

Rufus Decker, Accounting Branch Chief
Division of Corporation Finance
United States Securities and Exchange Commission
Washington, D.C. 20549

Re: Cabot Corporation
File No. 1-5667

Dear Mr. Decker:

This letter is being submitted in response to the Staff's comment letter of February 15, 2013 in respect of Cabot Corporation's Form 10-K for the fiscal year ended September 30, 2012. For ease of reference, we have restated the Staff's comments before our responses below.

Form 10-K for the Year Ended September 30, 2012

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings, including your interim filings.

Cabot Response:

The following supplemental responses include disclosures that we propose to include in our next filing that requires such disclosures which is our Form 10-Q for the quarter ended March 31, 2013.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 31

Critical Accounting Policies, page 31

Goodwill and Long-Lived Assets, page 33

2. Please expand your disclosures to clarify the level at which you determine your reporting units and describe how you determined them. Specifically address if the businesses underlying your Performance Material and Advanced Technologies business segments are reporting units. Refer to ASC 350-20-35-33 through 37 and ASC 350-20-55-1 through 55-9.

Cabot Response:

In future filings, we will expand our disclosure in the Goodwill and Long-Lived Assets section of our Critical Accounting Policies to include substantially the following disclosure (the addition to the existing disclosure is underlined):

"Goodwill is not amortized but is reviewed for impairment annually, 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 separate businesses included within the Performance Materials and Advanced Technologies business segments are considered separate reporting units. Goodwill balances relative to these segments are recorded in the Fumed Metal Oxides reporting unit within Performance Materials and the Security Materials reporting unit within Advanced Technologies."

3. Please expand your disclosures regarding impairment of long-lived assets to address how you group long-lived assets for impairment and your basis for that determination.

Cabot Response:

In future filings, we will expand our disclosure in the Goodwill and Long-Lived Assets section of our Critical Accounting Policies to substantially read as follows (the addition to the existing disclosure is underlined):

“To test for impairment of assets we generally use 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.”

Results of Operations, page 38

Provision for Income Taxes, page 41

4. You disclose on page 38 that your non-GAAP measure “operating tax rate” excludes discrete tax items, which are unusual or infrequent items, and the impact of certain items on both operating income and the tax provision. Please reconcile your effective tax rate to your operating tax rate and provide a statement disclosing the reasons why management believes that presentation of this non-GAAP financial measure provides useful information to investors. Refer to Item 10(e)(1)(i)(A) and (B) of Regulation S-K.

Cabot Response:

In our discussion of Cabot’s tax rate, we utilize a non-GAAP measure which we refer to as our “operating tax rate”. The operating tax rate measure excludes the tax impact of the certain items as defined on page 38 in the Definition of Terms and Non-GAAP Financial Measures section, and discrete tax items which include: i) items that management considers to be unusual or infrequent (such as the release of state tax valuation allowances in 2012 and the repatriation of high taxed earnings in response to changes in U.S. legislation in 2011), ii) items relating to uncertain tax positions (such as tax audit settlements, interest on tax reserves and the release of tax reserves from the expirations of statute of limitations), and iii) other discrete tax items (such as the retroactive renewal of the U.S. research and experimentation credit in 2011 and tax rate changes in foreign jurisdictions enacted in 2012).

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 understand what our tax rate on current operations would be without the impact of these items which we do not believe are reflective of the underlying business results. A reconciliation of the operating tax rate to the effective tax rate, its most comparable GAAP financial measure, is shown below.

Provision for Income Taxes and Reconciliation of Non-GAAP Measure

	Years Ended September 30		
	2012	2011	2010
Provision for income taxes	\$ 55	\$ 6	\$ 30
Effective tax rate	22%	3%	18%
Impact of discrete tax items:			
Unusual or infrequent items	3%	12%	1%
Items related to uncertain tax positions	—%	7%	8%
Other discrete tax items	1%	1%	—%
Impact of certain items	(1%)	(1%)	(2%)
Operating tax rate	<u>25%</u>	<u>22%</u>	<u>25%</u>

In future Form 10-Q and Form 10-K filings we will replace the Provision for Income Taxes table on page 41 with the above table which has been expanded to include the reconciliation of our effective tax rate to our operating rate. We will also revise the tax discussion in the “Definition of Terms and Non-GAAP Financial Measures” section on page 38 in future Form 10-K filings as follows:

“The discussion under the heading “Provision for Income Taxes and Reconciliation of Non-GAAP Measure” 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 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 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. 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 understand what our tax rate on current operations would be without the impact of these items which we do not believe are reflective of the underlying business results.”

