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Development of environmental auditing

This article sets out the methodology of environmental auditing. Are views of environmental auditing. Describes the special tests and measurements in order to validate the reporting on the impact on the environment; conformity assessment production process environmental requirements; conformity assessment system of industrial monitoring and control environmental requirements; assess the level of staff training. Environmental auditing refers to the auditing of organizations social and environmental reporting requirements and reporting thereon going beyond financial statements auditing. In this case auditors are providing assurance services to the organizations social and environmental activities. Customers, communities, and governments around the world are actively expressing concern on climate change and environmental degradation. Consequently, organizations under pressure to reduce any harmful effects on the environment.

Key words: Environmental audit, audit

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Экологиялық аудиттың дамуы

Мақалада экологиялық аудиттің әдістемесі көрсетілген. Экологиялық аудиттің түрлері берілген. Қоршаған ортаға әсер етуі бойынша ұсынылған есептіліктің анықтығын тексеру мақсатындағы арнайы зерттеулер мен өлшемдері сипатталған; өндірістік-технологиялық процесстің экологиялық талаптарға сәйкестік бағалары; өндірістік мониторинг жүйесінің сәйкестік бағасы мен экологиялық талаптар бақылауы; қызметкерлердің біліктілік деңгейінің бағасы. Әсіресе, мақалада экономиканың дамуындағы экологиялық аудиттің ерекшелігі айтылған. Себебі, бүгінгі күнгі нарықтық экономикада әлемдік қауымдастық пен үкіметтер, әлем бойынша қоршаған ортаның бүлінуімен климаттың ауысуы бойынша алаңдаушылықтарын белсенді түрде көрсетеді. Осыған сай, ұйымдар қоршаған ортаға деген кез-келген жағымсыз әрекеттердің тәуекелін төмендету бағытында болғандықтан, экологиялық аудитті жүргізуі қажет.

Түйін сөздер: экологиялық аудит, аудит

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Развитие экологического аудита

В данной статье изложена методика экологического аудита. Представлены виды экологического аудита. Описаны специальные исследования и измерения в целях проверки достоверности представленной отчетности о воздействии на окружающую среду; оценки соответствия производственно-технологического процесса экологическим требованиям; оценки соответствия системы производственного мониторинга и контроля экологическим требованиям; оценки уровня квалификации персонала. В данной статье подчеркивается особая роль экологического аудита при составлении социальной отчетности. В данной статье особенно подчеркивается роль экологического аудита для развития экономики. Ведь, в современной рыночной экономике, мировое сообщество и правительство во всем мире активно выражают озабоченность изменением климата и деградацией окружающей среды. Следовательно, организации, находятся под давлением, для того, чтобы снизить риски любых вредных воздействий на окружающую среду необходимо проводить экологический аудит.

Ключевые слова – экологический аудит, аудит.

The objects of environmental auditing audit are:

– enterprises, institutions and organizations,

their branches and representations or associations, separate manufactures, other economic objects;

– systems of environment management;

– other objects.

The subjects of environmental auditing are:

– customers (interested central and local bodies of executive power, bodies of local self-government other legal entities, as well as natural persons);

– agents (legal entity or natural person (ecological auditor) qualified for conducting of ecological audit) ;

Ecological audit is performed in the process of state property privatization, other change of ownership form, change of particular owners of objects, as well as for needs of ecological insurance.

Ecological audit and environmental auditing may be:

- voluntary (carried out as regards to any objects of ecological audit on order of the subject concerned with consent of the head or owner of the object of ecological audit);

- obligatory (carried out on order of interested bodies of executive power or bodies of local self-government as regards to objects or types of activity, which make increased ecological danger in cases of bankruptcy, privatization, transfer in concession of objects of state and communal ownership, transfer in long-term lease of objects of state or communal ownership, termination of production-sharing agreements, etc.).

Ecological audit and environmental auditing is divided into:

- internal (conducted on order of the owner of object for personal needs);

- external (conducted on order of other subjects concerned).

The results of ecological audit shall be presented in the form of report on ecological audit.

Scope of the Audit

As the prime objective of audits is to test the adequacy of existing management systems, a fundamentally different role from the monitoring of environmental performance. Audits can address one topic, or a whole range of issues. The greater the scope of the audit, the greater will be the size of the audit team, the time spent onsite and the depth of investigation. Where international audits need to be carried out by a central team, there can be good reasons for covering more than one area while onsite to minimize costs.

In addition, the scope of an audit can vary from simple compliance testing to a more rigorous examination, depending on the perceived needs of the management. The technique is applied not only to operational environmental, health and safety management, but increasingly also to product safety and product quality management, and to areas such as loss prevention. If the intention of auditing is to help ensure that these broad areas are managed properly, then all of these individual topics must be reviewed. Items which may be addressed in audits, including environment, health, safety and product safety are shown in table 1.

