.
(iv) Unrestricted Stock.
(v) Stock Units, including Restricted Stock Units.
(vi) Performance Awards.
(vii) Cash Awards.
(viii) Awards (other than Awards described in (i) through (vii) above) that are convertible into or otherwise based on Stock.

"Board": The Board of Directors of the Company.

"Cash Award": An Award denominated in cash.

"Change in Control": Upon the following event or events:

(A) an event in which any "person" as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934 (the "**1934 Act**") (other than (i) the Company, (ii) any subsidiary of the Company, (iii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company or of any subsidiary of the Company, or (iv) any company owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company), is or becomes the "beneficial owner" (as defined in Section 13(d) of the 1934 Act), together with all affiliates and Associates (as such terms are used in Rule 12b-2 of the General Rules and Regulations under the 1934 Act) of such person, directly or indirectly, of securities of the Company representing 25% or more of the combined voting power of the Company's then outstanding securities;

(B) the consummation of the merger or consolidation of the Company with any other company, other than (i) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any subsidiary of the Company, at least 65% of the combined voting power of the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or (ii) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) after which no "person" (with the method of determining "beneficial ownership" used in clause (A) of this definition) owns more than 25% of the combined voting power of the securities of the Company or the surviving entity of such merger or consolidation;

(C) if during any period of two consecutive years (not including any period prior to the execution of the Plan), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a person who has conducted or threatened a proxy contest, or has entered into an agreement with the Company to effect a transaction described in clause (A), (B) or (D) of this definition) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office, who either were directors at the beginning of the period or whose election or nomination for election was previously so approved cease for any reason to constitute at least a majority thereof; or

(D) the complete liquidation of the Company or the sale or disposition by the Company of all or substantially all of the Company's assets.

Notwithstanding the foregoing, in any case where the occurrence of a Change in Control could affect the vesting of or payment under an Award subject to the requirements of Section 409A, to the extent required to comply with Section 409A, the term "Change of Control" shall mean an occurrence that both (i) satisfies the requirements set forth above in this definition and (ii) is a "change in control event" as that term is defined in the regulations under Section 409A. If all or a portion of any Award constitutes deferred compensation under Section 409A and such Award (or portion thereof) is to be settled, distributed or paid on an accelerated basis due to a Change in Control that is not a "change in control event" under Section 409A, if such settlement, distribution or payment would result in additional tax under Section 409A, such Award (or portion thereof) shall vest at the time of the Change of Control (provided such accelerated vesting will not result in additional tax under Section 409A), but settlement, distribution or payment, as the case may be, shall only be accelerated to the maximum extent possible without resulting in a violation of Section 409A.

"Code": The U.S. Internal Revenue Code of 1986 as from time to time amended and in effect, or any successor statute as from time to time in effect.

"Compensation Committee": The Compensation Committee of the Board.

"Company": Cabot Corporation.

"Covered Transaction": Any of (i) a consolidation, merger, or similar transaction or series of related transactions, including a sale or other disposition of stock, in which the Company is not the surviving corporation or which results in the acquisition of all or substantially all of the Company's then outstanding common stock by a single person or entity or by a group of persons and/or entities acting in concert, (ii) a sale or transfer of all or substantially all the Company's assets, or (iii) a dissolution or liquidation of the Company. Where a Covered Transaction involves a tender offer that is reasonably expected to be followed by a merger described in clause (i) (as determined by the Administrator), the Covered Transaction shall be deemed to have occurred upon consummation of the tender offer.

Notwithstanding the foregoing, in any case where the occurrence of a Covered Transaction could affect the vesting of or payment under an Award subject to the requirements of Section 409A, to the extent required to comply with Section 409A, the term "Covered Transaction" shall mean an occurrence that both (i) satisfies the requirements set forth above in this definition and (ii) is a "change in control event" as that term is defined in the regulations under Section 409A. If all or a portion of any Award constitutes deferred compensation under Section 409A and such Award (or portion thereof) is to be settled, distributed or paid on an accelerated basis due to a Covered Transaction that is not a "change in control

event” under Section 409A, if such settlement, distribution or payment would result in additional tax under Section 409A, such Award (or portion thereof) shall vest at the time of the Covered Transaction (provided such accelerated vesting will not result in additional tax under Section 409A), but settlement, distribution or payment, as the case may be, shall only be accelerated to the maximum extent possible without resulting in a violation of Section 409A.

“Disability”: means the Participant meets one of the following requirements: (1) the Award recipient is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, (2) the Award recipient is, by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, receiving income replacement benefits under a disability plan of the Company, or (3) the Award recipient has been determined by the Social Security Administration to be totally disabled.

“Employee”: Any person who is employed by the Company or an Affiliate.

