



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

DIVISION OF
CORPORATION FINANCE

February 20, 2014

Via E-mail

Mr. James A. Hayward
Chief Executive Officer
Applied DNA Sciences, Inc.
50 Health Sciences Drive
Stony Brook, NY 11790

**Re: Applied DNA Sciences, Inc.
Form 10-K for the Year Ended September 30, 2013
Filed December 20, 2013
File No. 2-90539**

Dear Mr. Hayward:

We have reviewed your filing and have the following 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 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Item 1. Business, page 1

Present Markets, page 6

1. In future filings, please describe the principal products or services you provide within each of the markets discussed in this section. As currently drafted, the disclosure appears to be an overview of the markets generally, but your specific position within such markets is unclear. Refer to Item 101(h)(4)(i) of Regulation S-K.

Distribution of our Products and Commercial Agreements, page 10

2. We note disclosure of your agreements with 3SI Security Systems and one of the four largest American defense contractors. Please tell us whether these agreements are material contracts pursuant to Item 601(b)(10) of Regulation S-K and, if so, please file these agreements with your next Exchange Act report. Alternatively, please tell us why you believe you are not required to file such agreements.

Signatures, page 76

3. In future filings, please ensure that your controller or principal accounting officer signs the Form 10-K. Refer to General Instruction D to Form 10-K.

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 David Korvin, Staff Attorney, at (202) 551-3236 or Erin Jaskot, Staff Attorney, at (202) 551-3442 if you have questions regarding these comments.

Sincerely,

/s/ John Cash

John Cash
Accounting Branch Chief