



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

Mail Stop 7010

December 5, 2006

Mr. Loren J. Kalmen
Sulphco, Inc.
850 Spice Islands Drive
Sparks, NV 89431

Re: Sulphco, Inc.
Form 10-KSB for the year ended December 31, 2005
Form 10-QSB for the period ended September 30, 2006
File No. 1-32636

Dear Mr. Kalmen:

We have limited our review of your filing to those issues we have addressed in our 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 information so we may better understand your disclosure. 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-Q FOR THE PERIOD ENDED SEPTEMBER 30, 2006

Note 1 – Restatement of Construction to Research and Development, page 4

1. We note your disclosures concerning this restatement and have the following comments:
 - We read that your management and Audit Committee believe that the construction and purchase of equipment being installed in Fujairiah, UAE, and the building to house it, is beyond the development stage and thus not subject to expense under SFAS 2, and therefore you capitalized these costs

during the first and second quarters of 2006. Please explain to us in reasonable detail why you believe these costs should be capitalized.

- Please provide us a detailed description of the costs that you previously capitalized as property, plant, and equipment. We note your statement on page 17 that these costs related to the construction of Sonocracking equipment, and it appears that you intend to build a total of seven units for your JV. Tell us how many of the seven units have been built and their stage of completion. Help us to understand why these machines appear to be significantly more expensive than your previous Sonocracking machines, such as the machine you sold to OIL-SC for \$1 million in 2005. If possible, provide us with some insight into how much of the costs incurred to date represent research into new technology, raw materials, fabrication of the units, shipping to the UAE, or other general categories to help us to understand how this money was spent. Also, explain to us if the equipment has any alternative uses.
- We read that your auditors advised you, as part of their review of your third quarter financial statements, that they did not agree that these costs should be capitalized, and your auditors required you to expense them as research and development. It is unclear from your disclosures that management agrees with the auditors' assessment and the resulting restatement. We remind you that your financial statements are the responsibility of management. Please tell us if management agrees with the restatement. If so, please explain to us why management now believes that these costs should be expensed as research and development.
- We note that the March 31 and June 30, 2006 financial statements you filed in your Forms 10-Q were required to be reviewed by your auditors. Please tell if these interim financial statements were reviewed. If they were, please explain to why the auditors did not determine that these costs should be expensed until their review of your third quarter financial statements. We note that you began incurring and capitalizing these costs during the first quarter of 2006, and that these capitalized costs were material to your March 31 and June 30, 2006 financial statements.

Item 4 – Controls and Procedures, page 19

2. We note your conclusion concerning disclosure controls and procedures. Based on your current disclosure, it is unclear how your Chief Executive Officer and Chief Financial Officer considered the material error discovered in your interim financial statements and what impact the resulting restatement had on your assessment of effectiveness of disclosure controls and procedures as of September 30, 2006. Please explain to us the impact of this restatement on your assessment.

In addition, please be advised that your current conclusion is not appropriate since it essentially states that your disclosure controls and procedures are effective except to the extent that they are not effective. Your conclusion is required to state in clear and unqualified language that your disclosure controls and procedures are effective or ineffective.

3. We note your disclosure that there has been no change in your internal controls over financial reporting "except as follows." Please clearly state, if true, that there were changes in your internal controls over financial reporting that occurred during the quarter that have materially affected, or are reasonably likely to materially affect, your internal controls over financial reporting.

* * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your 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 Exchange Act of 1934 and that they have provided all information investors require for an informed 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 writing, a statement from the company acknowledging that:

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

Mr. Loren J. Kalmen
Sulphco, Inc.
December 5, 2006
Page 4

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.

If you have any questions regarding these comments, please direct them to Jennifer Thompson, Staff Accountant, at (202) 551-3737 or, in her absence, to Anne McConnell, Senior Staff Accountant, at (202) 551-3709 or the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief