



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

July 7, 2017

Dennis P. Kelleher
Senior Vice President and Chief Financial Officer
CF Industries Holdings Inc.
4 Parkway North, Suite 400
Deerfield, Illinois 60015

**Re: CF Industries Holdings Inc.
Form 10-K for the Year Ended December 31, 2016
Filed February 23, 2017
File No. 001-32597**

Dear Mr. Kelleher:

We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2016

Notes to the Financial Statements

Note 17. Noncontrolling Interests, page 120

1. We note that in February 1, 2016, CHS purchased a minority equity interest in CFN for \$2.8 billion. Please revise to disclose the percentage ownership owned by the minority interest.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Dennis P. Kelleher
CF Industries Holdings Inc.
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You may contact Kristin Shifflett at 202-551-3375, Claire Erlanger at 202-551-3301 or me at 202-551-3379 with any questions.

Sincerely,

/s/ Melissa Raminpour

Melissa Raminpour
Branch Chief
Office of Transportation and Leisure