



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3561

Mail Stop 3561

January 5, 2010

Mr. Timothy Carnahan
Chief Executive Officer and President
CYIOS Corporation
1300 Pennsylvania Avenue, Suite 700
Washington, D.C. 20004

Re: CYIOS Corporation
Form 10-KSB for Fiscal Year Ended December 31, 2007
Filed March 31, 2008
Form 10-QSB for Fiscal Quarter Ended March 31, 2008
Filed May 14, 2008
Form 10-Q for Fiscal Quarter Ended June 30, 2008
Filed August 14, 2008
Form 10-Q for Fiscal Quarter Ended September 30, 2008
Filed November 14, 2008
Form 10-Q for Fiscal Quarter Ended March 31, 2009
Filed May 14, 2009
Form 10-Q for Fiscal Quarter Ended June 30, 2009
Filed August 14, 2009
Form 10-Q for Fiscal Quarter Ended September 30, 2009
Filed November 12, 2009
File No. 0-27243

Dear Mr. Carnahan:

We have reviewed your response to our comment letter dated October 7, 2009 and have the following additional 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 provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so that we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-KSB for Fiscal Year Ended December 31, 2007

Item 8A(T). Controls and Procedures, page 17

1. We note your revised disclosure provided in response to comment 4 in our letter dated October 7, 2009. Please note that disclosure controls and procedures and internal control over financial reporting are not the same. Management is required to provide separate assessments of the effectiveness of disclosure controls and procedures and internal control over financial reporting. Your current disclosures are not clear. To clarify to your readers that management made separate assessments of the effectiveness of disclosure controls and procedures and internal control over financial reporting please consider providing the required disclosures for each in separate sections under Item 8A.
 - We suggest you begin your disclosure with a paragraph which provides information similar to that included in the first paragraph under Item 8A revised slightly to provide a complete definition of disclosure controls and procedures by revising your disclosure to state that your disclosure controls and procedures were designed to provide reasonable assurance that the information required to be disclosed in reports filed under the Securities Exchange Act of 1934 (“Exchange Act”) is recorded, processed, summarized and reported within the time periods specified and that it is accumulated and communicated to your management, including the Certifying Officers, as appropriate to allow timely decisions regarding required disclosure. You should then provide the conclusions of your management, including the Certifying Officers about whether your disclosure controls and procedures are effective at that reasonable assurance level as of the end of the period covered by the report. Refer to Item 307 of Regulation S-K.
 - You should provide in a separate section, all of the information required by Item 308T of Regulation S-K with regard to your management’s annual assessment of your internal control over financial reporting. In this separate section, you should discuss only the information regarding your internal controls over financial reporting. In this regard you should restore the statement of your management’s responsibility for establishing and maintaining internal control over financial reporting (the third paragraph in the draft of your Form 10-K/A filed on September 1, 2009) to comply with Item 308T(a)(1) of Regulation S-K. You should remove the first sentence of the fourth paragraph in the current draft of your Form 10-K/A filed on November 17, 2009 as it refers to disclosure controls and procedures and this information is already contained in the first paragraph under Item 8A. Similarly, you should remove the third sentence in the fourth paragraph under Item 8A as it refers to disclosure controls and procedures and your revised

conclusion on disclosure controls and procedures will already be provided in a revised second paragraph under Item 8A. Please make these changes to your amended December 31, 2007 Form 10-K, and confirm to us that you will also make these changes in future Forms 10-K.

Certifications

2. Please revise your certifications to remove the words the “small business issuer” and replace them with the words the “registrant” in paragraphs 3, 4, 4.a., 4.b., 4.c., 4.d., 5, 5.a. and 5.b. Please note that your certifications should be set forth exactly as seen in Item 601(b)(31) of Regulation S-K.

Form 10-Q for Fiscal Quarter Ended September 30, 2009

Item 4T. Controls and Procedures, page 19

3. We note your current disclosure in the second paragraph under Item 4T does not include a conclusion of your principal executive officer and principal financial officer regarding the effectiveness of your disclosure controls and procedures as of the end of the period covered by the report and refers to old versions of the rules regarding disclosure controls and procedures, such as 13a-14 rather than 13a-15. Please amend your filing to revise your disclosure as appropriate. Refer to Item 307 of Regulation S-K.

Certifications

4. Please remove Mr. Carnahan’s titles and positions from the first sentence of the certifications. The inclusion of his titles in that sentence has the effect of limiting the capacity of his certifications to those positions listed. He should continue to list his titles under his signature indicating that he is signing the certification as the Chief Executive Officer and Principal Financial Officer of the company. Please make this same change in all future filings.

Upon resolution of our comments, please amend your filings to include the changes you proposed to make in response to our comment letters.

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed response letters greatly facilitate our review. Please submit your response letter on EDGAR. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

Mr. Timothy Carnahan
CYIOS Corporation
January 5, 2010
Page 4 of 4

You may contact Sondra Snyder at (202) 551-3332 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3737 with any other questions.

Sincerely,

Jennifer Thompson
Branch Chief