



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

January 26, 2010

Via U.S. Mail and Facsimile (509) 375-3473

Brien Ragle
Controller
IsoRay, Inc.
350 Hills St. Suite 106
Richland, WA 99354

**Re: IsoRay, Inc.
Form 10-K for the Fiscal Year ended June 30, 2009
Filed February 10, 2009
Form 10-Q for the Fiscal Quarter ended September 30, 2009
File No. 001-33407**

Dear Mr. Ragle:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your Form 10-Q 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.

Form 10-K for the Fiscal Year ended June 30, 2009

Item 9A - Controls and Procedures, page 46

Disclosure controls and procedures, page 46

1. We note the disclosure that your Chief Executive Officer and Chief Financial Officer concluded that your disclosure controls and procedures are effective "in timely altering them to material information required to be included in the Company's periodic reports filed with the SEC under the Exchange Act." The language that is currently included after the word effective does not encompass the definition of disclosure controls and procedures as prescribed by Exchange Act Rules 13a-15(e) and 15d-15(e). Please remove this language in your future filings or revise the disclosure in those filings so that the language that appears after the word effective is consistent with the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e) and 15d-15(e). Please also apply this comment to all your future Form 10-Q and Form 10-K filings, including any future amendments.

Form 10-Q for the Fiscal Quarter ended September 30, 2009

Exhibit 31.1 and 31.2

2. We note that you present management's report on internal control over financial reporting on page 47 of the Form 10-K as required by Item 308T of Regulation S-K. As such, your certifications are required to include the introductory language in paragraph 4 of the certification that refers to the certifying officers' responsibility for establishing and maintaining internal control over financial reporting for the company. Please refer to Item 601(b)(31) of Regulation S-K and file an amendment to your Form 10-Q that includes corrected and newly dated certifications. You may provide an abbreviated amendment for the Form 10-Q that consist of a cover page, explanatory note, signature page and the certifications that comply with Item 601(b)(31) of Regulation S-K.
3. We note that the identification of the certifying individual at the beginning of the certification required by Exchange Act Rule 13a-14(a) also includes the title of the certifying individual. In future filings, including any amendments, the identification of the certifying individual at the beginning of the certification should be revised so as not to include the individual's title. Refer to Item 601(31) of Regulation S-K.

As appropriate, please amend your Form 10-Q and respond to these comments within 10 calendar days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments 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 amendments and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 filing;
- staff comments or changes to disclosure in response to staff comments 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Kevin Kuhar, Staff Accountant, at (202) 551-3662 or me at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. You may also contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 or me at with any other questions.

Sincerely,

Jeff Jaramillo
Accounting Branch Chief