

## ISO 14001 IMPLEMENTATION HUB

Volume 1 • Guide 5 of 6

# Environmental Internal Audit Program

*Building an Audit Program That Evaluates Real Environmental Performance —  
Not Just Documentation Compliance*

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EMS Implementation Roadmap • ISO 14001:2015

Audit Program Design • Auditor Qualification • EMS Audit vs. Compliance Audit • Audit Execution  
Techniques • Finding Classification • Corrective Action Management • Cascade First Audit Cycle

## How to Use This Guide

This is Guide 1.5 in Volume 1 of the ISO 14001 Implementation Hub. It covers the environmental internal audit program — the systematic self-evaluation mechanism that determines whether the EMS is operating as designed and actually improving environmental performance. The internal audit program is the most powerful ongoing quality assurance tool available to EMS organizations: used well, it identifies gaps before registrar auditors do, drives genuine improvement, and builds the evidence record that demonstrates a functioning system.

This guide covers the design and operation of the EMS internal audit program from the ground up: the regulatory and standard requirements for the program, what makes an environmental audit genuinely different from a quality management audit, auditor training and qualification, audit program scheduling and risk-weighting, the execution techniques that produce useful findings, finding classification and writing, corrective action management, and the Cascade first-cycle audit experience as a complete worked example.

## The Purpose of EMS Internal Audit — What It Must Accomplish

The ISO 14001:2015 internal audit requirement serves two distinct but equally important purposes that must both be fulfilled for the audit program to satisfy the standard:

### Standard Requirement

ISO 14001:2015, Clause 9.2.1: "The organization shall conduct internal audits at planned intervals to provide information on whether the environmental management system: a) conforms to: 1) the organization's own requirements for its environmental management system; 2) the requirements of this International Standard; b) is effectively implemented and maintained."

The first purpose — conformance verification — asks whether the EMS as documented matches the standard's requirements. Are the required documented information elements present? Are procedures in place for each significant aspect? Is the compliance evaluation being conducted? Are management reviews happening?

The second purpose — effectiveness evaluation — asks whether the EMS is actually working. Is environmental performance improving? Are the operational controls preventing permit exceedances? Is the compliance evaluation detecting actual compliance status accurately? Is the management review producing decisions that improve the EMS? This second purpose is analytically more demanding and more valuable — an EMS that conforms to the standard's documentation requirements but does not produce environmental performance improvement has form without function.

Both purposes must be addressed in every audit cycle. An environmental internal audit program that only checks whether the procedures exist and the forms are completed but never evaluates whether environmental performance is actually improving has satisfied the letter of Clause 9.2 while missing its intent. The most experienced EMS registrar auditors will probe the internal audit records for evidence of effectiveness evaluation — and the absence of this dimension is a recurring finding in both internal and external audits.

## EMS Audit vs. Environmental Compliance Audit — A Critical Distinction

One of the most important distinctions in environmental audit practice — and one that ISO 9001-experienced practitioners often need to develop — is the difference between an EMS audit (which evaluates the management system) and an environmental compliance audit (which evaluates adherence to specific legal requirements). Both are important; they are not the same thing; and the ISO 14001 internal audit program must address both.

Dimension	EMS System Audit	Environmental Compliance Audit
What it evaluates	Whether the EMS structure, processes, and controls conform to ISO 14001:2015 requirements and the organization's own documented EMS	Whether the organization is meeting specific legal obligations — permit conditions, regulatory standards, reporting requirements, and operational requirements imposed by law
Primary evidence sources	EMS documented information (aspects register, procedures, records); management processes (review, audit, corrective action); stakeholder interviews; process observations for control implementation	Permit monitoring data; environmental monitoring records; compliance logs; regulatory correspondence; physical inspection of emission sources, discharge points, waste storage areas, and environmental controls
Finding standard	Does this practice conform to the ISO 14001 requirement or the organization's own EMS procedure?	Does this practice meet the specific legal requirement? Compliance deficiencies may involve regulatory consequences independent of EMS certification status.
ISO 14001 connection	Directly satisfies Clause 9.2.1(a): conformance to the standard's requirements	Directly satisfies Clause 9.2.1(a)(1): conformance to the organization's own requirements (which include compliance obligations per Clause 6.1.3)
Cascade example finding	The aspects register does not document emergency condition aspects for the chemical batch change-out operation — a gap in Clause 6.1.2 coverage	The daily coating emission log for March 15 shows coating material usage but not the VOC content data required by PSCAA Permit Condition 4.5 — a regulatory recordkeeping deficiency

## Why Environmental Compliance Audit Is Uniquely Important in EMS Context

In ISO 9001, when a quality procedure is not followed, the consequence is typically a product quality risk. In ISO 14001, when an environmental procedure connected to a permit condition is not followed, the consequence may be a regulatory violation with enforcement implications — independently of whether the EMS nonconformance is corrected. This legal dimension of environmental non-compliance has no equivalent in quality management and requires the EMS internal audit program to include explicit compliance verification activities.

