



DIVISION OF
CORPORATION FINANCE

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

February 3, 2012

Via Facsimile

John Lorenz, President and Chief Executive Officer
GlyEco, Inc.
4802 East Ray Road, Suite 23-196
Phoenix, Arizona 85044

**Re: GlyEco, Inc.
Amendment No. 1 to Current Report on Form 8-K
Filed January 18, 2012
File No. 000-30396**

Dear Mr. Lorenz:

We have reviewed your amended filing and response letter and have the following comments.

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

Summary Compensation Table, page 21

1. We note your response to comment ten from our letter dated December 23, 2011. Please clarify in note 4 whether the \$79,240 and \$110,305 paid to Mr. Lorenz for 2010 and 2009, respectively, and the \$208,000 and \$117,000 owed to Mr. Lorenz for 2010 and 2009, respectively, is for consulting services to Global Recycling. Since your disclosure indicates that Mr. Lorenz earned \$148,500 and \$124,500 in 2010 and 2009, respectively, it is unclear how you are calculating the amounts owed to Mr. Lopez. If both the amounts currently disclosed as paid to and owed to Mr. Lorenz are for consulting services to Global Recycling, please explain to us how you arrived at the amounts owed given the amounts already paid to Mr. Lorenz.

Director Compensation, page 25

2. We note your disclosure that director compensation for Mr. Amato and Mr. Lorenz is fully reflected in the Summary Compensation Table. If any individuals are paid

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compensation for service as a director, including your named executive officers, please revise your disclosure to include the table and all other information required by Item 402(r) of Regulation S-K.

Convertible Securities, page 27

3. Please explain how the expiration of the Forbearance Agreements impacts the extended maturity dates thereunder. We note that the First Forbearance Agreement extended the maturity date to March 31, 2012, but it expired on November 30, 2010, and that the Second Forbearance Agreement extended the maturity date to May 25, 2015, but it expired on December 31, 2011. Please explain what the impact of the expiration of the Forbearance Agreements is on the company. Please also explain what the default was on the terms of the First Forbearance Agreement, and clarify whether the company is currently in compliance with the terms of the Second Forbearance Agreement.

Exhibit 99.1

4. We have read your response to comment 15 of our letter dated December 23, 2011 and the related disclosures. Please revise the financial statements included in Exhibit 99.1 to include an updated audit opinion, footnote disclosure regarding the restatement and revise the face of your financial statements to clearly indicate which columns are restated.

Please contact Melinda Hooker, Staff Accountant, at (202) 551-3732 or John Cash, Accounting Branch Chief, at (202) 551-3768 if you have questions regarding comments on the financial statements or related matters. Please contact Chambre Malone, Staff Attorney, at (202) 551-3262 or, in her absence, me at (202) 551-3760 with any other questions.

Sincerely,

/s/ Pamela Long

Pamela Long
Assistant Director

Cc: Virginia K. Sourlis, Esq.