



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

DIVISION OF
CORPORATION FINANCE

April 7, 2014

Via E-mail

Jack C. Bendheim
President and Chief Executive Officer
Phibro Animal Health Corporation
Glenpointe Centre East, 3rd Floor
300 Frank W. Burr Boulevard, Suite 21
Teaneck, New Jersey 07666-6712

**Re: Phibro Animal Health Corporation
Amendment No. 1 to Registration Statement on Form S-1
Filed March 31, 2014
Amendment No. 2 to Registration Statement on Form S-1
Filed April 4, 2014
File No. 333-194467**

Dear Mr. Bendheim:

We have reviewed your amended registration statements 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1 Amendment No. 1 Filed March 31, 2014

Risk Factors, page 17

Risks Related to this Offering and Ownership of Our Class A Common Stock, page 35

Future sales of our Class A common stock, or the perception in the public markets that these sales may occur, may depress our stock price, page 37

1. In the fourth paragraph, please verify the mathematical accuracy of the 21.7 million shares of Class B common stock that will have the right to require you to register such shares under the Securities Act. Please provide details of how you determined the

amount of such shares.

Use of Proceeds, page 45

2. Based on estimated gross proceeds of \$125 million (assuming an offering price of \$17.00 per share), costs and expenses of the offering of approximately \$3.7 million (per page II-1), and approximate net proceeds of \$114.6 million, it appears your estimated underwriting discounts are approximately \$6.7 million. Please confirm whether this is correct, what the estimated discount per share is, and whether such underwriting discount pertains to only shares offered by the Company, or also to those offered by the selling shareholder. Provide corresponding disclosure that fully reconciles estimated gross proceeds to estimated net proceeds.
3. In the third paragraph, you indicate the total to be available under your New Credit Facilities, \$390 million. Please also state the respective amounts available under each of the 2014 Revolving Credit Facility and the 2014 Senior Secured Term Loan Facility. Additionally, if true, indicate only the 2014 Senior Secured Term Loan Facility will be utilized concurrent with the offering, to correspond with the related "Sources" amount presented in the table below on this page.
4. In the "Uses" section of your tabular disclosure, you indicate "Fees and expenses" will amount to \$15.4 million. However, the difference between your estimated gross proceeds of \$125.0 million and estimated net proceeds of \$114.6 million (disclosed in the first paragraph on this page) amounts to only \$10.4 million. Please provide a detailed reconciliation of these amounts.
5. In the "Uses" section of your tabular disclosure, you indicate "Cash on Balance Sheet" will amount to \$13.9 million. Please provide a detailed reconciliation of this amount from the beginning "Cash and cash equivalents" amount of \$30.5 million presented on your unaudited balance sheet, as of December 31, 2013 (page F-35).

Capitalization, page 47

6. In your tabular presentation, under "Debt," the amount presented for your "9.25% senior notes," \$297,796, does not mathematically agree with the corresponding amount per your unaudited balance sheet, page F-35, of \$297,827. Please reconcile such amounts.
7. In your tabular presentation, the adjusted "Cash and cash equivalents" amount of \$15.9 million does not mathematically agree with the corresponding amount of \$13.9 million on page 45. Please reconcile such amounts.

Dilution, page 49

8. Please provide us with the details of your calculation to determine your net tangible book deficit of \$(115.7) million, as of December 31, 2013. Please also provide us with cross

referencing for each reconciling amount to where each is presented in your corresponding unaudited financial statements, included elsewhere in your filing.

9. As in the prior comment, please also provide us with the details of each of your calculations to determine your pro forma net tangible book deficits, for each additional scenario you disclose in this section. Please also provide the underlying details and calculations, if necessary, for the items impacting each of your pro forma determinations. For ease of reading and understanding, you may wish to consider providing a comparative tabular disclosure of the actual and pro forma scenarios, with sufficient underlying footnote explanations.
10. Please explain to us how you determined the total consideration amount of shares purchased by existing shareholders, \$50,123,161, you presented in the table at the bottom of this page.
11. On page 50, in the second paragraph of this section, you state: *“If the underwriters’ option to purchase additional shares is exercised in full, our existing stockholders would own approximately 17.8% and our new investors would own approximately 82.2% of the total number of shares of our Class A common stock outstanding after this offering.”* Please verify the accuracy of these percentages and provide us with your corresponding detailed calculation thereof.
12. On page 50, in the second paragraph, you state: *“If the underwriters exercise their option to purchase additional shares in full, the pro forma net tangible book value per share after this offering would be \$(1.21) per share, and the dilution in the pro forma net tangible book value per share to new investors in this offering would be \$18.21 per share.”* Please tell us why the pro forma amounts for this scenario are the same as those you determined for the scenario when the underwriters do not exercise their option to purchase additional shares, as you presented on page 49. Additionally, please tell us whether any additional underwriters’ discounts should be factored into the calculation, assuming additional shares are deemed to be sold if the underwriters exercise their option to purchase additional shares, and what such additional discount amount would be.
13. Your disclosure in the third paragraph on page 50 appears to contradict the statement made in the second paragraph, pertaining to whether the calculation “above” assumes no exercise of the underwriters’ additional purchase option. Please revise or expand your disclosure, as appropriate.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 55

Significant Accounting Policies and Application of Critical Accounting Estimates, page 80

Share-Based Compensation, page 81

14. Please expand your disclosure to also address the extent to which the estimates to determine the fair value of the Company's shares are considered highly complex and subjective, and to state such estimates will not be necessary to determine the fair value of new awards, once the underlying shares begin trading.

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, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Donald Delaney, Staff Accountant, at (202) 551-3863 or Shannon Buskirk at (202) 551-3717 if you have questions regarding comments on the financial statements

Jack C. Bendheim
Phibro Animal Health Corporation
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and related matters. Please contact Karina V. Dorin, Staff Attorney, at (202) 551-3763 or me at (202) 551-3611 with any other questions.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief