



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

October 6, 2009

Mr. Thomas J. Meaney
Chief Executive Officer
Mikros Systems Corporation
707 Alexander Road
Building 2, Suite 208
Princeton, New Jersey 08540

**RE: Mikros Systems Corporation
Form 8-K dated October 1, 2009
Filed October 5, 2009
File No. 0-14801**

Dear Mr. Meaney:

We have reviewed your filing (filings) and have the following comments. Where indicated, we think you should revise your documents 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.

Form 8-K dated October 1, 2009 filed October 5, 2009

Item 4.01 Changes in Registrant's Certifying Accountant

1. We note that on October 1, 2009, you engaged the accounting firm of ParenteBeard LLC as your independent registered public accounting firm. We are unable to verify that the firm of ParenteBeard LLC is registered with the Public Company Accounting Oversight Board (PCAOB). Please have ParenteBeard LLC confirm its registration with the PCAOB and provide us support of that registration. To the extent that the firm may use more than one name, we would suggest that you clearly indicate in any filing which will contain an audit report from this firm, the name of the firm that is registered with the PCAOB directly below the auditor's signature on the auditor's report. Otherwise, you must engage a new accountant that is a publicly registered accounting firm to perform review or audit work for the company and file a new Item 4.01 Form 8-K after you have engaged new accountants. Also include an updated Exhibit 16 letter with your amendment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require. 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 the filings;
- staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff 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.

Please file your supplemental response and amendment via EDGAR in response to these comments within 5 business days of the date of this letter. Note that if you require longer than 5 business days to respond, you should contact the staff immediately to request additional time. Please furnish a cover letter with your response that keys your

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responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review.

If you have any questions, please call me at 202 551-3618 or Jeffrey Jaramillo, Accounting Branch Chief at 202 551-3212. You may also speak with Martin James, Senior Assistant Chief Accountant at 202 551-3671.

Sincerely,

Dennis C. Hult
Staff Accountant