Specifically, the EMS internal audit program at a permitted industrial facility should include:

- Verification of actual permit monitoring data against permit limits — not just confirming that monitoring records exist, but confirming that the values recorded are within permit limits and that any exceedances were identified and reported as required
- Physical inspection of compliance-critical equipment and controls — spray booth filters and fans, secondary containment integrity, hazardous waste storage area conditions, stormwater controls — that are required by permits or regulations
- Review of regulatory correspondence and reporting submissions — confirming that required reports were filed on time and that regulatory correspondence has been appropriately handled
- Review of inspection records from regulatory authority visits — to identify any compliance concerns raised by regulators that may not have been fully captured in the EMS corrective action system

## Auditor Training, Qualification, and Independence

ISO 14001:2015 Clause 9.2.2(c) requires the organization to "select auditors and conduct audits to ensure objectivity and the impartiality of the audit process." The dual requirements of auditor competence and auditor independence create practical challenges for smaller organizations — and specific solutions that maintain the spirit of the requirement without creating impossible staffing constraints.

### What Makes an EMS Auditor Competent?

An EMS internal auditor must be competent in both the audit process (how to conduct a systematic, evidence-based audit that produces reliable findings) and the EMS subject matter (what ISO 14001:2015 requires and how the organization's EMS is designed to meet those requirements). ISO 19011:2018 (Guidelines for auditing management systems) is the reference standard for auditor competence.

Competence Area	What the Auditor Must Be Able to Do
Audit principles and process	Plan an audit with defined scope, criteria, and objectives; execute an audit using systematic evidence-gathering techniques (document review, records sampling, interviews, process observation); write findings with objective evidence citations; classify findings accurately as major nonconformance, minor nonconformance, or observation; communicate findings professionally and constructively
ISO 14001:2015 requirements	Interpret each clause of the standard to determine what a conforming EMS element would look like; identify the specific evidence that demonstrates conformance; distinguish between EMS requirements (what the standard mandates) and EMS good practice (what organizations do beyond the minimum); understand the relationship between clauses and why some elements depend on others
Environmental technical knowledge	Sufficient technical understanding of the environmental aspects and impacts relevant to the organization being audited to evaluate whether operational controls are adequate and whether monitoring data reflects actual environmental performance. An auditor who does not understand what VOC emissions are cannot evaluate whether the VOC emission control procedure is effectively implemented.
Regulatory knowledge	Familiarity with the specific regulatory requirements that apply to the organization — permit conditions, regulatory standards, reporting obligations. The auditor evaluating compliance with PSCAA permit conditions must understand what those conditions require well enough to evaluate the monitoring records against them.

### Auditor Training Program

For first-time ISO 14001 implementation, auditor training must be completed before the first internal audit cycle begins — which means it must be planned and scheduled in Phase 2 of the implementation (see Guide 1.2 timeline). The training requirements:

- Formal EMS internal auditor training: a two-day course covering ISO 14001:2015 requirements, ISO 19011:2018 audit principles, and practical audit technique. Available through accredited training providers as public courses or in-house programs. Course completion results in an internal auditor certificate that establishes the training basis for auditor competence.
- Organization-specific orientation: before the first audit, designated auditors must review the Cascade EMS documentation — the aspects register, the compliance obligations register, the operational procedures, and the audit program — to understand what they will be auditing and against what criteria.
- Accompanied first audit: wherever possible, the first internal audit should be accompanied by a more experienced auditor (the EHS Manager, an external consultant, or a peer with prior audit experience) who can coach the audit approach and review finding drafts before the audit report is issued.
- Ongoing development: auditors should review the results of registrar surveillance audits (which reveal how external auditors approach the same clauses and what they consider findings) and participate in annual refresher activities to maintain audit competence.

## Managing Auditor Independence in Small Organizations

The independence requirement — auditors must not audit their own work — creates practical challenges for organizations with limited staff. At Cascade, two auditors have been trained: the Operations Manager and a Production Engineer. The EHS Manager (Marcus Webb) cannot audit the EMS processes he owns, and the Operations Manager and Production Engineer cannot audit their own operational areas. This creates the following audit assignment logic:

Audit Scope Area	Who Can Audit	Who Cannot Audit (Conflict)
EMS system elements (aspects register, objectives, compliance evaluation, management review, corrective action system)	Operations Manager or Production Engineer — neither owns these processes	EHS Manager — owns all EMS system processes
Spray booth operations and VOC emission controls	EHS Manager — does not manage spray booth operations	Operations Manager — manages production operations; Production Engineer — may have designed the controls
Pre-treatment and wastewater operations	EHS Manager — does not manage pre-treatment operations	Operations Manager — manages production operations
Hazardous waste management	Operations Manager or Production Engineer — does not own the hazardous waste program	EHS Manager — owns the RCRA hazardous waste compliance program
Emergency preparedness and response	Production Engineer — not the plan owner	EHS Manager — owns the emergency preparedness program

When complete independence cannot be achieved internally (which is common in small organizations), two supplementary approaches maintain the spirit of the requirement: (1) External auditor augmentation — engaging an external EMS consultant to audit the one or two areas where no internal auditor can be objective. This is typically the EHS Manager's own EMS system processes, which are the most important to audit objectively. (2) Cross-peer review — having the EHS Manager review the operational audit findings for technical accuracy (as a

subject matter expert, not as the auditor) while the Operations Manager reviews the system audit findings for completeness.

# Audit Program Design — Scheduling, Scope, and Risk-Weighting

The audit program is the master plan for the internal audit activity — it defines which parts of the EMS will be audited, how often, by whom, and with what scope and criteria. ISO 14001:2015 Clause 9.2.2(a) requires the audit program to take into consideration the environmental importance of the processes concerned, changes affecting the organization, and the results of previous audits.

## Standard Requirement

ISO 14001:2015, Clause 9.2.2: "The organization shall establish, implement and maintain an audit program(s), including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the environmental management system processes concerned, changes affecting the organization, and the results of previous audits. The organization shall: a) define the audit criteria and scope for each audit; b) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process; c) ensure that the results of the audits are reported to relevant management; d) take appropriate corrections and corrective actions without undue delay; e) retain documented information as evidence of the implementation of the audit program and the audit results."

## Risk-Weighted Audit Scheduling

Not all EMS elements warrant the same audit frequency. Risk-weighting the audit schedule ensures that the highest environmental risk areas receive the most audit attention, while lower-risk administrative elements receive lighter coverage. The risk-weighting factors are:

- Environmental significance: processes associated with significant environmental aspects (especially those with active permit conditions) receive higher audit frequency than processes with non-significant aspects
- Regulatory consequence of failure: processes where a compliance failure has immediate regulatory reporting implications receive higher frequency than processes where compliance failures have only internal consequences
- Prior audit finding history: areas with findings from previous audit cycles receive increased frequency until two consecutive clean cycles demonstrate that the corrective actions were effective
- Operational change: new processes, new personnel in key environmental roles, new permits or permit amendments, and changes to operational controls all trigger increased audit attention in the affected area

EMS Area	Audit Frequency	Rationale
Spray booth VOC emission controls (significant aspect CA-A-001; active PSCAA permit)	Semi-annual	Highest environmental significance; direct permit compliance obligation; regulatory reporting consequence if controls fail
Wastewater pre-treatment operations (significant aspect CA-A-002; State Discharge Permit)	Semi-annual	Significant aspect; permit compliance with pH and metals limits; discharge to municipal system creates public health dimension
Hazardous waste management — generation and storage (significant aspects CA-A-003, CA-A-004)	Annual minimum; quarterly visual inspection (Tier 4 work instruction)	Significant aspect; RCRA LQG requirements; compliance failure has immediate legal consequence

EMS Area	Audit Frequency	Rationale
Stormwater controls and SWPPP compliance	Annual; additional after significant rain events	Significant aspect; NPDES permit; physical inspection verifies actual control conditions rather than only record review
Emergency preparedness and response plan	Annual; reviewed after each drill or incident	High consequence if inadequate; must remain current with operational changes
EMS system elements: aspects register, compliance obligations register, objectives	Annual	Administrative processes; lower consequence of failure; addressed annually as part of management review cycle
Training and competence records	Annual	Documents the foundation of operational control effectiveness; changes in personnel create new competence gaps
EMS documents and records control	Annual	Infrastructure element; lower direct environmental risk but important for evidence integrity
Management review and continual improvement processes	Annual	Governance processes; evaluated as part of complete EMS cycle review

## Audit Plan Development

For each planned audit event, a specific audit plan is developed before the audit begins. The audit plan defines the scope (what will be covered), the criteria (what requirements will be applied), the methods (document review, records sampling, interview, process observation), the assigned auditor(s), the auditee(s) and their areas, and the schedule for the audit day(s).

