

## ENVIRONMENTAL AUDIT – NEED OF THE HOUR

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**Abstract:** Industrial development significantly contributes towards economic growth. However industrial progress brings along with it a host of environmental problems. Many of these problems could be avoided if industries focus on sustainable development, and go for constructive criticism for their work, which can be done with the help of Environmental Audit. Environmental Audit is intended to measure the impact of an organisation's operations on the environment, against a predetermined set of criteria and so far as is possible to assess them in terms of costs. This paper tries to bring out the concept of Environmental Audit its importance and its position in India.

**Keywords:** Sustainable Development, Environmental Audit

Nature has been very kind to man. Ever since its appearance on the earth's surface, man has been dependent on nature for his subsistence. Although natural products existed over the earth's surface even during pre-historic time, but man had neither tools nor the technology to use them. With the time man learnt to use natural resources more aggressively for economic development instead of sustainable development, he started neglecting environment.

Neglecting environment and natural resources distorts the picture of sustainable development in two ways:

- (I) It produces undesirable output such as *pollution*, and
- (II) It *deteriorates the quality* of a number of crucial inputs such as soil, water, forest products, minerals, sea life coral (which are often implicitly valued at zero) provided in the form of natural resources to the production process.

Maintenance of proper accounts on environment and natural resources will check their depletion and degradation and ultimately protect the loss of economic growth and public health and assist to measure economic performance more accurately.

As such, economic growth has measured through the prevailing system of national income accounting is, far from reality and is overstated since it does not take into account the amount of natural resources used, the damage caused and the changes incurred by their use in economic growth. Decisions based only on Gross National Product and Net National Product- without giving due weightage to the use of natural resources - are far from reality.

The indiscriminating consumption of natural resources for rapid industrialisation and unplanned urbanisation are adversely impacting the environment. Dumping of wastes without proper treatment into rivers and lakes, clearing forest land for cultivation and increased emission of harmful pollutants into the environment have all contributed to degrading the environment.<sup>(1)</sup>

### **We all know that India has The Most Polluted Cities across the World: 4 out of 10.**

The national capital surfaced as the most polluted city in 2014 ranking of WHO, with an annual PM2.5 level of 153 mgm<sup>3</sup>. However, in the latest list, (2016) Delhi managed to chuck-off the tag of being the world's most polluted city in the latest World Health Organisation's (WHO) ranking on pollution levels, but still thirty plus Indian cities have made their way into the list of hundred most polluted ones. Twenty-two cities in the country parked themselves in the top fifty.

As per the latest list, (MAY 2016) Zabol in Iran is the most polluted city across the globe and India's Gwalior, Allahabad, Patna and Raipur stands at a close second, third, sixth and seventh positions, respectively. Even Raebareli and Varanasi held the 52nd and 78th spot in the global ranking. All inclusive, four of our cities rank in world's 10 most polluted cities and the half in the worst 20.<sup>(2)</sup>

From the past two decades in India, there has been a growth in efforts in the area of preservation of the environment. If government intervenes, it can very well lessen or completely push back environmental degradation. Government is using **Different tools** like

- Environmental Accounting,
- Environmental Audit,
- Environmental Impact Assessment,
- Environment Management System etc.

**Different methods** like

- Environmental Information System
- Rainwater Harvesting

**Different policies**<sup>(3)</sup> like

- National Environment Policy, 2006;
- National Conservation Strategy and Policy Statement on Environment and Development, 1992;
- Policy Statement for Abatement of Pollution;
- National Forest Policy etc.

Funds allocated for environmental programmes have also been increasing. But there is a need of utilising all these tools, methods and policies more effectively.

The current paper emphasises and discusses about the environmental audit- its meaning; need type, procedure, its status in India and providing some suggestions for better implementation of Environmental Audit.

**Meaning of Environmental Audit**

Environmental audit is a process which can quantify an organisation's environmental performance and position. It is an independent third party assessment of the current status of an organization's compliance with local environmental laws and regulations. EA aims at examining the positive and negative effects of the activities of an enterprise on environment.

