



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

Mail Stop 3561

May 28, 2009

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 March 31, 2009
Filed May 14, 2009
File No. 0-27243

Dear Mr. Carnahan:

We have reviewed your response to our comment letter dated November 4, 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

Note H – Stock Options and Warrants, page F-33

1. We reviewed your response to comment three in our letter dated November 4, 2008 and the proposed revisions to your disclosures. Please address the following items:
 - Please further revise your disclosures to provide a description of the vesting periods and any other substantive conditions (including those relating to

vesting). In this regard, it appears that all of the options granted in each of the two years ended December 31, 2007 were vested during the year of grant. Please disclose the specific vesting period of options granted in each period, including options which vested immediately upon grant. Refer to paragraph A240.a of SFAS 123R.

- For the most recent year for which an income statement is provided, please disclose the weighted-average exercise prices for options outstanding at the beginning and end of the year along with the number and weighted-average exercise prices for options exercisable at the end of the year. Refer to paragraph A240.b(1) of SFAS 123R.
- For each year for which an income statement is provided, disclose the weighted-average grant-date fair value of equity options or other equity instruments granted during the year and the total fair value of shares vested during the year. Refer to paragraph A240.c of SFAS 123R.
- For each year for which an income statement is presented, provide a description of the method used during the year to estimate the fair value of awards under share-based payment arrangements and provide a description of the significant assumptions used during the year to estimate the fair value of share-based compensation awards. Refer to paragraph A240.e of SFAS 123R.
- If not separately disclosed elsewhere, disclose the amount of cash received from the exercise of share options and similar instruments granted under share-based payment arrangements and the tax benefit realized from stock options exercised during each year. Refer to paragraph A240.i of SFAS 123R.

Exhibits 31.1 and 31.2

2. We reviewed your response to comment five in our letter dated November 4, 2008 and your proposed revised certifications. On the signature line of the certifications, please ensure you type the name of the chief executive officer and principal financial officer after the “/s/.” Please also ensure you make this change in all future filings.

Form 10-Q for the Fiscal Quarter Ended March 31, 2008

Consolidated Statements of Cash Flows, page 4

3. We reviewed your response to comment three in our letter dated August 7, 2008 and note that the proposed Form 10-Q/A for the quarter ended March 31, 2008

excludes the statements of cash flows. Please ensure your amended filing includes this statement.

Item 2. Management's Discussion and Analysis, page 15

4. In future filings on Form 10-Q, please revise Management's Discussion and Analysis to ensure that you provide a discussion of your results of operations for both the current quarter and the year-to-date periods.

Item 4. Controls and Procedures, page 18

5. We reviewed your response to comment seven in our letter dated November 4, 2008 and the proposed revisions to your disclosure. Please revise the conclusions of your principal executive officer and principal financial officer regarding the effectiveness of your disclosure controls and procedures in your proposed Form 10-Q/A to either say that your CEO and CFO have concluded that as of the end of the period covered by the report your disclosure controls and procedures are effective at the reasonable assurance level to ensure that information required to be disclosed in your reports is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms and that such information is accumulated and communicated to your CEO and CFO within the time periods specified in the Commission's rules and forms or to simply say that as of the end of the period covered by the report your CEO and CFO have concluded that your disclosure controls and procedures are effective at the reasonable assurance level. If you provide a definition of the rules in the conclusion, you must include the full definition. Please similarly revise the proposed Form 10-Q/A for the fiscal quarter ended June 30, 2008, Form 10-Q for the fiscal quarter ended September 30, 2008, and Form 10-Q for the fiscal quarter ended March 31, 2009.

Signatures, page 28

6. We reviewed your response to comment eight in our letter dated November 4, 2008. Although you indicate that you revised the signature page in the proposed Form 10-Q/A in response to our comment, Mr. Carnahan is still only signing the report in his capacity as your principal executive officer. The report should also be signed on your behalf by your principal financial officer. Please revise your signature page accordingly in Form 10-Q/A for the fiscal quarter ended March 31, 2008, Form 10-Q for the fiscal quarter ended September 30, 2008, and Form 10-Q for the fiscal quarter ended March 31, 2009. Refer to general instruction G to Form 10-Q. Any person who occupies more than one of the positions specified in general instruction G should indicate each capacity in which he signs the report. The certification filed in accordance with Item 601 (b) (31) of Regulation S-K should also be signed by your chief executive officer in his capacity as chief

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financial officer since he serves in both capacities. Please revise your certifications in Form 10-Q/A for the fiscal quarter ended March 31, 2008 and Form 10-Q for the fiscal quarter ended March 31, 2009. .

Exhibit 31.1, Certifications

7. We have reviewed your response to comment nine in our letter dated November 4, 2008. Please revise the certification to include the following introductory language in paragraph 4: "I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:". Please also revise the proposed Form 10-Q/A for the fiscal period ended June 30, 2008, Form 10-Q for the fiscal period ended September 30, 2008, and Form 10-Q for the fiscal period ended March 31, 2009 in a similar manner. Additionally, please revise the certification included in the March 31, 2009 Form 10-Q to include the internal control over financial reporting language of paragraph 4(b).

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.

You may contact Sondra Snyder at (202) 551-3332, or in her absence, Sarah Goldberg at (202) 551-3340 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3344 with any other questions.

Sincerely,

William H. Thompson
Branch Chief