The audit plan should be shared with the auditee in advance — typically 1 to 2 weeks before the audit date. Advance sharing allows the auditee to prepare relevant records, identify any operational scheduling constraints, and request any changes to the planned scope or timing. The advance plan does not mean the auditor only looks at what was pre-announced — the plan describes the intended scope, not the boundary of what the auditor may observe during facility walkthrough.

## EMS Audit Execution Techniques

The value of an EMS internal audit is entirely determined by the quality of the evidence gathering. An auditor who reviews documents, nods at what they find, and writes "no issues noted" for every item has conducted an audit activity without producing an audit result. The techniques described in this section are what turn an audit event into an evidence-based assessment that either confirms the EMS is working or identifies specific, actionable gaps.

### The SEAP Evidence-Gathering Model

The most reliable framework for structured evidence gathering in an EMS audit uses four methods in combination: See (observe), Examine (review documents), Ask (interview), Probe (follow up and verify). Each method addresses different types of evidence and compensates for the weaknesses of the others:

Method	What It Reveals	EMS Application	What It Misses
See (Observe)	Actual physical conditions and real-time practices. What is actually happening at the point of work — the controls in place, the physical environment, the waste storage conditions, the equipment state.	Inspect spray booth filters for evidence of replacement at required intervals; observe whether daily emission logs are at the booth; inspect hazardous waste accumulation area for labelling, container integrity, and secondary containment; observe stormwater controls at outdoor storage areas.	Past conditions and infrequent events — what was done last month cannot be seen today.
Examine (Document Review)	Historical record — what was done and when. The paper or electronic trail that documents past operational practice, compliance monitoring, training delivery, and management decisions.	Review the past 12 months of daily emission control logs for completeness; examine RCRA waste manifests against the waste disposal log; review training records for all coating operators; examine compliance evaluation records.	Current conditions — documents show what was recorded, which may not reflect what actually happened.
Ask (Interview)	Understanding and awareness — what people know and believe about the EMS. How employees understand their environmental responsibilities, what they would do in specific situations, and whether the EMS information they have received has been retained.	Ask coating operators: "What is the approved coating materials list and where is it kept?" "What would you do if the booth exhaust fan stopped during a production run?" "What is the VOC emission limit in the PSCAA permit?" Ask supervisors: "What would you do if an operator brought you a concern about an environmental issue?"	Physical evidence — what people say may not match what they do; interview data should always be corroborated with observation or document evidence.
Probe (Follow-up and Verify)	Depth and authenticity — whether what documents say and what people describe is	If the daily log shows complete entries, probe by selecting a specific day and	Only as good as the initial evidence it probes — probe

Method	What It Reveals	EMS Application	What It Misses
	actually true in practice. The cross-checking that confirms or refutes the initial evidence.	asking the operator who signed it to describe what they recorded — can they recall the specific material used that day? If a procedure says filters are replaced when pressure exceeds 0.5 in w.c., probe whether the pressure gauge is functional and readable.	strength depends on what was found in See, Examine, and Ask.

## Compliance Audit Techniques — Evaluating Against Permit Conditions

When auditing for regulatory compliance, the auditor works from the compliance obligations register (Section B — specific obligations) and evaluates each tracked obligation against available evidence. The compliance audit technique is different from the systems audit technique in one important way: the criterion for compliance evaluation is the specific regulatory requirement, not the organization's procedure.

The compliance audit sequence for a specific permit condition:

1. Identify the specific permit condition from the compliance obligations register — e.g., "PSCAA Permit Condition 4.5: Record coating material identity, VOC content, and quantity applied for each operating day"
2. Determine what evidence would demonstrate compliance — daily emission logs for each production day, containing each required field
3. Sample the evidence — select a random sample of production days (typically 10 to 20% of the period being evaluated) and pull the corresponding logs
4. Evaluate the evidence against the specific requirement — are all required fields completed? Are the values reasonable (VOC content consistent with the SDS for the material listed)? Are there any days with production but no log entry?
5. Determine the compliance result — fully compliant (all sampled records meet the requirement), partially compliant (some records meet the requirement, some have deficiencies), or noncompliant (records are missing or systematically inadequate)
6. Document the evaluation — what was sampled, what was found, and the compliance determination — this becomes part of the compliance evaluation record (Clause 9.1.2)

## Interview Techniques for EMS Audits

The employee interview is often the most revealing evidence-gathering method in an EMS audit — and the one most frequently conducted poorly. Common interview failures: asking closed questions that can be answered yes or no; asking leading questions that suggest the correct answer; moving on after the first answer without probing for depth; interviewing only the EHS Manager rather than the operational personnel whose practices determine whether the EMS actually works.

