

Via Facsimile and U.S. Mail  
Mail Stop 4720

September 25, 2009

John C.R. Hele  
Executive Vice President, Chief  
Financial Officer and Treasurer  
Arch Capital Group Ltd.  
Wessex House  
45 Reid Street  
Hamilton HM 12, Bermuda

**Re: Arch Capital Group Ltd.  
Form 10-K for the Year Ended December 31, 2008  
Form 10-Q for the Period Ended March 31, 2009  
File No. 001-16209**

Dear Mr. Hele:

We have reviewed your August 6, 2009 response to our July 1, 2009 comment letter and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, please explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

**Form 10-K for the Year Ended December 31, 2008**

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies, Estimates and Recent Accounting Pronouncements

Reserves for Losses and Loss Adjustment Expenses

Insurance Operations, page 74

1. Please refer to your response to our prior comment number one. We have reviewed your proposed revisions to your current disclosure and have the following comments:

- a. You state that “The development resulted from better than anticipated loss emergence.” Please cite the specific factors that resulted in loss emergence being better than previously anticipated.
- b. Further, for each short and long tail business cited in your response, please revise your disclosure to disaggregate the amount of favorable development attributed to each individual underwriting year discussed.
- c. You also state in your reserving process, “the reinsurance segment recognized there is a possibility that the assumptions made could prove to be inaccurate due to several factors.” Explicitly identify in your disclosure those factors that are no longer expected to be accurate with historical loss reserve development patterns, and elaborate on why these assumptions may no longer be appropriate.

Financial Condition, Liquidity and Capital Resources

Financial Condition

Investable Assets, page 102

2. Please refer to your response to our prior comment number five. Please confirm that you will incorporate the information provided in your response to part (b), in future filings, if material to net income.
3. Please refer to your response to our prior comment number eight. It is unclear how you have addressed our prior comment number eight. As such, we reissue this comment and ask that you disclose which financial instruments are affected by the lack of market liquidity (i.e. inactivity), how the lack of liquidity impacted the valuation technique you used, and how you factored illiquidity into your fair value determination of those financial instruments.

\* \* \*

Please provide us the information requested within 10 business days of the date of this letter or tell us when you will provide a response prior to the expiration of the 10-day period. Please furnish a letter with your responses that keys your response to our comments. Detailed letters greatly facilitate our review. You should furnish the letter on EDGAR under the form type label CORRESP.

John C.R. Hele  
Arch Capital Group Ltd.  
September 25, 2009  
Page 3

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658 or Mary Mast, Senior Staff Accountant, at (202) 551-3613, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg  
Senior Assistant Chief  
Accountant