

ENVIRONMENTAL MANAGEMENT SYSTEMS FOR THE RETAIL SECTOR

CHECK

Guide Four in a Series of Five. These guides may be used sequentially if your company is at the initial stages of implementing an EMS or in a modular approach for those looking to improve elements of their existing EMS.

This material is provided for informational purposes only and should not be construed as legal, financial or other professional advise.

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MONITORING, MEASUREMENT AND EVALUATION

An environmental management system (EMS) without effective monitoring and measurement is like driving at night without headlights, you know that you are moving, but can't tell where you are going. The EMS up to this point has been about prioritizing the areas to focus on (e.g. Significant Environmental Aspects [SEAs]) and ensuring that the organization is controlling its activities and implementing improvements. Monitoring and measurement is about ensuring that the intended management is indeed in place and effective.

ENVIRONMENTAL PERFORMANCE

An organization's control over its impact on the environment such as reducing pollution, reducing the use of natural resources and complying with environmental regulations.

EMS PERFORMANCE

How well an organization is implementing their EMS and following the procedures documented in the EMS.

In an EMS, the monitoring and measurement process serves to evaluate environmental performance, regulatory compliance

status, progress in meeting objectives and targets, and reduction or control of environmental impacts. It is also a fundamental enabling function for other critical compliance management functions.

Monitoring and measurement also helps:

- · Analyze root causes of problems;
- Stay in compliance with legal requirements;
- · Identify areas requiring corrective action; and
- · Improve performance and increase efficiency.

While environmental performance and EMS performance are related, they are not the same. Environmental performance is how well an organization is reducing its impact on the environment and complying with environmental laws and regulations. EMS performance is how well an organization has designed and is implementing its EMS. A well-performing EMS should lead to better environmental performance, but it might not if the objectives and targets are not effective, the wrong SEAs are identified or management support is lacking.

The terms "monitoring" and "measurement" used in the ISO 14001 standard reflect, to some extent, the industrial origins of EMS. While the terms have close, but different definitions (monitoring is to "observe, record, or detect" and measurement is the "act of measuring" or a measured dimension), in this guide we use the term "measure" for both.

EVALUATION OF COMPLIANCE

The most efficient way to evaluate environmental performance and compliance is to measure your organization's progress towards minimizing impacts from SEAs. The process for identifying environmental aspects and impacts is covered in *Guide 2: Planning Action – Addressing Risks and Opportunities*. Measuring key environmental aspects should show your progress against EMS and compliance objectives for specific SEAs. For example, if one of your objectives is 100% compliance with tank inspection requirements, a key aspect is likely to be compliance with weekly tank inspections as recorded in an inspection log. The table below provides examples of how EMS performance may be implemented and subsequently measured regarding hazardous waste management.

SIGNIFICANT ENVIRONMENTAL ASPECT: HAZARDOUS WASTE MANAGEMENT				
Objective	Target	Operational Controls	Key Characteristics to Measure Performance	
No hazardous waste (HW) shipped to distribution centers (DCs) in reverse logistics	Ongoing	 Scanner HW sort for store returns Store returns process poster (job aid) 	 Store compliance audit results DC log of HW in returns tote container by store Corporate audit of returns tote containers at DCs/ X-docks EMS audits 	
No HW placed in dumpsters and compactors	Ongoing	 Signage on compactor doors, dumpsters, and doors to dumpster areas At poor-performing stores, assess trash before dumping and maintain log 	 Store compliance audits Dumpster dives Evaluate HW hauler invoices for trends and anomalies EMS audits 	
Reduce amount of HW generated	10% in year 1	 Purchasing procedures to reduce internal use of hazardous materials Purchasing procedures to reduce products carried that may become hazardous waste Procedure to use manufacturer take-back programs 	• HW hauler records of amount of waste	

SELECTING PERFORMANCE INDICATORS

Indicators are agreed upon methods with data to measure and track environmental and/or EMS performance. For example, if an environmental objective was a reduction in greenhouse gas emissions, you may identify fossil fuel derived energy use as a key characteristic for this objective. The next step is to decide how to measure energy use. For buildings, the best metric may be energy intensity per square foot, which can be calculated from utility bills. (Although, in terms of greenhouse gas emissions, not all energy is the same). There are different types of measures, some of which are discussed below. Selecting measures is also discussed in more detail in *Guide 2 5: Planning Action – Objectives and Targets*.

RESULTS

You may evaluate the results of your environmental management activities either by measuring outcomes or at a broader system or process level. Measuring outcomes evaluates the success of a specific process or activity (e.g. the number of negative agency inspections, the amount of waste generated, or the number of spills over a given period). Outcomes typically focus on the result of a process and are therefore "lagging indicators" of performance, meaning that feedback may not catch an issue early enough to avoid the problem. For example, while an inspection may uncover that a petroleum tank was not being examined routinely, it may not be timely enough to avoid a leak caused by a damaged tank. Although if collected frequently enough, outcome measures may provide timely feedback to improve a process.

At a broader system view, process level indicators look "upstream," such as the ongoing amount of waste generated or the percent of employees trained on a topic. Process measures are "leading indicators" and often measure the root cause of the impact so that problems can be identified and corrected sooner than with outcome measures. For example, routinely monitoring employee training rates could show that employee turnover had resulted in a decrease in the percent of employees trained on the hazardous waste program. This could be fixed before an annual review of misidentified hazardous waste (an outcome measure) showed a problem.

Most organizations use a combination of process and outcome measures. Regardless of how you measure, it is important to make sure your measures provide accurate and useful information. For example, counting the number of employees trained can be misleading if the training is not effective. A more robust measure may be to capture both the number trained and the results of tests or evaluations.

Measures and their usefulness can also change over time. For example, you might use the design specifications of installed stormwater control features to estimate stormwater runoff in gallons per year. But, if you do not maintain the structures, the estimated and actual runoff will differ over time.

SMART MEASURES

The same rules for defining objectives and targets that were discussed in *Guide 2, Chapter 5 Planning Action – Environmental Objectives* should be considered for selecting performance indicators. For example, set SMART measures:

- Specific Simple and understandable;
- Measurable Can be measured and you have a means to measure them;
- · Attainable Ambitious enough to improve environmental performance, but not impossible to achieve;
- · Relevant Relate directly to your objectives and targets; and
- Time-bound Defined timeframes.

The more effective the measure you use to gauge performance, the more accurate and therefore the better performance you can achieve over time.

GETTING STARTED

You should first clearly define your needs. Measuring environmental and EMS performance can be a resourceintensive effort. Consider what information is required to determine if your EMS is working and your objectives and targets are being met. While collecting meaningful information is important, resist the urge to collect data "for data's sake."

Review your current monitoring related to regulatory compliance and other EMS-relevant elements (such as quality or health and safety management) to determine what can provide information on environmental and EMS performance. Tool 14-1: Monitoring and Measurement Questionnaire can help you document your company's current systems.

It is usually best to start with a relatively simple monitoring and measurement process and build on it as you gain experience with your EMS. It is better to measure fewer items consistently than to measure many items inconsistently. Keep in mind that no single measurement will tell your organization how it is doing environmentally across all areas.

Use your monitoring to communicate results. As you measure progress toward achieving objectives and targets, you should regularly communicate the results to employees including top management.

People respond best to information that is meaningful to "their world." Putting environmental information in a format that is relevant to the audience's function within the company will increase the likelihood they will act on the information. Be sure to link your measurement program with your communications program.

It is also important to document your processes for identifying what and how to measure. *Procedure 14-1: Sample Procedure for Compliance Assessment* can be used to document your approach to measuring regulatory compliance.

NEXT

Setting up your monitoring and measurement program is just the beginning. You will need to collect and communicate the data, as well as regularly adjust what you measure based on results and to reflect changes in your organization and your objectives and targets. The reward of a good system of measurements is better environmental performance as well as having concrete evidence to communicate the value of the EMS to top management.

TOOLS & PROCEDURES

Tool 14-1: Monitoring and Measurement Questionnaire

Tool 14-2: EMS Program Measurement Criteria Worksheet

Tool 14-3: Sample Form for Compliance Tracking Log

Procedure 14-1: Sample Procedure for Compliance Assessment

HELPFUL TIPS

As you prepare to monitor, analyze and evaluate your company's environmental compliance:

- » Identify processes, systems, and tools already used by your company that could be adapted for these activities.
- » Identify data already being collected in other business functions that may be useful to assessing environmental compliance.
- » Use samples provided under Tools & Procedures "as is" or as a starting point to developing your own.
- » Refer to the Compliance Leadership Program (CLP) matrix to fine-tune your processes associated with these activities.
- » Refer to your Environmental Policy to ensure the process for these activities and their intended outcomes are aligned with the goals of this policy.

IMPROVEMENT

In the EMS world, "to conform" means to meet a requirement, which can be a regulatory requirement or an EMS target. Therefore, nonconformity means you are failing to meet a requirement. Especially in the early phases of implementation, you will probably identify problems with your EMS through audits, measurement, or other activities. To deal with issues that arise and to ensure continual improvement, your organization needs to systematically:

- · Identify and investigate problems and nonconformities;
- · Determine root causes of the problems;
- · Implement corrective and preventive actions; and
- Track actions and verify their effectiveness.

WHY DO EMS PROBLEMS OCCUR?

- » Poor communication
- » Faulty or missing procedures
- » Equipment malfunction (or lack of maintenance)
- » Lack of training
- » Lack of understanding (of requirements)
- » Failure to enforce rules
- » Corrective actions that fail to address root causes

Nonconformities should be analyzed to detect if a problem is an isolated event or part of a trend, so that you can prevent future problems. Preventing problems is generally cheaper than fixing them after they occur or recur. Prevention can also significantly reduce risks to human health and the environment and decrease regulatory risk for the organization.

DETERMINING CAUSES OF PROBLEMS

You should establish a method to determine the causes of nonconformity. Root cause analysis is a systematic approach to understanding the underlying reasons for an issue and is typically used in EMS to reduce future problems instead of fixing issues one at a time.

There are many different methods for conducting root cause analysis, ranging from detailed graphical analysis to simply asking relevant staff open-ended questions. Generally, the process consists of:

- Gathering information (about an incident, the process, conditions, etc.);
- Analyzing the information (using tools to help visualize why an incident occurred, such as fishbone diagrams, cause and effect diagrams, causal factor charting, root cause mapping, root cause summary tables, etc.); and
- · Recommending changes to prevent the incident from happening again.

One of the simplest approaches is to ask "why" five times (the "5-Why" approach). This probing helps you find underlying issues, in addition to the immediate cause. For example, if a store employee puts potentially hazardous waste in the wrong container, the initial explanation may be "I did not think it was hazardous." Continued questioning may uncover that the employee never took a required training because they were sick the day it was given. Further questioning may show that the store has no tracking system for training. So, the root cause turns out to be the lack of a tracking system. Without extra questioning, only the individual's lack of training may be addressed, guaranteeing that the problem will happen again. If; however, the tracking system is fixed, then a lack of training is less likely to cause an issue in the future.

Root cause analysis can also be used to identify the underlying reasons for environmental impacts. Once you understand the underlying cause, you can then develop approaches to better control or even eliminate the impact. This is why "dumpster diving" can be an important first step in reducing waste; if you know what is being thrown away, you can then develop approaches to eliminate waste at its source. If one of your significant environmental aspects is air pollution from trucks at your loading dock, you may find out that trucks are idling because drivers waiting to unload don't know about local no-idling ordinances.

NONCONFORMITY AND CORRECTIVE ACTIONS

Within the context of an EMS it is important to take the necessary steps to address nonconformity immediately – whether it is the EMS itself (i.e. as identified via an audit, see Chapter 14) or the result of non-compliance with an environmental requirement. Addressing the nonconformity may involve steps to control initially, then followed by actions to correct and prevent recurrence.

For example, a hazardous materials spill in a warehouse requires immediate actions to contain and control. Once this is addressed, the next steps are to determine the root cause for the spill and to implement actions to prevent future spills.

Evaluating the effectiveness of corrective actions is important, since nonconformities can recur with similar consequences, but with different root causes. Using our example of a hazardous warehouse spill, the root cause for the first spill may have been a result of improper storage of the hazardous material and the corrective actions designed to ensure proper storage and training of staff. However, a similar spill may occur due to an onsite accident with a root cause in a different safety related issue. It is also possible for the company to experience a similar incident, but in a different warehouse. Part of preventing nonconformity may require deep thinking on all the potential causes and putting prevention measures in place in anticipation of possible nonconformity.

Once you understand the cause of a problem, then you need to take action to fix it. Corrective actions should:

- 1. Resolve the immediate problem;
- 2. Consider whether the same or similar problems exist elsewhere in the organization;
- 3. Prevent the problem from recurring; and
- 4. Define the responsibilities and schedules associated with each step listed above.

Employees in a store or distribution center often have good ideas for solving problems, so look for ways to include them in the process. For example, communicate findings to selected employees and ask them to provide input into solutions.

The following is a checklist to help complete corrective action. Have you:

- Identified the problems?
- Identified the causes?
- Developed a solution for each problem?
- Implemented the solutions?
- Documented the solutions?
- · Communicated the solutions?

Procedure 15-1: Sample Procedure for Corrective and Preventive Action can be modified to document your approach for analysis and corrective actions. Tool 15-1: Corrective and Preventive Action Questionnaire can be used to help you understand your organization's current systems. Tool 15-2: Sample Corrective and Preventive Action Notice and Tool 15-3: Sample Corrective and Preventive Action Tracking Log are sample forms that can be modified to fit your program.

HINTS FOR CORRECTIVE AND PREVENTIVE ACTION

If your organization has an ISO 9001 quality management system, you already have a corrective and preventive action process for quality, which can be used as a model or integrated with your EMS. Some organizations find that they can combine elements of their management review activities and corrective action processes. These organizations review nonconformities, discuss causes and trends, identify corrective actions, and assign responsibilities at regularly scheduled management review meetings.

The amount of planning and documentation needed for corrective and preventive actions will vary with the severity of the problem and potential environmental impacts. There is no need to go overboard with bureaucracy, simple methods are often quite effective.

Once you document a problem, your organization should commit to resolving it in a timely manner. Be sure that your corrective and preventive action process specifies responsibilities and schedules for completion. Review your progress regularly and follow up to ensure that actions taken are effective. Initially, your internal auditors will identify most EMS problems. However, over the long run employees may be able to point out problems and ideas for improvement, which should be encouraged. Find ways to get employees involved in the EMS improvement process, for example, via suggestion boxes, competitions, or incentive programs.

CONTINUAL IMPROVEMENT

One of the core aims of an EMS is to foster continual improvement of environmental management practices, which should ultimately enhance environmental performance by minimizing or eliminating adverse environmental impacts associated with business operations. In practical terms, continual improvement can be mapped to the cyclic process of Plan-Do-Check-Act, which are described as follows:

- Plan: establish environmental objectives and processes necessary to deliver results in accordance with the organization's environmental policy.
- Do: implement the processes as planned.
- Check: monitor and measure processes against the environmental policy, including its commitments, environmental objectives and targets, operating criteria, and report the results.
- Act: take actions to continually improve.



Figure 1: Relationship between Plan-Do-Check-Act cycle and ISO 14001 standard. Source: ISO 14001:2015

NEXT

Identifying and resolving an issue is only the beginning. Corrective action must include follow up to ensure that solutions are being implemented and are effective. This follow up is part of the system of continuous improvement that underlies a successful EMS.

TOOLS & PROCEDURES

Tool 15-1: Corrective and Preventive Action Questionnaire

Tool 15-2: Sample Corrective and Preventive Action Notice

Tool 15-3: Sample Corrective and Preventive Action Tracking Log

Procedure 15-1: Sample Procedure for Corrective and Preventive Action

HELPFUL TIPS

- » Use your company's existing systems, programs, tools, or other resources to address nonconformity and ensure continuous improvement of its environmental compliance.
- » Use samples provided under Tools & Procedures "as is" or as a starting point to developing your own.
- » Refer to the Compliance Leadership Program (CLP) matrix to fine-tune process to improve environmental compliance over time.
- Refer to your Environmental Policy to ensure that efforts to improve environmental compliance are aligned with the goals of this policy.

INTERNAL AUDIT

Once your organization has established its EMS, it is critical to verify that it is being implemented properly and to resolve any deficiencies. Periodic EMS audits are a valuable tool for evaluating EMS performance, especially since managers and employees are often so close to their work that they may not see problems or bad habits that have developed. Systematic evaluation can also help maintain management focus on the environment, improve performance of the EMS, and ensure that it is cost-effective.

An audit is a comparison of audit evidence to audit criteria – that is, actual to expected conditions. The evidence used is objective information collected through interviews, visual inspections, and document review. Audit criteria are the expectations or "rules" of how conditions should be. For example, in compliance auditing (see *Evaluation of Compliance section* on page 3 of this Guide), the criteria are the regulations. With an EMS audit, the criteria are the descriptions or "standards" of the system elements. By comparing evidence to standards, you can determine if the audited entity does or does not conform. This determination is a finding and a finding can either be conformance or non-conformance.

Other key audit definitions are: objectives, scope, and auditor. The audit objectives are why you are conducting an audit, which is usually to demonstrate conformance to stated criteria. The audit scope is what is being audited and can be a company, a site, or business unit within a company. The auditor is the one collecting evidence and determining findings. The auditor can consist of several individuals on a team. Auditors must be qualified in their tasks and should have training in EMS auditing. Although some audit team members may be on the team because of unique expertise, such as process, language, or technical and regulatory knowledge and not have EMS auditor training.

For your EMS audit program to be effective, you should:

- Develop audit procedures and protocols;
- Determine an appropriate audit scope, frequency, and methodology;
- · Select and train your auditors; and
- Maintain audit records.

Results of your EMS audits should be linked to the corrective and preventive action process (*Guide 4 Chapter 13: Checking – Improvement*). Results are also a critical piece of information for the Management Review (*Guide 4 Chapter 15: Management Review*).

AUDIT PROCEDURES SHOULD DESCRIBE:

- » Audit planning
- » Audit scope (e.g., areas and activities covered)
- » Audit frequency
- » Audit methods
- » Key responsibilities for the audits
- » Reporting mechanisms for the audits
- » Recordkeeping for audit results

DEFINING AUDIT CRITERIA

Auditing your EMS helps to understand how well your EMS is performing overall and it is important to identify the measures or criteria that will allow you to effectively assess your EMS.

To do this, you need to identify criteria that will help evaluate the success of the overall EMS program and not just progress against EMS objectives for specific SEAs. The audit criteria should help to determine how well your organization's environmental policy is being implemented and how actual practices compare to the documented practices in your EMS. In addition, you should have audit criteria for each component of your EMS. For example, you will need to consider how to measure the success of communication efforts, documentation, stakeholder outreach and training programs.

An easy approach is to measure actions associated with the EMS. For example, you can track the number of meetings held with stakeholders, number of documents created, number of employees trained, or number of hours of training. However, action does not always mean results. Consider the purpose of each EMS element and also measure results so that you can be satisfied that the element is effective.

Tool 15-2: EMS Program Measurement Criteria Worksheet can be used to identify measures for EMS performance.

SELECTING AUDITORS

Companies can use internal staff or third parties to audit the EMS. Outside consultants can provide many benefits, particularly an outsider's perspective, free of internal biases. Consultants who specialize in EMS development and/or EMS audits also bring a depth of experience and expertise that is unlikely for an internal audit team. However, you should not

EXAMPLES OF MEASURES FOR A RETAIL EMS

- » Number of SEAs in environmental programs
- » Number of environmental objectives and targets met
- » Number of negative inspection/auditing findings
- » Time to remedying negative inspection/audit findings
- » Number of complaints from the community
- » Percent of products for which life cycle assessment has been conducted
- » Number of instances of non-compliance
- » Findings from an EMS audit

use the same firm that helped you develop your EMS to perform the audit.

A blend of internal and third-party auditors is a common solution. In this case, the audit team may consist of the consultant leading a blended audit team, the consultant's auditors supplementing your internal team or separate teams dividing up the audit by task or geography.

Internal auditors should be trained in auditing techniques and management system concepts. In addition, familiarity with environmental regulations is valuable, if not essential, to adequately assess an EMS. More than one person should be trained as an internal auditor so that auditors can work in teams, review each other's work, switch roles, and perform other quality assurance checks.

For your EMS audit program to be effective, you should:

- · Develop audit procedures and protocols;
- · Determine an appropriate audit scope, frequency, and methodology;
- · Select and train your auditors; and
- Maintain audit records.

Results of your EMS audits should be linked to the corrective and preventive action process (Guide 4 15: Checking – Nonconformity and Corrective and Preventive Action). Results are also a critical piece of information for the Management Review (Module 18: Management Review).

EMS auditor training is commercially available, but it might be more cost-effective to link up with businesses or other organizations in your area, perhaps through a trade association, to sponsor an auditor training course. Local community colleges may also offer EMS auditor training. Some auditor training can be obtained on the job, as long as an experienced auditor leads or takes part in "training" audits.

Auditors should be independent of the activities being audited, which can be a challenge for small organizations. If your company is registered under ISO 9001, consider using your internal quality auditors. While some additional training might be needed for EMS auditing, many of the required skills are the same.

Many retailers use their loss prevention or compliance field teams or other audit teams for periodic or routine environmental compliance audits; their findings should be considered in your EMS audit, as numerous or significant nonconformities indicate potential problems with the EMS. Such teams could also be trained to perform elements of your EMS audit, though it is unlikely that their audit program would be sufficient to audit the EMS as a whole.

If you plan to have your EMS ISO 14000-certified, you will need to hire an independent third-party auditor as part of the certification process. The third-party auditor will evaluate the EMS both in the beginning and at prescribed intervals to maintain the certification.

CONDUCTING AN AUDIT

A complete discussion of how to conduct an EMS audit is outside the scope of this guidance. There are many resources on how to conduct an audit. Listed below are some general tips to help ensure a successful audit:

- Always share the audit scope, criteria, schedule, and any other pertinent information with the employees working in the areas to be audited.
- Your EMS audit findings should be based on objective evidence of conformity and tangible observations. Auditors should resist the temptation to evaluate or draw conclusions in the field or at the data collection stage. For example, do not make assumptions as to why a procedure was not followed, that step comes later when the EMS Manager and lead auditor compile and analyze the findings.
- During an audit, auditors should review identified deficiencies with people who work in the relevant areas. This
 will help them verify that their audit findings are correct and can also reinforce employee awareness of EMS
 requirements.
- Consider integrating your EMS audit and compliance audit processes, but keep in mind that these audit
 processes have different purposes. While you might want to widely communicate the results of EMS audits within
 your organization, the results of compliance audits, especially third-party compliance audits, might need to be
 conducted under legal counsel and communicated only on a need-to-know basis. Compliance audit findings are
 one set of useful indicators of EMS effectiveness.
- The individual audit findings of nonconformity should be described factually, along with a citation of the specific procedure, policy, and/or EMS element related to the issue of nonconformity.
- An EMS audit is not an audit of how well employees do their jobs and auditors should avoid only focusing on the negative. Instead, auditors should focus on both areas of good performance and those that need improvement.

REPORTING AUDIT RESULTS TO RELEVANT MANAGEMENT

A written report on the EMS audit should be only as detailed as you need it to be, provided it adequately documents and communicates the process, findings, conclusions, and recommendations. A potential outline consists of:

- · Audit purpose and objectives
- Audit scope (what parts of the organization and EMS elements were audited)
- Summary of audit procedures and protocols
- Summary of findings
- Analysis and conclusions
- Recommendations
- Appendices
- Tables or spreadsheets of findings
- Audit procedures and protocols
- Audit checklists

MAKING SENSE OF AUDIT FINDINGS

The EMS Manager usually analyzes the audit findings with support from the lead auditor, the EMS Team, other managers, and subject matter experts in the company. To get the most value from an audit, consider the following:

- Analyze data for patterns that may indicate systemic problems and to better understand what is working and what is not. A root cause analysis may help identify what will best fix problems. Chapter 13 has guidance on root cause analysis.
- Audit results should be judged on the type, as well as the number of findings. For example, are findings indicative of minor one-time nonconformities or a systemic deficiency? Also, is a particular finding or type of finding repeated at multiple facilities or across multiple programs?
- Conclusions on the cause of nonconformities should be translated into recommendations or action plans. Some conclusions may be about what is working and will recommend only minor or no changes, but in a continuous change model, there are always areas needing improvement.
- Note which recommendations can be acted on within the current EMS and with current resources and which will require review by senior management.
- Management can use EMS audit results to identify trends or patterns in EMS deficiencies. You should also
 have a process in place to ensure that system gaps or deficiencies are corrected in a timely fashion and that
 corrective actions are documented. Management review of the EMS relies on these results (*Guide 4, Chapter 15: Management Review*).
- You can use *Tool 16-1: EMS Auditing Questionnaire* to help establish your EMS audit program. *Procedure 16-1: Sample Procedure for EMS Audits* is a sample procedure for conducting internal EMS audits. You can customize *Tool 16-2: Sample EMS Audit Form* for use by your internal EMS audit team.

