



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-4631

June 24, 2010

Mr. Joseph D. Hill  
Chief Financial Officer  
Metabolix, Inc.  
21 Erie Street  
Cambridge, MA 02139

**Re: Metabolix, Inc.**  
**Form 10-K for the year ended December 31, 2009**  
**Filed March 11, 2010**  
**Definitive Proxy Statement on Schedule 14A**  
**Filed April 23, 2010**  
**File No. 1-33133**

Dear Mr. Hill:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2009

Consolidated Financial Statements

Note 2 – Summary of Significant Accounting Policies, page F-7

1. Please disclose the types of expenses that you include in the selling, general and administrative expenses line item. Please also disclose the income statement line item where you record inbound freight charges, purchasing and receiving costs, inspection costs, warehousing costs, internal transfer costs, and the other costs of your distribution network.

2. Please show us how you will revise your future filings to disclose your accounting policy for shipping and handling costs. Refer to FASB ASC 605-45-50-2.
3. Please show us how you will revise your future filings to disclose your advertising accounting policy, including the total amount charged to advertising expense for each period presented. Refer to FASB ASC 720-35-50-1.

Note 3 – Significant Collaborations, page F-13

4. Please help us better understand how you have accounted for the ADM Collaboration. In particular:
  - tell us how you have accounted for your 50% ownership in Telles
  - tell us why you have been unable to separate future compounding services, sales and marketing services and certain research and development activities as separate units of accounting
  - explain in more detail the rationale for deferring research and development revenues, when such activities have already been undertaken and you have received payment for these activities. In this regard, we note that you have recorded substantial expenses for the years presented, but have deferred substantial revenues.

In order for us to better understand your response, please provide us with a comprehensive table showing how you have accounted for and presented in the income statement, since inception, any and all expenses, revenues, receipts and costs incurred on your behalf, or that of Telles, regarding the ADM collaboration. You may need to provide references to the relevant agreements and GAAP, in order for us to fully understand the accounting.

DEFINITIVE PROXY STATEMENT ON SCHEDULE 14A

Potential Payments upon Termination or Change of Control, page 34

5. We note the references to footnotes (4) and (5) in the table, but we are unable to locate the text of footnotes (4) and (5). Please revise in future filings.

Executive Employment Agreements, page 35

6. In future filings, please state the base salary amount and the performance bonus amount of Dr. Oliver P. Peoples and Messrs. Johan van Walsem and Robert E. Engle under their employment agreements.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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.

You may contact Edward M. Kelly, Senior Counsel, at (202) 551-3728 or, in his absence, Pamela A. Long, Assistant Director, at (202) 551-3765 if you have any questions regarding legal matters. Please contact Lisa Haynes, Staff Accountant, at (202) 551-3424 or, in her absence, the undersigned, at (202) 551-3689 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

John Hartz  
Senior Assistant Chief Accountant