

December 5, 2017

VIA EDGAR AND FEDERAL EXPRESSUnited States Securities and Exchange Commission
Division of Corporation Finance
Mail Stop 3561
100 F Street N.E.
Washington, D.C. 20549

Attention: Susan Block and Donald E. Field

**Re: AquaBounty Technologies, Inc.
Registration Statement on Form S-1
Filed November 8, 2017
File No. 333-221435**

Dear Ms. Block and Mr. Field:

This letter is being submitted on behalf of AquaBounty Technologies, Inc. (the "Company") in response to the comments of the staff of the Division of Corporation Finance (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") with respect to the Company's Registration Statement on Form S-1 filed on November 8, 2017 (the "Registration Statement"), as set forth in your letter dated December 5, 2017 addressed to Ronald L. Stotish, Chief Executive Officer of the Company (the "Comment Letter").

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. For your convenience, we have italicized the reproduced Staff comments from the Comment Letter. Unless otherwise indicated, page references refer to the Registration Statement. All capitalized terms used and not otherwise defined herein shall have the meanings set forth in the Registration Statement.

The responses provided herein are based upon information provided to Goodwin Procter LLP by the Company.

Prospectus Cover Page

1. *We note that Intrexon Corporation has indicated an interest in purchasing a minimum of \$7.5 million of shares in the offering if "the aggregate proceeds to [you] from this offering are \$20 million." Please revise to clarify whether the \$20 million amount includes Intrexon Corporation's investment or if their investment would be in addition to that amount. In this regard, please clarify if the \$20 million amount is a threshold amount before Intrexon Corporation would purchase shares or clarify if the \$20 million includes that stockholder's \$7.5 million indicated interest.*

Response: The Company respectfully advises the Staff that proposed revisions to its disclosure which the Company intends to include in a subsequent amendment to the Registration Statement in response to the Staff's comment are set forth on the pages to Exhibit A attached hereto designated as cover page and pages 10, 22, 79, and 93.

Use of Proceeds, page 30

2. Please refer to the third paragraph. Please revise to more specifically identify and quantify the principal intended uses of the net proceeds. Refer to Item 504 of Regulation S-K. Additionally, we note your disclosure that you intend to use certain net proceeds to complete construction and renovations of your facilities in Rollo Bay and Indiana. To the extent material amounts of other funds are necessary to accomplish this purpose, please revise to state the amounts of other funds needed to accomplish this purpose and the sources thereof. For guidance, refer to Item 504 of Regulation S-K and Instruction 3 thereto.

Response: The Company respectfully advises the Staff that proposed revisions to its disclosure which the Company intends to include in a subsequent amendment to the Registration Statement in response to the Staff's comment are set forth on the pages to Exhibit A attached hereto designated as pages 10 and 30.

If you have any questions with regard to the Company's responses or would like to discuss any of the matters covered in this letter, please contact the undersigned at (617) 570-1021.

Sincerely,

/s/ Michael J. Minahan

Michael J. Minahan, Esq.

Enclosures

cc: Ronald L. Stotish, President, Chief Executive Officer, *AquaBounty Technologies, Inc.*
David Frank, Chief Financial Officer, *AquaBounty Technologies, Inc.*
Christopher Martin, Esq., General Counsel, *AquaBounty Technologies, Inc.*
Jocelyn M. Arel, Esq., *Goodwin Procter LLP*
Robert Charron, Esq., *Ellenoff Grossman & Schole LLP*

Exhibit A

Cover Page:

Intrexon Corporation, our majority stockholder, has indicated an interest in purchasing ~~a minimum of \$7.5 million of shares of our common stock in this offering at the public offering price, if the aggregate proceeds to us from this offering are \$20 million.~~

Page 10:

Intrexon Corporation, our majority stockholder, has indicated an interest in purchasing ~~a minimum of \$7.5 million of shares of our common stock in this offering at the public offering price, if the aggregate proceeds to us from this offering are \$20 million.~~

Page 22:

In addition, because Intrexon Corporation, our majority stockholder, has indicated an interest in purchasing ~~a minimum of \$7.5 million of shares of our common stock in this offering at the public offering price, if the aggregate proceeds to us from this offering are \$20 million,~~ the overall trading market for our shares may not be as active as it otherwise would have been.

Page 79:

Intrexon Corporation, our majority stockholder, has indicated an interest in purchasing ~~a minimum of \$7.5 million of shares of our common stock in this offering at the public offering price, if the aggregate proceeds to us from this offering are \$20 million.~~

Page 97:

Intrexon Corporation, our majority stockholder, has indicated an interest in purchasing ~~a minimum of \$7.5 million of shares of our common stock in this offering at the public offering price, if the aggregate proceeds to us from this offering are \$20 million.~~

Page 10:

We currently intend to use the net proceeds of this offering to complete construction and renovations of our existing facilities in Rollo Bay and Indiana, for working capital **costs associated with growing our first batches of fish at our Indiana and Rollo Bay farm sites**; and other general corporate purposes, **including investing further in our sales and marketing and research and development efforts and payment of anticipated general and administrative expenses**. We may also use a portion of the net proceeds for acquisitions of complementary businesses, technologies or other assets, although we do not currently have any agreements, commitments or understandings with respect to any such acquisitions.

Page 30:

We anticipate that we will use the net proceeds we receive from this offering, including any net proceeds we receive from the exercise of the underwriter's option to acquire additional shares of common stock in this offering **for the following purposes:**

- **approximately \$7.0 million to complete construction and renovation activities at our Indiana and Rollo Bay farm sites;**
- **approximately \$6.0 million for working capital costs associated with growing our first batches of fish at our Indiana and Rollo Bay farm sites; and**
- **the balance of the funds for other general corporate purposes, including investing further in our sales and marketing and research and development efforts and payment of anticipated general and administrative expenses.**