

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

DIVISION OF CORPORATION FINANCE MAIL STOP 7010

May 9, 2006

Mr. Phil Kramer Chief Financial Officer Plains All American Pipeline, L.P. 333 Clay Street, Suite 1600 Houston Texas, 77002

> Re: Plains All American Pipeline, L.P. Form 10-K for Fiscal Year Ended December 31, 2005 Filed March 2, 2006 File No. 1-14569

Dear Mr. Phil Kramer:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources

Cash generated from operations, page 74

1. We note that your operating cash flows have decreased significantly in 2005. It appears the primary change from 2004 to your net operating cash flows is related to an increase in accounts receivable at year end 2005. Please expand your disclosures to discuss the primary drivers and trends associated with your cash flows, particularly relating to accounts receivable for all years presented. Your disclosures should provide information about the quality and variability of your earnings and cash flow so that investors may ascertain the indicative value of your reported financial information. Please refer to Financial Reporting Codification (FRC) Section 501.13.b.1 for further guidance on this subject.

Consolidated Statement of Operations, page F-6

2. We note that you present your long-term incentive plan cost, which appear to be similar to a stock-based compensation plan, as a separate component of operating and General and administrative expense. Please modify your presentation to include the expense related to unit-based payment arrangements in the same line item or lines as cash compensation paid to the same employees. Refer to SAB Topic 14:F or SAB 107 for further guidance.

Note 1 Organization and Basis of Presentation, page F-10

Basis of Consolidation and Presentation, page F-10

- 3. We note your disclosure stating, "The accompanying consolidated financial statements of PAA include PAA and all of its wholly-owned subsidiaries." Please confirm whether all of your direct or indirect consolidated subsidiaries are wholly owned. In the event you consolidate subsidiaries that are less than wholly owned, please expand your disclosure to indicate whether you proportionately consolidate such entities and identify the criteria used in evaluating whether consolidation is appropriate.
- 4. Please expand your disclosure to indicate how you evaluate your equity investment for impairment. Refer to paragraph 19.h of APB 18.

Asset Retirement Obligation, page F-15

5. We note your disclosure indicating that you have obligations to retire certain of your assets for which settlement dates are indeterminate. Please tell us if you maintain and replace component parts on regular intervals. Also, please expand your disclosure to indicate why you are unable to reasonably estimate your settlement dates. Additionally, expand your disclosures to specifically describe the legal retirement obligations associated with your long-lived assets. Refer to paragraph 6 of FIN 47.

Other, net, F-16

6. Disclose separately your goodwill on the face of your balance sheet. Refer to paragraph 43 of SFAS 142. Additionally, please expand your accounting policy regarding goodwill impairment to describe how you define a reporting unit.

Environmental Matters, page F-16

7. We note your disclosure indicating that you capitalize environmental liabilities assumed in business combinations. Please modify your disclosure to clarify what you mean by "capitalize" and whether you are referring to recording the liability assumed or an asset associated with the liability which qualifies for capitalization treatment. Refer to EITF 90-8.

Note 3 Acquisitions and Dispositions, page F-19

Significant Acquisitions, page F-20

8. We note your acquisitions of the North American crude pipeline operations of Link Energy LLC and the interests of two entities of Shell Pipeline Company LP. Additionally, we note your other aggregate acquisitions in 2005. We were unable to locate the associated pro forma disclosures for these acquisitions prescribed by paragraphs 54-55 of SFAS 141. Please expand your disclosures accordingly or tell us why this literature would not apply.

Note 8 Related Party Transactions, F-32

Reimbursement of Expenses of Our General Partner and Its Affiliates

9. We note your disclosure indicating that you reimburse your General Partner for all direct and indirect costs. Please expand your disclosures to clarify how and when you record expense reimbursements to your general partner. Additionally, we note your statement that your general partner, "will determine the expenses allocated to us in any reasonable manner determined by our general partner in its

sole discretion." Please confirm that all costs of doing business are appropriately allocated to Plains All American Pipeline, L.P. Refer to SAB Topic 1:B.

Performance Option Plan

10. We note your disclosure in which owners of your general partner contributed 450,000 subordinate units to the general partner in connection with your performance option plan which appear to include variable exercise price terms. Additionally, we note your indication that because these units were contributed to the general partner no reimbursement obligation exists to the general partner for the cost of these units upon exercise of the options. Please clarify whether you recognized expense upon issuance and subsequent measurement of these options involving your subordinate units. Please tell us how you considered the application of SAB Topic 1:B.2 and SAB Topic 5T as amended by SAB Topic 14.

Note 9 Long-Term Incentive Plan, page F-35

11. We note that your general partner maintains and controls the unit compensation plans associated with incentives implemented to operate your business, although it appears you are ultimately responsible for issuing the unit compensation. Please clarify how your general partner applies the guidance of APB 25 and SFAS 123 in accounting for unit compensation. Compare and contrast a "cash plan probability model", as describe on page F-17, to a fair value model and demonstrate why it is an appropriate model in formulating an expense reflective of your compensation costs of issuing your units. Additionally, describe how you have accounted for the declining exercise price terms in your employee phantom units.

Note 10 Commitments and Contingencies F-37

12. We note your disclosure regarding potential civil penalty enforcement action related to oil releases, your preliminary assessment of damages related to hurricanes and your general disclosure of various legal proceedings and claims. Please expand your disclosure to include assessments of the likelihood of these loss contingencies using terms as defined in paragraph 3 of SFAS 5. Confirm whether you have disclosed all reasonably possible contingent losses which could individually or in the aggregate have a material impact on your financial condition.

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our 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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Jonathan Duersch at (202) 551-3719 or in his absence Kevin Stertzel at (202) 551-3723 if you have questions regarding comments on the financial

statements and related matters. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill S. Davis Branch Chief