



# Should the auditing profession be extended to encapsulate environmental issues? -An article review

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**Abstract:** Environmental issues have a significant impact on business and the auditing profession. Each year firms are prosecuted and fined for violating environmental laws. Corporations are faced with increasing pressures from diverse stakeholder groups, including governmental agencies, to address environmental concerns. The implications of environmental issues on business lead to the emergence of a number of arguments concerning the role of accountants and financial auditors in environmental issues. This study reviews the literature to contribute in such arguments. The critical question posed is should auditing profession develop its performance by widening its scope to encapsulate environmental issues? The study concludes that environmental issues have a number of implications on both the auditing profession and business. The auditing profession cannot continue to ignore these implications. It should accept this challenge and widen its scope to encapsulate environmental issues. The impact of environmental issues on the accounting and auditing profession can be noticed in a number of aspects such as corporate environmental reporting; environmental violations and illegal acts; accounting for contingencies; auditing accounting estimates; the going concern assumption; and materiality policy.

**Keywords:** Accounting & Auditing Profession, Environmental Issues, Auditors' Role Environmental Violations.

## 1. Introduction

Each year, hundreds of firms are prosecuted for violating environmental laws and hundreds of millions of dollars in penalties are assessed. At the same time, a much larger number of firms escape the various costs associated with litigation by adhering to the provisions of the same laws and regulations. Environmental laws are becoming more complex and extensive. If a company chooses not to comply, the eventual cost in terms of later clean up, fines, and penalties could be in the billions of dollars. Business ethics is commonly associated in the media with environmental disasters and financial scandals. Ethical concerns permeate every aspect of business activity. Ethical issues arise in connection with core ethical values. There are some interconnections between business and environmental ethics. Business has obligations to protect the environment over and above what is required by environmental law and that it should cooperate and interact

with government in establishing environmental legislation. Therefore, business should develop and demonstrate environmental moral leadership. The negative effect of business on the environment is easily observed. Planet Earth suffers from droughts, heat waves and forest fires, raising fears of global

warming due to the build-up of carbon dioxide and other gases in the atmosphere. Moreover, water in rivers, seas ... etc. has become polluted by raw sewage, medical wastes, oil spills, chemical materials, toxic materials. In addition, dumping tons of toxic wastes contaminates land. Air is polluted by poisonous gases such as carbon dioxide, chlorofluorocarbons (ferions), which led to depletion of the ozone layer...etc. All of these negative effects result from companies' activities.

The right of society to place ethical constraints on business stems from three considerations. First, a society has the right



to dictate business's ethical actions because it has given the organization the legal right to conduct business. It can also determine the conditions that will prevail in that environment. The second justification rests with the all-encompassing nature of the state. A third justification for society to define the ethical boundaries of business relates to the failure of companies to regulate themselves. The Business Roundtable's Corporate Ethics Report (1998) states that: "the corporate community should continue to refine and renew efforts to improve performance and manage effectively through programs in corporate ethics. Corporate ethics is a strategic key survival factor for profitability in this era of fierce competitiveness in a global economy". In contrast, Bowie (1990) argues that the real burden for environmental changes lies with consumers, not with corporations. If consumers are willing to accept the harm done to the environment by favoring environmentally unfriendly products, corporations have no moral obligation to change so long as they obey environmental law. The question is who produces products which effect badly on the environment? Consumers don't make products or provide services which can be either environmentally friendly or unfriendly. Business may have a moral responsibility to educate the public and promote environmentally responsible behavior. Protecting the environment requires moral management in business. It requires commitment, courage, and involves risk and sacrifice. Perhaps business is capable of such a challenge. Ethics is not only an individual, personal matter but also that business provides a unique and specific social setting in which ethical standards are applied. The law will remain a vital mechanism of social control, but the law cannot incorporate all ethical situations. Some of the responsibility for ethical issues can rest with organizations and with consumers. Moreover, stakeholders' pressure has led a number of organizations to disclose about their environmental performance and to initiate voluntary environmental auditing. ICAEW (1992) points out that "the business community should place improvement of its environmental performance high on its agenda. Government regulations and market pressures from the green consumer, the environmental

pressure groups, employees and investors allow no other choice". Most parties in any society think the organization's duty is to act affirmatively for social aspects to ascertain its responsibilities. However, environmental issues are becoming increasingly important to a broad range of corporate stakeholders, including consumers, shareholders, regulators, employee and others. Direct investors, take-over bidders and bank lenders are increasingly aware of the need to ascertain whether potential responsibilities for environmental liabilities are lurking within the companies with which they become involved (KPMG, 1991). From a consumer perspective, growing numbers of customers are showing preference for greener companies and products. For example, approximately a third of all adults in the UK pay premia of 15-50 % for organically sourced foods. From an employment perspective, it is becoming more difficult to attract Chief Executive Officers and other key employees to positions in industries with high environmental risk. The sustainability of businesses in long-term future is linked to their ability to minimize the environmental damage caused by their activities. Consequently, an awareness of a business's exposure to environmental risks can help managers in their strategic planning. When reported, environmental issues can help a business to boost its reputation, attract the best employees and differentiate itself from less proactive competitors.

Stakeholders pay more attention to companies' environmental performance, measurement issues are becoming increasingly important, and demand is growing for relevant information to assist them in making key decisions. Also, the need for a common definition and reliable measures of corporate environmental performance is required in order to assist users of such information in making informed consumption, employment, and investment decisions. The importance of business ethics stems from: -

- Business ethics plays an important role in protecting and preserving the environment.

- It is essential and vital for business. The business ethics challenge is to make that inevitable ethical decision-making explicit so



as to make it better. Owners want to ensure that their investments are safe, as reflected in accurate financial disclosure. Society wants to ensure that its firms reflect the values and ethics of a competitive, equal-opportunity environment. Business ethics actually provides essential support for maximizing long-term owner value. Stakeholders have a right to know about the social and environmental implications of an organization's operations at all times-not just when management has been shocked into action by legitimacy threatening events. In Europe and the United States, the late 1980's and early 1990's witnessed the emergence of interest in environmental accounting, auditing and reporting governmental bodies, environmental groups, firms and the accountancy profession in most countries have a concern about environmental issues. The social demand and the significant environmental legislation have forced companies to undertake and participate in extensive environmental activities. Organizations increasingly recognize the importance of addressing environmental issues effectively. Stakeholders are increasingly demanding the disclosure of information that reflects the interaction between organizations and the environment. Recently, there is an increasing propensity for firms to disclose information about their environmental performance. However, the method that companies use to address environmental requirements influences the success or failure of their products. Competitive opportunities exist for companies that address concerns for environmental costs, risk reduction, innovation, efficiency, and regulatory pressures. A number of companies have declared that they have not only economic but also environmental and social responsibilities. One part of taking these responsibilities is the reporting of the relevant achievements in environmental reporting. Environmental issues are evolving quickly and developments in thinking, law, practice and attitudes are rapid with consequent potential impact on a company's sustainability and the auditing profession. The structure of the paper is organized as follows; Section 2 presents the impact of environmental issues; Section 3 addresses the emergence of environmental auditing; Section 4 presents environmental

auditing has two dimensions; Section 5 explains the interrelations between the auditing profession and environmental issues; Section 6 concludes the paper.

