

Mail Stop 6010

March 16, 2007

VIA U.S. MAIL AND FAX (509) 375-3473

Mr. Jonathan R. Hunt
Chief Financial Officer
IsoRay, Inc.
350 Hills Street
Suite 106
Richland, Washington 99354

**Re: IsoRay, Inc.
Form 10-KSB for the year ended June 30, 2006
Filed September 28, 2006
Form 10-QSB for Fiscal Quarter Ended September 30, 2006
File No. 000-14247**

Dear Mr. Hunt:

We have reviewed your response filed February 27, 2007 and have the following comment. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. In our comment, we asked 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 comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-KSB for the year ended June 30, 2006

Financial Statements, page F-1

Note 12. Shareholders' Equity, page F-16

Isoray, Inc. June 2006 Warrant Exercise Solicitation, page F-17

1. Please refer to our prior comment 7. Please provide us with more information regarding the warrants that were "discounted." As part of your response please tell us about your assessment of the materiality of any accounting impact related to the reduction of the strike price. In addition, tell us your consideration about whether the one-time discount was in substance a cancellation of the prior warrants outstanding and the re-issuance of new warrants that needed to be valued and accounted for on such date. Please advise.

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

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640 or me at (202) 551-3603 if you have any questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant