



ISO 14001 Environmental Management System Training

Auditing Your Environmental Management System

Iowa Department of Natural Resources

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This webinar is being recorded

All slides and recordings of webinars in this series are available at

<https://www.iowadnr.gov/environmental-protection/land-quality/pollution-prevention-services/p2-workshops>



Welcome and Introductions

- ▶ Name
- ▶ Where do you work?
 - ▶ Title/Department/Facility
- ▶ What is your experience with:
 - ▶ EMS?
 - ▶ ISO 14001?
 - ▶ Environmental Compliance?
 - ▶ Audits?
- ▶ What do you hope to get out of this training?



Previous Webinar #1 Review

- ▶ Overview of the ISO 14001 Standard
- ▶ Identifying Environmental Aspects & Impacts and Defining Significance
 - ▶ Determining aspects and impacts
 - ▶ Ensuring your rating system is appropriately highlighting the most significant objectives
 - ▶ “Workshop” Exercise
- ▶ Brief intro to Developing Objectives & Actions



Previous Webinar #2 Review

- ▶ Establishing Environmental Objectives
 - ▶ Consistency with Environmental Policy
 - ▶ Measurable and Monitored objectives
 - ▶ Communicated to the organization
 - ▶ Documented and kept up-to-date
- ▶ SMART Objectives
- ▶ Actions to achieve objectives
- ▶ What if we aren't trending in the right direction?



Survey Results

► What you want more of:



Webinar #3 Agenda

- ▶ Audit Basics
- ▶ Types of Audits
- ▶ How-To Auditing
 - ▶ Steps of an audit
 - ▶ Tips & techniques
 - ▶ Examples
- ▶ Summary

