

## INTRODUCTION TO EMS AUDIT

The Environmental Management System (EMS) audit is based on the generic concept of auditing. Simply put, an audit, any audit, is the comparison of actual conditions to expected conditions, and a determination as to whether one is in conformance or not in conformance. This is the same philosophy used to perform financial, quality, regulatory compliance, and systems audits. It is prudent to first review what the common elements are in order to better understand why audits are different.

There are several definitions of audit components that are common to any type of audit. ISO 14010 defines these terms for EMS audits, but they apply in other cases also. As a matter of fact, the ISO committee decided not to create auditing standards for other types of audits, such as compliance audits, although it was originally considered. The main reason for deleting the work items was because the concepts and processes defined in 14011, originally intended for EMS audits, were generic enough to be applied “as is” to other types of audits. An audit is fundamentally a comparison of audit evidence to audit criteria to determine findings. The evidence is the objective information collected through interviews, visual reconnaissance, and documentation review. The audit criteria are the expectations or “rules” of how conditions should be. It is the criteria that distinguish one audit from the next. For example, in compliance auditing, the criteria are the regulations. With an EMS audit, the criteria would be the description of the expected system elements. In this case, the EMS criteria would be that described in ISO 14001, the specification standard.

### THE AUDIT Essential Features of an Audit

The EMS audit incorporates in a condensed form the following general features that are essential elements of any audit, i.e.:

- They are pre-planned and methodical in nature rather than haphazard
- They should be free from bias or prejudice
- They encompass some form of inquiry and critical consideration of the resultant findings
- They are concerned with all activities that affect environmental issues and with results reflecting environmental performance
- They should ensure that such activities are carried out in an effective and consistent manner in accordance with planned arrangements

Why Perform EMS audits? In order to confirm that the defined EMS system operates effectively, it is essential to carry out some form of monitoring activity in addition to ongoing monitoring and measurement. Listed below are some of the potential benefits of adopting EMS audits as the basis of any such additional monitoring: -

They provide a means of confirming that the EMS policy is understood and is being implemented.

- They give management confidence that the system is being implemented in the manner prescribed.

They provide a structured means of identifying deficiencies in the system, agreeing on corrective action, and following up to confirm effectiveness.

- They enable system weaknesses to be highlighted before the related potential problems are reflected in the environmental performance.

- They provide a convenient framework for investigating operations in a particular area, e.g., in response to environmental problems. - Again, if they involve personnel from other areas, the opportunity is created for interchange of ideas so that successful features of an area's system can be applied elsewhere if appropriate.

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They can, by involving personnel more widely in the operations of the business, lead to increased commitment and motivation.

## **The Audit Process**

The entire audit process can be described as planning, executing, and reporting. ISO 14011 on EMS audit procedures was created to describe this process, and provide suggestions on setting up audit programs. Recall that ISO 14001 requires that the organization establish auditing programs and procedures. In this section, we will examine the three major steps of auditing in detail, providing examples and suggestions towards establishing an audit program. Once the audit program is put together for the site EMS, it should not have to be changed appreciably.

Planning the Audit With EMS auditing, as with any type of auditing, a very important step is planning the audit. This involves preparing the specific audit

plan, making team assignments, deciding on working documents, and addressing any unique extenuating circumstances. To understand the importance of planning, imagine going on vacation without planning; in other words, not knowing where you are going, what you will do, or how long you will be gone.

## **The Audit Plan**

The audit plan is the document that establishes the scope, objectives and criteria, and schedule of the audit. It also goes into specific details on what areas will be audited, when, and by whom. Other details such as which checklists may be used, how the report is to be formatted and distributed, and how meetings will be conducted can also be included in the plan. In essence, the audit plan reflects the programs, procedures, and methodologies of the EMS audit process, in accordance with element 4.5.4 of ISO 14001. These planning items are usually described in the procedures for element 4.5.4 and do not need to be re-created every time an audit occurs. For example, it can be determined that the entire EMS will be audited once per year, but in four partial events. This schedule then becomes part of the procedure.

