



DIVISION OF  
CORPORATION FINANCE

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

November 18, 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  
Preliminary Proxy Statement on Schedule 14A  
Filed October 24, 2011  
Revised Preliminary Proxy Statement on Schedule 14A  
Filed November 7, 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.

Matters To Be Considered at the Special Meeting, page 20

1. We see from disclosures herein as well as elsewhere in the filing that on October 17, 2011 you entered into an asset purchase agreement with Vectronix Inc., which provides for the sale to Vectronix of substantially all of the assets used or held for use in connection with your Thermal Imaging Business for \$10 million in cash. Since this transaction appears to be a disposition of a significant business, and authorization is sought from shareholders for the disposition of your Thermal Imaging Business, please amend this proxy to include the following:
  - Unaudited financial statements of the Thermal Imaging Business to be disposed that cover the same periods as are required for the registrant, which should be for each of

- the two most recent fiscal years plus any required interim periods as prescribed by Regulation S-X.
- A pro forma balance sheet giving effect to the disposition as of the date of the most recent balance sheet required.
  - Pro forma statements of operations that reflect post-disposition operations for the latest fiscal year and interim period required. If the disposal qualifies as a discontinued operation, the pro forma operating information should be presented for each of the past two fiscal years and interim periods required.

Refer to the guidance in the Division of Corporation Finance's July 2001 Interim Supplement to Publicly Available Telephone Interpretations, Section H6, and Rule 8-01 of Regulation S-X. Alternatively, tell us why you believe such financial statements and pro forma information are not required.

2. In a related matter, please explain to us how you plan to comply with the financial statements updating requirements of Rule 8-08 of Regulation S-X.

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

3. Please revise where appropriate to provide more specific disclosure of the nature of the business to be sold, such as a description of the assets to be sold or an explanation of the significance of these assets to your business.
4. Please revise where appropriate to include additional explanation of the purposes of the transaction. In this regard, we note your discussion of your transformation, new focus, and market opportunities for your cyber security and 3D chip stacking products in the material filed on Schedule 14A on October 27, 2011.
5. Please revise to include the golden parachute compensation disclosure required by Item 402(t) of Regulation S-K or advise.

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

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- 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