



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

Mail Stop 3561

July 14, 2009

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

**Re: Pimi Agro CleanTech, Inc.
Amendment No. 1 to
Registration Statement on Form S-1
Filed May 5, 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.

Prospectus Summary, page 4

1. We note your response to comment three from our letter dated June 4, 2009, and we reissue the comment. Please provide the address and telephone number of the principal executive offices either on the cover page of the prospectus or in the

summary section of the prospectus.

Management's Discussion and Analysis, page 11

2. We note your response to comment nine of our letter dated June 4, 2009. Please discuss how the company earns or expects to earn revenues and income. For example, how will contracts with customers generally be structured? Furthermore, please provide to the extent known, insight into challenges, risks and opportunities of which management is aware and discuss any actions being taken to address the same. For example consider discussing potential pricing challenges from existing vendors, as discussed in the fifth risk factor, and also discuss the existence of other companies that may compete with the company's products, discussed on page 33.
3. Please reconcile the disclosure in the first paragraph of the overview, which states that you have started commercialization of StoreGuard, with the disclosure in the third paragraph of the overview, which indicates that you have not started commercialization of StoreGuard.
4. Please provide the basis for management's beliefs stated in this section. For example, we note the statements that "there is no other solution available at the moment, which suppresses sprouting and at the same time prevents quality losses, as SpuDefender does" and that "there is no other product which prevents yield losses caused by diseases in potatoes and at the same time prevents sprouting while maintaining the necessary qualities for food products" or remove such statements.
5. Please update the cash on hand as of the most recent practicable date.

Business, page 15

4. We note your response to comment 18 of our letter dated June 4, 2009. Please disclose how price affects competition in the market for SpuDefender. Disclose how SpuDefender is or will be priced relative to competitors. Lastly, discuss your competitive position in the industry as required by Item 101(h)(iv) of Regulation S-K. For example, it appears that many of your competitors are established companies with greater financial resources than your company.
5. We note your response to comment 21 of our letter dated June 4, 2009. Please provide a basis for many of the statements made in this section or remove. Many of these statements appear to be promotional in nature. For example and without limitation, we note your statement on page 16 that "management believes that there is no other solution available at the moment which suppresses sprouting and at the same time prevents quality losses as our Products do" and your statement

- on page 28 that by use of your products and technologies “the shelf life of stored crops can be gained.” In addition, we note that certain pilots discussed on page 26 mentioned a problem with sprouting. Provide clear disclosure throughout as to any current limitations or problems that have to be resolved regarding your products.
6. We note the reliance upon a number of reports and trials in assessing your products. Where the bases for such assertions are studies, reports, experiments or tests, please,
 - identify with specificity the source of such data or the identity of the party performing the experiments,
 - disclose any relationship that you may have to the publisher of the document, the source of the information, and/or the party performing the experiment, and
 - describe the nature and date of the reports or trials.
 7. You state on page 21 that “SpuDefender will be examined by the EPA for all its ingredients, a process which will take up to nine months.” Please discuss EPA registration and regulation for each of your other products.
 8. Please clarify whether each of your products must separately undergo the regulatory processes in Europe, as discussed on page 21.
 9. We note the statement on page 21 that Frit-o-lays and McCain have stated that “successful storage results in these pilot rooms will enable us to step into full commercial usage during the 2010 potato season.” Clarify whether you have an agreement with either party.
 10. Please disclose on page 22 the term of the agreement with Omex Agriculture Ltd.
 11. We note your response to comment 25 of our letter dated June 4, 2009. You discuss your business plan “[i]f the authorization for SpuDefender is not received in a timely manner” on page 21. Please discuss your business plan if the approvals are received in a timely manner.
 12. We note your response to comment 26 of our letter dated June 4, 2009. Please include your response regarding the lack of written agreements in the prospectus. We note the references to “verbal agreements” with some of your customers and partners. Please disclose the terms of the verbal agreements and whether they are binding upon the parties.
 13. We note your response to comment 32 of our letter dated June 4, 2009. Please disclose whether your product has shown “significant positive results to replace CIPC.” If so, please include a brief summary of any data that is the basis of that

- conclusion. Include any known limitations on the efficacy of your product, such as the pilots that have resulted in sprouting problems. In addition, as previously requested, provide the specific basis for management's opinion that "the recognition and acceptance of SpuDefender by the industry, and its regulatory approval, will be a significant factor in regulators' determination to ban CIPC in the coming years" or remove. Given the developmental stage of the company and the lack of regulatory approval, this statement and others throughout this section appear promotional in nature and should be removed.
14. We note your response to comment 34 of our letter dated June 4, 2009, and we reissue our comment. We note references on pages 26 and 34 to US companies, such as Target and McDonalds that have been contacted by your joint venture. Please remove references to such companies unless you have entered into agreements with these companies.

Executive Compensation, page 37

15. We note your response to comment 38 of our letter dated June 4, 2009. Please clarify your disclosure to indicate that the "loan" to Mr. Ben Yehuda was included in the summary compensation table as salary. Also, clarify whether the consideration that accrued for Mr. Lifshitz was reflected in the summary compensation table. Your response simply referred to the accounting treatment.
16. We reissue comment 36 of our letter dated June 4, 2009. Please disclose the amount and percent of time each officer devotes to the business of the company.
17. Please include the vesting dates of the options in a footnote, as required by Instruction 2 to Item 402(p)(2) of Regulation S-K.
18. The directors table reflects no compensation received by Mr. Tregar in 2008; however, the narrative before and after the table indicate the receipt of options. Please explain why the value of the options were not included in the table. Provide the grant date of the options.
19. Disclose the assumptions made in the valuation of the options in the director compensation table, as required by Item 402(n)(2)(v) and (vi) of Regulation S-K, as referenced in the Instruction to Item 402(r). Also, provide the disclosure required by the Instruction to Item 402(r)(2)(iii) and (iv).

Consolidated Statements of Operations, page F-4

20. We note that you have recorded revenues in each period presented. We further note on page 12 that your products and technology are in the development stage. Please tell us what the revenues represent and why you have classified these

amounts as revenues rather than a reduction of expenses in light of the fact that your products and technology are in the development stage. Clarify whether the revenues relate to product sales. If they do not relate to product sales, describe the nature of the revenues in the footnotes to your financial statements and revise the caption to more precisely describe its nature.

21. We reissue comment 47 of our letter dated June 4, 2009. Please provide the disclosure regarding sales of unregistered securities for the past three years as required by Item 701 of Regulation S-K. We note the Statement of Changes in Stockholders' Equity reflect a number of transactions not included in this section.

Exhibits

22. Please file exhibit 10.13 in its entirety. Currently you have omitted all the exhibits to the agreement. Also, please file Exhibit E to Exhibit 10.21, as requested in comment 56 of our letter dated June 4, 2009.

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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 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.

Youval Saly
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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