

Via Facsimile and U.S. Mail
Mail Stop 6010

May 30, 2006

Mr. Kenneth J. LeStrange
President and Chief Executive Officer
Endurance Specialty Holdings Ltd.
Wellesley House
90 Pitts Bay Road
Pembroke HM 08, Bermuda

**Re: Endurance Specialty Holdings Ltd.
Form 10-K for Fiscal Year Ended December 31, 2005
Filed on March 1, 2006
File No. 001-31599**

Dear Mr. LeStrange:

We have limited our review of your filing to those issues we have addressed in our comments. In our comments, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments.

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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Exhibit 13.1 Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Estimates, page 2

1. Since a significant portion of business is assumed, we believe your disclosure in Management's Discussion and Analysis regarding the estimate of premiums on your reinsurance business could be improved to better explain the judgments and uncertainties surrounding this estimate and the potential impact on your financial statements. Accordingly, please provide us in disclosure type-format the following information:

- The premium estimate for each line of business as of the latest balance sheet date presented, including the amount of any estimate for commissions and related expenses and the amount included in premium receivable related to the estimate.
- Discuss the key assumptions used to arrive at management's best estimate of the premium estimate. In addition discuss whether and to what extent management has adjusted each of the key assumptions used in calculating the most recent estimate given the historical changes, current trends observed and/or other factors observed.
- In order to show investors the potential variability in the most recent estimate of your premium estimate, quantify the effect that reasonably likely changes in the key assumptions identified may have on reported results, financial position and liquidity. Explain why management believes the scenarios quantified are reasonably likely.

Reserve for Losses and Loss Expenses, page 4

2. We note that the Company initially sets its losses and loss expense reserves based upon information it receives from external sources, including cedants, and we note that this appears to pose a potential for a higher degree of uncertainty related to your estimate of assumed loss reserves as compared to direct loss reserves. Please provide us in disclosure-type format a discussion of this uncertainty, including the risks associated with making this estimate and the effects and expected effects of the uncertainty on financial position and results of operations. Also in this disclosure, please consider including the following:

- The dollar amount of reserves recorded based on information received from the cedants and the nature and extent of the information received from the cedants related to policies, claims, unearned premiums and loss reserves;
- The time lag from when claims are reported to the cedant to when the cedant reports them to you and whether, how and to what extent this time lag affects your loss reserve estimate;
- The amount of any backlog related to the processing of assumed reinsurance information, whether the backlog has been reserved for in the financial statements and, if applicable, when the backlog will be resolved;
- What process management performs to determine the accuracy and completeness of the information received from the cedants;
- How management resolves disputes with cedants and how often disputes occur;
- How management uses the information received from the cedants in its determination of its assumed loss reserves, and whether reinsurance intermediaries are used to transact and service reinsurance policies and how that impacts your loss reserving methodology, and

- Whether management uses historical loss information to validate its existing reserves and/or as a means of noticing unusual trends in the information received from the cedants.
3. We believe your disclosure regarding the estimation of the reserve for loss and loss adjustment expenses could be improved to better explain the judgments and uncertainties surrounding this estimate and the potential impact on your financial statements. We believe in order to meet the principal objectives of MD&A this disclosure should enable the investor to understand 1) management's process for establishing the estimate 2) the reasons for changes in the historical estimate 3) whether and to what extent management has adjusted their assumptions used in the most recent estimate for trends or other factors identified from past experience and 4) the potential variability in the most recent estimate and the impact this variability may have on reported results, financial condition and liquidity. Please keep this objective in mind in drafting your responses to comments listed below. Please provide the following to us in disclosure-type format for each line of business discussed. Please also consider providing any additional information, in disclosure-type format, to achieve this objective.
- Please disclose the amount of the reserve for loss and loss adjustment expense for each year presented.
 - Please describe the nature and frequency of your procedures for determining management's best estimate of loss reserves on both an annual and interim reporting basis.
 - Recorded loss reserves for property and casualty insurers generally include a provision for uncertainty, when management determines that existing actuarial methodologies and assumptions do not adequately provide for ultimate loss development. Such a provision may be explicit (i.e. represented by the excess of recorded reserves over actuarial indications) or implicit in the assumption-setting process. So that investors can better understand the inherent uncertainties in your business and degree of conservatism that you have incorporated in your loss reserve estimates, please address as part of your discussion of the reserving methods herein, how you determine the provision for uncertainty.
 - It appears that you have significantly revised your estimate of loss reserves recorded in prior years most significantly in your Property per Risk Treaty Reinsurance and Casualty Individual Risk business segments. You state in your disclosures that loss emergence related to prior accident years was lower than expected, but it is unclear to us the reason(s) for the lower than expected loss emergence. As such identify and describe in reasonable specificity the nature and extent of a) new events that occurred or b) additional experience/information obtained since the last reporting date that led to the change in estimates.

- We acknowledge your discussion of the key assumptions that materially affect the estimate of the reserve for loss and loss adjustment expenses. Please identify and describe those key assumptions by tail or by line of business in addition to your current disclosures. In addition please disclose the following:
 1. For the key assumptions identified on page 4, make clear what management's assumption is. For example in the first key assumption listed, information developed from internal and external sources would appear to be an input to determine what management's assumption is. It is unclear exactly what the assumption is based on the information provided.
 2. For each of your key assumptions and for your provision for uncertainty, quantify and explain what caused them to change historically over the periods presented.
 3. Discuss whether and to what extent management has adjusted each of the key assumptions and the provision for uncertainty used in calculating the most recent estimate of the reserve given the historical changes, current trends observed and/or other factors as discussed in 2 above. This discussion should reconcile the historical changes, the current trends and/or other factors observed to what management has calculated as its most recent key assumptions.
- Explain why management believes that the net loss effect of a 10% change in the company's reserves for losses and loss adjustment expenses presented by segment in the table on page 31 are reasonably likely. To better help an investor understand the potential variability of the reserve please disclose the key assumptions that drive the volatility presented. Please consider presenting this information by tail or by line of business in addition to your current segment based presentation.

Results of Operations

Years ended December 31, 2005, 2004 and 2003

4. The table depicting consolidated results of operations on page 7 of MD&A includes a caption for underwriting (loss) income. Although you evaluate financial performance of your individual segments on this measure, please avoid its use as a measure of your consolidated statements of operations. Unless the presentation is in the context of a reconciliation of a segment measure consolidated total to the consolidated financial statement total as required by FAS 131 such as your presentation in the table on the bottom of F-25 in Note 7. Segment Reporting, we believe that this measure represents a non-GAAP measure that must comply with Item 10 of Regulation S-K. Please refer to Question 21 of our "Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures." Please discontinue presentation of the measure or provide us in disclosure type format the disclosure required by Item 10(e) of Regulation S-K.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please file your 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 filing to be certain that the filing include 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 filing; 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 filing or in response to our comments on your filing.

You may contact Ibolya Ignat, at (202) 551-3656, or Joseph Roesler, Accounting Branch Chief, at (202) 551-3628 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