PLAINS ALL AMERICAN PIPELINE, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002

January 29, 2007

United States Securities and Exchange Commission Division of Corporation Finance Mail Stop 7010 100 F Street, N.E. Washington, D.C. 20549-7010 Attn: Anne Nguyen Parker

Re: Plains All American Pipeline, L.P. Amendment No. 1 to Registration Statement on Form S-3 Filed December 21, 2006 File No. 333-138888

Ladies and Gentlemen:

Set forth below are our responses to the comments contained in the letter from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") dated January 18, 2007 relating to Amendment No. 1 to Registration Statement on Form S-3, File No. 333-138888, (the "Registration Statement"). For your convenience, the comments provided by the Staff have been included in bold face type preceding each response in the order presented in the comment letter. References to "we," "us" and "our" herein refer to Plains All American Pipeline, L.P.

Selling Unitholders, page 24

1. Please revise this section to disclose the transactions whereby the selling unitholders purchased the units that are registered for resale in this registration statement. For each of these transactions, please disclose the registration statement or exemption from registration upon which you relied.

Response: We have revised the Registration Statement to disclose this information in the "Selling Unitholders" section.

2. Please disclose if any of the selling unitholders is a registered broker-dealer or affiliate of a registered broker-dealer. If you determine that a selling unitholder is a registered broker-dealer, please revise your disclosure to indicate that such selling unitholder is an underwriter, unless such selling unitholder received its securities as compensation for investment banking services. If the selling unitholder is an affiliate of a registered broker-dealer, please disclose, if true, that such selling unitholder acquired its shares in the ordinary course of business and at the time of the acquisition did not have any arrangements or understandings with any person

to distribute the securities. If not, you must indicate that such selling unitholder is an underwriter.

Response: We have revised the Registration Statement to disclose this information in the "Selling Unitholders" section.

3. We refer you to Section 7.1 of the Common Unit Purchase Agreement dated December 13, 2006 and page S-4 of the prospectus supplement (File 333-126447) filed on December 14, 2006 with respect to a primary offering of securities to the investors identified in such documents. Specifically, we note that the purchasers in the primary offering agreed "not to offer, sell, contract to sell, pledge or otherwise dispose of (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise)), directly or indirectly, including the filing (or participation in the filing) of a registration statement with the Securities and Exchange Commission (the "SEC") in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, with respect to the purchased common units for a period of 90 days after the closing date of th[e] transaction without [y]our prior written consent".

Despite this representation, an additional 2,002,792 units are being offered in the current registration statement by additional selling unitholders who appear to have been amongst the purchasers who bought units in the recent primary offering. Given that the 90 day lock-up period had not yet passed prior to such unitholders offering their securities in the current registration statement, provide us with your analysis as to why such unitholders are not underwriters as defined in Section 2(a)(11) of the Securities Act of 1933. We may have further comment.

Response: Section 2(a)(11) of the Securities Act of 1933, as amended, defines an "underwriter" as "any person who has purchased from an issuer with a view to, or offers or sells for an issuer in connection with, the distribution of any security, or participates or has a direct or indirect participation in any such undertaking, or participates or has a participation in the direct or indirect underwriting of any such undertaking..."

As indicated in the revised Registration Statement, the units owned by the unitholders listed in the "Selling Unitholders" section of the Registration Statement were purchased or acquired at various dates in registered transactions between February 25 2005 and December 19, 2006. We have implicitly waived the registration component of the 90-day lock-up with respect to the selling unitholders who purchased units in the December 2006 offering. However, we have not waived and do not currently intend to waive the 90-day restriction on offers and sales of units purchased in the December 2006 offering and have not been asked to do so by the selling unitholders. Each of the unitholders listed in the "Selling Unitholders" section of the Registration Statement has advised us that they have each (i) purchased the securities for their own account, not as a nominee or agent, in the

ordinary course of business and with no intention of selling or otherwise distributing securities in any transaction in violation of securities laws and (ii) at the time of purchase, they did not have any agreement or understanding, direct or indirect, with any other person to sell or otherwise distribute the purchased securities.