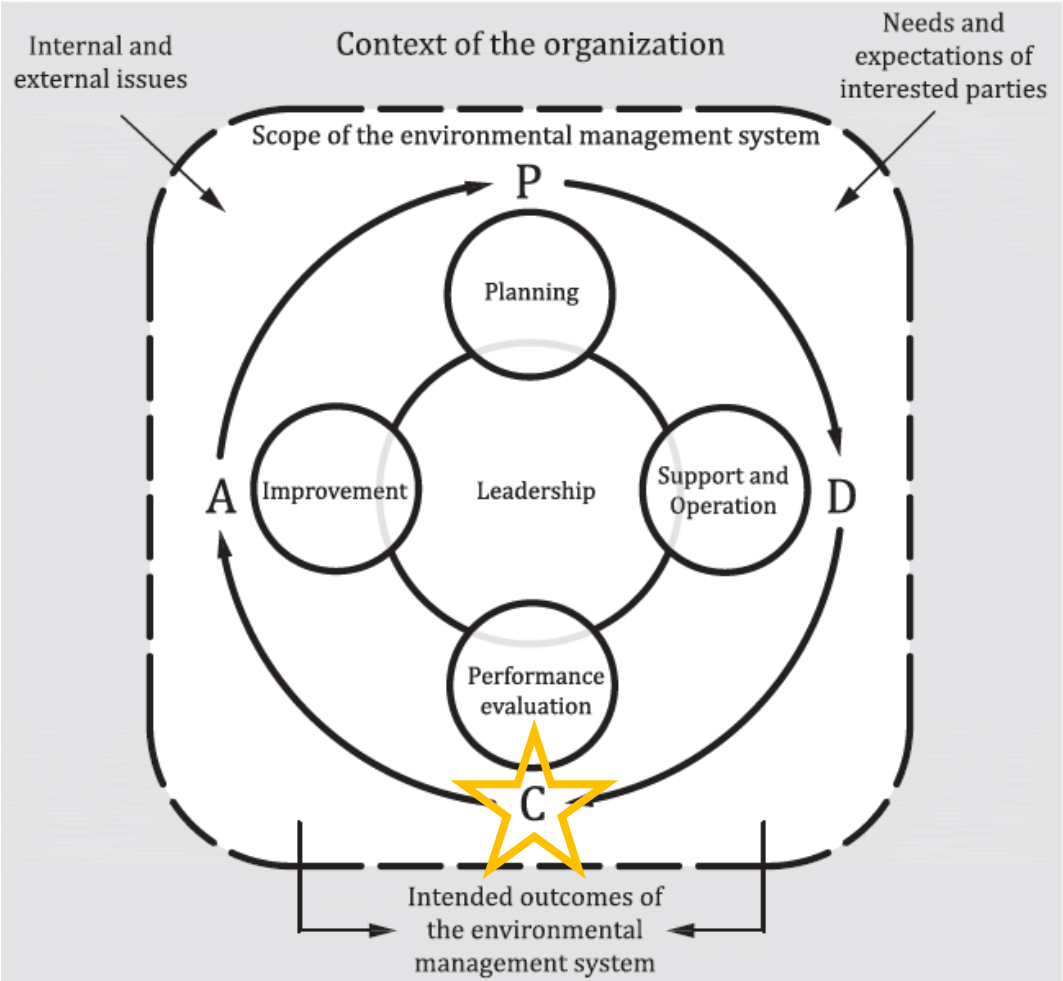




Environmental Management System Auditing

Plan – Do – Check - Act

▶ Auditing is part of **Checking**



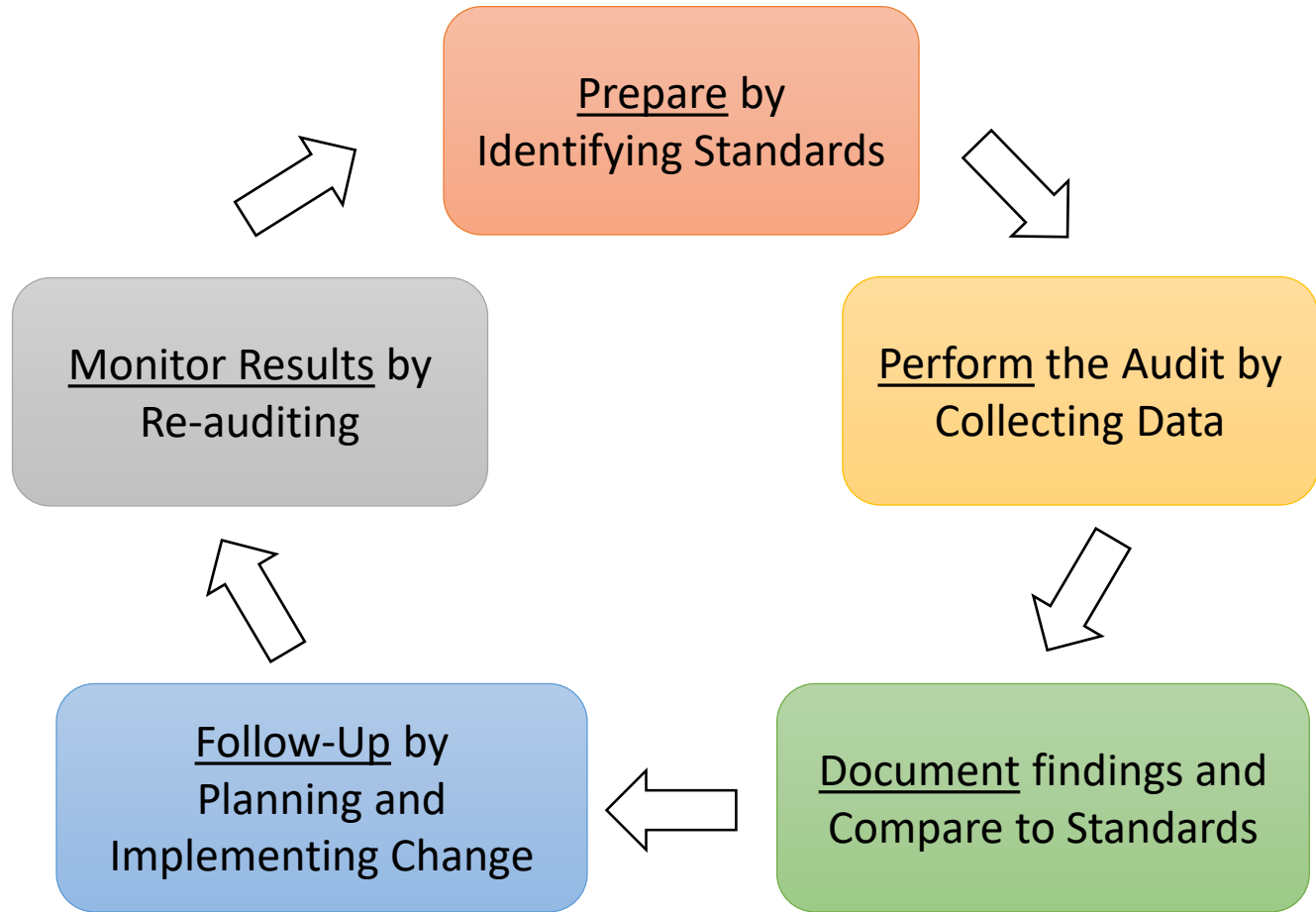
EMS Auditing (Checking)

