

APPENDIX A – THE AUDIT RISK MODEL

INDEPENDENT AUDITS OF FINANCIAL STATEMENTS

1 Publicly held companies and other entities (referred to in this report as *public companies* or *public entities*) are required by securities laws to file with the Securities and Exchange Commission (SEC) financial statements audited by independent auditors. Most users of financial statements are aware that such audits are being performed and that auditors issue reports that conclude with an opinion on whether the financial statements are in conformity with “generally accepted accounting principles” (GAAP).¹ GAAP is a technical accounting term that encompasses the conventions, rules and procedures necessary to define accepted accounting practice at a particular time. In general, the Financial Accounting Standards Board is the body that promulgates GAAP.

2 All auditors are required to perform audits in accordance with “generally accepted auditing standards” (GAAS).² The Auditing Standards Board (ASB) of the AICPA promulgates GAAS. The SEC historically has accepted GAAS as necessary and sufficient to comply with the requirements of the securities laws that call for independent audits of financial statements.

3 Audit firms are engaged by their clients (i.e., the preparers of financial statements) to perform audits. The management of a publicly held company is responsible for the preparation of the company’s financial statements. Auditors are responsible for carrying out their audits of those financial statements in accordance with GAAS, which state that auditors are responsible for planning and performing their audits to obtain *reasonable, though not absolute, assurance* about whether the financial statements are free of *material* misstatement, whether caused by error or fraud. The purpose of independent audits therefore is not to produce financial statements but rather to enhance their reliability.

THE AUDIT RISK MODEL

Overview of the Model

4 GAAS establish a “model” for carrying out audits that requires auditors to use their judgment in assessing risks and then in deciding what procedures to carry out. This model often is referred to as the “audit risk model.” The model allows auditors to take a variety of circumstances into account in selecting an audit approach. For example, the model calls for auditors to have an understanding of the client’s business and industry, the systems employed to process transactions, the quality of personnel involved in

¹ To distinguish GAAP or GAAS in the United States from accounting or auditing standards outside of the United States, these terms are sometimes modified as U.S. GAAP and U.S. GAAS (see Chapter 7).

² See note 1.

accounting functions, the client's policies and procedures related to the preparation of financial statements, and much more. The model requires auditors to gain an understanding of a company's internal control, and to test the effectiveness of controls if the auditor intends to rely on them when considering the nature, timing and extent of the substantive tests to be carried out. For example, if controls over sales and accounts receivable are strong, the auditor might send a limited number of accounts receivable confirmation requests at an interim date and rely on the controls and certain other tests for updating the accounts to year end. Conversely, if controls are not strong, the auditor might send a larger number of accounts receivable confirmations at year end. The model requires an assessment of the risk of fraud (intentional misstatements of financial statements) in every audit.

5 Based on the auditor's assessment of various risks and any tests of controls, the auditor makes judgments about the kinds of evidence (from sources that are internal or external to the client's organization) needed to achieve "reasonable assurance." On the one hand, GAAS set forth numerous requirements or matters that auditors should consider; on the other hand, the need to exercise audit judgment is embedded throughout GAAS.

Technical Briefing About the Model

6 Statement on Auditing Standards (SAS) No. 47, *Audit Risk and Materiality in Conducting an Audit*, essentially provides the high-level conceptual underpinning for the audit risk model, but the concepts in the model permeate GAAS. For example, the model directly influences audit sampling, which is the application of an audit procedure to less than 100% of the items in a given population for the purpose of evaluating some characteristics of the population.

7 Audit risk (AR) is the risk that the auditor may unknowingly fail to appropriately modify his or her opinion on financial statements that are materially misstated. Audit risk is the *product* of the following three interrelated factors:

IR = Inherent risk (the risk that an assertion is susceptible to a material misstatement, assuming there are no related controls)

CR = Control risk (the risk that a material misstatement that could occur in an assertion will not be prevented or detected on a timely basis by the entity's internal control)

DR = Detection risk (the risk that the auditor will not detect a material misstatement that exists in an assertion)

8 Thus, the "mathematical" depiction of the audit risk model in simple terms is $AR = IR \times CR \times DR$. Despite the precision implied by rendering the model in mathematical terms, in reality it is highly judgmental. The objective in an audit is to limit audit risk (AR) to a low level, as judged by the auditor.

9 Essentially this objective is accomplished as follows. Auditors are required to assess inherent risk (IR) and control risk (CR) along a spectrum. Often in practice this assessment is reduced to three levels: maximum risk, moderate risk or low risk (or similar terms, such as high, medium or low risk). These assessments are complex matters to carry out, and GAAS set forth a number of requirements on how to accomplish them at both the financial statement level and the individual account balance or class of transactions level. GAAS also contain a specific requirement that, if control risk is to be assessed at less than the maximum level, the auditor must test the effectiveness of controls to support that assessment. A maximum risk assessment (i.e., 100%) means that the auditor believes controls are unlikely to pertain to an assertion or are unlikely to be effective, or the evaluation of their effectiveness would be inefficient. In all cases, the auditor is permitted to “default” to a maximum risk assessment for inherent or control risk.

