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ISO 14001 LEAD AUDITOR
REFRESHER TRAINING
FOR ENVIRONMENTAL SPECIALISTS
KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP
ENVIRONMENTAL SPECIALIST CURRICULUM

ENVIRONMENTAL AUDIT SOCIETY
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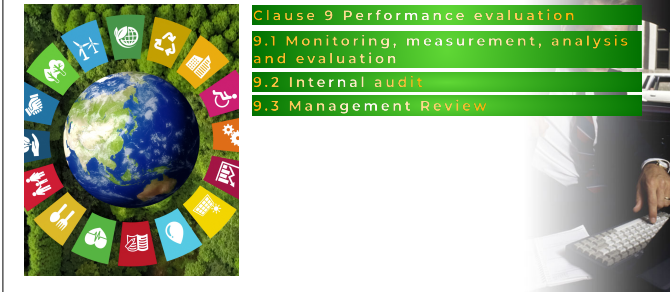
PERFORMANCE EVALUATION
FOR ENVIRONMENTAL PROFESSIONALS
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LEARNING OBJECTIVES

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Clause 9 Performance evaluation
9.1 Monitoring, measurement, analysis and evaluation
9.2 Internal audit
9.3 Management Review

ISO 14001:2015 CLAUSE 9 PERFORMANCE EVALUATION

ISO 14001:2015 Clause 9 Performance evaluation is all about measuring and evaluating your EMS to ensure that it is effective and it helps you to continually improve. You will need to consider what should be measured, the methods employed, and when data should be analyzed and reported on.

As a general recommendation, organizations should determine what information they need to evaluate environmental performance and effectiveness. Once the EMS is implemented, ISO 14001 requires permanent monitoring of the system as well as periodic reviews to:

- ✓ evaluate the effectiveness of the implemented EMS
- ✓ objectively evaluate how well the minimal requirements of the standard are fulfilled
- ✓ verify the extent to which the organizational, stakeholder and legal requirements have been met;
- ✓ review the suitability, adequacy, effectiveness, and efficiency of the EMS;
- ✓ demonstrate that planning has been successfully implemented;
- ✓ assess the performance of processes;
- ✓ determine the need or opportunities for improvements within the environmental management system.

9.1 MONITORING, MEASUREMENT, ANALYSIS AND EVALUATION

An EMS without effective monitoring and measurement processes is like driving at night without the headlights on — you know that you are moving but you can't tell where you are going. Monitoring in the sense of ISO 14001 means that the organization should check, review, inspect and observe its planned activities to ensure that they are occurring as intended.

Monitoring generally means operating processes that can check whether something is happening as intended or planned. In some respects auditing processes address this, but also operational control procedures will apply. Thus if an operational control states that housekeeping audits will occur twice weekly then this is a monitoring process, i.e. the site is checked weekly for 'good housekeeping practices'.

This could also involve 'visual' checking of the integrity of bunding around solvent storage tanks for example. Measurement tends to mean that the size or magnitude of an event is measured, calculated, or estimated with a numerical value assigned.

9.1 MONITORING, MEASUREMENT, ANALYSIS AND EVALUATION +

In short, monitoring and measurement help you manage your organization better. The results of pollution prevention and other efforts are easier to demonstrate when current and reliable data are available. These data can help you demonstrate the value of the EMS to top management. Your organization should develop means to

- ✓ Monitor key characteristics of operations and activities that can have significant environmental impacts and/or compliance consequences;
- ✓ Track performance (including your progress in achieving objectives and targets);
- ✓ Calibrate and maintain monitoring equipment; and,
- ✓ Through internal audits, periodically evaluate your compliance with applicable laws and regulations.

TRACKING PERFORMANCE

To have a successful EMS, it is important to determine program measurement criteria. Determining measurement criteria, also called performance indicators, will help you evaluate the success of your overall EMS program. Performance indicators measure overall success, while key characteristic indicators measure progress against EMS objectives for specific SEAs.

These performance indicators focus on how well the overall system for improving environmental management is functioning. Select performance indicators that will help you and your employees decide whether success has been achieved or whether improvement in procedures needs to be made. It is easier for management and staff to understand how things are going if they have benchmarked as guidelines.

You will need performance indicators that describe how well your environmental policy is being implemented. In addition, you will need performance indicators for all of the various components of your EMS.

TYPES OF ENVIRONMENTAL PERFORMANCE INDICATORS (EPIS)

Management performance indicators (MPis): policy, people, planning activities, practice, procedures, decisions, and actions in the organization

Operational performance indicators (OPis): inputs, the supply of inputs, the design, installation, operation and maintenance of the physical facilities and equipment, outputs and their delivery

Environmental condition indicators (ECis): Provide information about the local, regional, national or global condition of the environment. It help an organization to better understand the actual impact or potential impact of its environmental aspects and assist in the planning and implementation of the EPE

9.1.2 EVALUATION OF COMPLIANCE

Once the Compliance obligation has been determined, the organization should establish, implement and maintain the processes needed to evaluate fulfillment of its compliance obligations. The organization should determine the frequency from evaluation of compliance, action taken from evaluation of compliance, and maintain knowledge and understanding of its compliance status. The organization should retain documented information as evidence of the compliance evaluation results.

Once you have determined your Compliance Obligation, now you must evaluate your Compliance. Here you must plan and implement a process to evaluate if you meet the legal requirements that are applicable to you as determined above. This process needs to include:

- ✓Frequency of compliance evaluation;
- ✓Evaluate compliance and take action;
- ✓Maintain the status of your compliance;

9.2 INTERNAL AUDIT

9.2.1 General The organization must conduct internal audits at planned intervals to provide information on whether the environmental management system conforms to the requirements of ISO 14001:2015 standards, its own requirements for its environmental management system, and also to check whether the environmental management system is effectively implemented and maintained.

9.2.2 Internal audit program The organization must establish, implement and maintain an internal audit program, including the frequency, methods, responsibilities, planning requirements, and reporting of its internal audits. When establishing the internal audit program, the organization shall take into consideration the environmental importance of the processes concerned, changes affecting the organization, and the results of previous audits.

The organization must define the audit criteria, and scope for each audit. The organization must select auditors and conduct audits to ensure objectivity and the impartiality of the audit process; it must ensure that the results of the audits are reported to relevant management. The organization must retain documented information as evidence of the implementation of the audit program and the audit results.



9.3 MANAGEMENT REVIEW

ISO 14001 requires that the organization's top management shall, at planned intervals that it determines, review the environmental management system to ensure its continuing suitability, adequacy, and effectiveness. Again, common sense dictates that once a system is implemented, there should be a review process to test whether what was planned does happen in reality. Just as a person should have periodic physical exams, your EMS must be reviewed by management from time to time to stay "healthy." Management reviews are the key to continual improvement and to ensuring that the EMS will continue to meet your organization's needs over time.

Management reviews also offer a great opportunity to keep your EMS efficient and cost-effective. For example, some organizations have found that certain procedures and processes initially put in place were not needed to achieve their environmental objectives or control key processes. If EMS procedures and other activities don't add value, eliminate them. The key question that a management review seeks to answer is: "Is the system working? i.e., is the EMS suitable, adequate, and effective, given our needs?"



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