- ▶ EMS Auditing is a:
 - ▶ Systematic and documented verification process of objectively evaluating whether an organization's EMS conforms to EMS audit criteria.



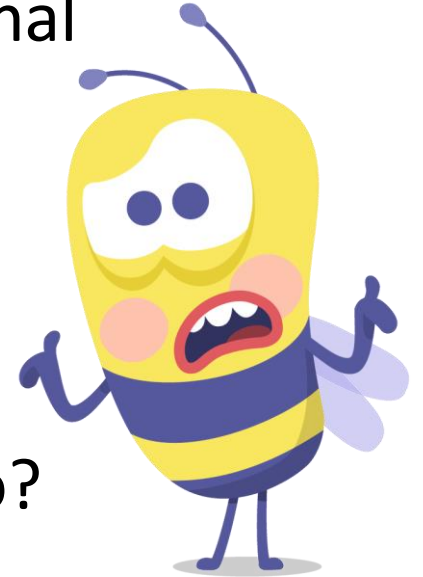
Audit Basics

- ▶ Prepare
- ▶ Perform Audit
 - ▶ Observe
 - ▶ Interview
 - ▶ Review records
- ▶ Document
- ▶ Follow-up
- ▶ Monitor



EMS Auditing

- ▶ Why Audit?
 - ▶ ISO 14001 requires regular audits of the EMS
 - ▶ Audits can be performed by in-house personnel or an external party
- ▶ Purpose of Audits:
 - ▶ To collect **objective evidence** to permit an **informed judgement** about the status of the **EMS**.
 - ▶ Also known as... are you *actually doing* what you *say* you do?
- ▶ Goal of Audits:
 - ▶ To improve the system through corrective actions and continual improvement.



Types of Audits

Types of Audits

- ▶ Certification Audit
- ▶ Compliance Audit
- ▶ Internal EMS Audit



ISO Certification Audit

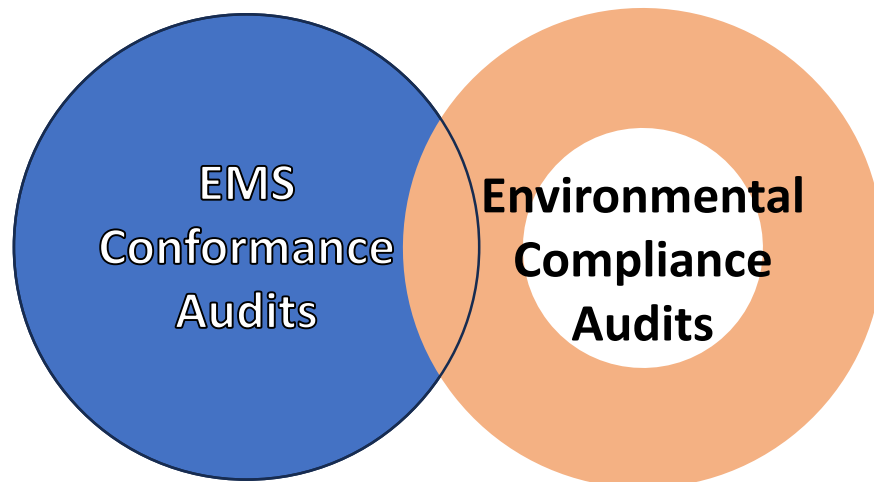
- ▶ Evaluation of an organization's adherence to the standards set by ISO 14001
- ▶ Steps include
 - ▶ Selecting an authorized third-party certification body
 - ▶ Stage 1: Documentation Review
 - ▶ Stage 2: Operational Review
 - ▶ Addressing Nonconformities
 - ▶ Certification Decision



