UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) October 14, 2004

Plains All American Pipeline, L.P.

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation)

1-14569

(Commission File Number)

76-0582150

(IRS Employer Identification No.)

333 Clay Street, Suite 1600 Houston, Texas 77002

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code (713) 646-4100

N/A

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events

During the second quarter of 2004, we changed our method of accounting for pipeline linefill in third party assets. This change in accounting principle was effective January 1, 2004 and has been reflected in our interim financial reports filed after July 21, 2004. In conjunction with this change, we have also reclassified the purchases and sales of linefill in assets that we own from cash provided by operating activities to cash used in investing activities.

On October 14, 2004, we filed a Registration Statement on Form S-1 relating to sales of common units from time to time by the unitholders identified therein. The Registration Statement contains financial statements for the years ended December 31, 2003, 2002 and 2001, which reflect the reclassification on the face of the consolidated statement of cash flows. In addition, the pro forma impact of the retroactive application of the change in accounting principle has been included in the footnotes to the financial statements.

The financial information contained in our Registration Statement on Form S-1 is available at the SEC's website at http://www.sec.gov.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PLAINS ALL AMERICAN PIPELINE, L.P.

Date: October 14, 2004 By: Plains AAP, L.P., its general partner

By: Plains All American GP LLC, its general partner

By: Name: Tina L. Val

Title: Vice President—Accounting and Chief Accounting Officer

QuickLinks

Item 8.01. Other Events

SIGNATURES