

September 5, 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.
Registration Statement on Form S-1
Filed July 29, 2013
File No. 333-190227**

Ladies and Gentlemen:

Set forth below are the responses of Plains GP Holdings, L.P. (the "**Partnership**," "**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 August 27, 2013, with respect to Registration Statement on Form S-1, File No. 333-190227, filed with the Commission on July 29, 2013 (the "**Registration Statement**"). Concurrently with the submission of this letter, we have filed through EDGAR Amendment No. 1 to the Registration Statement ("**Amendment No. 1**").

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 Amendment No. 1 unless otherwise specified.

Registration Statement on Form S-1 Filed July 29, 2013

General

- We may have additional comments once you supply the information you omit throughout the prospectus, file all omitted exhibits and any material contracts, supply the partnership agreement (preferably with your next amendment), and update the disclosure as necessary. Please remember to allow enough time to respond to all such staff comments. Also please provide updated information regarding the status of your NYSE listing application, promptly provide any omitted disclosure which has not been omitted pursuant to Securities Act Rule 430A, and update your disclosure accordingly.***

RESPONSE: We acknowledge the Staff's comment and advise the Staff that the Partnership intends to file the form of the Amended and Restated Agreement of Limited Partnership of Plains GP Holdings, L.P. with a subsequent amendment to the Registration Statement. We also wish to inform the Staff that the NYSE has scheduled the Partnership for a pre-filing confidential review on September 6, 2013. Once the NYSE has cleared us, we will file a listing application with the NYSE. We undertake to provide in future amendments updated

information regarding the status of our NYSE listing application, as well as all omitted exhibits and all information in the Registration Statement that we are not entitled to omit under Rule 430A. We will allow sufficient time for the Staff to review our complete disclosure (including all omitted exhibits) and for us to respond to any comments that may result from the Staff's review prior to the distribution of the preliminary prospectus.

- As soon as practicable, please furnish to us a statement as to whether the amount of compensation to be allowed or paid to the underwriter(s) has been cleared with FINRA. Prior to the effectiveness of this registration statement, please provide us with a copy of the letter informing you that FINRA has no objections.***

RESPONSE: We acknowledge the Staff's comment and undertake to provide the requested statement and a copy of the FINRA no-objections letter to the Staff as soon as such no-objections letter becomes available.

- Please update the financial statements of Plains All American GP LLC to comply with Rule 3-12 of Regulation S-X.***

RESPONSE: We acknowledge the Staff's comment and have included updated financial statements and related disclosures in the prospectus in accordance with Rule 3-12 of Regulation S-X.

Prospectus Cover Page

- Given that your only cash-generating asset will be your limited partner interests in Plains AAP, L.P. ("AAP"), which indirectly owns the 2% general partner interest in Plains All American Pipeline, L.P. ("PAA"), it could be argued that you indirectly control PAA's general partner. Please discuss at an appropriate place in the prospectus the relationship among you, AAP, and PAA with respect to general partner liability. Compare and contrast your structure and each party's responsibilities with those of a limited partner and general partner found in more typical limited partnership structures.***

RESPONSE: We acknowledge the Staff's comment and respectfully submit our belief that no further disclosure in the Registration Statement relating to general partner liability is warranted. We concur with the Staff's assertion regarding indirect control of PAA GP LLC ("PAA GP") by the Partnership, but, for the reasons described below, we do not believe that subjects us or our limited partners to meaningful risk of liability.

Specifically, while Section 17-403 of the Delaware Revised Uniform Limited Partnership Act (the "**Delaware Act**") subjects general partners to liability for the obligations of limited partnerships, Section 17-108 of the Delaware Act permits a limited partnership to indemnify and hold harmless any partner or other person from and against any and all claims and demands whatsoever. As permitted by Section 17-108 of the Delaware Act, Section 7.7 of

(<http://www.sec.gov/Archives/edgar/data/1070423/000119312512245124/d357272dex31.htm>) provides in pertinent part as follows:

"To the fullest extent permitted by law but subject to the limitations expressly provided in this Agreement, all Indemnitees shall be indemnified and held harmless by the Partnership from and against any and all losses, claims, damages, liabilities, joint or several, expenses (including legal fees and expenses), judgments, fines, penalties, interest, settlements or other amounts arising from any and all claims, demands, actions, suits or proceedings, whether civil, criminal, administrative or investigative, in which any Indemnitee may be involved, or is threatened to be involved, as a party or otherwise, by reason of its status as an Indemnitee; provided, that in each case the Indemnitee acted in good faith and in a manner that such Indemnitee reasonably believed to be in, or (in the case of a Person other than the General Partner) not opposed to, the best interests of the Partnership and, with respect to any criminal proceeding, had no reasonable cause to believe its conduct was unlawful..."

