

April 23, 2018

VIA EDGAR AND FEDERAL EXPRESS

United States Securities and Exchange Commission Division of Corporation Finance Mail Stop 3561 100 F Street N.E. Washington, D.C. 20549

Attention: J. Nolan McWilliams and Justin Dobbie

Re: AquaBounty Technologies, Inc. Registration Statement on Form S-3 Filed April 6, 2018 File No. 333-224184

Dear Messrs. McWilliams and Dobbie:

This letter is being submitted by 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-S filed on April 6, 2018 (the "Registration Statement"), as set forth in your letter dated April 18, 2018, addressed to David A. Frank, Chief Financial Officer of the Company (the "Comment Letter").

For reference purposes, the text of the Comment Letter has been reproduced herein with the response below the comment. For your convenience, we have italicized the reproduced Staff comment 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.

Form S-3

General

1. To the extent you intend to rely on General Instruction I.B.6 to Form S-3 for limited primary offerings, please disclose on the prospectus cover page the information called for by Instruction 7 to General Instruction I.B.6. Please also confirm to us your understanding of the size limitations for offerings made pursuant to General Instruction I.B.6.

Response: The Company respectfully advises the Staff that it has revised the cover page of the prospectus contained in the Registration Statement in response to the Staff's comment. The Company also hereby confirms its understanding that the aggregate market value of securities sold pursuant to the Registration Statement by or on behalf of the Company pursuant to General Instruction I.B.6. during the period of twelve calendar months immediately prior to, and including, any such sale may not exceed one-third of the aggregate market value of the voting and non-voting common equity held by non-affiliates of the Company.

If you have any questions regarding the Company's response or would like to discuss any of the matters covered in this letter, please contact the undersigned at (978) 648-6050.

Sincerely,

/s/ Christopher H. Martin

Christopher H. Martin, Esq. General Counsel AquaBounty Technologies, Inc.

Enclosures

 cc: Ronald L. Stotish, President, Chief Executive Officer, AquaBounty Technologies, Inc. David A. Frank, Chief Financial Officer, AquaBounty Technologies, Inc. Jocelyn M. Arel, Esq., Goodwin Procter LLP Michael J. Minahan, Esq., Goodwin Procter LLP

Exhibit A

Cover Page to Prospectus:

Our common stock is listed on the Nasdaq Capital Market under the symbol "AQB." On March 29, 2018, the last reported sale price of our common stock on the Nasdaq Capital Market was \$2.95 per share. As of the date of this prospectus, the aggregate market value of our outstanding voting and nonvoting common equity held by non-affiliates of the Company (*i.e.*, our public float) was approximately \$13,817,523, based on 4,378,176 shares of outstanding common stock held by non-affiliates and the closing price of our common stock on April 20, 2018, which was \$3.156 per share. We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock on any securities exchange. Pursuant to Instruction I.B.6 of Form S-3, in no event will we sell, pursuant to the registration statement of which this prospectus forms a part, securities in a public primary offering with a value exceeding more than one-third of our public float in any twelve-month period so long as our public float remains below \$75 million. We have offered and sold no securities pursuant to General Instruction I.B.6 of Form S-3 during the twelve calendar months prior to and including the date of this prospectus.