Below is the full list of recommended audit plan elements as described in ISO 14011:

- the audit objectives and scope;
- the audit criteria;
- identification of the auditee's organizational and functional units to be audited;
- identification of the functions and/or individuals within the auditee's organization having significant direct responsibilities regarding the auditee's EMS;
- identification of those elements of the auditee's EMS that are of high audit priority;
- the procedures for auditing the auditee's EMS elements as appropriate for the auditee's organization;
- the working and reporting languages of the audit;
- identification of reference documents;

- the expected time and duration for major audit activities;
- the dates and places where the audit is to be conducted;
- identification of audit team members;
- the schedule of meetings to be held with the auditee's management;
- confidentiality requirements;
- report content and format, expected date of issue and distribution of the audit report;
- document retention requirements.

## **Conducting the Audit**

### Roles and Responsibilities

Now that the audit plan is prepared, the team assigned, and working documents defined, it's time to execute the audit. Simply, this means collecting the information, or evidence which will be compared to the criteria to assess the degree of conformance to planned arrangements.

### Lead Auditor

The lead auditor is responsible for ensuring the efficient and effective conduct and completion of the audit within the audit scope and plan approved by the client.

Auditor : Auditor responsibilities and activities should cover:

- following the directions of and supporting the lead auditor;
- planning and carrying out the assigned task objectively, effectively and efficiently within the scope of the audit;
- collecting and analyzing relevant and sufficient audit evidence to determine audit findings and reach audit conclusions regarding the EMS;
- preparing working documents under the direction of the lead auditor;

- documenting individual audit findings;
- safeguarding documents pertaining to the audit and returning such documents as required;
- assisting in writing the audit report.

### Audit Team

The process for selecting audit team members should ensure that the audit team possesses the overall experience and expertise needed to conduct the audit.

### Auditee

The responsibilities and activities of the auditee should cover:

- informing employees about the objectives and scope of the audit as necessary;
- providing the facilities needed for the audit team in order to ensure an effective and efficient audit process;

### Executing the Audit

#### Collecting Evidence

Having established with the auditee and client the scope of the audit, now is the time to undertake an initial review of the related documentation, which will normally consist of:

- The EMS manual and the procedures applicable to the area being audited
- Regulatory documents and specifications that typically apply in the area being audited
- The findings of the last audit of the area and any available audit checklists relating to that area
- Any records of corrective action analysis relating to that area

## The Use of Checklists

Earlier, when preparation for the audit was discussed, great emphasis was placed upon the preparation of checklists. These checklists should be kept available throughout the audit. Ideally, they should not be followed blindly, but should be used as an aide to check that all the topics relevant to the area have been examined. In some instances, it may be beneficial to use spaces incorporated into the checklist to record information gathered during the audit. Frequently, internal audit procedures require that the checklist, completed in this way, be retained to provide objective evidence of effective implementation.

## Interviewing

It is ironic that probably the most sensitive part of auditing is the most difficult to teach, and is more an acquired skill. Interviewing is essentially the technique of gathering information from another individual by asking a series of questions. This may sound easy, but there are varying styles of questions that will prompt different types of answers. For example, closed questions (i.e., yes - no answers) will not yield details or explanations. It is not feasible to assess how well someone understands a concept by using closed questions. On the other hand, there is a time for closed questions, usually when the auditor wishes to verify a point or time is short. Keep in mind also that the auditor can ask additional clarifying questions to elaborate on a point.

## Reviewing Documentation

### The Documented EMS System

We have already defined the EMS system and it follows that the documented EMS system is the formal recording of the policies, procedures, organization structures, responsibilities, etc. in some form or another. The most common of these is an EMS manual with supporting environmental or departmental procedures and work instructions. Listed below are many of the reasons often quoted for having a documented system:

## Completing the Audit

Once the evidence has been collected, the audit team meets to agree on the findings. Recall that findings are the comparison of evidence to criteria to ascertain if the EMS is in conformance to planned arrangements. Therefore, findings will be either that the EMS is or is not in conformance.