In 1988 the International Chamber of Commerce (ICC) Position Paper on environmental auditing produced the following definition, which has now found wide acceptance:

'A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing with the aim of helping to safeguard the environment by:

- (i) Facilitating management control of environmental practices; and
- (ii) Assessing compliance with company policies, which would include meeting regulatory requirements. "<sup>(4)</sup>

**Need/ Objectives of Environmental Audit**

The need to conduct an environmental audit varies for different organizations, as per the objectives of auditing. It is not available in the form of a readymade package, applicable to all situations. Thus, the procedure of environmental audit should be planned as per the objectives of auditing. It should be incorporated with other effective environmental tools like Environmental Impact Assessment (EIA) and Environmental Management System (EMS) for better results.<sup>(5)</sup>

The growth of environmental auditing represented a growing recognition, on the part of business, of the need to develop and employ more effective internal tools to control environmental performance.

Environmental audit is done to safeguard the environment and minimize risks to human health. Following points describe the need of environmental audit:

To determine how well the environmental management information systems and equipment are performing

- To verify compliance with the relevant national, local or other laws and regulations
- To minimize human exposure to risks from environmental, health and safety problems. <sup>(6)</sup>
- To identify and document the environmental compliance status.
- To increase the overall level of environmental awareness.
- To upgrade the existing technologies with better input-output ratios.
- To assess the short term benefits sacrificed for long term environmental dividend

- To protect the company from statutory liabilities.
- To develop overall environmental control system.
- To develop a basis for utilizing environmental resources.
- To provide assurance to top management<sup>(7)</sup>

The purpose of the environmental audit is to provide an indication to the management of the improvements while environmental organization system & equipment are performing. To fulfill this purpose it is essential that audits should be seen as the responsibility of the company. The audit work can be voluntary and for the advantage of the company. The audit work can be done systematically and efficiently by the help of environmental auditing programme<sup>(8)</sup>. It helps in the proper utilization of natural resources as a whole it improves environmental quality.

#### **Types of Environmental Audit<sup>(9)</sup>**

Depending on the types of standards and the focus of the audit, there are different types of environmental audit available. But broadly it can be classified in to the following 3 categories:



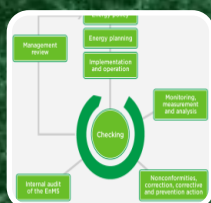
#### **Environmental Awareness Audit**

- This audit is conducted to determine about the awareness of the entity's employees about all issues involved in environment protection.



#### **Legal Compliance Audit**

- This audit will be performed to check whether entity is compliant with the environmental rules and regulations as prescribed by the Government.



#### **Green Management Audit**

- This audit is pursued by the company's management itself with the convection to save them from the burden of litigation as well as to project a clean image of their company to the public.

#### **Procedure of Environmental Audit<sup>(10)</sup>**

There are a number of different environmental auditing procedures advocated in the auditing literature. A model of the audit procedure which is universally accepted was first developed by Arthur D Little. This was later adopted by the International Chamber of Commerce (ICC) in 1989. Based on this approach, Humphrey and Hadley (2000) divided the environmental auditing process into three main areas of activity:



Each of these phases comprises a number of clearly defined objectives, with each objective to be achieved through specific actions. These actions produce results in the form of outputs at the end of each phase.

#### **Pre-audit activities**

Once a commitment to auditing has been made a number of activities need to be completed before the on-site activities commence. This is done to reduce the amount of time spent in on-site activities which is expensive for both the auditee and audit team.

The pre-audit activities usually include the following:

- The auditee should be informed of the date of the audit as soon as possible, enabling them to adjust and become used to the concept.
- The audit scope should be identified. The auditee should usually be consulted when establishing the scope.
- The audit plan should be designed in such a way that it can accommodate changes based on information gathered during the audit and effective use of resources. Audit team and assignment of responsibility should be established.
- The background information on the facility including the facility's organisation, layout and processes, and the relevant regulations and standards, should be collected.
- The background information on the site's historical uses, and the location of soil and groundwater contamination should be collected.
- The pre-audit questionnaire should be sent to auditee (Humphrey and Hadley, (2000)).