EMS Audits vs. Compliance Audits

- ▶ **EMS audits** are conducted to evaluate the effectiveness of the EMS (e.g., meeting the requirements of ISO 14001, facility EMS procedures, etc.).
- ▶ **EMS audits are referred to as conformance audits.**

- ▶ **Compliance audits** address legal requirements (e.g. 40 CFR, state regulations, permit requirements, etc.)
- ▶ Compliance auditing is carried out to determine whether a company is operating according to applicable legal, regulatory, and other environmental requirements.
- ▶ **Environmental compliance audits are referred to as compliance audits.**



Internal EMS Audits

- ▶ Required by ISO 14001 –
Section 9: Performance Evaluation
- ▶ Evaluate effectiveness of EMS
 - Find deficiencies in the system – want to catch problems before the outside auditor does
 - Identify improvement opportunities and make the system better
- ▶ Key tool to monitor for
“continuous improvement”



Internal EMS Audits

- ▶ May be a single audit or a series of small audits throughout the year.
- ▶ May be conducted by internal resources, such as an internal audit team.
 - ▶ Team should be qualified/competent based upon education, training, and experience.
 - ▶ Internal auditor training
 - ▶ OJT by shadowing experienced auditor
- ▶ May be performed by a qualified auditor acting as internal auditor (i.e., consultant).



Effective Internal Audits

- ▶ Does the audit schedule cover everything?
- ▶ Are audits are conducted in a timely manner?
- ▶ Are the auditors unbiased and objective?
- ▶ Did the audit yield value-added findings, observations, recommendations?
- ▶ Will we perform the appropriate follow-up?





How-To Auditing

Phases of Performing an Audit

- ▶ Planning
- ▶ Execution
- ▶ Reporting
- ▶ Close-out



Audit Planning

- ▶ Include in your Audit Plan:
 - ▶ Audit objective
 - ▶ Reasons for conducting the audit
 - ▶ Audit scope
 - ▶ defines the criteria and boundary of the audit
 - ▶ Identification of lead auditor/audit team
 - ▶ Duration and schedule
 - ▶ Working documents



Audit Planning

- ▶ After determining the audit objective and scope...
 - ❑ Prepare questions to ask
 - ❑ List records and documents to be reviewed
 - ❑ Make arrangements with auditees, including when/where/what will be audited
- ▶ Other important considerations:
 - ▶ When was this last audited?
 - ▶ Where there any previous findings/nonconformities?
 - ▶ Have the previous issues been resolved?
 - ▶ Have there been any recent revisions to the documentation since the last audit?



Planning: Audit Team

- ▶ Consider the Following to Select an Audit Team:
 - ▶ Audit team size
 - ▶ Dependent upon duration of audit
 - ▶ Need appropriate number to meet audit objective
 - ▶ Experience and training
 - ▶ Experience with function being audited
 - ▶ Avoid potential conflicts of interest



Planning: Auditor Responsibilities

- ▶ Remain within the audit scope
- ▶ Remain on objective
- ▶ Gather evidence to draw conclusions
- ▶ Interpret policies and procedures and determine conformance
- ▶ Document audit results
- ▶ Conduct follow-up



AUDITOR

Planning: Audit Schedule

- ▶ Date the audit begins
- ▶ Number of days
- ▶ Schedule for opening and closing meetings
- ▶ Schedule of areas to be audited, times, auditees, auditors
- ▶ Agenda