Effective EMS interview techniques:

- Open questions: "Tell me what you do when you prepare a spray booth for a production run." Not "Do you complete the pre-operation checklist?" The open question reveals the actual practice; the closed question produces a yes that reveals nothing.
- Scenario questions: "What would you do if you noticed that the booth exhaust fan had stopped while you were in the middle of a large batch coating job?" Scenario questions reveal whether the awareness and competence training has produced genuine understanding or only rote answers.
- Evidence-linked questions: "You mentioned completing the daily emission log. Can you show me the log from yesterday?" Linking interview questions to physical evidence prevents the interview from becoming a test of what the employee thinks the right answer is rather than what they actually do.
- Triangulation: interview the operator, then the supervisor, then review the records for the same process. Consistency between what people say, what supervisors report, and what records show is the test of whether the EMS is embedded in daily practice.

## EMS Finding Classification and Writing

The quality of the audit report is determined by the quality of the findings. Findings must be specific enough to enable a targeted corrective action, evidence-based enough to withstand challenge, and accurately classified so that the auditee and management understand the relative significance of each finding.

### Finding Classification Standard

Classification	Definition and Cascade Application Criteria	
Major Nonconformance	A finding that indicates: (1) the absence of a required EMS element (no aspects register, no compliance evaluation process, no management review); OR (2) a systemic failure that prevents the EMS from achieving its intended purpose; OR (3) a finding that, if unaddressed, creates an immediate risk of significant environmental harm or regulatory violation. At Cascade, examples: no compliance evaluation process (before implementation); absence of any operational controls for a significant aspect; systematic failure to conduct required RCRA training. A major finding must be resolved before certification or must have a credible action plan with a defined resolution date.	
Minor Nonconformance	A finding that indicates an isolated or limited failure to meet a specific EMS requirement — where the EMS element exists and is substantially implemented, but a specific deficiency or gap is present. At Cascade examples: daily emission log with incomplete VOC content entries for 2 of 14 sampled days; one coating operator whose competence verification record is missing the supervisor sign-off; the stormwater inspection form missing the required inspector signature for one of the past four quarterly inspections. Minor findings must be addressed through corrective action within a defined timeframe (typically 30 to 90 days).	
Observation (Opportunity for Improvement)	A finding that identifies a weakness, inconsistency, or potential future problem that does not currently constitute a nonconformance — either because the EMS is meeting the requirement at minimum level, or because the concern is about adequacy rather than conformance. An observation signals that continued development would improve the EMS. At Cascade examples: daily emission logs are complete but handwritten calculations contain several arithmetic errors that were caught before submission — technically conforming but suggesting that a calculation template would improve accuracy; the aspects register significance scoring methodology is documented but not consistently applied across assessors.	
Positive Observation	Documentation of a noteworthy strength — a practice that exceeds requirements, demonstrates exceptional	At Cascade examples: the

Classification	Definition and Cascade Application Criteria	
	<p>implementation, or provides a model that other areas should emulate. Environmental auditors should note positive observations with the same rigor as deficiency findings. Balanced audit reports produce better auditee engagement and provide management with evidence of where the EMS is working well.</p>	<p>compliance obligations register Section B is exceptionally detailed and directly useful to operational supervisors — the most complete permit-to-operation linkage observed by the registrar; the hazardous waste accumulation area is well-organized, clearly labelled, and includes secondary containment that exceeds the regulatory minimum.</p>

## Finding Writing Standard — The Three-Part Structure

A well-written finding contains three elements: the observed fact, the requirement not met, and the significance or quality implication. The three elements together create a finding that is: specific (the observed fact); requirement-referenced (not just "this is wrong" but "this violates requirement X"); and consequential (why this matters for environmental performance or compliance).

Finding Element	Content and Cascade Example
Observed Fact	<p>A specific, factual description of what the auditor observed, reviewed, or heard — referenced to specific records, locations, dates, or individuals where possible. Not "the logs are incomplete" but "review of daily emission control logs (MPC-EMS-FRM-001) for the period March 1 to March 14 identified that 3 of 14 days (March 4, March 8, and March 11) have VOC content data fields left blank for the liquid coating material used."</p>
Requirement Not Met	<p>The specific requirement — clause of the standard, section of a procedure, permit condition reference — that the observed fact does not satisfy. Not "this should be recorded" but "PSCAA Air Quality Permit Condition 4.5 requires that the VOC content of each coating material applied be recorded for each operating day. MPC-EMS-PRO-001 (VOC Emission Control Procedure) Section 5.2(b) requires VOC content to be recorded at the end of each shift."</p>
Significance / Quality Implication	<p>Why this finding matters — the environmental, compliance, or EMS integrity consequence of the gap. "The absence of VOC content data for these three days prevents accurate monthly VOC emission calculation for March and therefore prevents verification</p>

Finding Element	Content and Cascade Example
	of compliance with the PSCAA permit monthly emission limit. If the monthly limit was approached or exceeded during this period, the permit exceedance reporting obligation cannot be evaluated."