Given that the definition of "Indemnitee" under PAA's LPA includes the General Partner (PAA GP) and its Affiliates, this indemnity extends to the Partnership as well as to PAA GP, AAP, Plains All American GP LLC and the Partnership's general partner. As a result of these indemnification arrangements, PAA is generally required economically to bear the general partner liability that might otherwise attach pursuant Section 17-403 of the Delaware Act.

In addition to this contractual indemnity, PAA's organizational structure in combination with the terms of its commercial contracts further protects the Partnership and its limited partners from liability associated with ownership or control of PAA's general partner. First, PAA is primarily a holding company and substantially all of PAA's commercial contracts are entered into by subsidiaries who benefit from a corporate or LLC structure that protects the owners of these corporate entities, including PAA and the Partnership, from direct liability. Second, in the limited circumstances where PAA is a contractual counter-party (e.g., material debt agreements), the obligations under such contracts have been made expressly non-recourse to PAA GP. For these reasons and the protections afforded by PAA's LPA with respect to indemnification and exculpation of PAA GP and affiliated entities, we believe the likelihood that the Partnership or any other entity affiliated with PAA GP could be held individually liable for material obligations is remote and therefore not material to a prospective investor's investment decision in this offering.

For all of these reasons, we respectfully request the Staff's concurrence in our belief that no further disclosure in the Registration Statement is warranted.

Summary, page 1

Organizational Structure, page 12

5. *Please revise the diagram to provide the omitted percentages. Also, please break out as a separate entry the amount of PAA owned directly by the Existing Owners. For example, you could move the "Public PAA Investors" to the other side of PAA and*

draw a line from your "Existing Owners" to PAA that runs parallel to the Public PAA Investors' line and quantifies the limited partnership interest in PAA that each entity owns. We note footnote 3 to the chart in that regard.

RESPONSE: We acknowledge the Staff's comment and advise the Staff that the omitted percentages are not yet ascertainable, as the percentages are directly correlated to the intended size of the offering, which is the subject of ongoing discussions between the Existing Owners and the underwriters. We advise the Staff that we will revise the diagram on pages 13 and 54 to provide the omitted percentages in a future amendment to the Registration Statement following a determination of the omitted percentages. With respect to the separate entry of the percentage interest in PAA owned directly by the Existing Owners, we have revised the Registration Statement as requested to provide a placeholder to reflect the amount of PAA owned directly by the Existing Owners, which amount will be provided in a future amendment to the Registration Statement. Please see pages 13 and 54.

Limited Call Right, page 19

6. *You do not yet disclose what percentage of your outstanding Class A and Class B shares will be owned by your Existing Owners and any of the referenced affiliates. Please revise the disclosure here to clarify whether they will own more than the threshold amount to call and purchase all Class A shares at the time this offering concludes. We note the related risk factor disclosure at page 36. Also, please advise us whether you will comply with the tender offer rules and file a Schedule TO if this right is exercised, if applicable. If you believe an exemption from the tender offer rules would be available, please explain why.*

RESPONSE: We acknowledge the Staff's comment and advise the Staff that, based on the expected percentage of Class A and Class B shares owned by our Existing Owners and their affiliates as of the consummation of the offering, and assuming that our Existing Owners and their affiliates do not acquire any additional Class A and Class B shares, our general partner would not have the ability to exercise the call right. Therefore, we respectfully submit that any revision to the disclosure is not appropriate at this time. However, if for any reason the anticipated ownership levels of the Existing Owners and the referenced affiliates were to increase as of the consummation of the offering and this threshold amount would be met, providing our general partner with the ability to exercise the call right, we would adjust the threshold or further revise this disclosure in a subsequent amendment to the Registration Statement.

