Via Facsimile and U.S. Mail Mail Stop 6010

January 27, 2006

Mr. Clinton H. Severson Abaxis, Inc. President and Chief Executive Officer 3240 Whipple Road Union City, CA 94587

Re: Abaxis, Inc.

Form 10-K for Fiscal Year Ended March 31, 2005

Filed June 14, 2005 File No. 000-19720

Dear Mr. Severson:

We have limited our review of your filing to those issues we have addressed in our comments. In our comments, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended March 31, 2005

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 16</u>

Critical Accounting Policies, page 24

1. We note that the company reiterated the policy note included in the financial statements. Please note that Critical Accounting Polices should supplement, not duplicate, the accounting policies disclosed in the notes to the financial statements. Please provide us in a disclosure-type format the company's analysis of the judgments and uncertainties involved in applying these accounting principles at a given time, the potential impact on your financial statements of the variability that is reasonably likely to result from their application over time.

Mr. Clinton H. Severson Abaxis, Inc. January 27, 2006 Page 2

Such disclosures explaining the likelihood that any materially different amounts would be reported under different conditions, using different assumptions is consistent with the objective of Management's Discussion and Analysis. See Release 33-8350.

- 2. Your disclosures related to estimates of items that reduce gross revenue such as sales allowances, customer rebates and other discounts could be improved. Please provide us the following in disclosure-type format:
 - The nature and amount of each accrual at the balance sheet date.
 - The factors that you consider in estimating each accrual such as levels of inventory in the distribution channel, estimated remaining shelf life, price changes from competitors and others as applicable.
 - The major terms of material arrangements/agreements
 - A roll forward of the liability for each estimate for each period presented showing the following:
 - o Beginning balance,
 - o Current provision related to sales made in current period,
 - o Current provision related to sales made in prior periods,
 - Actual returns or credits in current period related to sales made in current period,
 - Actual returns or credits in current period related to sales made in prior periods, and
 - o Ending balance.
 - A discussion of results of operations for the period to period revenue comparisons including the amount of and reason for fluctuations for each type of reduction of gross revenue (i.e. chargebacks, customer rebates and other discounts and allowances) including the effect that changes in your estimates of these items had on your revenues and operations.

Financial Statements, page 37

Notes to Consolidated Financial Statements, page 43

Organization and Summary of Significant Accounting Policies, page 43

Revenue Recognition, page 44

3. It appears that you treat the sales under cross-distribution agreements in a manner that is similar to a consignment sale. Please explain to us the specific factors that led you to determine that these sales should be treated in this manner.

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Item 9A. Controls and Procedures, page 55

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures, page 55

4. Please explain to us why you were able to conclude that your controls "are effective" when "Management's Report on Internal Control Over Financial Reporting" concluded that you "did not maintain effective controls."

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

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

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Mr. Clinton H. Severson Abaxis, Inc. January 27, 2006 Page 4

You may contact Ibolya Ignat, at (202) 551-3656, or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant