



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

DIVISION OF
CORPORATION FINANCE

May 21, 2014

Via E-mail

Ronald L. Stotish
Chief Executive Officer
AquaBounty Technologies, Inc.
Two Clock Tower Place, Suite 395
Maynard, MA 01754

**Re: AquaBounty Technologies, Inc.
Form 10-12B
Filed April 25, 2014
File No. 001-36426**

Dear Mr. Stotish:

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 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 these comments, we may have additional comments.

General

1. Please note that in accordance with Section 12(d) of the Exchange Act, this Form 10 registration statement filed pursuant to Section 12(b) of the Exchange Act will become effective 30 days after the Commission receives certification from NASDAQ that your listing application has been approved.

Emerging Growth Company Status, page 1

2. We note your disclosure here that you have elected to take advantage of the extended transition period for complying with new or revised accounting standards. We also note your disclosure here and on page 18 that you have irrevocably elected not to avail yourself of the exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. Please reconcile and revise these disclosures.

Item 1. Business, page 3

3. We note your disclosure on page 23 that in conjunction with a fundraising in 2012, you implemented a reorganization to cut costs and spin off your research group, the Center for Aquaculture Technologies Canada. Please discuss this reorganization along with any other material changes in your business, such as the sale of your common stock to Intrexon. Refer to Item 101(a) of Regulation S-K.

Overview, page 3

4. Please balance the overview by disclosing your net losses for the most recently completed fiscal year and interim period and accumulated net losses.

The Aquaculture Industry, page 4

5. We note that you rely on reports and publications prepared by third parties, including Kontali Analyse and Marine Harvest ASA, for data. Please provide us with copies of the relevant portions of the reports and publications you cite. Additionally, please tell us whether any of the data provided by the listed sources, such as the data from other third-party sources and industry publications, were commissioned by you for use in the registration statement. If so, please file consents as exhibits to your registration statement.
6. Please balance this section by disclosing that several prominent grocery chains have publicly stated that they will not carry genetically modified salmon, and discuss the impact this and similar pronouncements may have on your business. Please revise the second and third risk factors on page 12 in this manner as well. We note in this regard several media accounts that specifically refer to your product.
7. We note media accounts of recent disease outbreaks impacting salmon production, most notably the infectious salmon anemia virus in Chile and the piscine reovirus in Norway and British Columbia. Please balance the disclosure in this section by discussing the impact of these diseases on salmon farming and the extent to which the costs of disease control and prevention may impact salmon prices and production costs. Please also add risk factor disclosure in this regard.
8. We also note media accounts that certain states have restricted or prohibited salmon farming. Please balance your disclosure in this section accordingly and discuss any impact state restrictions may have on your efforts to locate a site for your proposed salmon farms. Please also add a risk factor describing the attendant risks.

Plan of Operation, page 6

9. We note that you “plan to increase [y]our supply of unfertilized Atlantic salmon eggs through either the expansion of [y]our existing Canadian hatchery or through the purchase of an existing egg producer.” Please explain these plans in greater detail, including whether you have secured financing for such expansion, or whether you have identified any potential egg producers for acquisition. Similarly, please explain whether you have secured financing for the “construction and operation of land-based Recirculating Aquaculture System facilities,” and explain what a Recirculating Aquaculture System is. If you do not have definitive plans to implement your plan of operation beyond the short term, please describe the factors and criteria you expect to use to determine whether and when to pursue your longer-term plans. Revise the Financial Overview discussion in MD&A in this manner as well.

Intellectual Property, page 8

10. We note your disclosure that you “hold a global, perpetual, non-exclusive license from the Hospital for Sick Children of Toronto and Memorial University to the technology covering genetically modified salmonid fish that express endogenous growth hormone under the control of an anti-freeze protein gene promoter from an edible fish” and that the patent for this technology “which had been issued in every major salmon producing country, expired in August 2013 . . .” Please revise to discuss the material terms of your license for this technology. Additionally, please clarify the status of the intellectual property of this technology as it relates to your company both now and historically, as it appears from this disclosure that you never held a patent on the AquAdvantage Salmon, while page 13 of the risk factors section refers to “the patent for AquAdvantage Salmon.”
11. Please discuss your licensing of Intrexon’s UltraVector “and other” technology here, or explain to us why this is not an appropriate section for this discussion. Additionally, please disclose all material license agreements here. In this regard, we note the disclosure on page F-17 of a license agreement with Genesis Group, Inc., which is not discussed in the registration statement.

Item 1A. Risk Factors, page 10

Risks Related to Our Business, page 11

12. Please add a risk factor describing the risks because you receive government research grants, including the risks because of agency audit rights. We note in this regard your disclosure on page 24.

We may need substantial additional capital in the future, page 11

13. Please include an estimate of the amount of capital you believe you will need to raise to implement your business plan and place the risks described here in context by briefly discussing the factors that will influence the timing and amount of capital you require.

We may be sued by non-governmental organizations, page 13

14. So that investors may better assess the risks described here, please briefly discuss the application filed in Canadian Federal Court on January 16, 2014. We note your disclosure in Legal Proceedings on page 44.

Management's Discussion and Analysis, page 22

Results of Operations, page 25

Sales and Marketing Expenses, page 25

15. We note your disclosure that you incurred increased costs for your demonstration farm in Panama in conjunction with the transfer of the management of the site. Please tell us and disclose in your filing the facts and circumstances in regard to the transfer of the management of the demonstration farm in Panama and the associated impact on your future results, liquidity and cash flow.

General and Administrative Expenses, page 26

16. To the extent practicable, please quantify the estimated costs of being a public company. Please also include this disclosure under the risk factor regarding your status as a U.S. public company on page 19.

Liquidity and Capital Resources, page 27

Cash Flow from Operating Activities, page 28

17. Please clarify your analysis in regard to how the factors disclosed directly affect cash regarding the variance in net cash flows of operating activities. References to results of operations, which are prepared on the accrual basis of accounting, noncash items and working capital movements, may not provide a sufficient basis for an investor to fully understand comparative changes in cash flows of operating activities in terms of cash. Revise your disclosure to discuss the factors that directly affected cash of operating activities for each comparative period presented. Your discussion should address the drivers underlying each factor cited. For example, discuss the specific items that created favorable and unfavorable movements in working capital in terms of cash and the reasons underlying such movements. Refer to Section IV.B.1 of "Interpretation: Commission

Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations” available on our website at <http://www.sec.gov/rules/interp/33-8350.htm> for guidance.

Item 4. Security Ownership of Certain Beneficial Owners and Management, page 31

18. Please identify the individual or individuals who have voting and dispositive power with respect to the shares held by Intrexon Corporation.

Item 5. Directors and Executive Officers, page 32

19. Please revise this section to provide the dates indicating each director and executive officer’s term of office.
20. We note your disclosure that Richard L. Huber holds directorships in “several other companies in the United States and elsewhere in the world.” To the extent any of these directorships is of a company with a class of securities registered pursuant to Section 12 or subject to a reporting obligation pursuant to Section 15(d) of the Exchange Act, please identify these companies.

Item 9. Market Price of and Dividends on the Registrant’s Common Equity, page 44

21. In the table on page 45, we note that the figures have been adjusted to reflect a 1-for-10 reverse stock split that will become effective immediately following the effective time of your registration statement on Form 10. For consistency with the other sections of your filing, please present the figures unadjusted for the 1-for-10 reverse stock split along with pro forma figures adjusted to reflect the 1-for-10 reverse stock split. SAB Topic 4C states that such changes in the capital structure must be given retroactive effect if the capital structure change occurs after the date of the latest reported balance sheet but before the release of the financial statements or the effective date of the registration statement, whichever is later. In your circumstance, the change will occur after the effective date of your registration statement on Form 10 so we believe giving pro forma figures adjusted to reflect the 1-for-10 reverse stock split is appropriate for transparency.

Item 10. Recent Sales of Unregistered Securities, page 46

22. Please revise this section for each unregistered sale to include all of the information required by Item 701 of Regulation S-K, including, in each case, a brief discussion of the facts relied upon to make the exemption available.

Item 11. Description of Registrant’s Securities to be Registered, page 46

23. We note the statement that for a “complete description of the matters set forth in this section, [investors] should refer to the Restated Certificate of Incorporation and the new

Amended and Restated Bylaws, forms of which are included as exhibits to this Registration Statement on Form 10, and to the applicable provisions of Delaware law . . .” Please remove this statement, as it is not appropriate to qualify information in the registration statement by reference to information not included in the registration statement or filed as an exhibit.

Item 15. Financial Statements and Exhibits

24. Please file as an exhibit the license agreement with the Hospital for Sick Children of Toronto and Memorial University for the technology covering genetically modified salmonid, as discussed on page 8, along with all other material license agreements.
25. Please file as an exhibit the agreement you have with the Center for Aquaculture Technologies Canada for research and development, as discussed on page 9.

Consolidated financial statements, page F-1

26. Please update the financial statements included in the filing pursuant to Rule 8-08 of Regulation S-X.

Notes to the consolidated financial statements, page F-7

Note 1: Nature of business and organization, page F-7

27. We note your disclosure that you commenced sales of your first product in 2004 and expanded the markets to which that product had been sold. Considering that you present no revenues for fiscal years 2013, 2012, and 2011 please disclose when you ceased sales of the product and why. Also, please disclose the nature of the product that you sold.
28. In addition, we note your disclosure that you no longer devote most of your activities and resources toward raising capital. As a result, in 2006 you determined that you were no longer a development stage entity. ASC 915-10-20 defines a development stage entity as an entity devoting substantially all of its efforts to establishing a new business and for which either of the following conditions exists:
 - a. Planned principal operations have not commenced.
 - b. Planned principal operations have commenced, but there has been no significant revenue therefrom.

Considering that your planned operations have not commenced and there are no revenues, it appears that you may be a development stage entity. Please tell us in greater detail why you believe that you are no longer a development stage entity or revise as necessary.

Ronald L. Stotish
AquaBounty Technologies, Inc.
May 21, 2014
Page 7

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 Patrick Kuhn at (202) 551-3308 or Doug Jones at (202) 551-3309 if you have questions regarding comments on the financial statements and related matters. Please contact Ryan Adams at (202) 551-3191 or me at (202) 551-3217 with any other questions.

Sincerely,

/s/ J. Nolan McWilliams

J. Nolan McWilliams
Attorney-Advisor

cc: Via-Email
Bradley C. Brassler, Esq.
Jones Day