



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

Mail Stop 3561

August 31, 2009

Youval Saly  
Chief Executive Officer  
Pimi Agro CleanTech, Inc.  
1209 Orange Street  
Wilmington, Delaware 19801

**Re: Pimi Agro CleanTech, Inc.  
Amendment No. 3 to  
Registration Statement on Form S-1  
Filed August 25, 2009  
File No. 333-158986**

Dear Mr. Saly:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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.

Liquidity and Capital Resources, page 13

1. We note that your cash balance as of August 31, 2009 was \$31,000 and that you have a monthly burn rate of \$80,000. Given that your current cash is less than what you need for a month, please discuss in greater detail your need for

additional capital and the expected source(s) of funding. Discuss the risks that would result if you are unable to obtain the additional capital. Lastly, consider revising the risk factor on page 6 to discuss this current need for cash.

Business, page 15

2. We note your response to comment three of our letter dated August 14, 2009. Please reconcile your statement on page 17 regarding StoreGuard “preventing” a majority of crop skin diseases with your disclosure that Omex test results revealed that inoculated cabbage still had some level of infection. Additionally, please reconcile your statement on page 17 that StoreGuard was found to be effective in extending the shelf live of “fruits” with the apparent fact that the Andrew Richardson and Allium & Brassica Agronomy Ltd. tests were performed only on cabbage.
3. We note your response to comment seven of our letter dated August 14, 2009. Please clarify that there is no guarantee that you will be able to enter into definitive agreements with these companies and that there is no guarantee that your product will be able to enter commercial storage with these companies, even if you achieve successful results in the pilot storage rooms.
4. We note your response to comment 10 of our letter dated August 14, 2009. Please disclose to clarify the meaning of the phrase that McDonalds referred you to their supplier Lamb Weston/Conagra with a recommendation to “try our product,” and that Target referred you to their supplier of fresh potatoes, Potandon Produce LLC, with a recommendation to “try our products.”
5. Please revise your disclosure in the “Joint Venture with Vegiesafe LLC- USA” discussion on page 26 to reflect, if true, that you do not have agreements with ConAgra, McCain, Potandon, or Frit-O-Lay to design or inspect trials.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. In your responses, please include the page numbers of the amendment where we can find the changes. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Act of 1933 and that they have provided all information investors require

Youval Saly  
Pimi Agro CleanTech, Inc.  
August 31, 2009  
Page 3

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.

Any questions regarding the accounting comments may be directed to Yolanda Guobadia at (202) 551-3562. Questions on other disclosure issues may be directed to John Dana Brown at (202) 551-3859 or Pamela Howell at (202) 551-3357.

Sincerely,

John Reynolds  
Assistant Director

cc: Marc J. Ross, Esq.  
Fax (212) 930-9725