STATEMENT OF AUDITING STANDARDS 410 ANALYTICAL PROCEDURES

 $(\textit{Effective for audits of financial statements for periods beginning before 15 December 2004)}^*$

Contents	Paragraphs
Introduction	1 - 4
Nature and purpose of analytical procedures	5 - 8
Analytical procedures in planning the audit	9 - 11
Analytical procedures as substantive procedures	12 - 14
Analytical procedures in the overall review at the end of the audit	15 - 16
Extent of reliance on analytical procedures	17 - 19
Investigating unusual items	20 - 21
Controlling and recording	22 - 24
Compliance with International Standards on Auditing	25
Effective date	26

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^{*} HKSA 520 "Analytical Procedures" is effective for audits of financial statements for periods beginning on or after 15 December 2004.

STATEMENT OF AUDITING STANDARDS 410 ANALYTICAL PROCEDURES

Statements of Auditing Standards (SASs) are to be read in the light of SAS 010 "The scope and authority of auditing pronouncements". In particular, they contain basic principles and essential procedures, (auditing standards), indicated by paragraphs in **bold italic type**, with which auditors are required to comply in the conduct of any audit including those of companies applying section 141D of the Companies Ordinance. SASs also include explanatory and other material which is designed to assist auditors in interpreting and applying auditing standards.

Introduction

- 1. The purpose of this Statement of Auditing Standards (SAS) is to establish standards and provide guidance on the application of analytical procedures during an audit.
- 2. The auditors should apply analytical procedures at the planning and overall review stages of the audit. (SAS 410.1)
- 3. Analytical procedures may also be applied at other stages of the audit.
- 4. "Analytical procedures" means the analysis of significant ratios and trends including the resulting investigation of fluctuations and relationships that are inconsistent with other relevant information or which deviate from predicted amounts.

Nature and purpose of analytical procedures

- 5. Analytical procedures include the consideration of comparisons of the entity's financial information with, for example:
 - a. comparable information for prior periods;
 - b. anticipated results of the entity, such as budgets or forecasts, or expectations of the auditors, such as an estimation of depreciation; and
 - c. similar industry information, such as a comparison of the entity's ratio of sales to debtors with industry averages or with other entities of comparable size in the same industry.
- 6. Analytical procedures also include consideration of relationships:
 - a. among elements of financial information that would be expected to conform to a predictable pattern based on the entity's experience, such as gross margin percentages; and
 - b. between financial information and relevant non-financial information, such as payroll costs to number of employees.
- 7. Various methods may be used in performing the above procedures. These range from simple comparisons to complex analyses using advanced statistical techniques. Analytical procedures may be applied to consolidated financial statements, financial statements of components (such as subsidiaries, divisions or segments) and individual elements of financial information. The auditors' choice of procedures, methods and level of application is a matter of professional judgement.

- 8. Analytical procedures are used for the following purposes:
 - a. to assist the auditors in planning the nature, timing and extent of other audit procedures;
 - b. as substantive procedures when their use can be more effective or efficient than tests of details in reducing detection risk for specific financial statement assertions; and
 - c. as an overall review of the financial statements in the final review stage of the audit.

Analytical procedures in planning the audit

- 9. The auditors should apply analytical procedures at the planning stage to assist in understanding the business and in identifying areas of potential risk. (SAS 410.2)
- 10. Application of analytical procedures may indicate aspects of the business of which the auditors were unaware and would assist in determining the nature, timing and extent of other audit procedures.
- 11. Analytical procedures in planning the audit use both financial and non-financial information, for example, the relationship between sales and square footage of selling space or volume of goods sold. The information is usually obtained from interim financial information, budgets and management accounts. However, for those entities with less formal means of controlling and monitoring performance, it may be possible to extract the information from the accounting systems and bank statements. Discussions with management, focused on identifying significant changes in the business since the prior period may also be useful.

Analytical procedures as substantive procedures

- 12. The auditors' reliance on substantive procedures to reduce detection risk relating to specific financial statement assertions may be derived from tests of details, from analytical procedures, or from a combination of both. The decision about which procedures to use to achieve a particular audit objective is based on the auditors' judgement about the expected effectiveness and efficiency of the available procedures in reducing detection risk for specific financial statement assertions.
- 13. The auditors would ordinarily enquire of management as to the availability and reliability of information needed to apply analytical procedures and the results of any such procedures performed by the entity. It may be efficient to use analytical data prepared by the entity, provided the auditors are satisfied that such data is properly prepared.
- 14. When intending to perform analytical procedures as substantive procedures, the auditors would consider a number of factors such as the:
 - a. plausibility and predictability of the relationships identified for comparison and evaluation. For example, there is a strong relationship between certain selling expenses and turnover in businesses where the sales force is paid by commission;
 - b. objectives of the analytical procedures and the extent to which their results can be relied upon (paragraphs 17 19);
 - c. nature of the entity and the degree to which information can be disaggregated, for example, analytical procedures may be more effective when applied to financial information on individual sections of an operation or to financial statements of components of a diversified entity, than when applied to the financial statements of the entity as a whole;
 - d. availability of information, both financial, such as budgets or forecasts, and non-financial, such as the number of units produced or sold;
 - e. reliability of the information available, for example, whether budgets are prepared with sufficient care;