## **2. The impact of environmental issues on business**

At the beginning of the century thick dark smoke and stinking water were regarded as a necessary evil of economic welfare. Today society demands clean air, clean water, and sustainable development. The human impact on the natural environment is not only local or regional but poses a threat to the global ecosphere. As shown by scientific findings [e.g. about the ozone layer and climatic change]. In general, environmental issues have two aspects. The first is pertinent to the natural resource-base and involves land development to support food production, water shortage and quality, availability of energy and management of the natural heritage. The second is concerned with the decay of environmental quality such as air pollution and water pollution, soil erosion, solid waste and noise pollution.

Awareness of environmental issues has been rising during the last 20 years and environmental pressure groups have been growing in most countries. A number of countries have environmental laws and regulations to protect the environment. These laws impose sanctions on offending companies therefore, environmental issues may have a material effect on companies either directly or indirectly. The last decade has witnessed a lot of environmental risks for organizations, for example, in the 1960s, the asbestos industry sold products that have been causing tremendous health damage in the 1980's and 1990's. Today, asbestos as a product is mostly phased out and the insurance companies (which have not caused the damage) have to foot the financial bill. The consequent financial liabilities for pollution, illnesses, and clean up liabilities for asbestos are estimated to be \$ 2 trillion alone in the U.S. In 1984 a cloud of poisonous methyl iso-cyanate leaked from union Carbide's Pesticide Plant, located on the outskirts of Bhopal, India. Its effect on human life was devastating with approximately 4,000 deaths and 200,000 injuries. The



financial impact was also pronounced and virtually immediate. Within five trading days of the chemical leak the market value of Union Carbide's common stock fell approximately 27.9 % from US \$ 3,443 million to US \$ 2,483 million.

Some environmental liabilities have exceeded the worst losses of companies for example; among the major disasters in the 1980s were Bhopal (Union Carbide), Schweizerhalle (Sandoz), and Prince William Sound (Exxon), all of which had substantial financial consequences for the companies involved. On March 24, 1989 Oil Tanker Exxon Valdez ran ground in Prince William Sound on Alaska's West Coast. Forty million liters of crude oil spilled into the sea, causing enormous damage to the marine flora and fauna. The announcement of the court's decision in the first of four stages of the proceeding led to a 4 % fall in Exxon's share price wiping out roughly US \$ 3.1 billion of the firm's market capitalization (in short term). By then the company had already spent \$ 2.5 billion on cleaning much of the 2,400 km of beaches soiled by the spill, and another \$ 1.1 billion to settle several claims under criminal law. In the second stage the court decided that Exxon would have to pay \$ 268.8 million to affected fishermen. Third, the court decided the fine in total Exxon was confronted \$ 16.5 billion: (\$ 3.5 million for clean up, \$ 1.5 million in compensation and the rest as punitive penalties). In the fourth stage, the court will deal with the claims of thousands of individuals and groups that do not belong to those of stage three of the court case. In the US, Act of 1980 [referred to as the "Superfund Law"], which enables the US Environmental Protection Agency (EPA) to enforce landfill remediation by companies. EPA can also require any person or company involved to carry the total of all remediation costs, no matter how much of them the respective party has actually caused.

In 1992, Monsanto Company made a provision for liabilities to clean up waste sites, which was almost 83 % of its 1991 net income. During 1990, Atlantic Richfield Company (arco) added \$ 220 million to its reserves relating to future environmental cleanup costs. On December 31, 1990, such reserves

totalled \$ 737 million. Even banks, in the US, which have given mortgages or which manage closed properties can be held liable. The costs of cleaning up superfund sites are expected to exceed \$ 500 billion in the next 40 to 50 years (EIU, 1993).

The US (EPA) ordered in 1991 a major manufacturer of electronic parts to pay an estimated \$ 14.9 million to clean a contamination site in upstate New York. In 1993, the E. I. Dupont de Nemours and company spent approximately \$ 500 million for capital projects related to environmental goals and environmental expenses were about \$ 1 billion. Also, the management of Amoco York town refinery estimated that its environmental costs were approximately 3 % of operating costs, but the environmental costs were determined to be approximately 22 % of operating costs. Environmental risks are one of the risk areas that have grown in recent years due to an increasing the number of governmental regulations, such risks can be fines for pollution of land, water, or air; penalties may be imposed on a company; cleanup costs for land sites; liability for disposal of hazardous wastes; system breaks down allowing environmental problems to occur; loss of employee time and / or employee law suits due to safety hazards; product liability suits or recalls costs; loss of the public confidence (a company will have a bad reputation or corporate image); loss of market share when environmental incidents occur and finally, a company may lose its license or shut down.

Environmental issues have a strong impact on the financial statements of companies. On the basic of such events these issues have many potential impacts on financial statements, such as specific costs for clean up, effluent and emission control or reduction, waste treatment and minimization, remediation, and insurance costs. Also, contingent liabilities, provision, fines, damages, increased costs of plant, accelerated depreciation on machines or increased provisions for abandonment.

IAS36 sets out the requirements for recognizing and measuring impairment losses for assets. It points out that an enterprise should assess at each balance sheet date whether there is any indication that an asset may be impaired.



If any such indication exists, the enterprise should estimate the recoverable amount of the asset and after the recognition of an impairment loss, the depreciation charge for the asset should be adjusted. This standard identifies a range of factors, which an enterprise should consider when it evaluates an asset, such as significant changes with an adverse effect on the enterprise have taken place during the period, or will take place in the near future, in the technological market, economic or legal environment in which the enterprise operates or in the market to which an asset is dedicated (IASB, 1998). Financial auditors must be familiar with the environmental aspects of reviewing assets and liabilities to determine that the valuation is proper, that contamination has not reduced the underlying value of assets, and that the expending and capitalization of remedial costs have been recorded properly. ICAEW (1992) points out that environmental issue can impact on financial disclosures in financial statements in relation to provisions, e.g. for site restoration; contingent liabilities, e.g. for pending legal action; asset values, e.g. where stocks of goods, or the fixed assets used in producing them, are subject to environmental concern; accounting for capital or revenue expenditure on cleaning up the productive process or to meet legal and other standards; product redesign costs; product viability – going concern, e.g. Where new regulations impose tighter emissions criteria; any non-financial environmental disclosures within the financial statements, for example regarding environmental impact or actions to protect the environment (unlikely at present), will be subject to audit.