Table 1 – Scope of environmental audit

Environmental	Safety	Occupational Health	Product Safety
– Site history – Process/materials – Storage of materials above ground	– Safety policy/procedures – Accident reporting – Accident recording	– Employee exposure to air contaminants – Exposure to physical agents, e.g., noise, radiation, heat	– Product safety programme – Product quality control
– Below ground – Air emissions – Water discharges	– Accident investigation – Permit to work systems – Special procedures for confined space entry, work on electrical equipment, breaking into pipelines, etc.	– Measurements of employee exposure – Exposure records	– Product packaging, storage and shipping – Product recall/withdrawal procedures – Customer information on product handling and quality
– Liquid/hazardous wastes – Asbestos – Waste disposal onsite	– Emergency response – Fire fighting	– Ventilation engineering controls – Personal protective equipment	–Regulatory compliance – Labelling – Specifications for purchased materials/products/packaging

– Offsite – Oil/chemical spill prevention	– Job safety analysis – Safety training	– Information and training on health hazards – Medical surveillance programmer	– Materials safety data – Vendor qualification programmer – QA testing and inspections
– Permits/licenses	– Safety communication/promotion – Housekeeping – Regulatory compliance	– Hearing conservation – First aid – Regulatory requirements	– Record keeping – Product literature – Process control
Resource – 2			

The scope and style of audits vary, but common stages and activities include:

Pre-audit stage:

- full management commitment;
- setting overall goals, objectives, scope and priorities;
- selecting a team to ensure objectivity and professional competence;
- on-site audit, well defined and systematic using protocols or checklists;
- review of documents and records;
- review of policies;
- interviews;
- site inspection.

Pre-audit steps include the administrative issues associated with planning the audit, selecting the personnel for the audit team (often from different parts of the company or from a specialized unit), preparing the audit protocol used by the organization and obtaining background information about the facility. If auditing is new, the need for education of those involved in the audit process (the auditors or those being audited) should not be underestimated. This also applies to a multinational company extending an audit programme in its home country to subsidiaries abroad. In these situations, the time spent on explanation and education will pay dividends by ensuring that the audits are approached in a spirit of cooperation and are not seen as a threat by the local management [3].

Post- audit stage

Following the onsite work, the next step is to prepare a draft report, which is reviewed by the plant management to confirm its accuracy. It is then distributed to senior management according to the requirements of the company.

The other key step is to develop an action plan to address the deficiencies. Some companies ask for recommendations for corrective action to

be included in the formal audit report. The plant will then base its plan on implementing these recommendations. Other companies require the audit report to state the facts and the deficiencies, with no reference to how they should be corrected. It is then the responsibility of the plant management to devise the means of remedying the failings.

Once an audit programme is in place, future audits will include past reports – and progress in the implementation of any recommendations made therein – as part of their evidence: evaluation of findings:

- reporting with recommendations;
- preparation of an action plan;
- follow-up [4, c.34].

The environmental impacts covered by an audit may include:

- Energy
- Carbon dioxide and other emissions
- Waste
- Water
- Transport
- Biodiversity
- Procurement

(Please note, if we have recently carried out carbon footprinting or an energy survey for you, this will reduce the amount of work and therefore the fee.)

The benefits of the audit include:

- Ensuring legislative compliance
- Reducing environmental impacts
- Reducing waste, water and energy costs (annual savings are typically greater than our fee for the audit)
- Improving relations with stakeholders
- Providing the foundation for an environmental management system (EMS) such as ISO 14001 at a later date

A Baseline Review provides the following:

- An audit of all principle environmental impacts over which the organisation has control or influence

- A gap analysis of the changes required to improve the organisation's existing environmental management procedures

- A Legal Compliance Register listing all regulations applicable to the organisation's significant environmental impacts.

- An Environmental Aspects Register listing the organisation's environmental aspects cross-referenced with the Legal Compliance Register. The Environmental Aspects Register uses a significance rating or score so that your organisation can determine which environmental aspects are significant and therefore must be managed to meet the chosen standard.

- Written procedures detailing how your organisation ensures that its Legal Compliance Register and Environmental Aspects Register are relevant and maintained, and how the assessment of the significance of the Environmental Aspects is carried out.

The utility of environmental audits vary from organization to organization. It is likely that audits will be used increasingly to:

- provide baseline information to enable organizations to evaluate and manage environmental change, threat and risk;

- form the basis for initiating and monitoring the performance of Environmental Management Systems;

- contribute to environmental management approaches which become integrated with environmental impact assessment and the

management of predicted impacts, mitigation and monitoring measures;

- support the implementation and management of integrated pollution control procedures and assist in the definition of 'best practicable environmental options' (BPEO);

- tackle external off-site impacts which consider the broader environmental footprint of an organization's activities;

- pass environmentally responsible approaches down the supply chain [5, c.4].

Environmental audits have traditionally dealt with the environmental effects of industrial processes and, to a lesser extent, with resource consumption. Guided by the legislation and compliance procedures, the environment has usually been considered in terms of air land and water. Considerable conservation benefits could be achieved by broadening the focus of auditing to include natural heritage features and objectives.

Conclusion

Environmental audits have traditionally dealt with the environmental effects of industrial processes and, to a lesser extent, with resource consumption. Guided by the legislation and compliance procedures, the environment has usually been considered in terms of air land and water. Considerable conservation benefits could be achieved by broadening the focus of auditing to include natural heritage features and objectives.

Ecological audit shall be conducted on the basis of agreement between the customer and the agent. The results of ecological audit shall be presented in the form of report on ecological audit.

References

1. www.rs-rs.s
2. www.ilo.org
3. Chen, K.Y., K., Lin and J., Zhou, 2005. "Audit quality and earnings management for Taiwan IPO firms", *Managerial Auditing Journal*, Vol. 20, No. 1, pp. 86-104.
4. Zhou, J. and R., Elder, 2003. "Audit firm size, industry specialization and earnings management by initial public offering firms", *working paper*, Syracuse University, Syracuse.
5. Balsam, S., G.V., Krishnan and J.S., Yang, 2003. "Auditor industry specialization and earnings quality", *Auditing: a Journal of Practice & Theory*, Vol. 22, No. 2, pp. 71-97.