**Best Practice**

The most important discipline in EMS finding writing is distinguishing between the symptom and the cause. A missing log entry is a symptom. The cause may be inadequate operator training, insufficient supervisor oversight, a form that is difficult to complete, or a procedure that is unclear about what VOC content data to record. Writing the finding at the symptom level ("3 of 14 log entries incomplete") enables only symptom-level corrective action ("retrain operators"). Writing the finding to invite root cause investigation ("3 of 14 log entries have blank VOC content fields, suggesting that either the procedure requirement for this field is not clearly understood or that the information source for VOC content is not accessible at the booth") invites the corrective action process to address the system condition rather than the instance.

## Corrective Action Management for EMS Audit Findings

The corrective action process for EMS internal audit findings must satisfy both ISO 14001:2015 Clause 10.2 (Nonconformity and corrective action) and — for findings that reveal regulatory compliance deficiencies — any applicable regulatory requirements for self-disclosure and corrective action. This dual obligation makes EMS corrective action management slightly more complex than its ISO 9001 equivalent.

### The EMS CAPA Process for Audit Findings

The corrective action process for audit findings follows the same seven-step cycle used for other EMS nonconformances (described in detail in Volume 2, Guide 2.6):

7. Open a corrective action record (CAR) for each nonconformance finding. Observations do not require CARs but should be tracked as improvement opportunities.
8. Determine immediate containment: for findings with immediate environmental or compliance risk, what action is taken right now to prevent further harm? For the incomplete log finding, containment is ensuring that the current month's logs are complete before the monthly emission calculation is due.
9. Root cause analysis: determine why the gap occurred — not just what happened. Apply a structured method (5-Why, Fishbone, Is/Is Not) proportionate to the significance of the finding.
10. Develop the corrective action plan: identify specific systemic actions to address the root cause, with owners and target dates.
11. Implement the actions: execute the approved corrective action plan.
12. Verify effectiveness: after a defined observation period, confirm that the corrective action actually prevented recurrence of the nonconformance. This is the step most consistently absent in first-cycle EMS corrective action programs.
13. Close the CAR: document closure with effectiveness evidence and update the EMS records and risk register if the finding revealed a new risk.

### Regulatory Compliance Findings — Additional Obligations

When an audit finding reveals a regulatory compliance deficiency — a permit exceedance, a missed reporting deadline, a recordkeeping failure — the corrective action process must also assess whether any regulatory self-disclosure or notification obligation has been triggered. Most environmental permits and regulations include requirements for the facility to self-report certain violations.

The EHS Manager must evaluate each compliance-related audit finding against the compliance obligations register to determine:

- Does this finding constitute a permit violation or regulatory noncompliance?
- Does the specific violation trigger a mandatory self-reporting obligation (as PSCAA Condition 6.2 requires reporting permit exceedances within 10 business days)?
- If a voluntary self-disclosure is not required, would proactive communication with the regulatory authority be prudent given the compliance relationship and the nature of the finding?
- What documentation of the compliance finding and corrective action response should be maintained for the compliance evaluation record?

This regulatory interface dimension of EMS audit corrective action management is unique to the environmental management context and requires the EHS Manager to exercise informed regulatory judgment — not only EMS

management system judgment. When in doubt about whether a regulatory notification obligation exists, the advice of environmental legal counsel should be sought before the mandatory notification deadline passes.

## Cascade First Internal Audit Cycle — Complete Example

The following documents Cascade Industrial Coatings' first complete EMS internal audit cycle, conducted during Month 11 of the implementation (Phase 3 activation). The audit was conducted over two days by the two trained internal auditors (Operations Manager David Chen and Production Engineer Sarah Park), with the EHS Manager Marcus Webb as subject matter expert for technical questions but not as an auditor of his own EMS processes.