In future Form 10-Q filings, the discussion above will be included with some minor revisions to account for two additional items excluded from the operating tax rate during the quarters when applicable: the impact of the timing of losses for which there is no tax benefit and the cumulative adjustment to our estimated annual effective tax rate recorded in the quarter.

Item 8. Financial Statements and Supplementary Data, page 54

Note M. Venezuela, page 83

5. We note that given the uncertainties around the convertibility of the Venezuelan bolivar to the U.S. dollar and the ability of entities to actually repatriate U.S. dollars from Venezuela, the Company has endeavored, whenever possible, to repatriate the Company’s cash from its Venezuelan subsidiaries using available mechanisms. Please tell us and clarify in future filings whether the Company has been able to repatriate such cash during the periods presented and, if so, quantify the amounts repatriated.

Cabot Response:

We repatriated \$6 million, \$2 million, and no cash from our Venezuelan subsidiaries in our fiscal years ended 2012, 2011 and 2010, respectively. In addition, we repatriated \$4 million of cash from the subsidiaries in the first quarter of fiscal 2013. In future filings, we will include the following discussion in our Venezuela footnote to disclose the cash repatriated from our Venezuelan subsidiaries:

“The Company repatriated \$xxx million, \$xxx million and \$xxx million from its Venezuela subsidiaries in the quarters/fiscal years ended December 31/March 31/June 30/September 30 20xx, 20xx and 20xx, respectively.”

6. We note that management has closely monitored its investment in the operating affiliate in Venezuela to ensure that the investment continues to be recoverable and that you still intend to convert substantially all bolivars held by its Venezuelan subsidiaries to U.S. dollars as soon as practical. In light of your recent ability or inability to repatriate cash from these subsidiaries, please tell us and expand your disclosures in future filings to clarify how you have determined that your investment is recoverable.

Cabot Response:

We utilize a discounted cash flow model to determine if investments are impaired when triggering events occur that suggest that our investment may be subject to an other-than-temporary decline in value. Based on the profitability of our operating affiliate in Venezuela and our anticipated ability to continue to repatriate its earnings, we have determined that our investment in the affiliate is recoverable and no events have occurred that indicate an other-than-temporary decline in the investment value.

In future filings, we will include substantially the following discussion in our Venezuela footnote to disclose how we have determined that our investment in the Venezuelan affiliate is recoverable:

“The Company continues to monitor developments in Venezuela and their potential impact on the Company’s investment. Cabot uses a discounted cash flow model to determine if investments are impaired when events may indicate that an other-than-temporary decline in investment value has occurred. Based on the profitability of the operating affiliate and our ability to repatriate cash from this affiliate in recent years and our anticipated ability to repatriate earnings in the future, the Company does not believe that the investment in the operating affiliate is impaired.”

Note T. Commitments and Contingencies, page 102

7. We note your disclosure on page 103 that the \$7 million reserve for environmental matters represents your current best estimate of costs likely to be incurred for remediation. If there is at least a reasonable possibility that a loss exceeding amounts already recognized may have been incurred for any of your environmental proceedings, please revise to either disclose an estimate of the additional loss or range of loss, or state that such an estimate cannot be made. If you have not disclosed an estimate because the amount is immaterial, please disclose that fact in lieu of providing quantified amounts. Please refer to ASC 450-20-50.

Cabot Response:

In future filings we will include substantially the following discussion in our Commitments and Contingencies footnote (revisions to the existing disclosure are marked):

“As of December 31, 2012 and September 30, 2012, Cabot had \$6 million and \$7 million, respectively, on a discounted basis (\$7 million on an undiscounted basis at both December 31, 2012 and September 30, 2012), reserved for environmental matters primarily related to divested businesses. These amounts represent Cabot’s best estimates of ~~its share of the probable~~ costs likely to be incurred by Cabot at those sites where costs are reasonably estimable based on its 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. ~~Cabot reviews the adequacy of this reserve as circumstances change at individual sites.~~ Cash payments related to these environmental matters were less than \$1 million in the first three months of both fiscal 2013 and 2012. Cabot reviews the adequacy of the reserve as circumstances change at individual sites. Almost all of our reserves relate to environmental issues 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 we 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 in excess of amounts already recorded would be immaterial to the Company’s consolidated financial statements.”

