Registration No. 333-

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

Form S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

PLAINS ALL AMERICAN PIPELINE, L.P.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 4610

(Primary Standard Industrial Classification Code Number) **76-0582150** (I.R.S. Employer Identification No.)

333 Clay Street, Suite 1600 Houston, Texas 77002 (713) 646-4100

(Address, Including Zip Code, and Telephone Number, including Area Code, of Registrant's Principal Executive Offices)

Plains All American PPX Successor Long-Term Incentive Plan (Full Title of the Plan)

Tim Moore Vice President and General Counsel 333 Clay Street, Suite 1600 Houston, Texas 77002 (713) 646-4100 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copy to:

D. Alan Beck Vinson & Elkins L.L.P. 1001 Fannin Street, Suite 2500 Houston, Texas 77002 (713) 758-2222

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price per Unit(1)(2)	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common Units Representing				
limited partner interests	999,809	\$55.49	\$55,479,401.41	\$1,703.22

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, this registration statement shall also cover any additional common units that become issuable by reason of any unit dividend, unit split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of the registrant's outstanding common units.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) under the Securities Act of 1933, as amended, using the average of the high and low prices of the common units on the New York Stock Exchange on March 5, 2007.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be sent or given to participants as specified by Rule 428(b)(1) promulgated under the Securities Act of 1933, as amended (the "Securities Act").

PART II

INFORMATION REQUIRED IN THIS REGISTRATION STATEMENT

This Registration Statement on Form S-8 registers the offer and sale under the Securities Act of an additional 999,809 Common Units of Plains All American Pipeline, L.P. (the "Partnership") pursuant to the Plains All American PPX Successor Long-Term Incentive Plan (the "Plan"). On November 15, 2006, pursuant to the terms of an Agreement and Plan of Merger, dated as of June 11, 2006 (as amended, the "Merger Agreement"), by and among Pacific Energy Partners, L.P. ("Pacific"), Pacific Energy GP, LP, Pacific Energy Management LLC, the Partnership, Plains AAP, L.P. and Plains All American GP LLC, Pacific merged with and into the Partnership (the "Merger"). At the time of the Merger, Pacific had 1,298,454 of its common units available for issuance pursuant to the Amended and Restated Pacific Energy GP, LP Long-Term Incentive Plan (the "Pre-Existing Plan"). The Pre-Existing Plan was acquired by the Partnership in connection with the Merger. In accordance with the exemption set forth in NYSE Listed Company Manual Section 303A.08, the Pacific common units available under the Pre-Existing Plan (as adjusted to reflect the merger exchange ratio of 0.77 Partnership Common Units for each Pacific common unit) may be used for post-Merger grants and are available for issuance under the Plan.

Item 3. Incorporation of Documents by Reference.

We incorporate by reference and make a part of this registration statement the following documents as of their respective dates as filed with the Securities and Exchange Commission (the "Commission").

- the Partnership's Annual Report on Form 10-K for the year ended December 31, 2006;
- the Partnership's Current Report on Form 8-K filed with the Commission on February 28, 2007 (LTIP awards to Named Executive Officers); and
- the description of the Partnership's Common Units contained in its Registration Statement on Form S-1 filed October 14, 2004.

All documents we file pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), subsequent to the effective date of this registration statement, prior to the filing of a post-effective amendment which indicates that all securities offered by this registration statement have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference and to be a part of this registration statement from the date of filing of such documents. Any statement contained herein or in any document incorporated or deemed to be incorporated by reference shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained in any other subsequently filed document which also is or is deemed to be incorporated by reference modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed to constitute a part of this registration statement, except as so modified or superseded.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 17-108 of the Delaware Revised Limited Partnership Act empowers a Delaware limited partnership to indemnify and hold harmless any partner or other person from and against all claims and demands whatsoever. The partnership agreement of the Partnership provides that the Partnership will indemnify the general partner, any departing partner, any person who is or was an affiliate of the general partner or any departing partner, and any person who is or was a member, partner, officer, director, employee, agent or trustee of the general partner or any departing partner or any affiliate of the general partner or any departing partner, or any person who is or was serving at the request of the general partner or any departing partner or any affiliate of the general partner or any departing partner as an officer, director, employee, member, partner, agent, fiduciary or trustee of another person (each, an "Indemnitee"), to the fullest extent permitted by law, from and against any and all losses, claims, damages, liabilities (joint and several), expenses (including, without limitation, legal fees and expenses), judgments, fines, penalties, interest, settlements and 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 any of the foregoing; provided that in each case the Indemnitee acted in good faith and in a manner that such Indemnitee reasonably believed to be in or 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. Any indemnification under these provisions will be only out of the assets of the Partnership, and the general partner shall not be personally liable for, or have any obligation to contribute or loan funds or assets to the Partnership to enable it to effectuate, such indemnification. The Partnership is authorized to purchase (or to reimburse the general partner or its affiliates for the cost of) insurance against liabilities asserted against and expenses incurred by such persons in connection with the Partnership's activities, regardless of whether the Partnership would have the power to indemnify such person against such liabilities under the provisions described above.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Unless otherwise indicated below as being incorporated by reference to another filing of the Partnership with the Commission, each of the following exhibits is filed herewith:

Exhibit Number		Description
5.1	_	Opinion of Vinson & Elkins L.L.P. as to the validity of the securities being registered
23.1		Consent of PricewaterhouseCoopers LLP
24.1		Power of Attorney (set forth on the signature page contained in Part II of this Registration Statement)
99.1		Plains All American PPX Successor Long-Term Incentive Plan (incorporated by reference to Exhibit 10.45 to the
		Annual Report on Form 10-K for the year ended December 31, 2006)

Item 9. Undertakings.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (a) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (b) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment hereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (c) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (1)(a) and (1)(b) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, State of Texas, on the 9 day of March, 2007.

PLAINS ALL AMERICAN PIPELINE, L.P.

By: Plains AAP, LP, its general partner

By: Plains All American GP LLC, its general partner

By: /s/ Greg L. Armstrong

Greg L. Armstrong Chairman of the Board and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned directors and officers, do hereby constitute and appoint Phil Kramer and Tim Moore and each of them our true and lawful attorneysin-fact and agents, to do any and all acts and things in our names and on our behalf in our capacities as directors and officers and to execute any and all instruments for us and in our name in the capacities indicated below, which said attorneys and agents may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933 and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this Registration Statement, or any registration statement for this offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, including specifically, but without limitation, power and authority to sign for us or any of us in names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto; and we do hereby ratify and confirm all that said attorneys and agents shall do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated below.

SIGNATURE	TITLE	DATE
/s/ Greg L. Armstrong Greg L. Armstrong	Chairman of the Board, Chief Executive Officer and Director (Principal Executive Officer)	March 9, 2007
/s/ Phil Kramer Phil Kramer	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	March 9, 2007
/s/ Tina L. Val Tina L. Val	Vice President—Accounting and Chief Accounting Officer (Principal Accounting Officer)	March 9, 2007
/s/ David N. Capobianco David N. Capobianco	Director	March 9, 2007
/s/ Everardo Goyanes Everardo Goyanes	Director	March 9, 2007
/s/ Gary R. Petersen Gary R. Petersen	Director	March 9, 2007

SIGNATURE	TITLE	DATE
/s/ Robert V. Sinnott Robert V. Sinnott	Director	March 9, 2007
/s/ Arthur L. Smith Arthur L. Smith	Director	March 9, 2007
/s/ J. Taft Symonds J. Taft Symonds	Director	March 9, 2007

INDEX TO EXHIBITS

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		Report on Form 10-K for the year ended December 31, 2006)

Vinson & Elkins L.L.P. 1001 Fannin, Suite 2300 Houston, Texas 77002

March 9, 2007

Plains All American Pipeline, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002

Ladies and Gentlemen:

We have acted as counsel for Plains All American Pipeline, L.P., a Delaware limited partnership (the "Partnership"), with respect to certain legal matters in connection with the preparation of the Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission in connection with the registration under the Securities Act of 1933 of the offer and issuance of an aggregate of 999,809 common units representing limited partner interests in the Partnership (the "Common Units") that may be issued from time to time pursuant to grants made under the Plains All American PPX Successor Long-Term Incentive Plan (the "Plan").

In connection with the opinions expressed below, we have examined the Registration Statement, the Third Amended and Restated Agreement of Limited Partnership of the Partnership (the "Partnership Agreement"), the Certificate of Limited Partnership of the Partnership (the "Certificate") filed with the Secretary of State of Delaware pursuant to the Delaware Revised Uniform Limited Partnership Act (the "Delaware Act") in connection with the formation of the Partnership, and such other documents as we have deemed necessary or appropriate for purposes of this opinion.

Based on the foregoing and subject to the qualifications and limitations set forth below, we are of the opinion that the Common Units have been duly authorized and when issued in accordance with the provisions of the Plan, will be validly issued, fully paid and non-assessable, except as such non-assessability may be limited by Section 17-607 of the Act .

The opinions expressed herein are qualified in the following respects:

1. We have assumed, without independent verification, that the certificates for the Common Units will conform to the specimens thereof examined by us and will have been duly countersigned by a transfer agent and duly registered by a registrar of the Common Units.

2. We have assumed that (i) each document submitted to us for review is accurate and complete, each such document that is an original is authentic, each such document that is a copy conforms to an authentic original and all signatures on each such document are genuine, and (ii) each certificate from governmental officials reviewed by us is accurate, complete and authentic, and all official public records are accurate and complete.

3. This opinion is limited in all respects to federal law of the United States of America and the Delaware Act.

We consent to the filing of this opinion of counsel as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not admit that this firm is in the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and regulations of the Securities and Exchange Commission promulgated thereunder.

This opinion is rendered on the date hereof and we disclaim any duty to advise you regarding any changes in the matters addressed herein.

Very truly yours,

/s/ Vinson & Elkins L.L.P. VINSON & ELKINS L.L.P.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 1, 2007 relating to the consolidated financial statements, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in Plains All American Pipeline L.P.'s Annual Report on Form 10-K for the year ended December 31, 2006.

PricewaterhouseCoopers LLP

Houston, Texas March 7, 2007