

Via Facsimile and U.S. Mail
Mail Stop 4720

July 1, 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 filings and have the following comments. We have limited our review of your filings to your financial statements and related disclosures and do not intend to expand our review to other portions of your document. 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.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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 provide a detailed discussion addressing the specific reasons for the change in estimate of claims occurring in prior years, as the current explanation of such changes solely attributes them to lines of business, and does not provide insight into the underlying causes for the changes. This comment applies to both the Insurance and Reinsurance Operations. Please also address fiscal 2007.

Premium Revenues and Related Expenses, page 85

2. Please revise to disclose the circumstances under which management would adjust a report from brokers and ceding companies for management's best judgments and expectations and why you believe management's estimates would be more appropriate than reports received from third parties.

Financial Condition, Liquidity and Capital Resources

Financial Condition

Investable Assets, page 102

3. Your disclosures beginning on page 105 provide the average rating with and without the credit enhancement, a schedule of investments by average credit quality, and other references to average credit quality. However, it is not clear from your disclosure how these averages were obtained. Please revise your disclosure throughout to elaborate on how you determined the average rating of the securities.
4. You disclose that fair values of your Level 2 securities are valued using pricing models and matrix pricing. Please revise your disclosure to include the following additional information:
 - a. A discussion of any material changes you made to the valuation techniques or models used during the reporting period, why you made them, and, to the extent possible, the quantitative effect of those changes;

- b. A discussion of the extent to which, and how, you used or considered relevant market indices, for example ABX or CMBX, in applying the techniques or models you used to value your material assets. Describe any material adjustments you made during the reporting period to the fair value of your assets based on market indices and your reasons for making those adjustments;
 - c. A discussion of how you validate the techniques or models you use. Discuss whether and how often you calibrate the technique or models to market, back-test, or otherwise validate it.
5. With respect to the mutual funds and corporate bonds transferred into Level 3 during the period, please revise your disclosure to include a discussion of:
 - a. The significant inputs that you no longer consider to be observable. The current disclosure only states that there was a low level of transparency surrounding inputs to the valuation process; and
 - b. Any material gain or loss you recognized on those assets during the period, and, to the extent you exclude that amount from the realized/unrealized gains (losses) line item in the Level 3 reconciliation, the amount you excluded.
6. Please provide a discussion of how increases and decreases in the aggregate fair value of your assets may affect your liquidity and capital resources.
7. Please disclose the criteria you used to determine whether the market for a financial instrument is active or inactive (i.e., illiquid).
8. Please 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. To the extent you used a discounted cash flow approach to determine the fair value of a financial instrument, such as auction rate securities, loans held for sale, or mortgage-backed securities backed by subprime or Alt-A collateral, discuss the specific change in the discount rate or any other analysis you performed to account for the lack of liquidity and discuss how and why you changed your assumptions from prior periods.
9. You disclose that you use nationally recognized independent pricing sources in assisting you in determining fair values. Please revise your disclosure to explain the extent to which, and how, the information is obtained and used in developing the fair value measurements in the consolidated financial statements. Disclosure should address the following:

- a. The number of quotes or prices you generally obtained per instrument, and if you obtained multiple quotes or prices, how you determined the ultimate value you used in your financial statements; and
 - b. Whether, and if so, how and why, you adjusted quotes or prices you obtained from brokers and pricing services.
10. In order to more clearly present your analysis of the \$411.5 million in Gross Unrealized Losses for 2008 on your fixed maturities in a continuous unrealized loss position as disclosed in Note 7 to the financial statements, please revise your disclosure to:
- a. Provide a table that disaggregates the Gross Unrealized Losses on fixed maturities, for 2008 and 2007, by the seven classifications in Note 7 separately for Investment grade fixed maturities and Below investment grade fixed maturities.
 - b. Provide a table that presents the Gross Unrealized Losses, for each of the above classifications, for 2008 and 2007, by credit rating separately with and without third party guarantees.
 - c. Provide a table that presents the severity of gross unrealized losses broken out between investment grade and below investment grade for 2008 and 2007. For example, the table could include column headings for cost, gross unrealized loss, fair value, and percentage of unrealized loss to cost using categories to group investments based on severity of the gross unrealized loss to cost deemed appropriate and informative for the circumstances.
11. For securities in an unrealized loss position that are below investment grade, please provide a quantitative and qualitative assessment of how you concluded the unrealized losses should not be classified as other than temporary impairments. In addition, please revise your disclosure to include the factors that support your belief that it is probable you will be able to collect all amounts due with regard to these securities.

Form 10-Q for the Period Ended March 31, 2009

Consolidated Statements of Income, page 4

12. Please provide the disclosures required by parts d and f of paragraph 43 of FSB 115-2, or clarify your disclosure as to why they are not applicable.

7. Investment Information

Other-than temporary impairments

2008 and 2009 first quarters, pages 20-22

13. Please explain what you mean by “Of the \$36.1 million related to credit losses, \$21.8 million related to credit losses for which a portion of the OTTI was recognized in accumulated other comprehensive income while \$14.3 million related to an investment for which the total OTTI was recognized in earnings, a portion was recorded in Other Comprehensive Income.” It appears based on your disclosure that all of the \$36 million went through earnings.

* * *

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.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

John C.R. Hele
Arch Capital Group Ltd.
July 1, 2009
Page 6

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