



DIVISION OF
CORPORATION FINANCE

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

December 19, 2011

Via E-mail

Bill Joll

Chief Executive Officer and President

Irvine Sensors Corporation

3001 Red Hill Avenue

Costa Mesa, California 92626

**Re: Irvine Sensors Corporation
Definitive Proxy Statement on Schedule 14A
Filed December 9, 2011
File No. 001-08402**

Dear Mr. Joll:

We have limited our review of your filing to the issues addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Proposal One: Sale of Substantially All of the Assets . . . , page 20

1. Please expand your response to prior comment 3 to revise where appropriate, such as in this section and "The Transaction" on page 1, to highlight the significance of the assets to be sold to your business. For example, we note that the Thermal Imaging Business accounted for approximately 63.3% of your total revenue in fiscal 2011. Please also revise where appropriate to describe the impact of the asset sale on your business or describe your business operations upon completion of the asset sale.

Appendix D – Irvine Sensors Corporation Audited Consolidated Financial Statements

Note 15 – Subsequent Events, page D-37

Unaudited Pro Forma Financial Information, D-38

2. Please refer to the pro forma financial statements included herein and at Appendix F, and address the following:
 - Present pro forma consolidated statements of operations for each of the fiscal years ended October 2, 2011 and October 3, 2010 that disclose income (loss) from continuing operations before nonrecurring charges or credits directly attributable to the transaction rather than your current pro forma operating statement disclosures of pro forma net income (loss) which includes a non-recurring gain from discontinued operations.
 - We note your pro forma balance sheet includes an \$11.5 million pro forma adjustment that appears to give effect to the gain on the sale of the Thermal Imaging Business as well as other items. Please revise the notes to the pro forma financial statement to disclose the detail components of the referenced adjustment, and to explain how each component was calculated, including the method and assumptions used in estimating each amount.
 - Show all pro forma adjustments on a gross basis and accurately reference each adjustment to footnotes that clearly explain the assumptions involved, including how they were computed.
3. Please tell us why all amounts related to the liabilities and stockholders' deficit of your Thermal Imaging Business to be sold that are presented in the unaudited pro forma consolidated balance sheet at page D-39 do not agree with equivalent amounts in the unaudited Thermal Imaging Business balance sheet presented at page E-2. Also, tell us why the October 2, 2011 statement of operations adjustments for the Thermal Imaging Business to be sold that are presented at page D-40 do not include the tax provision that is presented in its October 2, 2011 historical statement of operations at page E-3. Revise the filing as necessary to ensure that amounts related to your Thermal Imaging Business presented in your pro forma financial statements agree with related amounts in the unaudited Thermal Imaging Business financial statements included in Appendix E or tell us why no revisions are necessary.

Appendix E - Thermal Imaging Business of Irvine Sensors Corporation

4. Refer to our prior comment 1. We see the proxy now includes unaudited financial statements as of and for the fiscal years ended October 2, 2011 and October 3, 2010 for the Thermal Imaging Business to be sold. Please tell us how the referenced financial

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statements address the guidance at and disclosure requirements of SAB Topic 1(B)(1). Revise the Thermal Imaging Business financial statements as necessary to comply with the disclosure requirements of SAB Topic 1(B)(1). For example, based on information in Note 3(b) in your pro forma financial statements, it appears you are required to disclose an explanation of the expense allocation methods used, in the notes to the financial statements as well as a management's assertion, if true, that the allocation method used is reasonable.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

You may contact Jay Webb at (202) 551-3603 or Jeffrey Jaramillo, Accounting Branch Chief, at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. Please contact Aslynn Hogue at (202) 551-3841 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc (via e-mail): Ellen S. Bancroft, Esq. — Dorsey & Whitney LLP