#### **On-site audit activities**

The on-site audit is the most important step of the audit procedure. This includes:

- The opening meeting is the first step between the audit team and auditee. In this meeting the purpose of audit, the procedure and the time schedule are discussed.
- Site inspection is the second step for on-site activity. In this step the audit team may discover matters which are important to the audit but which are not identified at the planning stage.
- The on-site phase requires the audit team to develop a working understanding of how the facility manages the activities that influence the environment and how any EMS, if there is one, works.
- Assessing strengths and weaknesses of the auditee's management controls and risks associated with their failure need to be established.
- Gathering audit evidence involves collecting data and information using audit protocol.
- Communicating with the staff of the auditee to obtain most information.
- Evaluating the audit evidence against the objectives established for the audit and an agreed protocol.
- An exit meeting takes place once all of audit findings have been finalized with facility personnel (Humphrey and Hadley, 2000).

#### **Post-audit activities**

Post-audit activities begin with the preparation of a draft report. The draft report should be reviewed by the facility personnel directly involved in the audit. The final report should be derived from it and it should then

be distributed to all interested parties within the organisation. Humphrey and Hadley (2000) confirm that it is important for management to follow-up the report and develop an action plan to implement those audit findings. The ICC (1991) (cited in Humphrey and Hadley, 2000) identifies five elements of a successful follow-up programme. These include:

- A standard action plan format;
- Established procedures for approving the action plan and communicating its contents;
- Regular reporting of the action plan's status;
- Special reporting and chasing up of overdue action; and
- Independent auditing of the action plan to verify that all actions sanctioned have been completed.

The formal audit procedure is completed as soon as the action plan has been completed.

### **Environment Audit in India<sup>(11)</sup>**

**INDIA is the first country in the world to make environmental audits compulsory.**The government of India, by its gazette notification [No. GSR 329 (E)] of March 13, 1992, made it mandatory for all industries to provide annual environmental audit reports of their operations, beginning with 1992-93. This required industries to provide details of water, raw materials and energy resources used, and the products and wastes generated by them. These audit reports were to be submitted to the concerned State Pollution Control Boards or before September 30 every year.

The critics of Environmental Audit feel that this notification was hurriedly implemented without the prior creation of necessary infrastructure/experts which would enable its appropriate implementation.

This novel concept of environmental audit was distorted, surprisingly, by the government, when on April 22, 1993, by a revised notification [No. GSR.386 (E)] the term Audit Report was replaced by Environmental Statement. This change inevitably toned down the impact of the regulation.

The industries were now to fill a form and submit it to the concerned Pollution Control Boards (PCBs). It made it easy for industries to make statements to the effect that they have taken the requisite steps in compliance with existing pollution control regulations. These statements might not be based on actual audit reports. If this becomes a rule, the whole purpose of the environmental audit regulation would be defeated.

Environmental audit did not get acceptance from the Industries. Industries were having list of objections against it, which are still not resolved completely. These objections are

- First and the most important objection is – industries are not satisfied by the modus operandi of Environmental Audit.
- Proper standards are not laid down by the government to conduct environmental audits.
- Sufficient number of trained environmental Auditors are not available for conducting environmental audits
- Environmental audits are a time consuming and expensive.
- The government officials are also not fully aware about the procedure.
- There is no scrutiny by the government officials of the data which is furnished by the companies.

As per a report by Hong Kong-based Political and Economic Risk Consultancy who ranks bureaucracies across Asia on a scale from 1 to 10, with 10 being the worst possible score. India scored 9.21. (<http://www.bbc.com/news/world-asia-india-16523672>) the pollution control board is also issuing clearance certificate to the industries that are not following rules and regulations laid down by the SAI (The Supreme Audit Institution in India which is headed by the Comptroller and Auditor General (CAG) of India who is a constitutional authority.) for environmental protection.