Contingent environmental liability is an obligation to pay future expenditures to remedy environmental damage that has occurred because of past events or transactions, or to compensate a third party, which has suffered from the damage. Contingent environmental liabilities have become not only much more common but also have much more impact on financial statements and the sustainable advantage of many companies. Environmental issues have many potential impacts of financial statements. Despite these potential impacts, financial auditors should express an opinion on financial statements. They have to make a decision based on the risk of

such matters affecting the financial statements.

### 3. The emergence of environmental auditing

Although the origins and some of the underlying concepts of social auditing go back as far as the nineteenth century, it was not generally accepted as a recognized audit activity until the 1960s. In the nineteenth century, many early efforts were embodied in social legislation designed to protect employees from some of adverse effects of the industrial revolution. But the term of social responsibility has as its symbolic starting in Howard Bowen's Seminal book "Social responsibility of the businessman" In 1960s, industrialized economics of North America and Western Europe started to concentrate on non-economic and non-financial variables such as the quality of the environment, working conditions, and equality of opportunities, only when a high level of material welfare has already been achieved. Therefore, social audit emerged as a mechanism to persuade the corporations to recognize and respond to society's demand. The efforts of governments in many countries from the mid-1960s to the mid-1970s to make social audit regulations took place in four main social areas: environmental protection, workers safety and health consumer and equal employment opportunities. For example, in May 1970, the US General Motors Company set up a committee to investigate the corporation's record of social responsibility in a number of areas. These areas included the amount of pollution produced by its cars and the efforts of corporation were making to reduce that pollution, the amount of researches to improve the safety and reliability of cars, and the increase in social accountability.

In many countries, governmental bodies, environmental groups also the accountancy profession, and business have contributed to the process. A number of institutional investors argue that the corporation, which is not responsive to corporate social responsibility, will be a more risky investment. Environmental issues have a great impact on the organization's financial aspects. There is a crucial need to provide information about the organization's environmental performance for diverse stakeholders. They need information, which they can rely on





and take their decisions. They will trust in the environmental information if this information is audited by an independent audit as ICAEW (1992, 2000) argues that the reliability and credibility of environmental disclosure can be increased by independent verification or audit.

Society expects auditors to play an important role on solving the environmental problems, which face organizations. Auditors could add to the credibility of environmental estimates by determining whether these estimates are reasonable, also whether the presentation and disclosure of environmental estimates are appropriate and adequate. The accountancy bodies should start to encourage the development of appropriate auditing and accounting for dealing with environmental issues by applying their unique expertise to corporate environmental reporting, practices of environmental auditing, and evaluation of risks and liabilities. Environmental auditing is a necessary tool for knowing more about the influence of environmental issues on companies and about the effects of organizations on the natural environment. Until now, there is no specific definition for environmental auditing may be because this subject is relatively new in auditing, but there are a number of attempts to establish some definitions for environmental auditing by the accountancy bodies, and researchers. Some of these definitions focus on the financial aspects of environmental issues, while others address performance aspects as follows. For example, Gray and Collison (1991) define an environmental audit as a means for organizations to both assess the environmental impact of their activities and to monitor the results of any environmental improvement programs they decide to enact.

While, Cornell and Apostolou (1991) point out that an environmental audit is a systematic examination of a client's operations and properties, both past and present, to identify potential liabilities arising from environmental causes. An environmental audit is a management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management, and equipment are performing with the aim of helping to safeguard the environment by first facilitating

management control of environmental practices, and Second assessing compliance with company policies which would include meeting regulatory requirements (The International Chamber of Commerce (ICC), 1991). This definition does not refer to any external performance standards against which a company's policies and practices should be judged in carrying out the audit (other than applicable laws and regulations). It suggests a continuing function of environmental auditing inside the company. An environmental audit is a systematic, documented verification process of objectively obtaining and evaluating audit evidence to determine whether specified environmental activities, events, conditions, management systems, or information about these matters conform with audit criteria, and communication the results of this process to the client. It can be observed that the most important part in this definition is communicating the results of audit process to users (The European Committee, 1996). Finally, the U.S. (EPA) defines an environmental audit as a systematic, documented, periodic and objective review by a firm or other regulated entity of facility operations and practices. From the previous definitions, it can be argued that a number of definitions are narrow while others encompass a wide range of elements of the environmental management system. There is no agreement on the role of environmental auditing in organization and its aims also still no uniform procedure of conducting environmental audit. However, the definition of American Accounting Association (AAA, 1973) for an audit, which is generally accepted between researchers and practitioners, points out that: "auditing is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communication the results to interested users". Through this definition, it can be noticed that such definition is a comprehensive one because the term "auditing" is modified by a descriptive word to indicate all kinds of auditing such as financial audit, internal audit, management audit, social audit, environmental audit ...etc. Also the term "economic" actions in this definition mean the process of auditing does not investigate only the



information in financial statements. Moreover, the term economic concerned with any situation in which a choice must be made involving scarce resources. This definition confirms that the auditing is a means of communication to inform interested users about the results of audit process.

Environment audit considers a new field in auditing. Then, environmental auditing can be defined as:- an integral part of auditing which concentrates on evaluating an organization's environmental performance and its environmental control systems, determining environmental liability accruals and the environmental impacts on the financial statements, and communicating environmental information to interested users in society. An environmental audit achieves five basic such as examination an organization's management system; determination of an organization's compliance with regulatory requirements; determination of an organization's conformance with the organization's own policies and with related industry standards; evaluation of the organization's routine management and housekeeping practices; and creation of an action plan to correct any identified deficiencies. The Institute of Internal Auditors in the US (1993) points out that the objectives of environmental auditing such as determining whether the company is in compliance with environmental regulatory requirements and laws; evaluating the effectiveness of the environmental management and control systems; determining the environmental organization's risks; identifying future environmental policy and plans; determining whether the company's internal policies, procedures, and practices are in compliance with future environmental plans; meeting customer requirements; providing environmental information for many parties; determining that known environmental liabilities are properly identified and reported and establishing that associated financial accruals are adequate; identifying and monitoring safety and health risks to employees and the public; and finally, verifying the effectiveness of waste reduction, energy conservation, or recycling programs or the use of recycled products.

Environmental audit has many objectives, such as providing an early warning, increas-

ing employee awareness, testing environmental performance against aims, assessing risk of litigation and reporting to third parties. Nowadays, environmental audits are being routinely conducted within companies to define the extent of their liabilities towards the environment, to check compliance with environmental legislation, to test newly acquired land or buildings, and to assess environmental risks, employees' safety, energy consumption, waste streams, or pollutant emissions. Environmental auditing has external and internal purposes. External purposes, such as to communicate information about corporate environmental performance to many parties in society as lending institutions, governmental agencies, consumers, stakeholders, etc, to help them to take their decisions or for disclosing environmental information in annual reports. While, internal purposes, such as to inform management that operations comply with regulations, environmental management decisions are being made on the basis of fact, and environmental liability accruals are appropriate.

#### 4. Dimensions of environmental audits

Environmental audit is used to refer to a variety of activities, which are conducted to assess and promote compliance with environmental regulations. This wide range of activities encompasses many types of audits. Environmental auditing has two dimensions, the social and the accountancy dimensions as follows:

##### 4.1. The social dimension

In the last two decades, a number of organizations, according to their social responsibilities, take into account environmental factors when they establish their strategies, objectives, and procedures to achieve a number of aims. The emergence of environmental pressure groups such as the Friends of the Earth concentrates on environmental protection. Friends of Earth has announced that it intends to prosecute directors of major companies that it identifies as breaching legal limits for polluting discharges to rivers, if the directors have not taken action to prevent further breaches. Accounting literature indicates that there is a social contract between the company and the society, where society provides natural resources and imposes regulations



to protect the environment, while, the company uses society's resources and then, it is expected from the company to comply with the society's regulation. If the company does not comply, the society may revoke its contract then the company cannot continue. Therefore, a company may bear its environmental responsibility to gain the acceptance of society to continue. However, over recent years-widespread public concern for effective protection of the environment has resulted in far more stringent legislation and tougher enforcement. For example in the UK under environmental legislation, directors of offending companies can face up to five years in prison or an unlimited fine.

- Some social perspectives argue that there is an exchangeable relation between the organization and the environment where the organization considers as a producer and the environment as a supplier (both of them depend on and impact on the other). Therefore, the organization must protect the environment to keep this relation and to guarantee its sustainability. Environmental protection may suppress the economic development programs and if the organization established its environmental responsibility may lead to weakness of the economic performance because of generating costs that business will never recover. In contrast, if the organization spends on reducing pollution results from its activities, this will not be accompanied negative effect on the economic performance in long term, contrary, improving environmental performance is related positively with financial benefits. For example, companies can achieve many benefits from protecting the environment, such as a good reputation or image, and competitive advantages.

- There are many changes in the role of management in companies. The objectives of management are now achieving not only the economic welfare for owners, and maximizing profits but also the social welfare for all parties that are connected to the organization. In recent years, the awareness of environmental issues has been rising and the protection of the environment has become the most important contents of social welfare. The 1990s have witnessed an increasing interest in environmental issues therefore the need for providing sufficient information

about the organization's environmental responsibility becomes a critical demand for diverse stakeholders. Investors no longer concentrate on achieving profits only but they argue that the corporation, which is not responsive to corporate social responsibility, will be a more risky investment. Investors need correct and accurate information about the social performance.

#### 4.2. The accountancy dimension

The need for environmental auditing stems from that environmental information has quantitative and financial nature. Environmental issues may impact on the organization's assets and its liabilities. The effects of environmental legislation are pervasive that virtually every business organization is likely to be affected to a greater or lesser degree and no valuation of business or its assets can safely undertake without taking this into account. The financial statements should reflect the implication of contingent liabilities that result from non-compliance with environmental laws.

- The Institute of Chartered Accountants in England and Wales (ICAEW, 1992 and 2000) points out that environmental issue impacts on financial statements in relation to many areas, such as provisions, contingent liabilities, asset values, and going concern considerations. It also argues that auditors should consider these issues when auditing financial statements.

- Under the environmental regulations and laws, the users of financial statements have become more interested to know information about environmental cleanup costs and environmental effects. The auditors of financial statements should evaluate whether environmental issues have been considered and whether environmental liabilities have reflected on these statements according to Generally Accepted Auditing Standards (GAAS).

- The International Federation of Accountants (IFAC, 1998) issued an international auditing practice statement developed by the International Auditing Practice Committee (IAPC) on "The Consideration of Environmental Matters in the Audit of Financial Statements". This study referred to environmental issues may have a material impact on an entity's financial state-





ments. A number of studies address the responsibility of organization to pay for environmental protection costs. Therefore, the responsibilities of accountants are to evaluate; record and determine environmental costs in financial statements. Environmental agencies in many countries argue that the environmental performance should be obligatory or compulsory. For example the USA and Canadian Exchange Commission both require reporting in the financial reports on the current and future financial effect of environmental protection requirements. Denmark in 1996 adopted a legislative requirement for companies with a significant environmental impact. In U.S. the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC) concentrate on measuring contingent environmental liabilities, which have become now within the scope of external auditing (KPMG, 1996; 1999).

- The United Nations (UN), in 1991, recommends disclosure in the notes to financial statements, including reporting of accounting practices in the notes, as well as, specific financial information about liabilities, provisions and reserves, and contingent liabilities (if quantifiable), as these relate to environmental measures. The importance of environmental auditing stems from a number of factors such as the material impact of environmental issues on companies' financial statements; the implications of environmental issues on the accounting and auditing profession; the increase of environmental awareness among a variety groups of society, such as consumers, investors, creditors, bankers...etc. These groups ask for clean environment and provide information about environmental performance of companies and finally the increase of environmental risks because of environmental laws and regulations in countries.

##### **5. The interrelations between the auditing profession and environmental issues**

The relationship and overlap between financial and environmental audits has been widely discussed (IFAC, 1995). A number of studies have addressed the relevance of accountants and financial auditors in carrying out environmental audits. ICAEW (1992) addresses the question

of the competence of the financial auditor in the environmental area. It suggests that financial auditors should apply scientific expertise, according to their professional qualifications, as would any specialist, in order to achieve credibility in an environmental audit. An increasingly substantial number of studies have argued that environmental issues have a significant impact on the auditing profession and financial auditors should consider these issues when auditing the financial statements of companies. Such issues often have implications on business and cannot be ignored by auditors (ICAEW, 2000). The American Institute of Certified Public Accountants (AICPA, 1973) points out that the basic objective of financial statements is reporting about an organization's activities, which impact on society, can be determined or measured, and are essential for the organization's role in its environment. AICPA (1976) argues that there is a necessity to widen the scope of conventional auditing for evaluating environmental control standards or regulatory procedures. It concluded auditors had responsibilities for environmental management. They should understand different situations for control pollution and be able to evaluate its effects for external parties. AICPA (1989) addressed the impact of illegal acts (such as, environmental violations) on the auditors' report when auditing the financial statements. ICAEW (1992) points out that "where environmental factors will impact on a company's policy and activities, and will impose costs on the company, or affect its asset values or liabilities, actual or contingent, the financial consequences need to be accounted for or reported in accordance with existing accounting requirements". In the past, consumers have demanded traditional information to make their economic choice in areas such as, value, price, quality, and service. Now consumers have new values such as, the impact of products on the environment, environmental protection, etc. And they need information about those values to express their choice and make the market work effectively. Investors prefer not to deal with companies, which have a bad reputation or do not have a socially responsible attitude towards the environment.