“Employment”: A Participant’s employment or other service relationship with the Company and its Affiliates. Employment will be deemed to continue, unless the Administrator expressly provides otherwise, so long as the Participant is employed by, or otherwise is providing services in a capacity described in Section 5 to, the Company or an Affiliate. If a Participant’s employment or other service relationship is with an Affiliate and that entity ceases to be an Affiliate, the Participant’s Employment will be deemed to have terminated when the entity ceases to be an Affiliate unless the Participant transfers Employment to the Company or its remaining Affiliates or the Administrator expressly determines otherwise.

“Equity Award”: An Award other than a Cash Award.

“**Fair Market Value”:** As of a particular date, (i) the closing price for a share of Stock as reported on the New York Stock Exchange (or on any other national securities exchange on which the Stock is then listed) for that date or, if no closing price is reported for that date, the closing price on the next preceding date for which a closing price was reported or (ii) in the event that the Stock is not traded on a national securities exchange or as otherwise determined by the Administrator, the fair market value of a share of Stock determined by the Administrator consistent with the rules of Section 422 and Section 409A to the extent applicable.

“ISO”: A Stock Option intended to be an “incentive stock option” within the meaning of Section 422. Each option granted pursuant to the Plan will be treated as providing by its terms that it is to be a non-incentive stock option unless, as of the date of grant, it is expressly designated as an ISO.

“Participant”: A person who is granted an Award under the Plan.

“Performance Award”: An Award subject to Performance Criteria. The Committee in its discretion may grant Performance Awards that are intended to qualify for the performance-based compensation exception under Section 162(m) and Performance Awards that are not intended so to qualify.

“Performance Criteria”: Specified criteria, other than the mere continuation of Employment or the mere passage of time, the satisfaction of which is a condition for the grant, exercisability, vesting or full enjoyment of an Award. For purposes of Awards that are intended to qualify for the performance-based compensation exception under Section 162(m), a Performance Criterion will mean an objectively determinable measure of performance relating to any or any combination of the following (measured either absolutely or by reference to an index or indices or a peer group or select group of companies and determined either on a consolidated basis or, as the context permits, on a divisional, subsidiary, line of business, project or geographical basis or in combinations thereof and subject to such adjustments, if any, as the Administrator specifies, consistent with the requirements of 162(m)): sales; revenues; assets; costs; earnings before or after deduction for all or any portion of interest, taxes, depreciation or amortization, whether or not on a continuing operations or an aggregate or per share basis; return on equity, investment, capital or assets; one or more operating ratios or metrics; borrowing levels, leverage ratios or credit rating; market share; capital expenditures; cash flow; productivity measures; one or more working capital measures; stock price; or stockholder return or shareholder value; sales of particular products or services; customer acquisition or retention; collection of outstanding accounts or debts; safety,

health or environmental affairs performance; compliance; acquisitions and divestitures (in whole or in part); joint ventures and strategic alliances; spin-offs, split-ups and the like; reorganizations; recapitalizations, restructurings, financings (issuance of debt or equity); or refinancings. A Performance Criterion and any targets with respect thereto need not be based on an increase, a positive or improved result or avoidance of loss. An Award may specify more than one Performance Goal and, with respect to any Performance Goal, may specify levels of achievement at which different levels of payment may be earned. To the extent consistent with the requirements of Section 162(m), the Administrator may establish, by the deadline that otherwise applies to the establishment of the terms of an Award, that one or more of the Performance Criteria applicable to such Award will be adjusted in an objectively determinable manner to reflect events (for example, the impact of charges for restructurings, discontinued operations, mergers, acquisitions, other unusual or infrequently occurring items, and the cumulative effects of tax or accounting changes, each as defined by U.S. generally accepted accounting principles) occurring during the applicable performance period that affect the applicable Performance Criterion or Criteria.

"Plan": The Cabot Corporation 2017 Long-Term Incentive Plan as from time to time amended and in effect.

"Restricted Stock": Stock subject to restrictions requiring that it be redelivered or offered for sale to the Company if specified conditions are not satisfied.

"Restricted Stock Unit": A Stock Unit that is, or as to which the delivery of Stock or cash in lieu of Stock is, subject to the satisfaction of specified performance or other vesting conditions.

"SAR": A right entitling the holder upon exercise to receive an amount (payable in cash or in shares of Stock of equivalent value) equal to the excess of the Fair Market Value of the shares of Stock subject to the right over the base value from which appreciation under the SAR is to be measured.

"Section 409A": Section 409A of the Code.

"Section 422": Section 422 of the Code.

"Section 162(m)": Section 162(m) of the Code.

"Stock": Common Stock of the Company, par value $1.00 per share.

"Stock Option": An option entitling the holder to acquire shares of Stock upon payment of the exercise price.

"Stock Unit": An unfunded and unsecured promise, denominated in shares of Stock, to deliver Stock or cash measured by the value of Stock in the future.

