

Green Audit – A Boom to Human Civilization

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Abstract: “Nature provides a free lunch, but only if we control our appetites”¹. Corporate

Social Responsibility may be a voluntary call but Corporate Environmental Responsibility is now mandatory. In this era of globalization as the money game is getting momentum but risk to human civilization is also getting deeper because of the inappropriate exploitation of natural and man-made resources. One of the most devastating risks that the business today poses to the world is pollution and we all know how terrible its effect could be on the growth and survival of human civilization. Green audit is a step to safeguard the interest of entire human race and to ensure that business follows appropriate standards of production. This paper is an attempt to know the meaning and process of green audit, essential pre-requisite for conducting green audit, necessary compliances with standards for environmental clearance of the project, offences and penalties for non-compliances, emerging professional opportunities in green sector, and report on green audit.

1. Introduction: Green audit according to the dictionary meaning is “*Inspection of a company to assess the total environmental impact of its activities or of a particular product or process*”.

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For Example, a green audit of a manufactured product looks at the impact of production (including energy use and the extraction of raw material used in manufacture), use (which may cause pollution and other hazards), and disposal (potential for recycling, and whether waste causes pollution). Green audit refers to verification of environmental measures taken by an organization. These are also undertaken to ensure compliance with regulatory requirement and corporate guidelines. Environmental audit popularly known as Green audit is defined as “A systematic documented, periodic and objective review by a regulated entity of facility, operations and practices related to meeting environmental” requirement”

The aim of green audit is to give citizens the information they need to be able to question the companies which are destroying the environment we all depend on. In simple terms green audit is audit to save environment. It involves not only evaluation of business operations to detect discrepancy as far as environment, energy and pollution is concerned, but also with an objective to find ways to operate more judiciously and with environmentally responsible methods including renewable resources such as wind, solar and geothermal energy.

1.1 Examples where disregard for environment, energy and green related issues affected people:

- In Mumbai 110 hectare deonar dumping ground rises up, the dumping ground was opened in

1927 and accepted approximately 14,50,000 tonnes of waste in 2006. Currently, the site has approximately 9.2 million tonnes of waste in place. An 11 month-old boy diagnosed as Mumbai's first confirmed polio case of 2008 in April, in Govandi. In past years, health post in Govandi registered 1629 TB patients, while asthma, skin diseases and malaria is common here as well.

- Second largest oil spill in history occurred when Iraqi military forces tried to foil an armed landing by American soldiers by opening the release valves at sea island oil terminal on the Persian Gulf. They eventually dumped an estimated 462 million gallons of crude; killing thousands of fish and birds and leaving several inches of oil sediment that remain to this day.

3. Information for Green audit and Green audit planning: Green audit is highly skilled task. It calls for not only a high level of professional audit skills, but also a deep understanding of environmental and organizational issues. The auditor must be familiar with international treaties and conventions on environmental issues apart from having an excellent grasp of the national policies, strategies and programs for environmental protection and conservation and climate change control.

3.1 Information on Entity: on which green audit is conducted, can be obtained from various resources such as:

- Financial Statement/ policies of company

- Environmental statement
- Environmental clearances obtained by company from regulatory authorities and Government agencies.
- Environmental policy of the entity
- Rules and regulations governing the company relating to environment compliance.
- Commitments and assurance provided by the entity to government agencies, regulatory bodies etc.
- Internal audit report by the entity/ evaluation reports by external experts and annual reports.

3.2 Information on environment, professional and other issues:

- Adequate knowledge in all aspects of auditing and capability to carry out financial compliance and performance audits.
- Comprehensive knowledge of environmental and climate change issues.
- Adequate knowledge on environmental auditing acquired through training followed by practical experience.
- Emerging and expanding field of audit, inclination to develop and apply new techniques and methodologies to assess the environmental related performance of the entity, by drawing experience from elsewhere.
- Good human relations and communication skills.
- An independent and unbiased approach, with aptitude for research.

Audit planning is vital to the success of the audit undertaken. It is essential that the internal auditor spends adequate time in planning as this will result in better identification of important areas, potential problems and proper assignment of work. Audit plan should include:

- Key environmental issues to be focused during the audit
- Audit objective, scope, limitations and audit risk if any,
- Composition of audit team, recourse to external resources and experts where applicable
- Suggested areas for close scrutiny, documents and audit evidence to be checked, audit methodology to be followed
- Details of previous audits and evaluation by outside agencies including environmental experts
- Expected output of the audit, reference to international and national/regional laws, regulations and conventions

4. Green audit process: Usually green audit involves five steps; each step is a stage to be covered hierarchically in order to move to the next stage/step.

Stage 1 Gathering information from the employees: This is the first step taken when conducting green audit. Usually information is collected from employees of the organization through surveys, questionnaire's etc. Questionnaire contains following queries:-

- Do you consider yourself eco conscious?
- Do you consider your organization to be eco-friendly and supporting the environment?

- What are the issues related to environment, energy which make you feel concerned with regards to your workplace?

This information helps an auditor to get a larger and clearer view of employee-based environmental impacts and organization's carbon footprint.

Stage 2 Conducting organization premises survey: After ample basic information is collected from employees, the next step is to get a bit deeper view by analyzing the workplace, techniques applied and the work culture. This information like square footage, utility bills and IT equipment is added to carbon footprint, data related to organization which helps in getting knowledge about organization's annual greenhouse gas emissions. Data related to electricity consumption, fuel power usage, and natural gas and water usage is collected. This data is for further assessment related to organization consumption pattern and its after effects.

Stage 3 Carbon footprint calculator: Information gathered from the employee survey and the premise survey is run through carbon footprint calculator. Carbon footprint calculator helps in calculating the carbon emission effect generated through the activities of the entity in numerical terms. Green audit not only calculates the annual tons of carbon emission that client office emits, but also breaks it down by key "carbon drivers" so that proper analysis of carbon footprint can be made and assessment can be made to know from which type of behaviour carbon footprints are generated and in what quantities (e.g. air travel Vs. car commuting Vs. paper use Vs. utilities).

Through green audit companies not only get information about their carbon footprints, but also about their absolute carbon emission.

Stage 4 Visit to Worksite This step of onsite visit also known as “Understanding Sustainability” The first component of the onsite visit is an 90 minute workshop, which gives everybody in the company an opportunity to hear about the concept of sustainability and why the company choosing to “Green it’s operation”. Workshop will cover issues of organizational culture, existing environmental policies/ programs and employees vision for the future and challenges to being more sustainable. At last of onsite visit “Results and recommendation” presentation is undertaken and organization is informed about the result of the whole green audit exercise.

Stage 5 Green audit report generation the final stage. The report includes all the previously presented information as well as list of additional resources to get started. Auditor not only reports discrepancies, but also suggests measures and an action plan specifically tailored to the company, its available staff and budget resources, with the primary goal to identify “Low hanging fruits” and opportunities for cost saving through better environment management.

5. Standards prescribed for the Industries: No person carrying on any industry, operation or process is permitted to discharge or emit or permit to be discharged or emitted any environmental pollutant in excess of the prescribed standards. Industries, operations, process, automobiles and domestic sources produce a combined effect of emission or discharge of environmental pollutants in an area.

This is not permitted to exceed the relevant concentration in ambient air as specified against each pollutant in columns (3) to (5) of Schedule VII.

In case the discharge of any environmental pollutant occurs in excess of the prescribed standards or is apprehended to occur, due to any accident or other unforeseen act or event, the person responsible for such discharge and the person in charge of the place shall be bound to prevent or mitigate the environmental pollution caused as a result of the discharge. They are also bound to intimate the concerned authorities or agencies regarding the fact of such occurrence or apprehension of such occurrence, as well as to render all assistance if called upon by the authorities or agencies as may be prescribed.