10 The importance of the assessments of inherent and control risk is highlighted by their effects on detection risk (DR). The effects can be depicted in mathematical form by the equation $DR = AR / (IR \times CR)$. The auditor mitigates or compensates for the assessed levels of risk by designing and performing procedures to detect material misstatements. The greater the inherent and control risks, the lower the detection risk needs to be, resulting in “more” procedures (“more” includes their nature and timing as well as their extent) that the auditor would need to carry out. At the end of the day, the objective is to limit audit risk to an appropriately low level, thus enabling the auditor to achieve *reasonable assurance* that the financial statements are free of material misstatement.

11 Some added observations about what the audit risk model contains and does not contain are worthy of discussion. First, the model subsumes the concept of “materiality.” Auditors do not have to concern themselves with every possible misstatement of a financial statement that might occur. Consequently, the concept of materiality enters into the risk assessment process, and the selection of the nature, timing and extent of the audit procedures is an integral part of the model. Furthermore, the model calls for auditors to make “fraud risk” assessments that encompass attributes of both inherent and control risk.

12 Lastly, the auditor also is exposed to risks that are not embraced in the audit risk model. For example, auditors may be exposed to loss or injury to their professional practice from litigation, adverse publicity or other events arising in connection with financial statements they audited and reported on. This exposure is present even though the auditor has performed the audit in accordance with GAAS and has reported appropriately on the financial statements. Even if the auditor assesses this exposure as low, the auditor is not permitted to perform less extensive procedures than otherwise would be appropriate under GAAS. The “risks” that fall outside of the audit risk model generally are referred to as “engagement risk,” “client risk” or “client continuance (or acceptance) risk.”

Historical Perspective of the Model in GAAS

13 The audit risk model is codified in GAAS (although not by name), primarily in SAS No. 47. The ASB issued SAS No. 47 in 1983, and it was amended in 1997 by SAS No. 82, *Consideration of Fraud in a Financial Statement Audit*. Prior to SAS No. 47, many auditors employed some of the model's concepts in practice, albeit they were not explicitly codified and embedded in GAAS. There is, however, no clear record of exactly what practice was in this area prior to SAS No. 47. Generally, it is believed that, while auditors' judgments entered into the audit process, many auditors employed "procedural" approaches that were not fully supported by strict conceptual underpinnings. In other words, audits tended to be conducted using a variety of substantive testing approaches with less reliance on judgments about risk. Testing of internal control, primarily by testing individual transactions, was common and sometimes extensive.

14 Since 1984, auditors have been required to follow SAS No. 47; in other words, they have been required to employ the audit risk model. Notwithstanding this requirement, anecdotal and other evidence indicates that many (but by no means all) audits continued to be performed using substantive testing approaches with little or no attention paid to the results of the risk assessments called for by the model. This phenomenon perhaps is facilitated by the fact that the model permits "defaulting" to an assumption that risks are at a *maximum level*.

15 Over time, however, audit firms began to evaluate both the effectiveness and efficiency of their audits. The sheer volume of transactions processed by client organizations, the fast pace of technological developments affecting client organizations and audit firms alike, and economic constraints on the ability of audit firms to recover rising costs were influential drivers in these evaluations. They led some firms to conclude that many audits were being conducted without sufficient consideration being given to the risk assessment process and that they consequently lacked in both effectiveness and efficiency. Some firms responded by making important changes to their audit methodologies. Furthermore, changes to audit methodologies continue to be made by firms and some of those changes are highly significant.

AUDIT FIRM METHODOLOGIES

16 While all audits of financial statements of publicly held companies are required to comply with GAAS, audit firms are at liberty to design their audit processes or methodologies in whatever manner best suits their needs so long as the processes or methodologies result in audits that comply with GAAS. Historically, audit firms have adapted their processes or methodologies in response to such matters as changes in business or industry conditions, changes in clients' systems or use of technology, and new or changed requirements of GAAS or GAAP.

17 Auditors are guided in many ways by their firms' processes or methodologies – for example, how personnel are assigned to engagements, how they are supervised and their work is reviewed, the way audit working papers are prepared (e.g., by electronic means or otherwise) and the nature and extent of documentation retained in the working papers. For multi-location audits, including those for which work is to be performed outside of the United States, the processes or methodologies guide how that work is carried out and by whom, and how it is reviewed. Included in the processes and methodologies are policies and guidance on matters for which consultation within the audit firm is required or advisable, and on other quality control matters.

18 Audit firms also take into consideration their clients' expectations, such as expectations that the auditor will inform them of matters that might benefit their businesses. Clients' expectations often go well beyond GAAS requirements for performing financial statement audits. Auditors respond to those expectations by providing information or services beyond the financial statement audit, either separately or as an integral part of their audit processes and methodologies.