GETTING STARTED

As a first step, you should determine how frequently to conduct EMS audits. Generally, all parts of the EMS should be audited at least annually, with more frequent audits considered depending on factors such as:

- · The nature of your operations and activities;
- Potential impacts of your significant environmental aspects (for example, a tank management or hazardous waste program);
- The results of your monitoring processes; and
- The results of previous audits.
- You can audit your entire EMS at one time or break it down into discrete elements for smaller, more frequent audits.

HELPFUL TIPS

- » Use your company's existing systems, programs, tools, or other resources to address nonconformity and ensure continuous improvement of its environmental compliance.
- » Use samples provided under Tools & Procedures "as is" or as a starting point to developing your own.
- » Refer to the Compliance Leadership
 Program (CLP) matrix to fine-tune process
 to improve environmental compliance over
 time.
- Refer to your Environmental Policy to ensure that efforts to improve environmental compliance are aligned with the goals of this policy.

NEXT

Your audit results should be used to improve the performance of your EMS, otherwise the audit was a waste of time and resources. Audit results can also be used to communicate the value and the success of your EMS.

TOOLS & PROCEDURES

Tool 16-1: EMS Auditing Questionnaire

Tool 16-2: Sample EMS Audit Form

Procedure 16-1: Sample Procedure for EMS Audits

MANAGEMENT REVIEW

Management Review is the most important element of any management system. Management review of the EMS keeps management informed about the progress of the EMS and helps maintain their continued support. It is also an opportunity for management to evaluate if the EMS continues to be appropriate and sufficient. The management review is a critical part of the Plan-Do-Check-Act process and provides input for improvement. The scope and frequency of the review depends on the size and complexity of the organization, environmental issues, and other factors that are determined to be relevant in each organization. In many ways, you can see management review as the connection between the environmental policy and the rest of the management system. Without effective review, top management has no idea if the policy is being met or not.

THE SENIOR MANAGEMENT REVIEW PROCESS

Your company's senior management should review the EMS at defined intervals, such as annually or quarterly, to ensure its continuing suitability, adequacy, and effectiveness.

Tool 17-1: Management Review Questionnaire can help you to understand your organization's current management review process and see how the EMS review could be included. *Procedure 17-1: Sample Procedure for EMS Management Reviews* can be modified to document your EMS management review process.

The scope of the management review should be comprehensive, although not all EMS elements need to be reviewed at once. The management reviewer should be relevant to the EMS elements under review. For example, if certain policies, objectives, and procedures apply only to a specific business unit or part of the company, those items should be reviewed by the management of that business unit. Whether the items need higher review depends on issues such as cost, implications for brand reputation, effects on other business units, and your company's management structure and style.

The types of questions for management to consider include:

- Are we meeting our goals for environmental performance?
- Are we reducing our environmental impacts?
- Is there more that we should be doing?
- What is our priority and plan for next year?
- Is our environmental policy still relevant?
- · Are roles and responsibilities clear and do they make sense?
- Are we applying resources appropriately?
- · Are we meeting our regulatory obligations?
- Are the procedures and operational controls adequate? Do we need others? Should we eliminate some?
- What effects have changes in materials, products or services had on our EMS and its effectiveness?
- How effective are our measurement and management systems?
- · Can we set new measurable performance objectives?
- Have changes in regulations, our operations, or other considerations required us to change some of our approaches?
- What stakeholder concerns have been raised since our last review?
- Is there a better way? What else can we do to improve?

Remember, an EMS is built on a cyclical, continuous improvement model. The management feedback and directives from the management review should loop back into the Plan-Do-Check-Act cycle. Just as when first implementing an EMS, you need to check progress toward your desired improvements. It is also important to document management observations, conclusions, and recommendations; *Tool 17-2: Management Review Form* is an example form for this documentation.