"Substitute Awards": Equity Awards issued under the Plan in substitution for equity awards of an acquired company that are converted, replaced or adjusted in connection with the acquisition.

"Unrestricted Stock": Stock not subject to any restrictions under the terms of the Award.

P: +1 978 663 3455
F: +1 978 663 5471
W: cabotcorp.com

Cabot Corporation
157 Concord Road
P.O. Box 7001
Billerica, MA 01821-7001
USA

Exhibit 10.2

February 28, 2017

Nicholas Stewart Cross
[Address]

Dear Nick,

We are pleased to confirm your transfer back to Schaffhausen from the United States effective January 1, 2017 in the position of EVP and President of Performance Chemicals and President, EMEA Region, reporting to me.

This agreement outlines the terms of your repatriation and the end of your assignment in the United States under the terms set forth in the assignment letter between you and Cabot effective May 15, 2015. To the extent the terms of this repatriation letter differ from the terms of the employment agreement between you and Cabot Switzerland GmbH dated April 1, 2010 (the "Employment Agreement"), the terms of this repatriation agreement will apply. All other provisions of the Employment Agreement shall remain in full force and effect.

Compensation and Taxes
Your salary will be 442,900 CHF annually (paid monthly). You will continue to participate in the Cabot Short Term Incentive Plan (STI) and Long Term Incentive plan (LTI). Your STI target will be 65% of your base pay. Your LTI range will be $600,000 to $900,000.

As your job will require travel to the United States, you will be expected to keep track of all days in the U.S. (including those for non-work days). Cabot will provide individual income tax protection (tax protection) related to your required U.S. travel and subsequent U.S. individual income tax filings. The purpose of providing you with tax protection is to protect you from paying more individual income tax as a result of your U.S. required travel than you would have paid if no U.S. travel occurred. Any tax protection payments provided will not result in any additional individual income tax burden to you.

Relocation
Your repatriation and related relocation will be managed under the repatriation section of the Cabot Corporation International Assignment Policy. Under the terms of this policy, you will receive an allowance equal to one-month's base salary less appropriate taxes and applicable social security deductions. This allowance is made to compensate for any unusual expenses incurred during relocation.

P: +1 978 663 3455
F: +1 978 663 5471
W: cabotcorp.com

Cabot Corporation
157 Concord Road
P.O. Box 7001
Billerica, MA 01821-7001
USA

Benefits
As of January 1, 2017 all payments and benefits associated with your international assignment will end (i.e. housing allowance, goods and service allowance, home support allowance, expatriate health insurance etc.).
You will however continue to be eligible for the Executive Financial Planning/ Tax Preparation and Executive Physical benefits.

If you should have any questions, please do not hesitate to contact Jessica Jones at [Phone Number]. Nick, we wish you the best and will work to ensure that your transition back to Switzerland goes smoothly.

This letter supersedes all communications, oral and written, between you and Cabot on this subject. Notwithstanding anything in this assignment letter to the contrary, Cabot shall have the right to amend, modify, change, discontinue, or terminate health and welfare benefits at any time and for any reason.

Sincerely,

/s/ Sean D. Keohane

Sean Keohane
CEO and President, Cabot Corporation

I understand and accept this repatriation and agree to the terms outlined in this letter. I am not relying on any representations in accepting this offer of repatriation.

/s/ Nicholas S. Cross
Nicholas Cross
EVP and President of Performance Chemicals and
President, EMEA Region

cc: Brian Berube, SVP and General Counsel, Interim CHRO
Virginia Leonard, HR Shared Services Director
Jessica Jones, Global Mobility Program Manager
Wes Perry, Sr. HR Manager, Billerica
Nuno Cunha, HR Director, EMEA
Simone Potyka, Sr. HR Manager, EMEA
Dora Unger, HR Manager
US Benefits Team

Exhibit 31.1

Principal Executive Officer Certification

I, Sean D. Keohane, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cabot Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2017

/s/ Sean D. Keohane

Sean D. Keohane
President and
Chief Executive Officer

Exhibit 31.2

Principal Financial Officer Certification

I, Eduardo E. Cordeiro, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cabot Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2017

/s/ EDUARDO E. CORDEIRO

Eduardo E. Cordeiro
Executive Vice President and
Chief Financial Officer

Exhibit 32

Certifications Pursuant to 18 U.S.C. Section 1350,
as Adopted Pursuant to Section 906 of the
Sarbanes-Oxley Act of 2002

In connection with the filing of the Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 (the “Report”) by Cabot Corporation (the “Company”), each of the undersigned hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

1. The Report fully complies with the requirements of section 13 (a) or 15 (d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2017

/s/ SEAN D. KEOHANE

Sean D. Keohane
President and Chief Executive Officer

Date: May 8, 2017

/s/ EDUARDO E. CORDEIRO

Eduardo E. Cordeiro
Executive Vice President and
Chief Financial Officer