



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 7010

February 2, 2007

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 reviewed your response letter dated January 4, 2007 and have the following additional 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.

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 responses to our prior comments and have the following additional comments:
 - Please provide us with a detailed summary and timeline of the significant events and milestones that occurred during the construction of the pilot facility in South Korea. Please help us to understand the scope and results of any testing related to that facility. If successful testing has not yet occurred, please help us to fully understand why you commenced construction of the Fujairah facility in the absence of successful pilot facility testing.
 - Please provide us with a detailed summary and timeline of the significant events and milestones that have occurred during the construction of the Fujairah facility and a detailed summary and timeline of the significant events and milestones that need to

occur for the Fujairah facility to commence commercial testing. Please help us to understand the anticipated scope and timeframe of the commercial testing and the timeframe for the related results. Please also help us to understand the remaining material risks and uncertainties related to the completion and commercialization of the Fujairah facility.

- Please help us to understand the specific facts and circumstances that have resulted in continuing delays related to the start-up of the Fujairah facility. Please tell us the initial anticipated start-up date and the current anticipated start-up date. Please help us to understand each event that has occurred and resulted in delays.
- It remains unclear to us why you and your auditors initially determined that it was appropriate to capitalize the costs associated with equipment and construction of the Fujairah facility and why you and your auditors subsequently determined that it was appropriate to expense these costs. It is not clear to us what specific facts and circumstances changed from the first quarter of 2006 to the third quarter of 2006 that changed these determinations. It appears to us that the majority of the factors identified in your response regarding your and your auditors' judgments did not change from the first quarter of 2006 to the third quarter of 2006. Please provide us a more comprehensive analysis of why you and your auditors determined that it was appropriate to capitalize the costs associated with the Fujairah facility during the first and second quarters of 2006 and why you and your auditors subsequently determined that such accounting was inappropriate.
- It remains unclear to us how and why you believe your disclosure controls and procedures were adequate in light of the material restatement of your financial statements for the periods ended March 31, 2006 and June 30, 2006. Please advise or revise.

* * *

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.

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.

Mr. Loren J. Kalmen
Sulphco, Inc.
February 2, 2007
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Sincerely,

John Cash
Accounting Branch Chief