

Mail Stop 6010

May 4, 2007

Ralph Schmitt
Chief Executive Officer
Sipex Corporation
233 South Hillview Drive
Milpitas, California 95035

**Re: Sipex Corporation
Amendment No. 2 to Registration Statement on Form S-1
Filed April 20, 2007
File No. 333-138740**

Dear Mr. Schmitt:

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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement Fee Table

1. The number of warrants indicated as being registered in footnote 6 to your fee table does not reconcile to the number of shares you indicate are being registered for resale in your fee table. Please revise so that these numbers are consistent.
2. We note from your response to comment 3 of our letter dated March 1, 2007 that you do not intend to register the primary offering of shares of common stock to subsequent holders of the warrants upon exercise of those warrants, and it appears that you intend to rely on the exemption provided by Section 3(a)(9) of the Securities Act for such issuance. Please note that the Section 3(a)(9) exemption is

not available if cash or other consideration not consisting of securities of the issuer is paid by the security holder to the issuer. Since a cash payment will have to be made by a warrant holder to the company in order to exercise the warrants, the exemption does not apply. Please revise your registration statement to indicate that it covers the issuance of any shares of common stock to a subsequent holder of a warrant upon the exercise of that warrant.

Principal and Selling Securityholders, page 18

3. We note the revisions you have made in response to comment 4 of our letter dated March 1, 2007. We also note from your response to comment 9 in your letter dated February 13, 2007 that Capital Ventures International was identified as an affiliate of a broker-dealer. If Capital Ventures International is an affiliate of a broker-dealer, please make the requested representations in the prospectus with respect to such selling securityholder or identify such selling securityholder as an underwriter with respect to the securities it is offering for resale.

Form 10-K for the Fiscal Year Ended December 31, 2006

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 24

Critical Accounting Policies and Estimates, page 26

4. We note that on pages 28 and 61 you refer to using the valuation of an independent appraisal firm when determining fair value of the wafer fabrication assets. Please revise the filing to name the independent valuation expert here and in the Experts section, and include its consent as an exhibit. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.

Note 5. Property, Plant and Equipment, page 62

5. Please refer to prior comment 6. We are still in the process of evaluating your response and may have further comments after our evaluation is complete.

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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. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Julie Sherman at (202) 551-3640 or Angela Crane at (202) 551-3554 if you have questions regarding comments on the financial statements and related matters. You may contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy A. Fisher
Assistant Director

cc: Robert G. Day, Esq. (via fax)
Allison Berry Spinner, Esq. (via fax)