Via Facsimile and U.S. Mail Mail Stop 6010

February 24, 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:

This letter supplements our January 27, 2006 letter to you. In our comment, 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

General

 We note that Exhibit 10.34 to your 10-K/A for the fiscal year ended March 31, 2002, is a distribution agreement between you and Melet Schloesing Laboratories granting Melet the right to distribute your products in a number of countries, including Iran. Please advise us whether this distribution agreement is still in force and, if so: whether the device or any or its components have any nonmedical military application; and whether you have obtained a license from the U.S. Treasury Department's Office of Foreign Assets Control and/or a license Mr. Clinton H. Severson Abaxis, Inc. February 24, 2006 Page 2

from the U.S. Department of Commerce's Bureau of Industry and Security to sell products into Iran.

In addition, in light of the fact that Iran has been identified by the U.S. State Department as a state sponsor of terrorism, and is subject to economic sanctions administered by OFAC, please describe for us the extent and nature of your past, current, and anticipated contacts with Iran, if any; advise us of the materiality to you of any contacts with Iran; and advise us of your view as to whether those contacts, if any, constitute a material investment risk for your security holders. In preparing your response please consider that evaluations of materiality should not be based solely on quantitative factors, but should include consideration of all factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company's reputation and share value. In this regard, we note that Arizona and Louisiana have adopted legislation requiring their state retirement systems to prepare reports regarding state pension fund assets invested in, and/or permitting divestment of state pension fund assets from, companies that do business with countries identified as state sponsors of terrorism. Your materiality analysis should address the potential impact of the investor sentiment evidenced by these actions.

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Please respond to this comment within 10 business days or tell us when you will provide us with a response. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

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