September 26, 2013

H. Roger Schwall Assistant Director United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549-3561

Re: Plains GP Holdings, L.P.

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

Filed September 6, 2013 File 333-190227

Ladies and Gentlemen:

Set forth below are the responses of Plains GP Holdings, L.P. ("we," "us" or "our"), to comments received from the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") by letter dated September 18, 2013, with respect to Amendment No. 1 to the Registration Statement on Form S-1, File No. 333-190227, filed with the Commission on September 6, 2013 (the "Registration Statement"). Concurrently with the submission of this letter, we have filed through EDGAR Amendment No. 2 to the Registration Statement ("Amendment No. 2").

For your convenience, each response is prefaced by the exact text of the Staff's corresponding comment in bold, italicized text. All references to page numbers and captions correspond to the Amendment No. 2 to Registration Statement on Form S-1 unless otherwise specified.

Amendment No. 1 to Registration Statement on Form S-1 Filed September 6, 2013

General

1. We note your response to the first numbered comment from our letter to you dated August 27, 2013, and we re-issue the comment in part. Please provide the partnership agreement by no later than with your next amendment so that we can complete the related portions of our review, or explain to us the reasons for any further delay in providing it. Also, we will need to review the other omitted exhibits, including the legality and tax opinions, once you file them.

<u>RESPONSE</u>: We acknowledge the Staff's comment and have filed with Amendment No. 2 the Amended and Restated Limited Partnership Agreement of Plains GP Holdings, L.P. We have also filed certain of the other exhibits with Amendment No. 2, including the form of (i) opinion of counsel as to the legality of the securities being registered and (ii) opinion of counsel relating to tax matters. We will file the remaining omitted exhibits soon enough to allow sufficient time for the Staff to review them.

Prospectus Cover Page

2. We note your supplemental response to prior comment 4. Please provide, at an appropriate place in the prospectus, the explanation that appears in your response, particularly the information in its last two substantive paragraphs.

RESPONSE: We acknowledge the Staff's comment and have revised the Registration Statement as requested. Please see page 229.

Material U.S. Federal Income Tax Consequences, page 255

3. Revise or eliminate the text at page 261 which includes the disclaimer language "THE FOREGOING DISCUSSION IS FOR GENERAL INFORMATION ONLY." Please see Staff Legal Bulletin 19 (Corp. Fin.) (October 14, 2011), Section III.D.1, which states in part that "Investors are entitled to rely on the opinion expressed. Examples of inappropriate disclaimers include 'This discussion is being provided for informational purposes only....'"

<u>RESPONSE</u>: We acknowledge the Staff's comment and have removed the disclaimer language referenced above from the Registration Statement. Please see page 262.

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Please direct any questions that you have with respect to the foregoing or any requests for additional supplemental information to Alan Beck of Vinson & Elkins L.L.P. at (713) 758-3638.

Very truly yours,

PLAINS GP HOLDINGS, L.P.

By: PAA GP HOLDINGS LLC, its general partner

Enclosures

cc: Paul Monsour Timothy Levenberg David P. Oelman Alan Beck Joshua Davidson

Jason Rocha Al Swanson By: /s/ Richard K. McGee
Name: Richard K. McGee
Title: Executive Vice President,
General Counsel and Secretary

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