ICAEW (1992, 2000) argues that the financial auditor's responsibilities already extend to



consideration of the impact of environmental factors because environmental issues can impact on financial disclosures in the financial statements such as, provisions and contingent liabilities. Accountants and auditors are involved in reporting on corporate environmental issues, particularly evaluating contingent liabilities, determining the incentive effects of the environmental movement on environmental management, and providing decision-makers with quantitative information on environmental performance. Accountants and auditors will increasingly find themselves involved in areas, such as, dealing with new types of taxes, having to take new factors into consideration in investment appraisal, helping cost out new pollution control methods, examining the feasibility of replacing materials used with sustainable resources and exploring recycling opportunities, and helping estimate the impact of green consumer preference in existing new markets.

In 1991:1992, Price Waterhouse established two empirical studies in U.S. about environmental accounting and measurement of environmental costs. These studies recommended widening the scope of financial auditing to include environmental issues and its liabilities (Price Waterhouse, 1992). The European Commission (EC) proposed that environmental audit can be carried out either by the company's own auditors (if the company has established its own appropriate system) or by auditors authorized for this purpose by a body recognized by the relevant member state. Also the environmental statements must be validated by authorized environmental auditors. Some big accounting and auditing companies in the UK such as KPMG, Price Waterhouse, Coopers and Lybrand established the association of environmental consultancies. They will be founder members, become involved with a variety of legal firms and technical consultancies. These companies felt their reputation was being threatened by fringe organizations set up overnight and calling themselves environmental auditors. The financial auditor's concern with environmental issues arises because of the need for appropriate accounting for the financial aspect. Environmental problems may result in contingent losses. Such losses must be appropriately reflected in the financial statements. ICAEW (1992) argues

that stakeholders ask for information about the environmental impact on business. They need information to be appropriate and credible. The credibility of environmental information can be achieved by conducting the independent audit. Auditing has many objectives, such as to give independent opinion upon the financial statements of a company, to improve management performance, to control and monitor on the company's activities. However, these studies point out that auditing lends credibility to accounting information, which assists a variety of users, such as shareholders, creditors and employees to take their decisions. Accountants and auditors are becoming more involved in various aspects of the environmental agenda and the notion of auditing is gaining a wider currency on the environmental agenda than as applied to only attestation of financial statements. Every accountant and auditor should be able to evaluate the consequences of environmental issues in relation to accounting and auditing practices in the financial statements audit. Finally, Environmental responsibility, whether voluntary or through regulation, is a major new challenge for accountants, auditors and business. The demand for environmental information by accountants and auditors is increasing rapidly. They have to cope with their new responsibilities for environmental issues. The impact of environmental issues on the accounting and auditing profession can be noticed in a number of aspects such as corporate environmental reporting; environmental violations and illegal acts; accounting for contingencies; auditing accounting estimates; the going concern assumption; and materiality policy.

### **5.1 Corporate environmental reporting**

A number of firms are increasing the reporting of environmental matters. Environmental disclosures may be linked to efforts to legitimise corporate actions and to the development of a positive corporate image due to social changes. Companies may engage in environmental reports to create a positive image or reputation about their activities, which helps companies to achieve a number of benefits such as confirming their legitimacy, creating competitive advantage, and attracting investors.



In the UK, the Advisory Committee on Business and Environment (ACBE) established a Financial Sector Working Group (FSWG) to assist their members to improve their environmental awareness and performance. In February 1993, the FSWG issued a report including the disclosure by companies of information about their environmental performance, the report indicated that the level of disclosure is still low, there is no standard for the quality of environmental reporting and disclosure varies between companies. KPMG (1999) survey analysed the reporting of the global top 250 companies in eleven countries (Australia, Belgium, Denmark, France, Germany, Japan, Netherlands, Norway, Sweden, UK, and USA). The majority of the top 250 companies are based in the USA, Japan, Germany and France. Overall only 35 % (88) of the top 250 companies issued an environmental report. The level of reporting varied widely between countries and within industrial sectors. Disclosing environmental information in annual reports may affect the perceptions of an enterprise's earnings and cash flows. Environmental issues can dramatically impact upon a company's short-term financial position and its chances for long-term success. It can be observed that:-

- Despite corporate environmental reporting studies indicate the importance of environmental performance disclosure for many stakeholders. These studies do not provide a theoretical framework for the contents and shape of corporate environmental reporting.
- There is no agreement as to how companies should report and what information should be disclosed in environmental reports. Adams and Kuasirikun (2000) investigate the reporting of ethical issues in the corporate annual reports of the largest UK and German chemical and pharmaceutical companies between 1985 and 1995. The study found substantial differences in the nature and patterns of reporting both across time and between the two countries studied. Also, it referred to factors, which might be thought to have caused this diversity in reporting between the two countries including: industry activities, extent of regulations demanding ethical responsibility, and other social and political pressures.

Epstein and Freedman (1994) examine how

investors react to corporate social disclosures, with this reaction often being gauged by market share reactions. These studies indicate that various stakeholder groups find corporate social disclosure to be useful to their decision making processes. Spicer (1978) provides some empirical evidence relevant to the social performance disclosure by testing some relations between a number of economic and financial indicators of investment value (profitability, size, total and systematic risk, price, earning ratio) and corporate performance on one key social issues (pollution control) in a sample of companies drawn from a pollution prone industry. The author assumed that there is a strong relation between the investment value of a company's common shares and its social performance. Some statistically significant relations were found to exist. While generalisation of these results will require further research, the findings reported were consistent with stated investors' perceptions.

Herremans et al. (1993) investigate whether large U.S. manufacturing companies with better reputation for social responsibility provided investors better stock market returns and lower risk in 21 manufacturing industries, such as mining, oil, chemicals...etc, during a six-year period 1982-1987. Three main findings emerged in the study:

- A good reputation for corporate social responsibility and higher reported profitability are strongly related.
- A good reputation for corporate social responsibility is strongly associated with lower total firm risk.
- Investors appear to be cognisant of differences in reputation about social responsibility among companies as evidenced by positive abnormal returns accruing to the stocks of companies with superior reputation during the period of the study.

