FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Washington, B.C. 20045

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

OMB Number: 3235-0287
Estimated average burden
hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* PEFANIS HARRY N (Last) (First) (Middle) 333 CLAY STREET, # 1600 (Street) HOUSTON TX 77002 | | | | | | Ssuer Name and Ticker or Trading Symbol PLAINS ALL AMERICAN PIPELINE LP PAA 3. Date of Earliest Transaction (Month/Day/Year) 12/22/2009 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | elationship of Reporting Person(s) to Issuer eck all applicable) Director 10% Owner Cofficer (give title Other (specify below) President & COO dividual or Joint/Group Filing (Check Applicable) Comparison Form filed by One Reporting Person Form filed by More than One Reporting | | | | ner pecify dicable | | |
|---|--|--|---|-------|------------------------------|--|-----|--------|--|--------|---|----------------|---|-------|--|--|---|--|--|--|--|
| (City) | (Sta | te) (2 |) (Zip) | | | | | | | | | | | | | | Person | | | | |
| Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | | | | action 2A. Deemed | | | 3. Transa Code (| action | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 | | |) or | 5. Amount of Securities Beneficially Owned Following Reported | | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of ndirect Beneficial Ownership | | |
| | | | | | | | | | Code | v | Amount | (A) (D) | or F | Price | Transacti (Instr. 3 a | on(s) | | | (Instr. 4) | | |
| Common Units 12/22 | | | | | | /2009 | | | M | | 27,500 |) <i>A</i> | | (1) | 222,827 | | | D | | | |
| Common Units 12/22 | | | | | 2/2009 | /2009 | | | F | | 1,709 | I | | (1) | 221,118 | | | D | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deeme Execution if any (Month/Da | Date, | 4. Transacti Code (Ins | | | | 6. Date Exercis Expiration Date (Month/Day/Yea | | e of Se ar) Unde Deriv | | . Title and Amount f Securities Inderlying Iderivative Security Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) | | |
| | | | | | Code | v | (A) | (D) | Date Exercisa | able | Expiration Date | Title | or Nu of | ımber | | | | | | | |
| Common Units- Performance Option Plan | (1) | 12/22/2009 | | | M | | | 27,500 | (2) | | (3) | Commo Units | n 27 | 7,500 | \$0 | 0 | | D | | | |

Explanation of Responses:

- 1. Strike price for each unit equals \$22 less 80% of each per unit distribution after, and including the distribution on, August 14, 2001
- 2. 13,700 units vested on each of 4/22/05 and 8/12/05.

3. N/A

Remarks:

/s/ Harry N. Pefanis

12/22/2009

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.