



DIVISION OF
CORPORATION FINANCE

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

June 16, 2016

Thomas E. Zelibor
Chief Executive Officer
Lightwave Logic, Inc.
1831 Lefthand Circle, Suite C
Longmont, Colorado 80501

**Re: Lightwave Logic, Inc.
Post-Effective Amendment to Form S-1
Filed June 7, 2016
File No. 333-206059**

Dear Mr. Zelibor:

We have reviewed your post-effective amendment and have the following comment.

Please respond to this letter by providing the requested information. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing any information you provide in response to this comment, we may have additional comments.

1. We note that your registration statement, File No. 333-206059, was declared effective on August 11, 2015. That registration statement included your audited financial statements for the year ended December 31, 2014. The post-effective amendment filed on June 7, 2016 was your first post-effective amendment to this registration statement. If an offering continues for more than nine months, you are required to update your registration statement by post-effective amendment if the information in the prospectus is more than sixteen months old. Please tell us whether you have made offers and sales during the period in which your audited financial statements were not current. If yes, please provide us with a legal analysis of your compliance with Section 5 of the Securities Act.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, before we can declare the amended registration statement effective, the company should provide us with a letter, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 Kate McHale, Staff Attorney, at (202) 551-3464 or me at (202) 551-3754 with any questions.

Sincerely,

/s/ Asia Timmons-Pierce, *for*

Pam A. Long
Assistant Director
Office of Manufacturing and
Construction