Management reviews also offer a great opportunity to keep your EMS relevant and efficient. For example, organizations have found that some procedures and processes initially put in place were not needed to achieve their environmental objectives or to control key processes. If EMS procedures and other activities don't add value, eliminate them.

PREPARING FOR THE MANAGEMENT REVIEW

Preparing for a management review generally takes more time and effort than the actual review. You must condense up to a year's worth of effort across a broad section of your organization, input from people at all levels, and multiple competing priorities, costs, and benefits down to a handful of essential questions for your senior management. This process will be easier if you have maintained good documentation throughout the year. The management review should include:

- · Results from the EMS audit and any other assessments;
- · Progress in meeting objectives and targets;
- The continuing suitability of the EMS in relation to changing conditions and information;
- Concerns of relevant stakeholders; and

SAMPLE AGENDA FOR THE MANAGEMENT REVIEW MEETING

- » Status of actions from previous management reviews
- » Update on significant changes in:
 - external and internal issues that are relevant to the EMS
 - needs and expectations of key stakeholders internally and externally, including compliance obligations
 - significant environmental aspects
 - risks & opportunities
 - progress on achievement of environmental objectives
- » Report on environmental performance, including trends in:
 - nonconformities and corrective actions
 - monitoring and measurement results
 - fulfilment of its compliance obligations
 - audit results
 - adequacy of resources
- » Review of relevant communications from stakeholders, including complaints
 - Opportunities for continual improvement
 - Management's response
 - Decisions & assignment of actions
- » Next steps
- Recommendations for the next Plan-Do-Check-Act cycle. Here are some hints to help make the process more
 effective.
- Focus on management's priorities for the EMS and environmental performance and areas where you need their guidance and decision-making.
- Include the right people in the review, such as:
 - » People who have the right information and knowledge about the EMS; and
 - » Managers who can make decisions about the organization and its resources.
- Determine the best management review frequency. Some organizations combine these reviews with other meetings, such as director meetings or meetings for other processes like budget review. Other organizations hold dedicated EMS reviews. At a minimum, management should conduct reviews annually.

- During management review meetings, make sure someone records the issues discussed, decisions made, and action items identified. You can use *Tool 17-2: Management Review Form*, or a similar form, to document management reviews.
- Management reviews should assess how changing circumstances might influence the suitability, effectiveness, or adequacy of your EMS. Changing circumstances could be internal (e.g. new facilities, changes in products or services, new customers) or external (e.g. new laws, new scientific information or changes in adjacent land use).
- Be sure that someone is responsible for following up on the action items from the management review and tracking progress to completion.
- As you assess potential changes to your EMS, consider other organizational plans and goals in order to integrate environmental decision-making into your overall management and strategy.

NEXT

Results of the management review need to be communicated to relevant staff and stakeholders. After the review, you need to incorporate the necessary information into your EMS. This may mean updating objectives and targets, changing procedures, or revising environmental programs. As always, it is important to document the results and the process.

Some typical outputs of a management review may include:

- conclusions on the continuing suitability, adequacy, and effectiveness of the EMS;
- · decisions related to continual improvement opportunities;
- decisions related to any need for changes to the EMS, including resources;
- actions, if needed, when environmental objectives have not been achieved;

HELPFUL TIPS

- » Use your company's existing systems, programs, tools, or other resources to address nonconformity and ensure continuous improvement of its environmental compliance.
- » Use samples provided under Tools & Procedures "as is" or as a starting point to developing your own.
- » Refer to the Compliance Leadership Program (CLP) matrix to fine-tune process to improve environmental compliance over time.
- Refer to your Environmental Policy to ensure that efforts to improve environmental compliance are aligned with the goals of this policy.
- opportunities to improve integration of the EMS with other business processes, if needed; and
- implications for the strategic direction of the organization.

TOOLS AND PROCEDURES

Tool 17-1: Management Review Questionnaire

Tool 17-2: Management Review Form

Procedure 17-1: Sample Procedure for EMS Management Reviews

ABOUT THE RETAIL COMPLIANCE CENTER

The Retail Compliance Center (RCC) provides resources on environmental compliance and sustainability for all types and sizes of retailers. The RCC's goal is to develop retail-specific resources, tools and innovative solutions to help companies cost-effectively improve their compliance and environmental performance.