

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

October 4, 2013

Via E-mail
Richard K. McGee
General Counsel
Plains GP Holdings, L.P.
333 Clay Street
Suite 1600
Houston, TX 77002

Re: Plains GP Holdings, L.P.

Amendment No. 2 to Registration Statement on Form S-1

Filed September 26, 2013 File No. 333-190227

Dear Mr. McGee:

We have reviewed your response letter dated September 26, 2013 as well as your amended registration statement and have the following additional comments.

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.

Amendment No. 2 to Registration Statement on Form S-1 Filed September 26, 2013

Summary, page 1

Organizational Structure, page 13

1. It appears that each AAP unit is effectively linked with one of your Class B shares and a general partner unit for purposes of any transfer or exchange of AAP units. See pages 57 and 134. Therefore, please modify your "Exchange right" bullet under the "Existing Owners" oval to indicate that one AAP unit plus one Class B share *plus one general partner unit* is exchangeable for one Class A share. Alternatively, tell us why such a

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description would not be accurate. Please also make the changes to this diagram that were discussed by telephone during a call with counsel today.

Ownership of Our General Partner; Election of Directors, page 15

- 2. In the first sentence, you state that "[i]n connection with the recapitalization transactions ..., the Existing Owners will initially own all of the membership interests in PAA GP Holdings LLC, our general partner." Disclosure elsewhere, including in the proposed pricing terms pages, reflects less than 100% interest ownership once the transactions occur. Please revise to eliminate any potential ambiguity about the timing and percentages involved. For example, make clear when the Existing Owners will in fact own a 78.9% membership interest in your general partner.
- 3. We note your statement that "[a]s the Existing Owners reduce their ownership of AAP units through this offering and in connection with future exchanges of AAP units and Class B shares for Class A shares following this offering, the Existing Owners' ownership interest in our general partner will be reduced, and our ownership interest in our general partner will be proportionately increased." As discussed with counsel today, please provide new Risk Factors disclosure regarding any associated risks, along with a cross-reference to the enhanced disclosure elsewhere that counsel proposed to include in order to address this issue.

Forms of Opinion

4. Prior to requesting accelerated effectiveness, you will need to file as exhibits the final, signed versions of the opinions. In the meantime, please revise the exhibit list to make clear the versions you have filed are merely "forms of opinion" at this point.

Exhibit 8.1

5. In the penultimate paragraph, counsel indicates in part that the opinion may not be "furnished to, assigned to, quoted to or relied upon by any other person, firm or other entity, for any purpose . . ." Notwithstanding the other portions of the paragraph, please obtain and file an opinion which does not include this limitation on reliance.

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 Act of 1933 and all applicable Securities 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.

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Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jenifer Gallagher, Staff Accountant, at (202) 551-3706, or Kimberly Calder, Assistant Chief Accountant, at (202) 551-3701, if you have questions regarding comments on the financial statements and related matters. Please contact Paul Monsour, Staff Attorney, at (202) 551-3360, or in his absence, Timothy Levenberg, Special Counsel, at (202) 551-3707, with any other questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall Assistant Director

cc: Mr. David P. Oelman