In addition, Rule 13e-4(h)(1) of the Securities Exchange Act of 1934 provides that "this rule shall not apply to calls or redemptions of any security in accordance with the terms and conditions of its governing instruments." The Partnership's partnership agreement (the instrument that governs the terms and conditions of our Class A shares and Class B shares), which we will file with a subsequent amendment to the Registration Statement, will provide our general partner with the limited call right described in the Registration Statement. Consequently, we believe that the tender offer rules are not applicable to the contractual call right of our general partner and therefore we do not expect that our general partner would file a Schedule TO if this right is

exercised. To the extent that the exception set forth in Rule 13e-4(h)(1) is not available, any exercise of the call right would be made in compliance with the tender offer rules.

Material Tax Consequences, page 20

7. *We note your representations at page 1 and elsewhere that available deductions will offset your taxable income for an extended period of time following the closing of this offering and that none of the distributions paid to investors “should be treated as taxable dividend income under current existing federal tax regulations” for the listed years. Please obtain and file an opinion of counsel or an independent public or certified accountant regarding all the material federal income tax consequences related to the securities being offered, as well as those flowing from the partnership’s election to be treated as a corporation. Disclose why the partnership is making that election. Also provide appropriate corresponding disclosure under a caption such as “Material Federal Income Tax Consequences,” either summarizing the opinion or providing it in the prospectus. Please see generally Staff Legal Bulletin No. 19 (Corp.Fin.) (October 14, 2011) [“SLB 19”] at Section III. In particular, we refer you to SLB19 at Section III.A.2, which includes limited partnership offerings among the examples of transactions “generally involving material tax consequences.”*

RESPONSE: We acknowledge the Staff’s comment and have undertaken to revise the Registration Statement accordingly. Please see “Material U.S. Federal Income Tax Consequences” beginning on page 255. Please note that the revisions to such section include the addition of a statement to the effect that the legal conclusions in such section are, unless otherwise noted, the legal opinion of Vinson & Elkins L.L.P. Please note that we intend to file the legal opinion of Vinson & Elkins L.L.P. confirming the legal conclusions in such section as Exhibit 8.1 in a future amendment to the Registration Statement. We believe that the revised disclosure accurately describes all of the material federal income tax consequences related to the securities being offered, as well as those flowing from the Partnership’s election to be treated as a corporation for federal income tax purposes. Regarding the reasons for the Partnership’s decision to make such election, the Partnership has elected to be taxed as a corporation for federal income taxes as it believes this election will provide the Partnership with access to a larger pool of investor capital. This access largely results from the fact that certain institutional investors will only make (or at least have a strong preference for) investments in entities that issue Form 1099s to investors as opposed to entities that issue partnership returns on Form K-1, which returns could include an allocation of specific types of income that certain institutional investors desire to avoid. We do not believe an explanation of the reasons for our election to be treated as a corporation for federal income tax purposes is material to an investment decision with respect to the Partnership’s Class A shares and have therefore not proposed to include additional language explaining the election. We have disclosed in the Summary of the Registration Statement and elsewhere the different nature of the tax reporting associated with an investment in the Partnership, as compared to a master limited partnership. See pages 1, 21, 230 and 255 of the revised Registration Statement.

Risk Factors, page 23

8. *Please revise and shorten this 30-page section to comply with Item 503(c) of Regulation S-K. That Item indicates in part that your risk factors discussion “must be concise and organized logically. Do not present risks that could apply to any issuer or any offering.” Note also that Securities Act Release 33-6900 indicates that “meticulous care should be taken to assure that investors are provided with clear, concise and understandable disclosure” as required by Commission rules. Your risk factors should be brief and to the point.*

RESPONSE: We acknowledge the Staff’s comment and have revised the Risk Factors accordingly. Please see “Risk Factors” beginning on page 24.

9. *We note the disclosure under “Our cash flow will be entirely dependent upon the ability of PAA” at page 23. If true, please add a risk factor to disclose that there is no limit on the fees and expense reimbursements that you may be required to pay to the general partners and its affiliates and to make clear that there similarly is no restriction regarding the amount of reserves that your general partner may establish for the proper conduct of your business, etc. Discuss the impact that these items may have on the cash available for distribution. In the alternative, revise and streamline the current risk factor to make these points.*

RESPONSE: We acknowledge the Staff’s comment and have revised the referenced risk factor to disclose that there is no limit on the fees and expense reimbursements that we may be required to pay the general partner and its affiliates and to make clear that there similarly is no restriction under our partnership agreement regarding the amount of reserves that our general partner may establish for the proper conduct of our business. Please see pages 24-25.

Our Cash Distribution Policy and Restrictions on Distributions, page 62

10. *Your disclosures under “Rationale for Our Cash Distribution Policy” require further clarification. You begin that discussion by stating, “Our partnership agreement requires that we distribute all of our available cash quarterly.” You also state that “we believe that our investors are best served by our distributing all of our available cash to our Class A shareholders....” But in the following subsection captioned “Restrictions and Limitations on Our Cash Distribution Policy,” you indicate that (emphasis supplied), “Our distribution policy and PAA’s distribution policy are subject to certain restrictions and may be changed at any time.” The balance of your prospectus, including reference at page 1 to a quantified expected “initial quarterly cash distribution,” appears to suggest that the receipt of such quarterly distributions is intended to be an essential aspect of the securities you are offering. Please revise or explain these apparently contradictory statements.*

RESPONSE: We have revised the Registration Statement to remove the statement that our distribution policy “may be changed at any time.” While our and PAA’s partnership agreements may be amended in various circumstances, an amendment to either partnership agreement that would be adverse in any material respect to the applicable partnership’s equity holders would require a vote of the affected holders. Accordingly, a material change to either entity’s partnership agreement modifying such entity’s obligation to distribute all of its available cash quarterly is unlikely and we have deleted the related statement. See page 61 of the revised Registration Statement.

PAA's Cash Distribution Policy, page 67

11. *We note the table PAA's Cash Distribution History on page 68 has a column for Pro Forma Distributions to Plains GP Holdings, L.P. for the periods 2009 through 2013. Please provide pro forma distributions for only the most recent fiscal year and interim period, per Rule 11-02(c) of Regulation S-X.*

RESPONSE: We acknowledge the Staff's comment and have revised the Registration Statement as requested. Please see page 66.

Unaudited Pro Forma Available Cash to Pay Distributions for the Year Ended December 31, 2012 and the Twelve Months Ended March 31, 2013, page 69

12. *You present pro forma information for the year ended December 31, 2012, and twelve months ended March 31, 2013. Please advise us whether you intend to provide updated disclosure in that regard and, if not, whether presenting a different period would have yielded different results.*

RESPONSE: We acknowledge the Staff's comment and note that we have updated the disclosure on page 68 to present pro forma information for the twelve months ended June 30, 2013.

13. *We note you adjust PAA EBITDA amounts to remove the (gain) loss from derivative activities net of inventory valuation adjustments to compute the non-GAAP measure, PAA Adjusted EBITDA. Please revise your disclosure to specify how the (gain) loss from derivative activities are calculated for all periods presented. To the extent Adjusted EBITDA is intended to reflect cash flow associated with derivatives settled during the period, please confirm no amounts represent a recovery of cost.*

RESPONSE: We acknowledge the Staff's comment and note that our presentation of Adjusted EBITDA is not intended to reflect cash flow associated with derivatives settled during the period. We use derivative instruments for risk management purposes, and our related processes include specific identification of hedging instruments to an underlying hedged transaction. Although we identify an underlying transaction for each derivative instrument we enter into, there may not be an accounting hedge relationship between the instrument and the underlying transaction. In the course of evaluating our results of operations, we identify the earnings that were recognized during the period related to derivative instruments for which the identified underlying transaction does not occur in the current period and exclude the related gains and losses in determining Adjusted EBITDA. We have revised the related disclosure in the Registration Statement to describe our treatment of these items. Please see page 70.

14. *Please disclose how you define maintenance capital expenditures for purposes of computing the available cash for distribution by PAA.*

RESPONSE: PAA defines "maintenance capital" as "capital investments for the replacement of partially or fully depreciated assets in order to maintain the service capability, level of production and/or functionality of [its] existing assets." The Registration Statement has been revised to add a footnote description to disclose this definition of maintenance capital expenditures. See page 71.

Estimated Minimum Cash Available for Distribution Based upon Estimated Minimum Adjusted EBITDA of Plains All American Pipeline, L.P., page 72

15. *We note that you intend to make quarterly distributions, but that you have provided projected information only for the twelve months ending September 30, 2014. Insofar as you intend to make quarterly distributions, please revise the tabular entries to make this presentation on a quarterly basis.*

RESPONSE: We acknowledge the Staff's comment and have revised the tabular entries on page 73 of the Registration Statement to make the presentation on a quarterly basis.