Example: Agenda

Audit Name (Type of Audit, Location) Audit Date(s) and Number of Total Days Auditor(s)			
Does the site have any pending environmental litigations? Does the site have any notices of violation? Does the site have a regulatory issued compliance plan?			
Time Start	Time End	Activity/ Department	Representatives
8:00 am	9:00 am	Opening Meeting – Review of scope and agenda, establish communication links and availability of guides, confirm resources / facilities, PPE required	-Leadership team -Environmental Management System team and manager
9:00 am	10:30 am	Training & Human Resources – Discuss environmental training plan, environmental management system communication	-Training Manager -Environmental Trainer
10:30 am	12:00 pm	Maintenance Department – Discuss used oil, waste disposal, contractor communication, stormwater sampling	-Maintenance Manager -Maintenance Employee

Planning: Working Documents

- ▶ Sources of background information:
 - ▶ EMS Documents (Manual, Policy, Procedures, Work Instructions, etc.)
 - ▶ Prepare Audit Checklists
 - ▶ Location and layout map
 - ▶ Organizational chart



Example: Audit Notes

Audit ABC notes, Date, Name of Auditor	
Leadership / Top Management Discussion	<ul style="list-style-type: none">• Establishing Environmental goals (KPIs)• Support to different departments• Resources• Priorities
<u>Potential Findings:</u>	
Best Practices	
Opportunities for Improvement Non-Conformities	
Facility Tour	<ul style="list-style-type: none">• Observations• Locations• Discussions• Floor Employee interviews
<u>Potential Findings:</u>	
Best Practices	
Opportunities for Improvement Non-Conformities	
Interview with X Department	<ul style="list-style-type: none">• How does the department interact with environmental• What systems does the department have in place
<u>Potential Findings:</u>	
Best Practices	
Opportunities for Improvement Non-Conformities	

Documenting the Audit

- ▶ Document what you observed/asked/reviewed/looked at
 - ▶ **Objective evidence**
 - ▶ Include good and bad findings/observations
- ▶ Need evidence of what was reviewed
 - ▶ Don't rely on memory!
 - ▶ Provides historical information for the next audit of this procedure/element/section
 - ▶ Provides evidence of audit effectiveness for external audit



Audit Execution

- ▶ Opening Meeting
- ▶ Examination
 - Collecting evidence
 - Observation
 - Reporting
- ▶ Closing meeting



Conducting the Audit

- ▶ Observe actions
 - ▶ If possible, conduct the audit when you can observe the procedure “in action”
- ▶ Interview auditee(s)
 - ▶ Gather info
 - ▶ Measure awareness
- ▶ Review records/collect objective evidence
- ▶ Take good notes



Interviewing Techniques

- ▶ Ask open-ended questions
- ▶ Keep questions simple
- ▶ Ask one question at a time
- ▶ Listen and let them talk
- ▶ Avoid
 - ▶ Rapid questions
 - ▶ Asking more than one question at a time
 - ▶ lengthy questions
 - ▶ Asking questions that imply the answers
 - ▶ Interrupting the auditee



Example Audit Questions

- ▶ What are your job responsibilities?
- ▶ What is the environmental policy?
- ▶ What does this policy mean to you?
- ▶ Can you tell me about any environmental aspects associated with your job?
- ▶ How might you impact the environment?
- ▶ Can you tell me about any objectives related to your responsibilities?
- ▶ How did you learn your job?
- ▶ What training have you had?
- ▶ What procedures are related to your job?
- ▶ How do you know your procedures are current?
- ▶ Why is it important to follow policies and procedures?
- ▶ What records do you keep?
- ▶ What would you do if you had a concern or a suggestion related to the EMS?



Let's do some examples together

Scenario #1

- ▶ Auditor asks:
“What wastes do you generate in your department?”
- ▶ Auditee answers:
“Used batteries and used oil”

What follow-up questions could the auditor ask?



Scenario #1

- ▶ Auditor asks:
“What wastes do you generate in your department?”
- ▶ Auditee answers:
“Used batteries and used oil”



What follow-up questions could the auditor ask?

- ▶ How do you dispose of your waste?
- ▶ Where do you dispose your different types of waste?
 - ▶ Can I see where?
- ▶ Do you have records of disposal?
 - ▶ Can you show me?

