FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington,	D.C.	20549

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

OMB APPROVAL										
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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* <u>Temple Chris</u>					2. Issuer Name and Ticker or Trading Symbol PLAINS ALL AMERICAN PIPELINE LP PAA PAA										k all appli Directo	ionship of Reportin all applicable) Director		10% Ov	wner
(Last) 7700 GR	`	irst) BLVD., #D3	(Middle)			3. Date of Earliest Transaction (Month/Day/Year) 02/18/2010									Officer below)	(give title		Other (s below)	specify
(Street) DALLA			75209 (Zip)		4. If <i>i</i>	4. If Amendment, Date of Original Filed (Month/Day/Year)							5. Indi ine) X	′					
		Tab	le I - Non-I	Deriva	ative	Sec	uritie	s Ac	quired,	Dis	posed (of, or Be	nefic	ally	Owned	k			
			2. Transa Date Month/Da	h/Day/Year) i		2A. Deemed Execution Date, if any (Month/Day/Year)		Code (8)	ction Dispose Instr. 5)		ities Acquired (A) or (D) (Instr. 3, 4		and	Reporte Transac	es For (D) Following ed etion(s)		n: Direct r Indirect istr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
									Code	V	Amount	(D)	Pric	e 	(Instr. 3	and 4)			
		Т	able II - De (e.						uired, D s, option						wned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	Execution Date, T if any		4. Transaction Code (Instr. 8)		ı of i		6. Date Exercisable ar Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Secu (Instr. 3 and 4)		y Dispersion of the second of	Price of erivative ecurity nstr. 5)	9. Number derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	ly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	ode	v	(A)	(D)	Date Exercisab		xpiration ate	Title	or Number of Shares						
Phantom Units	(1)	02/18/2010			A		5,000		(2)		(3)	Common Units	5,00		\$0	5,000		D	

Explanation of Responses:

- ${\bf 1.\ 1-for\hbox{-}1\ Common\ Units\ for\ Phantom\ Units\ granted\ under\ long-term\ incentive\ plan.}$
- 2. 625 phantom units will vest upon the August 2010 distribution payment date, with an automatic re-grant of an equivalent amount. Beginning in August 2010, 1,250 phantom units will vest annually on the August distribution date, with an automatic re-grant of an equivalent amount.
- 3. Upon termination of service as director, other than because of death, disability or retirement.

Remarks:

/s/ Chris Temple

02/18/2010

** 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.