



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

DIVISION OF
CORPORATION FINANCE

May 9, 2011

Mr. John J. Stuart, Jr.
Chief Financial Officer
Irvine Sensors Corporation
3001 Red Hill Avenue, Bldg. 3, Suite 104
Costa Mesa, California 92626

RE: Irvine Sensors Corporation
Form 10-K for the fiscal year ended October 3, 2010
Filed December 17, 2010
File No. 1-08402

Dear Mr. Stuart:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

Jeffrey Jaramillo
Branch Chief