



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

DIVISION OF
CORPORATION FINANCE

Mailstop 4631

June 26, 2017

Ian Rhodes
Chief Executive Officer
GlyEco, Inc.
230 Gill Way
Rock Hill, SC 29730

**Re: GlyEco, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed June 14, 2017
File No. 333-215941**

Dear Mr. Rhodes:

We have limited our review of your registration statement to those issues we have addressed in our 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.

Material U.S. Federal Income Tax Consequences, page 83

1. In light of the “short form” tax opinion you have filed, please revise the tax section to:
 - a. Clarify that the discussion represents the opinion of Robinson Brog Leinwand Greene Genovese & Gluck P.C.
 - b. Revise the disclosure on page 84 that reads: “This discussion is not a complete analysis of all potential U.S. federal income tax consequences”, to clarify that you have described all material tax consequences.
 - c. Revise statements such as “we believe” to “it is the opinion of counsel”
 - d. Clearly set forth the opinions of counsel with regard to the tax consequences.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

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Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Kate McHale, Staff Attorney, at (202) 551-3464 or me at (202) 551-3765 with any questions.

Sincerely,

/s/ Pamela A. Long

Pamela A. Long
Assistant Director
Office of Manufacturing and
Construction