

ARMSTRONG GREG L  
Form 4  
December 28, 2009

**FORM 4** UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

OMB APPROVAL

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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 OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
ARMSTRONG GREG L

2. Issuer Name and Ticker or Trading Symbol  
PLAINS ALL AMERICAN PIPELINE LP [PAA]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)  
333 CLAY STREET, # 1600  
(Street)

3. Date of Earliest Transaction (Month/Day/Year)  
12/23/2009

Director  10% Owner  
 Officer (give title below)  Other (specify below)  
Chairman of the Board & CEO

HOUSTON, TX 77002

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 Form filed by More than One Reporting Person

(City) (State) (Zip)

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)	
				(A) or (D)	Price			
				Code	V	Amount		
Common Units	12/23/2009		M		37,500	A	Ⓛ 349,802	D
Common Units	12/23/2009		F		2,312	D	Ⓛ 347,490	D

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

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**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. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Security (Instr. 3 and 4)
Common Units-Performance Option Plan	(1)	12/23/2009		M	37,500	(2) (3)	Common Units 37

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
ARMSTRONG GREG L 333 CLAY STREET, # 1600 HOUSTON, TX 77002	X		Chairman of the Board & CEO	

## Signatures

/s/ Greg L.  
Armstrong 12/23/2009

\*\*Signature of Reporting Person Date

## Explanation of Responses:

- \* 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).
- (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) 18,750 units vested on each of 4/22/05 and 8/12/05.
- (3) N/A

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.