Investors, stakeholders and others suffer when companies pay millions of dollars in fines, clean up fees, and court costs to keep corporate officers out of jail because of environmental issues. It can be observed that, although some accounting studies found a relationship between the impact of environmental issues and



the investment value of the company's shares, the results of these studies might need more research to allow generalisation also, these studies did not provide explicitly look to estimate the impact of environmental issues on business. Stakeholders ask for appropriate information for their assessment. ICAEW (1992) argues that stakeholders think that the credibility of environmental information will be achieved if the independent auditor audits and reports upon this information. Discussion on the relevance of environmental issues for the financial auditor has addressed by Collison and Gray (1997). They conducted a large survey on audit practitioners in the UK. The questionnaire investigated auditors' experience of the issues and any actions that they may have been taken in response to them. The results suggest that some firms may be at risk of giving insufficient attention to the financial implications of environmental issues. The majority of respondents thought the environmental awareness of auditors needs to be raised. The study also expects a possible wider role for the financial auditor in the verification of environmental reports. Collison (1996) explores the reaction of UK financial auditors by a series of interviews with a range of audit practitioners to the growth of society's environmental awareness and attendant legislative pressures. The results show that environmental issues can have significant implications for financial statements and should be of concern to auditors who express opinions on them. Although the financial effect of environmental issues may be indirect, the amounts may be material. The auditor must be alert to the possibility of loss contingencies and must ascertain if the contingencies are accounted for properly.

## 5.2 Environmental violations and illegal acts

The term illegal act in the US SAS54 "Illegal Acts by Clients" refers to violations of laws or governmental regulations (AICPA, 1989). SAS54 divides illegal acts into two categories with the first, illegal acts that have a direct and material effect on line-item amounts in the financial statements. The second illegal act has an indirect effect. A number of laws affect companies. Environmental laws and regulations are among those, which could have an indirect impact on the financial statements. The effect is

not direct because environmental issues do not necessarily directly affect the financial and accounting areas of the company. The indirect-effect illegal acts relate to company's operations more than its finances. The indirect effect arises from the possibility of a contingent liability. SAS54 provides guidance to the auditor considering environmental transactions or situations, which may be violations of rules, regulations, or laws. The standard aids the auditor who is considering the possibility of environmental illegal acts by defining the auditor's responsibility with respect to such occurrences.

In the UK the APC (1991) argues that illegal acts may be expected to have a fundamental effect on the operations of the entity and this could have financial consequences that are material to the true and fair view of financial statements. The possible monetary effect of an environmental violation might take many forms. The company could be fined. Penalties may be imposed. Damages could be assessed. A company might be shutdown, resulting in loss of income and litigation could occur. If any of these possible monetary effects could be material the auditor must ascertain that the event has been treated as a loss contingency and occurred or disclosed as appropriate.

AICPA (1989) and APC (1991) identify the auditors' responsibility for detecting the illegal acts as follows:-

- The auditors should be aware of the possibility that such illegal acts may have occurred. Therefore, they should understand the client's business and be aware of those laws, regulations and provisions of an entity's constitution, which may be expected to have a fundamental effect on the operations of the entity.

If specific information comes to the auditor's attention that provides evidence concerning the existence of possible illegal acts that could have a material indirect effect on the financial statements, the auditor should apply audit procedures to ascertain whether an illegal act has occurred.

The auditor should consider the effect of illegal acts on the financial statements including contingent monetary effects, such as fines, penalties and damages. Loss contingencies re-





sulting from illegal acts may be required to be disclosed or should be evaluated in the same manner as other loss contingencies. The auditor should evaluate the adequacy of disclosure in the financial statements of the potential effects of illegal acts on the entity's operations. If material revenue or earnings are derived from transactions involving illegal acts, or if illegal acts create significant unusual risks associated with material revenue or earnings, such as loss of a significant business relationship, that information should be considered for disclosure.

Furthermore, AIPCA (1989) addresses the impact of illegal acts on the auditor's report as follows:-

- If the auditor concludes that an illegal act has a material effect on the financial statements, and the act has not been properly accounted for or disclosed, the auditor should express a qualified opinion or an adverse opinion on the financial statements.
- If the client precludes the auditor from obtaining sufficient competent evidential matter to evaluate whether an illegal act that could be material to the financial statements has, or is likely to have, occurred, the auditor generally should disclaim an opinion on the financial statements.
- If the client refuses to accept the auditor's report, the auditor should withdraw from the engagement and indicate the reasons for withdrawal in writing to the audit committee or board of directors.
- The auditors may be unable to determine whether an act is illegal because of limitations imposed by the circumstances rather than by the client or because of uncertainty associated with interpretation of applicable laws or regulations in these circumstances, they should consider the effect on their report.

Although, the auditors should normally report to senior management of an entity illegal acts, there may be exceptional occasions when it is necessary for the auditors to report direct to a third party without the knowledge or consent of management (APC, 1991). In circumstances the auditors are not bound by their duty of confidentiality and can disclose matters to a proper authority in the public interest such as, if they

have a reasonable suspicion of an illegal act and they can demonstrate that in the court. Finally, the auditors have to decide whether they consider disclosure of the matter is justified in the public interest (APC, 1991).

### 5.3 Accounting for contingencies

The US Statement on Financial Accounting Standards No. 5 (SFAS5) "Accounting for contingencies", is the most applicable standard to the accounting for environmental costs. Contingent liabilities arising from environmental cleanup costs should be accounted for and disclosed according to SFAS5. A contingency is defined in SFAS5 as: -

"an existing condition, situation or set of circumstances involving uncertainty as to possible gain or loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the acquisition of an asset or the reduction of a liability or the loss or impairment of an asset or the incurrence of a liability" (FASB, 1975, P. 1). It can be observed that, SFAS5 defines both loss and gain contingencies but contingencies that might result in gains usually are not reflected in the accounts since to do so might be to recognize revenue prior to its realization. The discussion in this study is limited to loss contingencies. When considering a loss contingency, the accountant determines the likelihood that a future event will confirm the impairment of an asset or the incurrence of a liability. SFAS5 categorizes the likelihood into three levels: probable, possible, and remote (FASB, 1975).

- Probable: the future event or events are likely to occur.
- Reasonably possible: the chance of the future event or events occurring is more than remote but less than likely.
- Remote: the chance of the future event or events occurring is slight.

However, IAS37 (1998) defines a contingent liability as a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise; or a pres-





ent obligation that arises from past events but is not recognized because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or the amount of the obligation cannot be measured with sufficient reliability (IASC, 1998).

#### 5.4 Measurement of a loss contingency

A loss contingency must be measured or reliably estimated in order to qualify for recognition in the financial statement under certain conditions.

