



DIVISION OF
CORPORATION FINANCE

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

July 29, 2015

Via E-mail

Tyler W. Painter
Chief Operating Officer and Chief Financial Officer
225 Gateway Blvd.
South San Francisco, CA 94080

Re: Solazyme, Inc.
Form 10-K for Fiscal Year Ended December 31, 2014
Filed March 6, 2015
Form 10-Q for Fiscal Quarter Ended March 31, 2015
Filed May 8, 2015
File No. 1-35189

Dear Mr. Painter:

We have reviewed your filings 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 filings, 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 filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2014

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 47

Liquidity and Capital Resources, page 62

1. Please disclose under this heading a reasonable estimate of the amount you may be required to make in partner contributions, as well as guarantees, over the next 12-18 months.

Financial Statements, page 69

Note 2- Summary of Significant Accounting Policies and Recent Accounting Pronouncements, page 79

Inventories, page 82

2. Please tell us whether the 2014 inventory accounting change disclosed under this heading was material to gross margin in any quarter during fiscal year 2014.

Note 8- Investments in Joint Venture and Related Party Transactions, page 92

3. We note your disclosure stating that during the year ended December 31, 2014, you contributed \$15.3 million to the Solazyme Bunge JV through a reduction in your receivables due from the Solazyme Bunge joint venture of \$15.3 million. Further, we note that during the three months ended March 31, 2015, you contributed \$2.9 million to the Solazyme Bunge JV through a reduction in your receivables due from the joint venture of \$2.9 million. Please address the following points:
 - Tell us the nature of the revenue earned and original terms of payment.
 - Tell us how the contributions to the joint venture through a reduction in receivables were journalized.
 - Tell us how the earnings process was completed such that the revenue was recognizable.
 - Tell us how you concluded the receivables were not uncollectible.
4. We note your stock price per share dropped significantly in the fourth quarter of 2014. Please tell us how you considered the guidance in paragraphs 31 and 32 of ASC 323-10-35 -32, as well as the specific positive and negative factors you relied on, in concluding that there was no impairment of your investment in the Solazyme Bunge joint venture, other than the \$0.2 million impairment expense recorded due to lease terminations.

Form 10-Q for Fiscal Quarter Ended March 31, 2015

Note 11- Investments in Joint Ventures and Related Party Transactions, page 15

5. Please expand your disclosures with regards to the Solazyme Bunge joint venture to provide the information required by paragraphs a and b, if b is applicable, of ASC 810-10-50-5A. In addition, provide us with a most recent copy of the joint venture contract and any other contracts that outline the significant powers held by each joint venture partner. Include an analysis of the specific rights and powers you focused on in analyzing

“The power to direct the activities that most significantly affect the VIE’s economic performance.”

6. Concerning the recoverability of your investment in the Solazyme Bunge joint venture, please help us to understand the issues that have materially impacted the progress of your Moema plant and that are expected to materially impact the joint venture’s near term operating results. Provide us with a detailed chronology of the events that have impacted construction progress at the Moema plant, including the specific dates of events and an analysis of all material factors that caused changes in the estimates of project completion and changes in expectations regarding achievement of full name plate production capacity. Address the timing and causes of operational and efficiency problems, energy connectivity issues, and any other relevant factors in your response.

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 Tracie Mariner, Staff Accountant, at (202) 551-3744, or Alfred Pavot, Staff Accountant, at (202) 551-3738, if you have questions regarding comments on the financial statements and related matters. You may contact me at (202) 551-3355 with any other questions.

Sincerely,

/s/ Terence O’Brien

Terence O’Brien
Branch Chief