Lock-Up Agreements, pages 247 and 256

16. *If the underwriters have any understandings, tacit or explicit, or any present intent to release the lock-ups early, disclose this. We note the related disclosure at page 31 in the Risk Factors section.*

RESPONSE: We acknowledge the Staff's comment and respectfully advise the Staff that there are currently no understandings, tacit or explicit, or any present intent to release the lock-ups early. Please see "Underwriting" beginning on page 264. We also note that the Existing Owners of PAA's general partner are still discussing the details of the lock-up and related arrangements, and we will advise the Staff, and revise our disclosure accordingly, if such discussions result in a change regarding the existence of any understandings, tacit or explicit, or any present intent to release the lock-ups early.

Index to Financial Statements, page F-1

Plains All American Pipeline, L.P.

17. *Given your reliance on the operations and cash distributions of Plains All American Pipeline, L.P. (PAA) for the cash flows of the Company and for the ability of the Company to make its cash distributions, it appears that the financial statements of PAA are necessary for the adequate presentation of the financial condition of the Company and for the protection of investors, as indicated in Rule 3-13 of Regulation S-X.*

RESPONSE: We acknowledge the Staff's comment. However, as noted under "Financial Presentation" within "Management's Discussion and Analysis of Financial Condition and Results of Operations," the financial statements of the registrant consolidate PAA and its subsidiaries. As a result of this consolidation, the registrant's financial statement presentation and results of operations do not differ materially from PAA's financial statement presentation and results of operations. As explained, the only meaningful differences in the registrant's financial statements (as compared to PAA) relate to (i) indebtedness that resides in AAP above the PAA entity level (which indebtedness is described in detail in the Registration Statement) and (ii) the presentation of noncontrolling interests in AAP and PAA as well as their subsidiaries that are not owned by the registrant. See page 85.

Given these insignificant differences, we respectfully submit that inclusion of PAA's stand-alone financial statements would result in a significantly greater volume of financial pages (in excess of 100 pages) without providing any meaningful information relative to a prospective investor's investment decision. In that regard, we believe PAA's financial statements are more likely to confuse an investor than contribute to an informed investment decision. Accordingly, we request the Staff's concurrence in our belief that PAA's financial statements are not necessary for the adequate presentation of the financial condition of the Partnership and for the protection of investors.

Unaudited Pro Forma Condensed Consolidated Financial Statements, page F-3

18. *Please clarify within the notes to the pro forma financial statements why the transfer of ownership interests in AAP in exchange for cash proceeds from the offering are accounted for at the historical carrying basis for US GAAP accounting purposes.*

RESPONSE: We acknowledge the Staff's comment and have revised the Registration Statement to explain why this transfer is accounted for on a historical cost basis. Please see page F-12.

19. *We note you have elected to be treated as a corporation for U.S. Federal income tax purposes. Please disclose why your pro forma statements of operations and per share data do not include adjustments to reflect the impact of this change in tax filing status.*

RESPONSE: We acknowledge the Staff's comment. The effective date of our election to be taxed as a corporation for U.S. federal income tax purposes will be the date on which we were formed and thus we do not consider this election to be a change in tax filing status. Further, we note that our election will only impact the Partnership (and not PAA's general partner and its consolidated subsidiaries), and we have no significant assets on the date of our formation. Please reference footnote L in the notes to the pro forma financial statements on page F-12.

Plains All American GP LLC and Subsidiaries Financial Statements, page F-18

Note 10 — Derivatives and Risk Management Activities, page F-60

20. *We note you characterize a portion of the gains or losses for derivatives not designated for hedge accounting as realized. The guidance in FASB ASC 815-10-35-2 does not differentiate between realized and unrealized gains and losses when recording changes in the fair value of derivatives not designated as hedges. Please provide clarifying disclosure to indicate how you derived the realized portion of the derivative loss.*

RESPONSE: We acknowledge that the guidance in FASB ASC 815-10-35-2 does not differentiate between realized and unrealized gains and losses when recording changes in the fair value of derivatives not designated as hedges. For derivatives not designated as hedges, we present all changes in fair value in a single line item on our consolidated statement of operations from the inception of the derivative instrument to the settlement of the derivative instrument. To clarify our disclosure we have deleted footnote 2 to our table. Please see pages F-64 and F-65.

* * * * *

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

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

Enclosures

cc: Jenifer Gallagher
 Kimberly Calder
 Paul Monsour
 Timothy Levenberg
 David P. Oelman
 Alan Beck
 Joshua Davidson
 Jason Rocha
 Al Swanson