A number of factors can be considered when estimating a loss contingency such as current laws and regulations; the extent of regulatory involvement; the number and viability of the parties involved; prior legal, economic, political and scientific experience; and finally the complexity of the problem, existing technologies and technological experience. However, SFAS5 requires that:-

A loss contingency should be incurred by a charge to income if both of the following conditions are met:-

- Information available prior to issuance of the financial statements indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements.
- The amount of loss can be reasonably estimated (FASB, 1975).

International Auditing Standard no. 10 (IAS10) requires that “the estimation of the amount of a contingent loss to be recognized in the financial statements may be based on information that provides a range of amounts of loss which could result from the contingency. The best estimate of the loss within such a range is recognized when no amount within the range is indicated as a better estimate than any other amount. At least the minimum amount in the range if there is a possibility of loss in excess of the amount recognized” (IASC, 1995, P. 183). Among the factors taken into account by management in evaluating the contingency are the progress of the claim at the date on which the financial statements are authorized for issue, the opinions of legal experts or other advisers, the experience of the enterprise in similar cases and the experiences of other enterprise in similar

situations (IASC,1995). Moreover, disclosure of a loss contingency depends on the likelihood of loss and in some cases, on the ability of the company to estimate the loss. However, disclosure of the contingencies should be made in financial statements if they are material and if the contingencies or the events leading to the contingencies are probable or if these contingencies can be reliably measured (or reasonably estimated) (FASB, 1975). The disclosure of a loss contingency should indicate the nature of the contingency and should give an estimate of the possible loss or range of loss or state that such an estimate cannot be made (FASB, 1975).

IASC (1995) requires that contingent losses must be disclosed in the notes to the financial statements if they are probable that they have occurred, although no reasonable estimate can be made of the amount. Footnote disclosure of the contingent loss is appropriate if the likelihood of a loss is at least reasonably possible. Also, if the likelihood of loss is remote, there is no disclosure necessary. For example, if the environmental protection agency informed a company that its disposal site does not comply with legal regulations, it is still not known which technique of remediation will be necessary, and thus what costs the company will face. Then, at least the costs of the cheapest remediation should be recognized. An additional exposure to loss should be disclosed in a footnote and the management should mention that the amount cannot be estimated. Furthermore, reserves for contingent liabilities may be made according to the same rules as reserves for other liabilities. Reserve charges to income or provisions for contingent liabilities can be made to cover losses or debts, which are defined and which on the date of the balance sheet are either likely to be incurred or certain to be incurred, but uncertain as to amount or as to the date on which they will arise (IASC, 1992).

FASB (1975) pointed out that “Some enterprises accrue estimated losses from certain types of contingencies by a charge to income prior to the occurrence of the event or events that are expected to resolve the uncertainties while, under similar circumstances, other enterprises account for those losses only when the confirming event or events have occurred”. In



general, SFAS5 requires that a provision for a loss contingency be recorded when it is probable that a liability has been incurred at the date of the financial statements and the amount of the loss can be reasonably estimated.

IASC (1997) states that "Some liabilities can be measured only by using a substantial degree of estimation. Some enterprises describe these liabilities as provisions. In some countries, such provisions are not regarded as liabilities because the concept of a liability is defined narrowly so as to include only amounts that can be established without the need to make estimates". A slightly different tack is taken by the Canadian Institute of Chartered Accountants (CICA 1993) who recommend as follows:-

- Environmental liabilities should be disclosed separately in the financial statements.
- Environmental liabilities of individual materiality should be disclosed separately.
- A deferred charge should be disclosed in connection with the liability it relates to.
- The nature of any uncertainties of measurement should be explained.

The general accounting standards would be sufficient to cope with environmental liabilities, if they were only applied correctly or enforced by regulatory authorities, so there is no need for new accounting standards defining the disclosure of environmental liabilities.

### 5.5 Auditing accounting estimates

SAS57 provides guidance to auditors on obtaining and evaluating sufficient competent evidential matter to support significant accounting estimates in an audit of financial statements in accordance with Generally Accepted Auditing Standards (AICPA, 1989). SAS57 should be considered when the company has developed or should develop as estimate of an environmental liability. However, SAS57 emphasizes that management is responsible for making the accounting estimates included in the financial statements. Estimates are based on subjective as well as objective factors and, as a result, judgment is required to estimate amount at the date of the financial statements. Management's judgment is normally based on its knowledge

and experience about past and current events and its assumptions about conditions it expects to exist and courses of action it expects to take (AICPA, 1989). The auditor is responsible for evaluating the reasonableness of accounting estimates made by management in the financial statements taken as a whole. As estimates are based on subjective as well as objective factors, it may be difficult for management to establish controls over them. Even when management's estimation process involves competent personnel using relevant and reliable data, there is potential for bias in the subjective factors. Planning and performing procedures to evaluate accounting estimates require the auditor to consider, with an attitude of professional skepticism, both the subjective and objective factors (AICPA, 1989). Environmental issues have a strong effect on business and this may lead to some environmental costs. Management bases the estimate of these costs on assumptions and actions, which it expects to take. For example, the company may have received notice from the Environmental Protection Agency that it is in violation of regulations concerning smoke emissions. The company plans to modify the equipment to bring the emission within acceptable limits. Management should identify relevant factors, which may affect the estimate and gather data on which to base it. The cost of modification should then be estimated and accrued. However, AICPA (1989) points out that if the auditors believe the estimated amount included in the financial statements is unreasonable, they should treat the difference between that estimate and the closest reasonable estimate as a likely error and aggregate it with other likely errors. They should also consider whether the difference between estimates best supported by the audit evidence and the estimates included in the financial statements, which are individually reasonable, indicate a possible bias on the part of the entity's management. The auditors have three objectives when auditing environmental estimates. First, the auditor should ascertain that all necessary material environmental estimates have been developed. Second, they should determine that the estimates are reasonable. Finally, the auditors should consider that the presentation and disclosure of environmental estimates are appropriate.