Scenario #2

- ▶ Auditor asks:
“Have you been trained on the EMS?”
- ▶ Auditee answers:
“I know about the Spill Plan”

What follow-up questions could the auditor ask?



Scenario #2

- ▶ Auditor asks:
“Have you been trained on the EMS?”
- ▶ Auditee answers:
“I know about the Spill Plan”



What follow-up questions could the auditor ask?

- ▶ Do you know the EMS Policy?
- ▶ When were you trained on the EMS?
- ▶ Can you tell me more about the spill plan?
- ▶ What would happen in the event of a spill?

Scenario #3

- ▶ Auditor asks:
“Do you know what the company Environmental Policy is?”
- ▶ Auditee answers:
“Oh, that’s on our employee board in the cafeteria”

What follow-up questions could the auditor ask?



Scenario #3

- ▶ Auditor asks:
“Do you know what the company Environmental Policy is?”
- ▶ Auditee answers:
“Oh, that’s on our employee board in the cafeteria”



What follow-up questions could the auditor ask?

- ▶ Have you read the policy?
- ▶ Have you been given further information about it?
- ▶ Do you perform tasks related to the policy?

What would you do if their answer was... ‘I don’t know?’

Evidence

- ▶ Collecting evidence
 - ▶ Observations
 - ▶ Interviews
 - ▶ Document and record reviews
- ▶ Objective evidence
 - ▶ Evidence that exists
 - ▶ Not influenced by emotion
 - ▶ May be stated or documented
 - ▶ May be based on observation
 - ▶ About the EMS
 - ▶ Can be verified



Collect Evidence

- ▶ Look through records to obtain “objective evidence”
 - ▶ Take good samples - don't just look at last 2 or 3 records
 - ▶ Gather historical data – go back several months or years, as appropriate
 - ▶ The longer it's been since the last audit, the further back you should go
 - ▶ Ensure records are completed and kept consistently, as required
- ▶ An auditor should not let the auditee choose what is to be sampled
- ▶ Be thorough
 - ▶ Follow where the audit trail leads: ask questions, ask for records, “show me”, “prove it”
- ▶ **Remember, our purpose is to improve the system!**
We want to dig deeper than the outside auditors.



Informed Judgement

- ▶ Once the **objective evidence** is identified and reviewed, an **informed judgement** is made to determine whether there is a **nonconformity** or not.

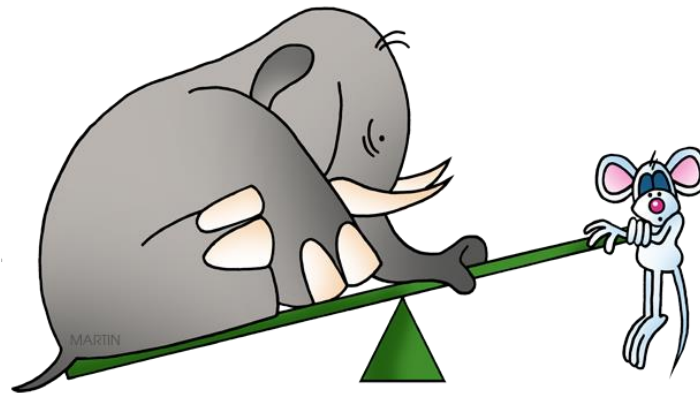


- ▶ A **nonconformity** is the non-fulfillment of a requirement
- ▶ The difference between what you “say you do” and “what you do”

Major vs. Minor Nonconformity

▶ Major nonconformity

- ▶ Significant nonconformity with requirements of the standard
- ▶ Failure of a complete system or lack of an EMS requirement
- ▶ Significant quantity of minor nonconformities