- f. relevance of the information available, for example, whether budgets have been established as results to be expected rather than as goals to be achieved;
- g. source of the information available, for example, sources independent of the entity are ordinarily more reliable than internal sources;
- h. comparability of the information available, for example, broad industry data may need to be supplemented to be comparable to that of an entity that produces and sells specialised products; and
- i. knowledge gained during previous audits, together with the auditors' understanding of the effectiveness of the accounting and internal control systems and the types of problems that in prior periods have given rise to accounting adjustments.

Analytical procedures in the overall review at the end of the audit

- 15. The auditors should apply analytical procedures at or near the end of the audit when forming an overall conclusion as to whether the financial statements as a whole are consistent with the auditors' knowledge of the business and the individual components of the financial statements. (SAS 410.3)
- 16. The conclusions drawn from the results of such procedures are intended to corroborate conclusions formed during the audit of individual components or elements of the financial statements and assist in arriving at the overall conclusion as to the reasonableness of the financial statements. However, they may also identify areas requiring further procedures.

Extent of reliance on analytical procedures

- 17. The application of analytical procedures is based on the expectation that relationships among data exist and continue in the absence of known conditions to the contrary. The presence of these relationships provides audit evidence as to the completeness, accuracy and validity of the data produced by the accounting system. However, reliance on the results of analytical procedures would depend on the auditors' assessment of the risk that the analytical procedures may identify relationships as expected when, in fact, a material misstatement exists.
- 18. The extent of reliance that the auditors place on the results of analytical procedures depends on the following factors:
 - a. other audit procedures directed toward the same audit objectives, for example, other procedures performed by the auditors in reviewing the collectibility of debtors, such as the review of subsequent cash receipts, might confirm or dispel questions raised from the application of analytical procedures to an aging of customers' accounts;
 - accuracy with which the expected results of analytical procedures can be predicted. For example, the auditors would ordinarily expect greater consistency in comparing gross profit margins from one period to another than in comparing discretionary expenses, such as research or advertising; and
 - c. assessments of inherent and control risks, for example, if internal control over sales order processing is weak and therefore control risk is high, more reliance on tests of details of transactions and balances than on analytical procedures in drawing conclusions on debtors may be required.

19. The auditors would consider testing the controls, if any, over the preparation of information used in applying analytical procedures. When such controls are effective the auditors would have greater confidence in the reliability of the information and, therefore, in the results of analytical procedures. The controls over non-financial information can often be tested in conjunction with tests of accounting-related controls. For example, an entity in establishing controls over the processing of sales invoices may include controls over the recording of unit sales. In these circumstances, the auditors could test the controls over the recording of unit sales in conjunction with tests of the controls over the processing of sales invoices.

Investigating unusual items

- 20. When analytical procedures identify significant fluctuations or relationships that are inconsistent with other relevant information or that deviate from predicted amounts, the auditors should investigate and obtain adequate explanations and appropriate corroborative evidence. (SAS 410.4)
- 21. The investigation of unusual fluctuations and relationships ordinarily begins with enquiries of management, followed by:
 - a. corroboration of management's responses, for example, by comparing them with the auditors' knowledge of the business and other evidence obtained during the course of the audit; and
 - b. consideration of the need to apply other audit procedures based on the results of such enquiries, if management is unable to provide an explanation or if the explanation is not considered adequate.

Controlling and recording

- 22. Analytical procedures cannot be regarded as a mechanical process. The effective performance of analytical procedures requires experience, judgement and a thorough knowledge of the entity and the factors that might affect it. Therefore the auditors would ensure that staff possessing such qualities are assigned to the task of conducting analytical procedures.
- 23. The documentation for analytical procedures would normally include matters set out below.
 - a. The information examined, the sources thereof and the factors considered in establishing its reliability.
 - b. The extent and nature of material variations found.
 - c. The sources and level of management from which explanations for material unexpected variations have been obtained.
 - d. The verification of those explanations.
 - e. Any further action taken.
 - f. The conclusions drawn by the auditors.
- 24. Analytical procedures may be made more efficient and effective by compiling a client profile in permanent working papers detailing key ratios and trends from year to year. This would allow the auditors to build up a base of financial and non-financial information which they may use for their analytical procedures in subsequent years.

Compliance with International Standards on Auditing

25. Compliance with the auditing standards contained in this SAS ensures compliance in all material respects with the basic principles and essential procedures in International Standard on Auditing 520 "Analytical Procedures".

Effective date

26. This SAS is effective for audits of financial statements for periods beginning before 15 December 2004.