

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

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

1. Name and Address of Reporting Person* Peterson, Shirley D			2. Issuer Name and Ticker or Trading Symbol AK Steel Holding Corporation [AKS]			5. Relationship of Reporting Person(s) to Issuer (Check all applicable)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 12/31/2009			<input checked="" type="checkbox"/> Director <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> 10% Owner <input type="checkbox"/> Other (specify below)		
9227 Centre Pointe Drive								
(Street Address)			4. If Amendment, Date Original Filed (Month/Day/Year)			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		
West Chester	OH	45069						
(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 Transactions (Instr. 3 and 4)	6. Ownership Form: Direct(D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	12/31/2009		A		948.237 (1)	A	0	22,373.546 (2)	D	
Common Stock								2,000	I	By 1976 Trust For The Benefit Of Donald M. Peterson
Common Stock								1,500	I	By Husband

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, 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (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 of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

Signatures

/s/ Roger K. Newport, attorney-in-fact for Ms. Peterson

** Signature of Reporting Person

01/04/2010

Date

Explanation of Responses

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).

- (1) The securities reported in this column consist of restricted stock units which give the reporting person a contractual right to receive at a future date one share of common stock of AK Steel Holding Corporation for each restricted stock unit held.
- (2) The number of securities reported in this column includes 4,334.546 restricted stock units held by the reporting person as of the date of this filing. That includes 11.108 restricted stock units that were acquired as a result of the reinvestment of dividends paid by the company on December 10, 2009.

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.