



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3561

October 12, 2016

Via E-mail

Michael F. Biehl  
Chief Financial Officer  
Fairmount Santrol Holdings Inc.  
8834 Mayfield Road  
Chesterland, OH 44026

**Re: Fairmount Santrol Holdings Inc.  
Form 10-K for Fiscal Year Ended December 31, 2015  
Filed March 15, 2016  
File No. 001-36670**

Dear Mr. Biehl:

We have limited our review of your filing to the financial statements and related disclosures 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2015

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

Segment Contribution Margin, page 60

1. You attribute the changes in segment contribution margin between reporting periods for each segment to multiple factors such as changes in sales volumes, changes in product mix, changes in selling prices and higher operating costs per ton due to lower volumes over which to absorb fixed costs such as railcars and logistics. Please revise your disclosure to quantify the effect for each underlying factor that you have identified.

Michael F. Biehl  
Fairmount Santrol Holdings Inc.  
October 12, 2016  
Page 2

Notes to Consolidated Financial Statements

9. Goodwill and Other Intangible Assets, page 91

2. You state that the acquired technology from the SSP acquisition will be amortized ratably over its estimated useful life once product using the technology is fully commercialized. Please tell us how you determined that the capitalization of the asset was appropriate at the time of acquisition and why you are deferring its amortization. Please refer to ASC 730-10-25-2c.

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.

You may contact Suying Li at (202) 551-3335 or me at (202) 551-3651 with any questions.

Sincerely,

/s/ Joel Parker

Joel Parker  
Senior Assistant Chief Accountant  
Office of Beverages, Apparel and  
Mining