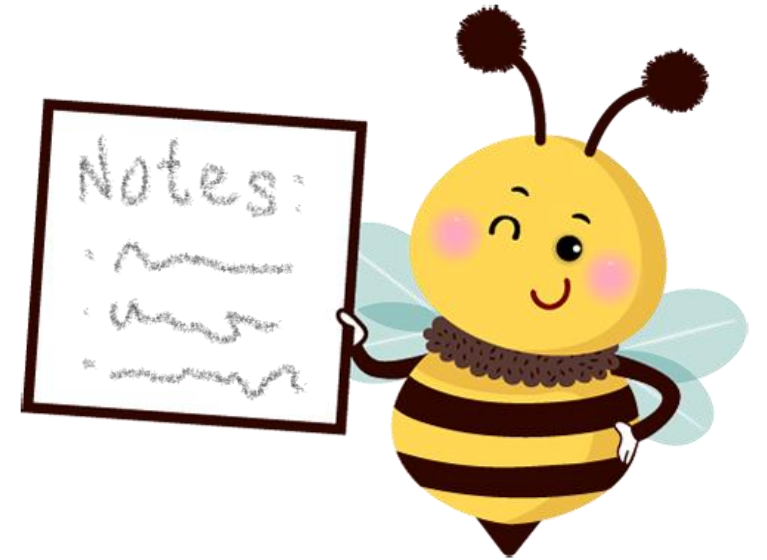


▶ Minor nonconformity

- ▶ Isolated, witnessed incident or failure to conform with a procedure or a requirement of the standard
- ▶ Minor problem that warrants attention
- ▶ Cause and solution can be easily identified

Recording Audit Evidence

- ▶ Keep good notes and be sure to include:
 - ▶ Personnel interviewed (can use position instead of name)
 - ▶ Statements made
 - ▶ Document numbers
 - ▶ Records reviewed
 - ▶ Departments
 - ▶ Identifiers
 - ▶ Date



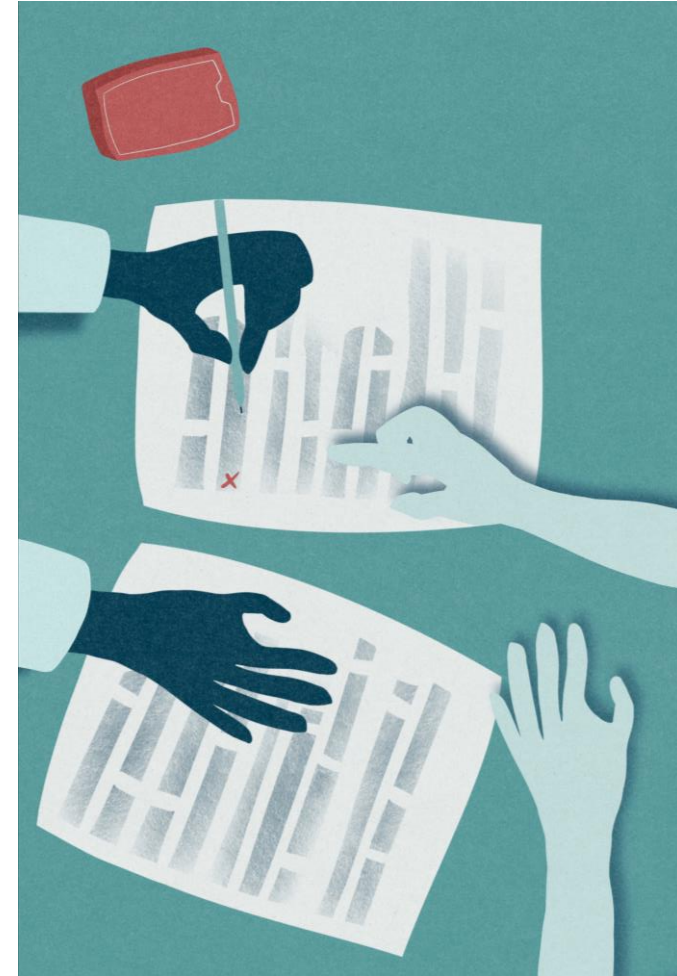
Closing Meeting

- ▶ Follow-up/Close Out:
 - ▶ Thank you for your time
 - ▶ Reiteration of objectives and scope
 - ▶ Presentation of good and bad findings
 - ▶ Summary
 - ▶ Discussion and Clarification
 - ▶ Recommendations
 - ▶ Corrective action/follow-up