8. You identify four business segments: Reinforcement Materials, Performance Materials, Advanced Technologies, and Purification Solutions. Performance Material is comprised of two businesses: Specialty Carbons and Compounds and Fumed Metal Oxides. Advanced Technologies is comprised of five businesses: Inkjet Colorants, Aerogel, Security Materials, Elastomer Composites and Specialty Fluids. We have the following comments in this regard:

- Please tell us how you considered if these businesses are operating segments as defined by ASC 280-10-50;
- Please revise your accounting policy to clarify how you identified your operating segments. Specifically, please clarify the level at which your chief operating decision maker (CODM) receives financial information for purposes of making decisions about the allocation of resources and evaluating performance; and
- If you are aggregating any operating segments into reportable segments, please disclose this fact in accordance with ASC 280-10-50-21a and provide disclosures that confirm the aggregated operating segments all have similar economic characteristics in addition to similar products and services, processes, customers, distribution channels, and regulatory environments. Please refer to ASC 280-10-50-11 for guidance.

Cabot Response:

In response to the first part of the Staff's comment to "Please tell us how you considered if these businesses are operating segments as defined by ASC 280-10-50", we advise that we have identified our operating segments by applying the criteria of ASC 280-10-50-1. We have determined that all of our businesses are operating segments as each of these businesses engages in commercial activity, earns revenues and incurs expenses and discrete financial information is available at the business level. The CODM regularly reviews a package that includes discrete financial information for each of the operating segments. Primarily, the CODM uses earnings before income taxes to evaluate the operating results of each operating segment, allocate resources and make other decisions on business operations and strategy.

In response to the second part of the Staff's comment to "Please revise your accounting policy to clarify how you identified your operating segments. Specifically, please clarify the level at which your chief operating decision maker (CODM) receives financial information for purposes of making decisions about the allocation of resources and evaluating performance", in future filings, we will include the following accounting policy describing how we identify our operating segments, including a clarification as to the level at which our CODM receives financial information for purposes of making decisions about the allocation of resources and evaluating performance, as part of our Financial Information by Segment & Geographic Area footnote:

"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) 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 of each operating segment."

In response to the third part of the Staff's comment, "If you are aggregating any operating segments into reportable segments, please disclose this fact in accordance with ASC 280-10-50-21a and provide disclosures that confirm the aggregated operating segments all have similar economic characteristics in addition to similar products and services, processes, customers, distribution channels, and regulatory environments if segments are aggregated to reporting segment", we will disclose that we have aggregated the Specialty Carbon and Compounds and Fumed Metal Oxides operating segments, which are similar in terms of economic characteristics, nature of products, processes, customer class and product distribution methods, into the Performance Materials reportable

segment. We will also disclose that we have combined five operating segments (Specialty Fluids, Inkjet, Aerogel, Elastomer Composites and Security Materials) into an “all other” segment labeled “Advanced Technologies”. We will include the following disclosure in our Financial Information by Segment & Geographic Area footnote in future filings:

“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 Materials, Advanced Technologies and Purification Solutions. Reinforcement Materials represents our Rubber Blacks Business. Purification Solutions represents our Activated Carbon Business. Performance Materials is an aggregation of the Specialty Carbon and Compounds and Fumed Metal Oxides Businesses which are similar in terms of economic characteristics, nature of products, processes, customer class and product distribution methods.

The Company has combined and disclosed five of its operating segments (Specialty Fluids, Inkjet, Aerogel, Elastomer Composites and Security Materials) into an other segment labeled “Advanced Technologies”. These operating segments do not meet the thresholds to be reported as separate reportable segments.”

As requested, in connection with responding to the Staff’s comments, the Company hereby acknowledges that the Company is responsible for the adequacy and accuracy of the disclosure in its filings, Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing, and the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

We would be happy to discuss any of our responses with you at your convenience. Please do not hesitate to call Jim Kelly, Cabot’s Controller, at 617-342-6020 with any questions concerning our financial statements, and Jane Bell, Cabot’s Corporate Secretary and Chief Counsel-Securities and Governance, at 617-342-6035 with any questions concerning legal matters.

Very truly yours,

/s/ Eduardo E. Cordeiro

Eduardo E. Cordeiro

Cc: Patrick M. Prevost
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