### Audit Program for the First Cycle

Audit Day / Session	Scope	Auditor(s)	Primary Method
Day 1, Session 1 (Morning)	EMS System Elements: Aspects register (Clause 6.1.2), compliance obligations register (Clause 6.1.3), risk register (Clause 6.1.1), objectives (Clause 6.2)	Operations Manager (David Chen)	Document review + interview with EHS Manager
Day 1, Session 2 (Afternoon)	EMS System Elements: Training and competence records (Clause 7.2), awareness verification (Clause 7.3), document control (Clause 7.5)	Production Engineer (Sarah Park)	Records sampling + worker interviews (3 coating operators selected at random)
Day 2, Session 1 (Morning)	Spray booth operations: VOC emission controls (Clause 8.1, CA-A-001, PSCAA Permit); compliance verification — daily logs, monthly calculations, materials list compliance	EHS Manager (Marcus Webb) auditing operational controls	Process observation + records review (12 months daily logs) + compliance evaluation
Day 2, Session 2 (Morning continued)	Pre-treatment operations: wastewater controls (Clause 8.1, CA-A-002, State Discharge Permit); compliance verification — monitoring data vs. permit limits	EHS Manager (Marcus Webb)	Records review (12 months monitoring data) + process observation + compliance evaluation
Day 2, Session 3 (Afternoon)	Hazardous waste management (RCRA compliance, CA-A-003/004); emergency preparedness plan (Clause 8.2); corrective action system (Clause 10.2)	Operations Manager (David Chen)	Physical inspection of waste accumulation area + records review + compliance verification against RCRA requirements
Day 2 Closing	Audit closing meeting: findings presented to EHS Manager and Operations Manager; open discussion; agreed actions	Both auditors	Verbal presentation + written finding summaries distributed

## Cascade First Audit Findings Summary

Finding No.	Classification	Clause	Finding Statement
CIC-AUD-001-F01	<b>MINOR</b>	6.1.2	Review of the environmental aspects and impacts register (MPC-EMS-ASP-001) identified that Aspect CA-A-004 (chemical spill during batch change-out) is documented as an abnormal condition aspect. However, four additional emergency scenarios identified in the Emergency Preparedness and Response Plan — stormwater contamination from outdoor spill, wastewater pre-treatment failure, HVAC failure causing solvent vapor accumulation, and fire in coating booth — are not documented as aspects in the register. Clause 6.1.2 requires aspects to be identified under normal, abnormal, and emergency conditions. The aspects register does not completely address emergency condition aspects for all foreseeable scenarios.
CIC-AUD-001-F02	<b>MINOR</b>	7.2	Production Engineer Sarah Park (one of two designated EMS internal auditors) was verified as having completed the two-day EMS internal auditor training course. Competence assessment results from the training provider were not available; only a certificate of attendance was retained. Clause 7.2 requires competence to be documented on the basis of education, training, or experience — attendance evidence alone does not constitute competence documentation. The training provider assessment results should be obtained and added to the competence record.
CIC-AUD-001-F03	<b>MINOR</b>	8.1 / PSCAA Permit	Review of daily emission control logs (MPC-EMS-FRM-001) for the period July 1 through October 31 (the operational period since procedure implementation) identified that 4 of 87 production days have incomplete VOC content entries for one or more coating materials used. PSCAA Permit Condition 4.5 requires VOC content data to be recorded for each coating material for each operating day. MPC-EMS-PRO-001 Section 5.2(b) states the same requirement. Incomplete entries prevent accurate monthly emission calculations for those days and may constitute a permit recordkeeping deficiency.
CIC-AUD-001-F04	<b>OBSERVATION</b>	6.1.3	The compliance obligations register (MPC-EMS-LEG-001) Section B documents specific PSCAA and State Discharge Permit conditions with monitoring methods and responsible roles. Section B does not yet include the RCRA hazardous waste regulations beyond the manifest requirement and the training obligation — there are no entries for satellite accumulation container requirements, central accumulation area requirements, or emergency response planning obligations (40 CFR 262.17). These requirements are being met (verified during the Clause 8 audit of the waste area) but are not tracked in the

Finding No.	Classification	Clause	Finding Statement
			register in a form that would support a systematic compliance evaluation.
CIC-AUD-001-P01	POSITIVE	8.1 / 9.1.2	The compliance obligations register Section B contains unusually detailed operational guidance for the PSCAA and State Discharge Permit conditions — beyond the minimum required by Clause 6.1.3. Each permit condition is linked to the specific monitoring record, the responsible role, and the EMS procedure that implements the control. This structure enables direct and efficient compliance evaluation and demonstrates a level of integration between the compliance system and operational practice that significantly exceeds the requirements of the standard.

