# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

## PLAINS GP HOLDINGS, L.P.

(Exact Name of Registrant as Specified in its Charter)

**Delaware** (State or incorporation or organization)

**90-1005472** (I.R.S. Employer Identification No.)

333 Clay Street, Suite 1600 Houston, Texas 77002

(Address of principal executive offices and zip code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered Name of each exchange on which each class is to be registered The New York Stock Exchange

Class A shares representing limited partner interests

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), check the following box. x

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box. o

Securities Act registration statement file number to which this form relates: 333-190227.

Securities to be registered pursuant to Section 12(g) of the Act: None.

#### INFORMATION REQUIRED IN REGISTRATION STATEMENT

## Item 1. Description of Registrant's Securities to be Registered.

The class of securities to be registered hereby are Class A shares representing limited partner interests (the "Class A Shares"), of Plains GP Holdings, L.P., a Delaware limited partnership (the "Registrant").

A description of the Class A Shares is set forth under the captions "Summary—The Offering," "Our Cash Distribution Policy and Restrictions on Distributions," "How We Make Cash Distributions," "Description of Our Shares," "Description of Our Partnership Agreement," "Shares Eligible for Future Sale" and "Material U.S. Federal Income Tax Consequences" in the prospectus to be filed by the Registrant pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which prospectus will constitute a part of the Registrant's Registration Statement on Form S-1, as amended (Registration No. 333-190227), initially filed with the Securities and Exchange Commission on July 29, 2013. Such prospectus, in the form in which it is so filed, shall be deemed to be incorporated herein by reference.

#### Item 2. Exhibits.

Pursuant to the Instructions as to Exhibits with respect to Form 8-A, no exhibits are required to be filed because no other securities of the Registrant are registered on the New York Stock Exchange and the securities registered hereby are not being registered pursuant to Section 12(g) of the Exchange Act.

2

### **SIGNATURE**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

### PLAINS GP HOLDINGS, L.P.

By: PAA GP Holdings LLC,

its general partner

By: /s/ Richard McGee

Name: Richard McGee

Title: Executive Vice President

Date: October 15, 2013