An environment audit programme, if designed and implemented conscientiously, can enhance an industry's environmental performance. If an industry sets up its own system in compliance with existing laws, then conducting audits would be a normal and considerably easier procedure. It will expose problems that require action. It improves the material and energy efficiency of production processes, conserves resources, minimises wastes, provides direct economic benefits to the industry and stimulates growth of the industry as well as the national economy.



### **Suggestions for effective implementation of Environmental Audit**

Number of recommendations and suggestions are proposed to improve the position of environmental audit in India.

- Develop the standard procedure to perform environmental audit.
- Develop Environmental Audit standards to prepare Environmental Statement.
- The setting up of an institute of environmental auditors like the Institute of Chartered Accountants of India will be an apt preamble to the adoption of Environmental Audit.
- Investment bankers and venture capitalist can ask to the industry for environmental audit before investing in it.
- Establish a system of administrative fines and streamline the system of environmental fine.
- Establish and disseminate comprehensive standard compliance monitoring and enforcement policies and procedures, and develop and deliver related training programs.
- Increase the emphasis on compliance monitoring and enforcement and prioritize inspection efforts based on environmental risk.
- Develop more balanced compliance monitoring and compliance promotion programs by extending them to SMEs.
- Conduct extensive training programs for government officials and industrialists.
- Establish a public information disclosure program.
- Focus more attention on SMEs, both in terms of compliance monitoring and financial assistance.
- The data furnished by the industries must be verified by the state pollution control Boards.
- There should be follow up from the pollution control Board

### **ANNEX 1. U.S. EPA RECOMMENDATIONS ON ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT IN INDIA<sup>(12)</sup>**

#### Summary of Recommendations

##### Recommendation 1

: Advocate for more resources, and streamline current practices to maximize currently available resources.

##### Recommendation 2

: Develop policies and implementing guidance to assist the zonal offices and SPCBs in implementing compliance and enforcement programs. As these policies and guidance are developed, effective organization will necessitate that a system for cataloguing and distributing the guidance in a timely manner also be developed.

##### Recommendation 3

: Establish the authority to use self-monitoring, self-recordkeeping, and self-reporting as direct evidence of a violation in the courts (and administratively should such a process be established); develop and distribute the necessary policies and implementing guidance; and provide training to SPCBs.

##### Recommendation 4

: Establish opacity standards and test methods for emissions from stacks; develop implementing policies and guidance; and establish the necessary training Infrastructure.

##### Recommendation 5

: Develop national guidance on minimum inspector training requirements; develop and fund a compliance and enforcement training program to implement the requirements; and ensure that all SPCBs are aware of the program and the schedule of courses.

##### Recommendation 6

: Develop a policy and provide implementing guidance that requires regulated industries to provide bank guarantees for negotiated compliance schedules incorporated in directives issued by the Boards.

##### Recommendation 7

: Utilize current statutory provisions to establish civil administrative authority; establish the infrastructure for managing administrative cases; develop the necessary enforcement response and penalty policies; and provide training for the states.

##### Recommendation 8

: Develop educational materials and compliance assistance tools for the regulated community, especially small businesses, and distribute the materials to all regulated sources.

**Recommendation 9**

: Develop measures of success for the compliance and enforcement program utilizing a variety of parameters, and communicate these measures and the rationale for why they are needed to SPCBs, the regulated community, and the public.

**Recommendation 10**

: Develop a uniform computerized system for collecting, maintaining and utilizing compliance and enforcement data at the national as well as the state level; develop the necessary implementing policies and guidance; and ensure that the SPCBs are aware of them.

**Recommendation 11**

: Establish a support organization to facilitate communication among SPCBs on important environmental compliance and enforcement issues, and between CPCB and the Boards.

Source: U.S. EPA, 2005.

### **Conclusion**

Environmental audit is an important key not only for sustainable development and clean environment but also to detect environmental problems at industries' level. It also equips the industries with the maintenance measures to uproot the pollution problems.

In developed countries audit is conducted to establish a "green edge" quality assurance over competitors in environmentally sensitive markets. Environmental audits have been made quintessential by the investment banks before they finance these industries. In this regard Indian economy which is seeing the rising sun can only sustain in the race if Indian Industries choose to go green.

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