*Audit closing meeting attended by: Marcus Webb (EHS Manager), Jennifer Ramos (CEO), David Chen (Operations Manager), Sarah Park (Production Engineer). Corrective actions for all three minor findings initiated within 5 business days of the closing meeting. Jennifer Ramos's comment after reviewing the audit report: "Finding F03 is exactly the kind of issue that could become a regulatory problem if we weren't looking for it."*

# Quick Reference: Environmental Internal Audit Program

## Audit Program Conformance Checklist

	Checklist Item
<input type="checkbox"/>	Written audit program document defines frequency, methods, responsibilities, planning requirements, and reporting for the complete EMS audit cycle
<input type="checkbox"/>	All ISO 14001:2015 clauses and all significant environmental aspects are covered by the audit program within each certification cycle
<input type="checkbox"/>	Audit frequency is risk-weighted — high-significance aspects and compliance-critical processes receive more frequent coverage than administrative EMS elements
<input type="checkbox"/>	At least two trained, qualified EMS internal auditors available — sufficient to maintain independence requirements across all audit areas
<input type="checkbox"/>	Auditor training documentation is available — certificate of completion plus assessment results, not only attendance records
<input type="checkbox"/>	No auditor assigned to audit processes they own or are responsible for — independence requirement met for all audit assignments
<input type="checkbox"/>	Audit plans prepared and shared with auditees in advance of each audit event
<input type="checkbox"/>	Audit evidence gathered using multiple methods (observation, document review, interview, probing) — not document review only
<input type="checkbox"/>	Compliance audit component included in the program — not only EMS system conformance, but evaluation against specific permit conditions and regulatory requirements
<input type="checkbox"/>	Findings written with observed fact, requirement reference, and significance — not vague observations without evidence or requirement citation
<input type="checkbox"/>	Audit report distributed to relevant management (including the manager of audited area and the CEO) within defined timeframe
<input type="checkbox"/>	Corrective actions initiated for all nonconformance findings without undue delay — target dates defined and tracked
<input type="checkbox"/>	Effectiveness verification conducted after corrective action implementation — not closed by action completion alone
<input type="checkbox"/>	Audit records retained — audit program, audit plans, checklists, reports, and corrective action records
<input type="checkbox"/>	Audit program reviewed and updated based on prior cycle findings and any significant EMS changes before the next cycle begins

## Most Common EMS Internal Audit Program Findings

Finding Area	Clause	Typical Finding Statement
No compliance audit component	9.2.1	Internal audit program covers EMS system elements (aspects register, procedures, objectives, corrective action) but does not include compliance verification activities — evaluation of permit monitoring data against permit limits, physical inspection of compliance-critical equipment, or review of regulatory reporting submissions. The program does not satisfy the requirement to provide information on whether the EMS is effectively implemented with respect to fulfilling compliance obligations.
Audit frequency not risk-weighted	9.2.2(a)	Internal audit program assigns identical annual coverage to all EMS elements. The spray booth VOC emission control processes — associated with the highest-significance environmental aspect and a direct permit compliance obligation — receive the same audit frequency as the document control system and management review processes. The program does not take into consideration the environmental importance of the processes as required.
Auditor independence not maintained	9.2.2(b)	The EHS Manager conducted all internal audit activities for the certification period. The EHS Manager is responsible for all EMS processes, including the aspects register, compliance evaluation, management review, and corrective action system. No independent auditor evaluated these processes during the audit cycle. The objectivity and impartiality requirement has not been maintained.
Effectiveness not evaluated	9.2.1(b)	Internal audit findings and corrective action records confirm that the EMS elements exist and that procedures have been implemented. Audit records do not contain evidence of evaluating whether the EMS is effectively achieving its intended purpose — whether environmental performance is improving, whether compliance evaluation is accurately detecting compliance status, or whether management review decisions are producing EMS improvements. The audit evaluates conformance but not effectiveness.
No audit program — ad hoc audits only	9.2.2(a)	The organization conducted an internal audit in Month 11 of the implementation cycle. No written audit program exists defining frequency, methods, responsibilities, or reporting requirements. The single audit event cannot demonstrate that the program satisfies the requirement for "planned intervals" or that it will systematically cover all EMS elements across the certification cycle.
Findings not evidenced	9.2.2(d)	Audit report contains finding statements written as observations without specific evidence references ("the aspects register appears to be incomplete," "training records may not be adequate"). No specific records, dates, or measurements cited as evidence. Findings written in this way cannot be traced to specific deficiencies and cannot support targeted corrective action.

*Next in Volume 1: Guide 1.6 — EMS Certification Preparation. The final implementation guide: preparing for Stage 1 and Stage 2 certification audits, selecting and working with a registrar, managing the audit process, responding to audit findings, and planning the certification cycle — completing the Cascade EMS journey from gap analysis to certificate.*

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