



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

September 1, 2016

Greg L. Armstrong
Chief Executive Officer
Plains GP Holdings, L.P.
333 Clay Street, Suite 1600
Houston, TX 77002

**Re: Plains GP Holdings, L.P.
Preliminary Proxy Statement on Schedule 14A
Filed August 5, 2016
File No. 1-36132**

Dear Mr. Armstrong:

We have reviewed your filing 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.

The Transactions and Transaction Documents, page 23

Background of the Transactions, page 39

1. We note that representatives of PAA management and the boards of PAA and PAGP reviewed and considered various alternative transaction structures at meetings held on April 28, 2016, and May 18, 2016, respectively. Please expand your disclosure regarding the various alternatives that were considered at these meetings, and briefly explain how you arrived at your conclusion “that an IDR Elimination Transaction using the PAA Simplification structure coupled with a distribution reduction appeared to present the best long-term solution for PAA and PAGP of the various alternatives considered.”

Unaudited Financial Projections of PAA, page 53

2. Explain to us how you decided which “summary information” regarding the projections to omit and which to disclose. In your discussion, please consider the guidance that Item

10(b) of Regulation S-K provides; in particular, please refer to Item 10(b)(2), which discusses format considerations.

3. You state at page 89 that the PAGP board and its financial advisor considered the projections in its due diligence and in evaluating the recapitalization and related transactions. You state that the board considered the entities' "prospects," which presumably derived at least in part from the projections, as part of its analysis in deciding to approve the Transactions. However, you state at page 53 that "PAGP shareholders are cautioned not to rely on the forecasts" and at page 57 that the PAGP board viewed "the uncertainty of the unaudited financial projections of PAA and the bases on which the PAGP GP board made its determination" as weighing against approval. Please revise to clarify how the PAGP board used the projections in its deliberative process and during negotiations, and explain further why it cautions shareholders against relying on the same information when they decide how to cast their votes.
4. Please disclose the material assumptions used in deriving each of the four financial forecast cases described on pages 55-56.

Opinion of the Financial Advisor to the PAGP GP Board, page 58

5. Please provide us with the board books Jefferies prepared and presented.
6. You refer the reader to the text of the fairness opinion for certain items that Item 1015(b) of Regulation M-A requires you to provide in the summary, such as the procedures followed. Please revise accordingly. In addition, the disclaimers which appear at pages 61, 69, and B-4 are inconsistent with the right of shareholders to rely on the fairness opinion. Eliminate any suggestion that the opinion was directed "solely" to your board or may not be relied upon by others. Refer to the related guidance available at the following location: http://www.sec.gov/divisions/corpfin/guidance/ci111400ex_regm-a.htm.
7. For each analysis involving the use of financial projections, please briefly explain why the advisor chose to use the three referenced sets of projections but not the "hybrid" case.

General, page 68

8. We note your reference to the "unrelated" matter for which Jefferies provided PAA with investment banking services within the past two years. Please revise to quantify the fees paid to Jefferies for these services. See Item 1015(b)(4) of Regulation M-A.

Comparison of the Rights of Our Shareholders Before and After the Transactions, page 78

Economic Alignment with PAA Common Unitholders, page 79

9. Please disclose the number of Class A shares, Class B shares, and Class C shares that you believe will be outstanding after giving effect to the transactions contemplated by the Simplification Agreement, as well as the estimates and assumptions underlying your calculations. Also fill in the percentages and numbers omitted from the chart at page 16.

Security Ownership of Certain Beneficial Owners and Management, page 90

Beneficial Ownership of Plains GP Holdings, L.P., page 90

10. Consistent with Item 403 of Regulation S-K and Exchange Act Rule 13d-3, please identify the natural person or persons who directly or indirectly exercise sole or shared voting and/or dispositive power with respect to the shares held by Tortoise Capital Advisors, L.L.C., Chickasaw Capital Management LLC, Salient Capital Advisors, and Oxy Holding Company (Pipeline), Inc.

Unaudited Pro Forma Condensed Consolidated Financial Statements, page P-1

11. You filed your Form 10-Q for the quarterly period ended June 30, 2016 on August 8, 2016. Please update your pro forma financial statements as well as your selected historical financial information to reflect the financial information included in that filing.

Closing Comments

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.

Greg L. Armstrong
Plains GP Holdings, L.P.
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You may contact Irene Barberena-Meissner, Attorney-Adviser, at (202) 551-6548 or, in her absence, Timothy S. Levenberg, Attorney-Adviser, at (202) 551-3707 with any questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director
Office of Natural Resources

cc: Alan Beck, Esq.
Vinson & Elkins LLP