



DIVISION OF
CORPORATION FINANCE

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

September 9, 2010

Steven K. Sprague
President and Chief Executive Officer
Wave Systems Corp.
480 Pleasant Street
Lee, MA 01238
Also via facsimile at: (413) 243-7080

**Re: Wave Systems Corp.
Form 10-K for the fiscal year ended December 31, 2009
Form 10-Q for the quarterly period ended March 31, 2010
File No. 000-24752**

Dear Mr. Sprague:

We have reviewed your letter dated August 19, 2010 in connection with the above-referenced filings, and we have the following comment. 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 this comment, we may have additional comments. References to prior comments refer to our letter dated August 5, 2010.

General

1. In response to prior comment 1, you advise that the company included the disclosure called for by Item 5.07 of Form 8-K with respect to the shareholder vote at your annual meeting held on June 21, 2010, in your Form 10-Q filed on August 9, 2010. It appears you should nonetheless also file a current report on Form 8-K providing the information required by Item 5.07, in order to be current with your filing requirements. Please file such a Form 8-K, or advise. Note also that in connection with the preparation of future registration statements under the Securities Act of 1933, the use of Form S-3 is limited to companies that have timely filed all reports required to be filed during the twelve calendar months and portion of a month preceding the filing of the Form S-3. See General Instruction I.A.3 to Form S-3. Please consider the foregoing as it relates to the company's effective shelf registration statement on Form S-3 (file no. 333-150340).

Steven K. Sprague
Wave Systems Corp.
September 9, 2010
Page 2

You may contact Melissa Walsh, Staff Accountant, at (202) 551-3224 if you have questions regarding comments on the financial statements and related matters. Please contact Katherine Wray, Staff Attorney, at (202) 551-3483, Mark P. Shuman, Branch Chief – Legal, at (202) 551-3462 or me at (202) 551-3488 with any other questions.

Sincerely,

Stephen Krikorian
Accounting Branch Chief