### 5.6 The going concern assumption

In recent years widespread public concern for effective protection of the environment has resulted in pervasive and extensive legislation in many nations. Environmental issues may actually threaten the company's viability as a going concern. For example, a chemical company, after numerous warnings and fines, continues to dispense hazardous materials into a lake. The external auditor should consider the likelihood that a governmental agency could order the company to be shutdown. However, the going concern assumption is a fundamental concept of annual financial reporting. This means that it is assumed that the business will continue in existence and there will be no dramatic change in its economic circumstances, it excludes the possibility of short-term break-up, forced sale or liquidation. IASC (1997) recognizes "going concern" as one of fundamental accounting assumptions. According to this assumption, the enterprise is normally viewed as a going concern, that is, as continuing in operation for the foreseeable future. It is assumed that the enterprise has neither the intention nor the necessity of liquidation or of curtailing materially the scale of its operations. While, the external auditor is not concerned to express an opinion on the quality of the management, if the audited accounts provided an appropriate representation of economic reality, then users should be able to form their own judgment about managerial effectiveness. One limited instance in which the external auditor has to consider especially the effectiveness of management is in regard to its success in ensuring the continued short-term future existence of the enterprise. IAS1 requires that where fundamental accounting assumptions are followed in financial statements, disclosure of such assumptions is not required. If a fundamental accounting assumption is not followed, that fact should be disclosed together with the reasons (IASC, 1997). Because of the importance of going concern assumption to the form and content of the accounts, external auditors indicate by inference their belief that it is the appropriate basis. They do not guarantee that the business is a going concern in the long term, but they do confirm that the going concern assumption is a valid basis for the financial statements. The Auditing Practices Commit-

tee's guidance suggests that only if the auditors become aware of indications that the going concern basis may not be valid, they should carry out additional procedures. SAS59 "the Auditor's Consideration of an Entity's Ability to Continue as a Going Concern". This standard requires that, on every audit, the auditor consider whether the entity will continue as a going concern for a reasonable period of time (AICPA, 1989). If the auditors conclude, there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time, such as violations of environmental regulations, potential losses, they should: -consider the adequacy of disclosure about the entity's possible inability to continue as a going concern for a reasonable period of time and, include an explanatory paragraph (following the opinion paragraph) in their audit report to reflect their conclusion. If the auditors conclude that substantial doubt does not exist, they should consider the need for disclosure (AICPA, 1989). Furthermore, ICAEW (1992) points out that financial auditor may be required to comment directly on environmental uncertainties in their audit reports will be increased if the Auditing Practices Board (APB) exposure draft "Auditors' Reports on Financial Statements". It requires auditors to draw attention in their report to inherent uncertainties, when those uncertainties; affect the validity of the going concern assumption; or involve possible outcomes falling within a range which is unusually or exceptionally wide in relation to the financial statements; or involve possible outcomes which are so material and pervasive in their possible effects that resolution of the matter could significantly alter the view given by the financial statements. Environmental issues threaten the continuity of a company. Stakeholders need information about the impact of these issues on a company, especially in an uncertain situation. Diverse stakeholders may depend on financial statements to get information, which can help them to make their judgments. Therefore, external auditors may find themselves involved in some aspects of environmental issues.

### 5.7 Materiality policy

Accounting policies encompass the principles, bases, conventions, rules and proce-



dures adopted by management in preparing and presenting financial statements (IASB, 1997). IASB requires that the disclosure of all significant accounting policies, which have been adopted in the preparation and presentation of financial statements. Accounting policies such as prudence, materiality...etc, should govern the selection and application by management in the preparation of financial statements (IASB, 1997). A variety of users such as stakeholders, creditors, employees...etc, depend on financial statements to get information for making evaluations and financial decisions. They cannot make reliable judgments on these matters unless the financial statements clearly disclose the significant accounting policies, which have been adopted in preparing them (IASB, 1997). ICAEW (2000) points out that materiality criterion applicable to environmental information are no different from those applicable to other information, i.e. that information is material if it could influence users' decisions taken on the basis of the financial statements. Materiality signifies two aspects of auditing. The more common use of the word relates to the size and sensitivity of errors that may affect an audit opinion. The other aspect was touched on above and relates to the depth of search in an audit. The two concepts are linked since the depth of search will govern the likelihood of errors being discovered. In essence materiality relates to those monetary values above which auditors believe that their objectives are directly affected. As such, materiality is subjective to external auditors and it may be varied from one audit situation to another. Using modern audit technique materiality rather than risk is the main determinant of the depth of search. Materiality is a misstatement in the financial statements can be considered material if knowledge of the misstatement would affect a decision of a reasonable user of the statements". It is the major determinant of the impact which any piece of information produced by the audit investigation has in stimulating further enquiry or the value of information for the purposes of the report or opinion which an external auditor proposes to make to discharge the audit responsibility and fulfill the audit purpose. Also, the concept of materiality underlies the application of Generally Accepted Auditing Standards (GAAS). It

has a pervasive effect in a financial statement audit. The concept of materiality is extremely important to external auditors in that planning the audit, it will indicate to the amount of work that should be done in any particular audit area; evaluating whether the financial statements taken as a whole are presented fairly in conformity with GAAS; and determining information and data essential for the audit report. This includes accounting and non-accounting information and data necessary to auditors to enable an adequate understanding of the organization affairs, the financial statement, the audit objective, and the significance of the audit report. In the UK, SAS220 addresses materiality and the audit. It requires that auditors should consider materiality and its relationship with audit risk when conducting an audit when determining the nature, timing and extent of audit procedures and also in evaluating whether the financial statements give a true and fair view, auditors should assess the aggregate of uncorrected misstatements. Materiality is an essential consideration in determining the appropriate type of report for a given set of circumstances. For example, when a misstatement in the financial statements exists but is unlikely to affect the decisions of a reasonable user, it is considered to be immaterial. Unqualified opinion is therefore appropriate. FASB (1980) defines materiality as "the magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement". This definition requires external auditors to consider both the circumstance pertaining to the entity and the information needs of those who will rely on the audited financial statements.

## 6. Conclusions

Awareness of environmental issues has been rising during the last 20 years and environmental pressure groups have been growing in most countries to enact environmental laws for protecting the environment. These laws impact on organizations either directly or indirectly. Offending companies may be paid millions of pounds as fines or penalties besides losing their reputation, customers, employees





and others because of environmental violations. Organizations cannot ignore the impact of these issues on business. A number of arguments therefore have emerged to address the need for widening the scope of conventional auditing to encapsulate environmental issues. The emergence of environmental auditing goes back to social origins. It can be defined as an integral part of auditing concentrates on evaluating an organization's environmental performance and its environmental control systems, determining environmental liability accruals and the environmental impacts on financial statements, and communicating environmental information to interested users in society. Environmental issues can affect a number of items in the financial statements, such as contingent liabilities, expenditures, provisions, assets values and future profitability, in addition to, corporate environmental reporting; environmental violations and illegal acts; accounting for contingencies; accounting estimates; the going concern assumption; and materiality policy. Therefore, the auditing literature is beginning to pay attention to identify these impacts on the financial statements of companies, the auditing profession and the sustainability of a company. The study concludes that environmental issues have a number of implications on both the auditing profession and business. The auditing profession cannot continue to ignore these implications. It should accept this challenge and widen its scope to encapsulate environmental issues.

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