The Staff has issued a number of interpretations relating to "underwriter" characterization and its implications under Form S-3 and Rule 415, including among others, the following:

- "As discussed in Release No. 33-6383 there are no presumptive underwriter standards under Rule 415. Thus, the determination of whether a person is an underwriter with respect to a large amount of securities acquired in one or a series of offerings under the rule depends on the particular facts and circumstances."
- "Where there is a sale of a block of shelf-registered securities directly by the issuer to an institutional purchaser, the securities will not be deemed to be "restricted securities"... However, the purchaser of the securities will still have to determine whether it may be deemed an underwriter in connection with resales of such securities. Such a determination will depend upon the facts of the particular case." (Telephone Interpretation 24 of Section D)
- "It is important to identify whether a purported secondary offering is really a primary offering, i.e., the selling shareholders are actually underwriters selling on behalf of an issuer. Underwriter status may involve additional disclosure, including an acknowledgment of the seller's prospectus delivery requirements... The question of whether an offering styled a secondary one is really on behalf of the issuer is a difficult factual one, not merely a question of who receives the proceeds. Consideration should be given to how long the selling shareholders have held the shares, the circumstances under which they received them, their relationship to the issuer, the amount of shares involved, whether the sellers are in the business of underwriting securities, and finally, whether under all the circumstances it appears that the seller is acting as a conduit for the issuer." (Telephone Interpretation 29 of Section D)

In considering the Staff's "facts and circumstances" guidance regarding underwriter status, we do not believe the unitholders listed in the "Selling Unitholders" section of the Registration Statement should be characterized as underwriters for the following reasons:

• Notwithstanding limited holding periods in certain cases, each unitholder has advised us that (i) it purchased the securities for its own account, not as a nominee or agent, in the ordinary course of business and with no intention of selling or otherwise distributing securities in any transaction in violation of securities laws and (ii) at the time of purchase, it did not have any agreement or understanding, direct or indirect, with any other person to sell or otherwise distribute the purchased securities.

- The units proposed to be registered in the Registration Statement were all acquired pursuant to registered transactions, either pursuant to our primary shelf registration statement on Form S-3 (File No. 333-126447), pursuant to a resale shelf registration statement on Form S-3 (File No. 333-68446) or pursuant to our registration statement on Form S-4 (File No. 333-135712) relating to our merger with Pacific Energy Partners, L.P. With the exception of the merger issuance, each of these transactions were negotiated with multiple parties and involved individual investment decisions of the unitholders and not an attempt to assist us in connection with a further distribution of securities.
- While the unitholders have pre-existing relationships with us (as disclosed in the "Selling Unitholders" section), we do not believe those relationships are dispositive of underwriter status. As the Staff has indicated in Telephone Interpretation 20 of Section H, even in the case of "affiliate" status secondary sales may be made under General Instruction I.B.3 to Form S-3 relating to secondary offerings, unless the facts clearly indicate that an affiliate is acting as an underwriter on behalf of the issuer.
- The Registration Statement covers a total of 5,120,517 units. As of January 29, 2007, we had 109,405,178 units outstanding. Accordingly, the registered units comprise less than 5% of our total equity capitalization.
- None of the unitholders listed in the "Selling Unitholders" section is in the business of underwriting securities.
- Finally, we do not believe that the totality of the facts and circumstances surrounding the proposed registration support an argument that the unitholders were acting as conduits of the issuer.
- 4. Please tell us why you are including in this resale registration statement units that apparently have been registered already pursuant to your primary shelf registration statement (File 333-126447). We may have further comment.

Response: As a condition to their willingness to participate in certain of the equity offerings, the unitholders listed in the Registration Statement required that we provide them with resale registration rights. We did not view the request as a significant burden and to encourage their participation in the offering and continued support of our partnership, we complied with their request and entered into Registration Rights Agreements, dated July 26, 2006 and December 19, 2006, which are filed as exhibits to the Registration Statement. Given that the unitholders own a significant number of our units, the Registration Statement provides each unitholder an avenue to effect an orderly distribution through a firm commitment underwritten offering or otherwise. We have included the units purchased in all of the equity offerings because we are contractually obligated to do so. We have also included the units acquired by the Kayne Anderson entities in Pacific merger pursuant to a pre-existing registration rights agreement between

Pacific, Kayne Anderson and other parties. We have filed this registration rights agreement as an additional exhibit to the Registration Statement.

If you have any questions or comments regarding legal matters, please contact Alan Beck of Vinson & Elkins L.L.P. at (713) 758-3638.

Sincerely,

PLAINS ALL AMERICAN PIPELINE, L.P.

By: Plains AAP, L.P., its general partner

By: Plains All American GP, LLC, its general partner

By: /s/ Tim Moore

Name: Tim Moore

Title: Vice President and General Counsel

cc: D. Alan Beck, Jr.