Audit Report

- ▶ Audit name and date(s)
- ▶ Audit scope and objective
- ▶ Auditors/auditees
 - ▶ Attach opening and closing meeting sign-in sheets
- ▶ Concise summary
 - ▶ Nonconformities
 - ▶ Best practices
 - ▶ Recommendations



Summarizing the Audit

- ▶ Where were nonconformities identified?
- ▶ Did you see opportunities for improvement?
- ▶ What best practices were observed?
- ▶ Recommendations

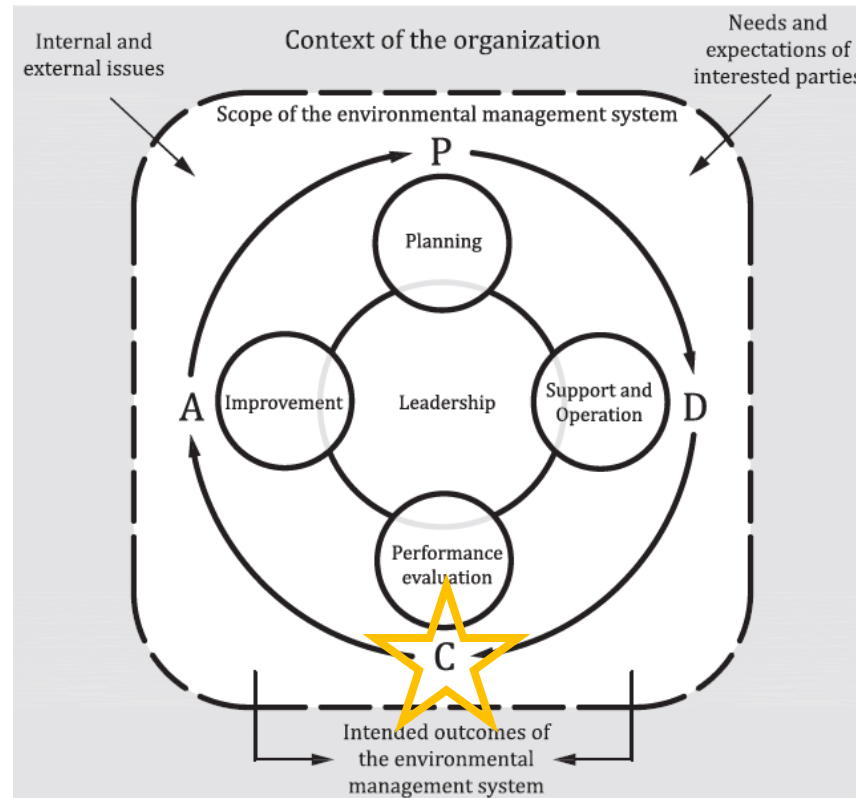




Summary: Auditing

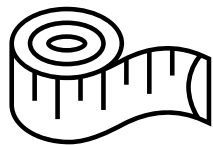
Summary: Plan – Do – Check - Act

- ▶ Checking is Auditing!
- ▶ Section 9.0 – Performance Evaluation



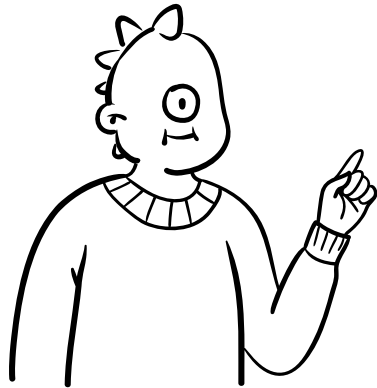
Summary: Being Audited

- ▶ “Did you do what you say you’re going to do?”
 - ▶ Did you monitor and measure to determine if you met your objectives?
 - ▶ If your objective was to increase energy efficiency, did you reduce energy usage? How did you do?
 - ▶ According to the standard, did you record these things? (The organization shall retain appropriate documented information as evidence of the monitoring, measurement, analysis and evaluation results)



For Next Time...

Please fill out this survey that will also be sent shortly after this meeting. Let us know how we did, and what you want to hear next time. We really do care!





Questions??

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