6. Offences and penalties under Various Acts: *Water (Prevention and control of pollution Act, 1974* Consent of state pollution control board should be obtained by an industrial establishment for discharge of sewage or trade effluents. Sections 41 to 48 deals with activities considered as offences under the Act and details of penalties to be imposed for committing such offences.

- Failure to furnish information regarding the abstraction of water or discharge of sewage/effluent as directed the State Pollution Control Board – Imprisonment for a term which may extend to three months, or with fine which may extend to ten thousand rupees, or both – Additional fine which may extend to five thousand rupees for every

day during which such failure continues after the conviction for the first such failure.

- Failure to furnish information regarding the construction, installation or operation of such establishment, or of any disposal system, or any extension/addition to such establishment or system and other particulars as required by the State Pollution Control Board – Imprisonment for a term which may extend to three months, or with fine which may extend to ten thousand rupees, or both – Additional fine which may extend to five thousand rupees for every day during which such failure continues after the conviction for the first such failure.
- Failure to comply with the direction of the Board with regard to closure, prohibition or regulation of any industry, operation or process - Imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine - Additional fine which may extend to five thousand rupees for every day during which such failure continues after the conviction for the first such failure.

The Air (Prevention and Control of Pollution) Rules, 1982 Whosoever fails to comply with the provisions of section 21 or section 22 of the Air Act shall, in respect of each such failure, be punishable with imprisonment for term which shall not be less than one year and six months but which may extend

to six years and with fine, and in case the failure continues with an additional fine which may extend to five thousand rupees for every day during which such failure continues after the conviction for the first such failure.

7. Emerging professional opportunities in Green sector: Opportunities in environmental law are rapidly expanding, driven by various government regulations and a movement by business and industry to reduce environmental liabilities associated with their operations. Government agencies, industries, manufacturing sector, nuclear stations, waste disposal organizations, consultancies, research organizations, NGO's all offer opportunity in the environmental sector.

Compliance audits are conducted to verify an entity's compliance with environmental laws, regulations, standards, industry guidelines or company's own policy. It is felt that CAs can very efficiently conduct compliance audits if they gain knowledge of relevant environmental laws and regulations. Some of the opportunities for professionals are listed below:

- Before establishing an industrial unit a certificate from a professional about proposed Capital Investment or Gross capital investment (Land, building, plant and machinery) is required to be submitted along with the consent application for establishment of a Unit.
- Professionals as environment consultants can play an important role in obtaining environmental clearance under the Environment Impact Assessment Notification

- Professionals can also assist the Industrial Units in record keeping of various hazardous wastes, chemicals etc.
- Professionals can also provide information on the capital and recurring (O&M) expenditure on various aspects of environment protection such as effluent, emission, hazardous wastes, solid wastes, tree-plantation, monitoring, data acquisition etc.
- Professionals can also ensure on a monthly/quarterly/half-yearly basis that the conditions of the authorization are complied by the industrial units under the Hazardous Wastes (Management and Handling) Rules, 1989
- Professionals as environmental consultants can give opinion on - viability of various projects, technologies to prevent pollution and clean up polluted resources
- Environmental audits can be conducted by Professionals. Environmental auditing refers to the monitoring of environmental management system of the Unit, checking the status of consent orders, compliance of consent orders, water cess, other legal requirements, industrial data collection regarding product process, electric consumption, water consumption, raw materials and energy balance etc.

8. Conclusion: The need for green audit arise because *“there was a growing gap between the efforts to reduce the impact of business and industry on nature and the*

worsening state of the planer” and *“this gap is due to the fact that only a small number of companies in each industry are actively integrating social and environmental factors into business decisions”* Green audit is a more detailed audit focusing on operations. This audit includes verification of compliance with permits and consent orders. The auditor typically traces the compliance process through to the reporting requirements to ensure regulatory compliance.

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