



DIVISION OF
CORPORATION FINANCE

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

January 3, 2011

via U.S. mail and facsimile to (203) 229-3143

Mr. Steven C. Giuliano, Chief Financial Officer
Arch Chemicals, Inc.
501 Merritt 7
Norwalk, CT 06851

**RE: Arch Chemicals, Inc.
Form 10-K for the fiscal year ended December 31, 2009
Filed February 19, 2010
File No. 1-14601**

Dear Mr. Giuliano:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Terence O'Brien
Branch Chief