



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

Mail Stop 4631

October 5, 2009

By U.S. Mail and Facsimile

Mr. Frank Cesario
Chief Financial Officer
Nanophase Technologies Corporation
1319 Marquette Drive
Romeoville, Illinois 60446

Re: Nanophase Technologies Corporation
Form 10-K for the Fiscal Year Ended December 31, 2008
Form 10-K/A for the Fiscal Year Ended December 31, 2008
Form 10-Q for the Fiscal Quarter Ended March 31, 2009
Form 10-Q/A for the Fiscal Quarter Ended March 31, 2009
Form 10-Q for the Fiscal Quarter Ended June 30, 2009
File No. 000-22333

Dear Mr. Cesario:

We have reviewed your amendments to your Form 10-K and Form 10-Q, filed September 16, 2009, and have the following additional comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. After reviewing this information, we may or may not raise additional comments.

Amendment 2 to Form 10-K for the Fiscal Year Ended December 31, 2008

Item 9A(T). Controls and Procedures

1. We appreciate your response to prior comment one; however, in your amendment, you omitted the disclosure that you previously provided that stated that your assessment of internal controls over financial reporting were based on "criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)." As this language is required by Item 308(T)(a)(2) of Regulation S-K, please amend your document to re-insert this disclosure.
2. We note that you present both the evaluation of disclosure controls and procedures and changes in internal control over financial reporting within your disclosure of management's annual report on internal control over financial reporting. We remind you that these three disclosures should be presented

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separately with Item 9A. In future filings, please present these disclosures separately as required by Items 307 and 308(T) of Regulation S-K.

Amendment 1 to Form 10-Q for the Fiscal Quarter Ended March 31, 2009

Item 4. Controls and Procedures

3. In your amendment, you omitted the disclosure you previously provided regarding changes in internal control over financial reporting during the quarter. Please amend your document to re-insert this disclosure as required by Item 308(T)(b) of Regulation S-K.

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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 response to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865, Anne McConnell, Senior Staff Accountant, at (202) 551-3709 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief