

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

**Plains All American Pipeline, L.P.**

(Name of Issuer)

**Common Units Representing Limited Partner Interests**

(Title of Class of Securities)

**726503105**

(CUSIP Number)

**Richard McGee**  
**Executive Vice President, General Counsel and Secretary**  
**Plains All American GP LLC**  
**333 Clay Street, Suite 1600**  
**Houston, Texas 77002**  
**(713) 646-4100**

(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**November 15, 2016**

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box:

(Continued on following pages)

CUSIP No. 726503105

SCHEDULE 13 D

1 Name of Reporting Person  
Plains AAP, L.P.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions)  
OO (please see [Item 3](#) below)

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6 Citizenship or Place of Organization  
Delaware, United States

	7	Sole Voting Power 244,707,926 Common Units
Number of Shares Beneficially Owned by Each Reporting Person With	8	Shared Voting Power 0 Common Units
	9	Sole Dispositive Power 244,707,926 Common Units
	10	Shared Dispositive Power 0 Common Units
11	Aggregate Amount Beneficially Owned by Each Reporting Person 244,707,926 Common Units	
12	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares <input type="checkbox"/>	
13	Percent of Class Represented by Amount in Row (11) 37.2% of Common Units*	
14	Type of Reporting Person PN	

\* - See Item 5.

1	Name of Reporting Person Plains All American GP LLC
2	Check the Appropriate Box if a Member of a Group
(a)	<input type="checkbox"/>
(b)	<input type="checkbox"/>
3	SEC Use Only
4	Source of Funds (See Instructions) OO (please see <u>Item 3</u> below)

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

---

6 Citizenship or Place of Organization  
Delaware, United States

---

7 Sole Voting Power  
244,707,926 Common Units

---

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With

8 Shared Voting Power  
0 Common Units

---

9 Sole Dispositive Power  
244,707,926 Common Units

---

10 Shared Dispositive Power  
0 Common Units

---

11 Aggregate Amount Beneficially Owned by Each Reporting Person  
244,707,926 Common Units

---

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

---

13 Percent of Class Represented by Amount in Row (11)  
37.2% of Common Units\*

---

14 Type of Reporting Person  
OO

---

\* - See Item 5.

1 Name of Reporting Person  
Plains GP Holdings, L.P.

---

2 Check the Appropriate Box if a Member of a Group

(a)

---

(b)

---

3 SEC Use Only

---

4 Source of Funds (See Instructions)  
OO (please see Item 3 below)

---

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

---

6 Citizenship or Place of Organization  
Delaware, United States

---

7 Sole Voting Power  
244,707,926 Common Units

---

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With

8 Shared Voting Power  
0 Common Units

---

9 Sole Dispositive Power  
244,707,926 Common Units

---

10 Shared Dispositive Power  
0 Common Units

---

11 Aggregate Amount Beneficially Owned by Each Reporting Person  
244,707,926 Common Units

---

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

---

13 Percent of Class Represented by Amount in Row (11)  
37.2% of Common Units\*

---

14 Type of Reporting Person  
PN

---

\* - See Item 5.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions)  
OO (please see Item 3 below)

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6 Citizenship or Place of Organization  
Delaware, United States

7 Sole Voting Power  
244,707,926 Common Units

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With

8 Shared Voting Power  
0 Common Units

9 Sole Dispositive Power  
244,707,926 Common Units

10 Shared Dispositive Power  
0 Common Units

11 Aggregate Amount Beneficially Owned by Each Reporting Person  
244,707,926 Common Units

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)  
37.2% of Common Units\*

14 Type of Reporting Person  
OO

\* - See Item 5.

## Item 1. Security and Issuer

This Schedule 13D (“*Schedule 13D*”) relates to the common units representing limited partner interests (the “*Common Units*”) of Plains All American Pipeline, L.P., a Delaware limited partnership (the “*Issuer*” or the “*Partnership*”), which has its principal executive offices at 333 Clay Street, Suite 1600, Houston, Texas 77002.

## Item 2. Identity and Background

(a) *Name of Persons Filing this Schedule 13D:*

- (1) Plains AAP, L.P., a Delaware limited partnership (“*AAP*”),
- (2) Plains All American GP LLC, a Delaware limited liability company (“*GP LLC*”),
- (3) Plains GP Holdings, L.P., a Delaware limited partnership (“*PAGP*”), and
- (4) PAA GP Holdings LLC, a Delaware limited liability company (“*PAGP GP*” and, together with AAP, GP LLC and PAGP, the “*Reporting Persons*”).

GP LLC is the general partner of AAP. PAGP is the sole member of GP LLC. PAGP GP is the general partner of PAGP. Accordingly, GP LLC, PAGP and PAGP GP may, pursuant to Rule 13d-3, be deemed to be indirect beneficial owners of any securities held by AAP. Accordingly the Reporting Persons are hereby filing a joint Schedule 13D.

(b) *Principal Business Address and Principal Office Address of Reporting Persons:*

- (1) The principal business address and principal office address of each of the Reporting Persons is 333 Clay Street, Suite 1600, Houston, Texas 77002.

(c) *Present Principal Occupation or Principal Business of Reporting Persons:*

- (1) The principal business of AAP is to hold the membership interest in PAA GP LLC (“*PAA GP*”) and to hold the Common Units reported as beneficially owned herein.
- (2) The principal business of GP LLC is to hold the general partner interest in AAP. GP LLC also employs the Partnership’s management and operational personnel.
- (3) The principal business of PAGP is to hold the membership interest in GP LLC and, directly and indirectly through GP LLC, Class A Units in AAP representing an approximate 41% interest in AAP as of the date of this Schedule 13D.
- (4) The principal business of PAGP GP is to hold the general partner interest in PAGP. Through its board, PAGP GP also manages the business and affairs of PAGP, GP LLC, AAP, PAA GP and the Partnership.

6

---

(d) During the past five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the past five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violations with respect to such laws.

(f) Not applicable.

In accordance with the provisions of General Instruction C to Schedule 13D, information concerning the general partners, executive officers, board of directors and each person controlling a Reporting Person, as applicable (collectively, the “*Listed Persons*”), required by Item 2 of Schedule 13D, is provided on Schedule 1 hereto and is incorporated by reference herein. To the Reporting Persons’ knowledge, none of Listed Persons has been, during the last five years, (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

## Item 3. Source and Amount of Funds or Other Consideration

Pursuant to the closing of the transactions contemplated by the Simplification Agreement (the “*Simplification Agreement*”) dated July 11, 2016, by and among PAGP GP, PAGP, GP LLC, AAP, PAA GP and the Partnership (collectively, the “*Plains Entities*”), on November 15, 2016, PAA GP’s 2.0% general partner interest in the Partnership was converted into a non-economic general partner interest (“*GP Conversion*”) and the Partnership redeemed all of the incentive distribution rights representing limited partner interests held by AAP (“*IDR Redemption*”). As partial consideration for the GP Conversion and IDR Redemption, the Partnership issued 244,707,926 Common Units to AAP.

## Item 4. Purpose of Transaction

Each of the Reporting Persons acquired the Common Units reported herein solely for investment purposes.

The following describes plans or proposals that the Reporting Persons may have with respect to the matters set forth in Item 4(a)-(j) of Schedule 13D:

(a) The transactions contemplated by the Simplification Agreement were designed in part to ensure that one Class A share of PAGP will represent an indirect ownership of a Common Unit. To maintain this economic parity, pursuant to an Omnibus Agreement, dated November 15, 2016 by and among the Plains Entities (the “*Omnibus Agreement*”), to the extent that PAGP issues additional Class A shares, it will cause AAP to purchase an equal number of Common Units from the Partnership for the same net amount of consideration as received by PAGP for the issuance of such Class A shares. In addition, PAGP shall not, nor shall it allow its subsidiaries (including AAP) to transfer any Common Units unless it redeems a like number of Class A shares.

7

In addition, to the extent that a Class B Unit representing a limited partner interest in AAP (the “AAP Management Units”) that is not yet “earned” pursuant to the terms of AAP’s partnership agreement becomes an “AAP Earned Unit”, the Partnership shall issue to AAP a number of additional Common Units as calculated pursuant to the Omnibus Agreement.

(b) None.

(c) None.

(d) Beginning in 2018, PAGP will hold an annual meeting of Shareholders for the election of “eligible PAGP GP directors,” which will include all directors with expiring terms other than (i) any director subject to designation, (ii) PAGP GP’s chief executive officer and (iii) any director subject to appointment by the holders of the Partnership’s Series A Preferred Units.

On November 15, 2016 PAGP issued 477,648,826 Class C shares representing limited partner interests in PAGP to the Partnership. The Class C shares are non-economic shares that provide the Partnership, as the sole holder, the right to vote in elections of eligible PAGP GP directors together with the holders of PAGP’s Class A and Class B shares. The Partnership will hold an annual meeting of its limited partners in advance of PAGP’s annual meeting of its limited partners. The purpose of the Partnership’s annual meeting will be to allow its limited partners other than AAP to cast a “pass-through vote” instructing the Partnership how to vote its Class C Shares in such election. The Partnership will vote (or refrain from voting) its Class C shares for the election of eligible PAGP GP directors in the same proportion as the votes received from or withheld by its limited partners. At the Partnership’s annual meeting, Common Units held by AAP will not be voted and will not be counted for purposes of determining whether a quorum exists.

(e) The Reporting Persons, as the direct and indirect owners of the general partner of the Partnership, may cause the Partnership to change its dividend policy or its capitalization, through the issuance of debt or equity securities, from time to time in the future. The Reporting Persons, however, have no current intention of changing the present capitalization or dividend policy of the Partnership, other than through ordinary course sales under the Partnership’s existing at-the-market equity offering program.

(f) None.

(g) The Reporting Persons, as the direct and indirect owners of the general partner of the Issuer, may cause changes to the Partnership’s Certificate of Limited Partnership and Partnership Agreement. The Reporting Persons, however, have no current intention of changing the Partnership’s Certificate of Limited Partnership, Partnership Agreement or any other instrument relating thereto to impede the acquisition of control of the Issuer by any person.

(h) None.

(i) None.

8

(j) Except as described in this Item 4, the Reporting Persons do not have, as of the date of this Schedule 13D, any other plans or proposals that relate to or would result in any of the actions or events specified in clauses (a) through (i) of Item 4 of Schedule 13D. The Reporting Persons may change their plans or proposals in the future.

#### **Item 5. Interest in Securities of the Issuer**

- (a) (1) AAP is the record and beneficial owner of 244,707,926 Common Units. Based on there being 657,967,899 Common Units outstanding as of November 15, 2016, AAP’s Common Units represent 37.2% of the outstanding Common Units at such time.
- (2) GP LLC, PAGP and PAGP GP may, pursuant to Rule 13d-3, be deemed to be indirect beneficial owners of the 244,707,926 Common Units owned of record by AAP.

(b) The information set forth in Items 7 through 11 of the cover pages hereto is incorporated herein by reference. See Schedule 1 for the information applicable to the Listed Persons.

(c) Except as described elsewhere in this Schedule 13D, none of the Reporting Persons or, to the Reporting Persons’ knowledge, the Listed Persons has effected any transactions in the Common Units during the past 60 days.

(d) The owners of Class A units of AAP have the right to receive a pro rata portion of cash distributed in respect of the Common Units owned by AAP. EMG Investment, LLC, through its 18.6% economic ownership interest in AAP, has the right to receive such distributions in respect of approximately 6.9% of the outstanding Common Units as of November 15, 2016.

(e) Not applicable.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer**

The information provided or incorporated by reference in Item 3 and Item 4 is hereby incorporated by reference herein.

To the Reporting Persons' knowledge, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any other person with respect to any securities of the Issuer, other than the following:

The AAP Partnership Agreement provides holders of Class A units, including Greg Armstrong and Harry Pefanis, the right, subject to certain limitations, to cause AAP to redeem such Class A units in exchange for a like number of Common Units (an "AAP Unit Redemption").

9

---

On November 15, 2016, the Partnership entered into a Registration Rights Agreement with the holders of Class A units of AAP (other than PAGP and GP LLC), pursuant to which the Partnership will agree to use commercially reasonable efforts to file, and cause to be continuously effective, a shelf registration statement to permit the public resale of the Common Units to be held by AAP that are distributable to such holders following an AAP Unit Redemption. Additionally, the Partnership will agree to register the resale of any Common Units issued to AAP following the Closing pursuant to the Omnibus Agreement in respect of certain currently outstanding AAP Management Units that become AAP Earned Units in the future. In certain circumstances, the holders will have piggyback registration rights on offerings initiated by persons (other than the Partnership) for whom the Partnership has the obligation to undertake an underwritten offering (including the holders of its Series A Preferred Units), and certain holders will collectively have the right to request up to a total of twelve underwritten offerings, subject to size limitations and customary rights of the Partnership to delay such offerings.

**Item 7. Material to Be Filed as Exhibits**

- Exhibit A Simplification Agreement dated July 11, 2016, by and among the Plains Entities (filed as Exhibit 2.1 to the Partnership's Current Report on Form 8-K, filed with the Commission on July 14, 2016 and incorporated herein in its entirety by reference).
- Exhibit B Eighth Amended and Restated Limited Partnership Agreement of Plains AAP, L.P. dated November 15, 2016 (filed as Exhibit 3.4 to the Partnership's Current Report on Form 8-K filed with the Commission on November 21, 2016 and incorporated herein in its entirety by reference).
- Exhibit C Registration Rights Agreement, dated November 15, 2016, by and among Plains All American Pipeline, L.P., and the initial holders listed therein (filed as Exhibit 10.4 to the Partnership's Current Report on Form 8-K filed with the Commission on November 21, 2016 and incorporated herein in its entirety by reference).
- Exhibit D Omnibus Agreement dated November 15, 2016, by and among the Plains Entities (filed as Exhibit 10.1 to the Partnership's Current Report on Form 8-K filed with the Commission on November 21, 2016 and incorporated herein in its entirety by reference).
- Exhibit E Joint Filing Statement (filed herewith).

10

---

**Signature**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

**Date:** November 21, 2016

**PLAINS AAP, L.P.**

By: Plains All American GP LLC, its general partner

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

**PLAINS ALL AMERICAN GP LLC**

By: Plains GP Holdings, L.P., its sole member

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

**PLAINS GP HOLDINGS, L.P.**

By: PAA GP Holdings LLC, its general partner



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

**PAA GP HOLDINGS LLC**

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

11

**Exhibit E**

**JOINT FILING AGREEMENT**

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of the Common Units of Plains All American Pipeline, L.P.

Dated: November 21, 2016

**PLAINS AAP, L.P.**

By: Plains All American GP LLC, its general partner

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

**PLAINS ALL AMERICAN GP LLC**

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

**PLAINS GP HOLDINGS, L.P.**

By: PAA GP Holdings LLC, its general partner

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

**PAA GP HOLDINGS LLC**

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

**Schedule I**

*Executive Officers(1)*

**Greg L. Armstrong**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Chairman of the Board and Director of PAA GP Holdings LLC and Chief Executive Officer of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 1,507,871

**Harry N. Pefanis**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: President and Chief Operating Officer of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 847,532

**Wilfred (Willie) C. Chiang**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Executive Vice President and Chief Operating Officer (U.S.) of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 0

**Dan Nerbonne**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Executive Vice President—Operations and Engineering of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 0

**Phillip D. Kramer**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Executive Vice President of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 395,321

**Richard K. McGee**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Executive Vice President, General Counsel and Secretary of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 113,420

---

(1) GP LLC employs management and operational personnel of each of the Reporting Persons.

---

**Al Swanson**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Executive Vice President and Chief Financial Officer of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 165,998

**John P. vonBerg**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Executive Vice President—Commercial Activities of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 122,359

**W. David Duckett**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Chief Executive Officer, Plains Midstream Canada

Citizenship: Canadian

Amount Beneficially Owned: 0

**Chris Herbold**

Address: c/o PAA GP Holdings LLC 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Vice President—Accounting and Chief Accounting Officer of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 34,227

*Directors(2)***Greg L. Armstrong**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Chairman of the Board and Director of PAA GP Holdings LLC and Chief Executive Officer of Plains All American GP LLC

Citizenship: USA

Amount Beneficially Owned: 1,507,871

**John T. Raymond**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Owner and Founder of The Energy & Minerals Group

Citizenship: USA

Amount Beneficially Owned: 1,599,616

**Robert V. Sinnott**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

---

(2) None of AAP, GP LLC or PAGP have a board of directors. PAGP GP's board of directors functions as the board of directors for each of the Reporting Persons.

---

Principal Occupation: Co-Chairman of Kayne Anderson Capital Advisors, L.P.

Citizenship: USA

Amount Beneficially Owned: 346,393

**Bernard (Ben) Figlock**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Vice President and Treasurer at Occidental Petroleum Corporation

Citizenship: USA

Amount Beneficially Owned: 0

**Everardo Goyanes**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Founder of Ex Cathedra LLC

Citizenship: USA

Amount Beneficially Owned: 88,400

**J. Taft Symonds**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Chairman of the Board of Symonds Investment Company, Inc.

Citizenship: USA

Amount Beneficially Owned: 104,050

**Victor Burk**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Managing Director for Alvarez and Marsal

Citizenship: USA

Amount Beneficially Owned: 14,543

**Gary R. Petersen**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Managing Partner of EnCap Investments L.P.

Citizenship: USA

Amount Beneficially Owned: 49,450

**Bobby S. Shackouls**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: Retired Chairman, Burlington Resources

Citizenship: USA

Amount Beneficially Owned: 19,418

**Christopher M. Temple**

Address: c/o PAA GP Holdings LLC, 333 Clay Street, Suite 1600, Houston, Texas 77002

Principal Occupation: President of DelTex Capital LLC

Citizenship: USA

Amount Beneficially Owned: 31,250

---