

Koch Philipp P  
Form 4  
August 12, 2009

**FORM 4**

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

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

## OMB APPROVAL

OMB  
Number: 3235-0287  
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2005  
Estimated average  
burden hours per  
response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Koch Philipp P

(Last) (First) (Middle)

C/O CF INDUSTRIES HOLDINGS,  
INC., 4 PARKWAY NORTH,  
SUITE 400

(Street)

DEERFIELD, IL 60015

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading  
Symbol

CF Industries Holdings, Inc. [CF]

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

08/10/2009

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

5. Relationship of Reporting Person(s) to  
Issuer

(Check all applicable)

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_X\_ Officer (give title \_\_\_\_ Other (specify  
below) below)  
VP, Supply Chain

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

**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)
Common stock, par value \$0.01 per share	08/10/2009		A	1,700	A \$ 0	8,740	D
Common stock, par value \$0.01 per share	08/10/2009		F	1,385	D \$ 82.03	7,355	D

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

**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 control number.**

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(9-02)

**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 Securities (Instr. 3 and 4)	8. Amount or Number of Shares
Employee Stock Option (right to buy)	\$ 82.03	08/10/2009		A	4,500	<u>(1)</u> 08/10/2019	Common stock, par value \$0.01 per share	4,500

## Reporting Owners

### Reporting Owner Name / Address

### Relationships

Director 10% Owner Officer Other

Koch Philipp P  
C/O CF INDUSTRIES HOLDINGS, INC.  
4 PARKWAY NORTH, SUITE 400  
DEERFIELD, IL 60015

VP, Supply Chain

## Signatures

/s/ Douglas C. Barnard, by power of  
attorney

08/12/2009

\*\*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) The options vest in three equal installments on August 10, 2010, 2011, and 2012.

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.