

**ISO 14001 LEAD AUDITOR
REFRESHER TRAINING
FOR ENVIRONMENTAL SPECIALISTS**

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**PROCESS APPROACH TO AUDITING
FOR ENVIRONMENTAL PROFESSIONALS**

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LEARNING OBJECTIVES

- Attributes of Auditor
- Process Approach to Auditing
- A Process Approach to Auditing
- Value of the Process Approach

ATTRIBUTES OF AN AUDITOR



PROCESS APPROACH TO AUDITING

William Edwards Deming:

- 'A system is a network of interdependent components that work together to accomplish the aim of the system. A system must have an aim. Without an aim, there is no system. The aim of the system must be clear to everyone, it must include plans for the future'.
- The performance of a system with regard to its aims will be suboptimal if each part is optimized without an understanding of the interdependencies of all parts working together. Effectiveness of connections and communications between processes can be, at least, as important as the performance of the individual processes. To optimize the system, management must be fully aware of the interdependencies and interactions between system components. Now, the greater the interdependence within a system, the greater the need for clarity of and alignment with system aim, and the greater the need for communication and cooperation there within. According to Deming (p.81), interdependencies are far stronger in a system like a company, than they are in other systems such as an orchestra or a bowling team.
- —An example of a system, well optimized, is a good orchestra. The players are not there to play solos as prima donnas, each one trying to catch the ear of the listener. They are there to support each other. Individually, they need not be the best players in the country|| (p.80).

PROCESS APPROACH TO AUDITING

A process audit is an objective evaluation of a process to determine the extent to which the process is meeting its requirements. Using the process definition, the process audit includes an examination of process inputs, activities, and outputs and evaluates its outcomes against the intended results.

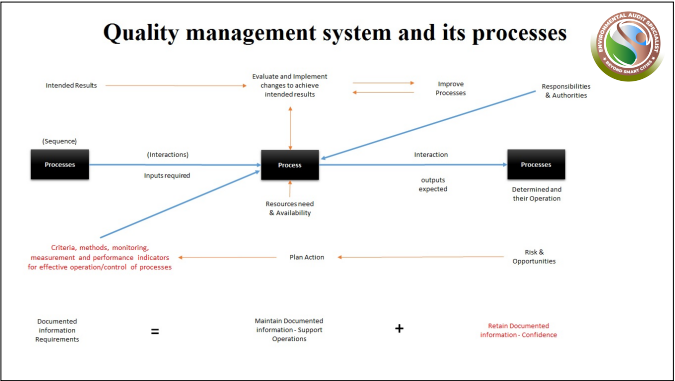
However, a process is part of a larger set of processes that make up an overall quality management system. Therefore, a process audit must also consider the linkage and interaction of the process with these other processes.

PROCESS APPROACH TO AUDITING

A systematic approach to collecting evidence based on specific samples, that the output of a series of inter-related processes meets expected outcomes.

But what does this mean in practice?

- Although applied by some auditors, the use of an audit trail is by no means universally accepted. It is the failure to ensure all audits employ process audits following an audit trail that undermines their credibility. Auditors should understand the path of the process that they are auditing and perform the audit accordingly, ensuring that the requirements of the process are being met.
- For example, as a matter of course auditors will visit the shop floor. This enables the auditor to see what is taking place and to identify the specific order numbers of jobs that are going through at that time. From this information it is easy to identify in the sales department the agreed specification for that product or service and select relevant samples to be chosen. This means the process can be checked to ensure that what takes place is controlled and will meet the required specification. From here, the audit trail is picked up and followed through.



PROCESS APPROACH TO AUDITING

	Interview	Review Documented Information	Observe
Process Owner	What is being done and what is the expected outcome? Objectives, Resources, Roles, Responsibilities and authorities, Method & Criteria	Documents Method & Criteria (procedure) Objectives and their achievements, process performance analysis, Roles, Responsibilities & Authorities	 Conditions, activities, people, equipment, identification of product/service
Worker	How is it being done? Objectives, Policy, consequences of non-conformance	Records Objective achievements, process Evidences of monitoring Test Results, approvals, Calibration certificates, performance analysis, Records of Training & competencies Non-Conformances and complaints Supplier approval and evaluations, Control of externally provided services,	
QA/QC	Results of Monitoring, & Measurement and evaluations		
Management	Risks & Opportunities and performance		

PROCESS APPROACH TO AUDITING

Techniques

- Start with top management and business management processes
- Continue with resource management processes, establishing linkages
 - ✓ Effective resource management processes will provide competent employees and capable equipment to other processes
- Continue with other processes from marketing to delivery

Outcomes

- Data for managerial decisions on growth, technology, staff development, products / processes based on current performance, not just current conformity
- Information on whether performance meets targets
- Information on opportunities for improving performance through better control of processes
- Information on making processes more effective and more efficient

A PROCESS APPROACH TO AUDITING

Approach

- Plan: Establish the objectives and processes necessary to deliver results in accordance with customer requirements and the organization's policies.
- Do: Implement the processes.
- Check: Monitor and measure processes and product against policies, objectives, and requirements for the product and report the results.
- Act: Take actions to continually improve process performance.

Question- Sample

- Remembering PDCA can help you ask process-oriented audit questions:
 - Plan: How do you know what to do?
 - Do: How do you do it?
 - Check: How do you know it is right?
 - Act: What do you do if it is not right?
- Likewise, PDCA can help you identify evidence:
 - Plan: procedures, instructions, flowcharts
 - Do: observations, explanations, records
 - Check: standards, specifications, targets
 - Act: accept, reject, adjust, rework, repair

VALUE OF THE PROCESS APPROACH

- Focuses on results, not procedures
- Determines effectiveness of the management system
- Evaluates the results the system delivers
- Tests linkages between departments and processes
- Follows flow of work throughout organization
- Determines if operations are under control and controls are effective
- Allows judgment on significance of findings
- Helps determine depth of problems across organization
- Focuses on benefits of correcting nonconformities related to improving organizational effectiveness

PROCESS APPROACH TO AUDITING



1. **INPUTS:** (What Received, When, and from Who)
2. **OUTPUTS:** (What Delivered, When, and to Who)
3. **WHAT – Resources:** (Equipment, Tools, and Software)
4. **WHO – Resources:** (People, Skills, and Experience)
5. **METHODS:** (Procedures, Instructions, and Controls)
6. **MEASURES:** (Performance Results and Objectives)
7. The Plan-Do-Check-Act (PDCA) methodology can be applied to any process.

