EMS Documentation
Background and Exhibits

EMS documentation usually takes the form of an EMS manual that is made available throughout the facility, either electronically or in hard-copy format. Documentation is important to the success of your EMS for several reasons:

- Consistency. Word-of-mouth information is rarely communicated consistently, whereas written information is more likely to be consistent from person to person and over time. Documentation is vital to maintaining this consistency. In most facilities, change is a fact of life—new projects are undertaken, the facility grows, and employees change positions or leave the facility. Accurate documentation will make it much easier to maintain an effective and flexible EMS during these changes.
- Assessment of Progress. Creating documentation helps you assess the progress of your EMS. Some inconsistencies may appear only as you commit your ideas to paper and having this record will allow you to check on progress and evaluate results.
- Demonstration. If you want to certify your EMS (for example, to the ISO 14001 EMS Standard) or enter a recognition program, such as those under EPA's Performance Track, you must demonstrate that your EMS is complete and functioning. In this case, documentation is part of the evidence that demonstrates continuing suitability and effectiveness of your EMS.

The **EMS Manual**

Some sort of EMS manual, either electronic or hard copy, usually serves as the EMS documentation. Its purpose is to provide a road map to the vital pieces and linkages of the EMS. At a minimum, your EMS documentation should:

- Describe core elements of the system and how the elements interact; and
- Provide direction to related documentation.

What Constitutes EMS Documentation?

Consider the following:
- Your environmental policy;
- Your organizational chart or lists/tables of key responsibilities;
- A description of how your facility satisfies the EMS requirements—how your EMS addresses the requirements of each of the 17 elements;
- System-level procedures (for example, procedure for corrective and preventive action);
- Activity- or process-specific operational control procedures/work instructions; and
- Other EMS-related documents (such as emergency preparedness and response plans, training plans, etc.).

EMS documents are related to, but different from EMS records. **EMS documentation** describes the make up of your system (i.e., what you do and how you do it), while **EMS records** demonstrate that you are doing what the documentation said you would do. Records management is discussed later in this Guide (see *Module 16*).

Keep EMS documentation simple. Your manual does not need to describe every detail of your EMS. Instead, the manual can provide references to other documents or procedures. EMS documentation should be updated as needed, based on any system improvements you put in place. However, if you put too much detail in an EMS manual, you might need to update the manual frequently.

Action **Steps**

1. Determine how EMS documentation can be integrated into existing documents. Before you dive into your documentation, learn how deep the water is. Find out what documentation already exists, what its purpose is, and whether it works. The goal of this search is to locate materials you can use to begin your EMS implementation and documentation. Many facilities use the same format for all of their documents. An example of existing documentation might be a quality plan or tracking report. Use your answers to the questions provided in *Exhibit 10-1: Element Review Questions* to begin the process of developing your facility's EMS documentation.

2. Tailor the documentation to meet your facility's needs. You will probably need to make a compromise between your documentation production needs and your budget. Here are some questions to help you determine what fits your needs:

   · How can we use or revise existing documents rather than create new ones?

   · Does our business operate in a single location or many? This will affect who creates some of the documents and where they are located. It may also affect how many versions of a document might be necessary to cover different circumstances.

   · What is our current computer capability? Many companies use an electronic system to maintain documents.

   · What security precautions do we need? While computer systems are handy, they often can be accessed by a number of people. Electronic documentation can be edited or destroyed. Security, or at least restrictions on who can change data, can be a critical issue for many facilities that use electronic documentation systems.

3. Determine a standard format for all documents. Before developing your EMS documents, plan the format (document and page appearance) for the documents. If a facility standard exists, use it. If not, the need for EMS documentation provides an opportunity to create a standard facility format. Consider whether pages are single- or double-sided and why; choose margins, header, footer, typefaces, text, headings, etc. Include plans for

bulleted and numbered lists, tables, and even paragraph spacing. Once you have a consistent format for documents, anyone who writes one will use the established format and fill in the necessary text. All documents will look like part of an organized, integrated system. Most importantly, documents will be easier to read and understand!

Not all documentation needs to be text. Some facilities use signs above the appropriate equipment for some work instructions (like a no dumping sign above a storm drain). Sometimes, bilingual text may be needed. Consider the needs of the user—if it's not understood, it won't be implemented.

4. Prototype each document. Prototyping means visualizing what you will need in the document and creating an outline for it before you actually have information to fill in. This is like drafting a document, but in an outline fashion. As you consider what is needed for the document, you also gain an understanding about what you may need to support the EMS. It's a way of "outlining" your EMS as well as designing documents.

The best people to prototype or provide early input into documents are the people who will use the document. Involving them in the process should help ensure that the documents are usable and applied to support the EMS.

The following questions will help you plan your documents. Consider these questions for each document you identify as necessary for your facility:

- What is the document's purpose?
- Who will use it and how will they use it?
- How long should the document be?
- What must be included in the document? Which information is most critical?
- Is it process-focused? Focus on process helps people who use the documents to better understand how their jobs fit into the rest of the facility's functions.
- How is the information best arranged? Will the user read sequentially or randomly?

Use *Exhibit 10-2: Worksheet for Development of EMS Documentation* to define the documents and responsibilities included in your EMS documentation process and customize *Exhibit 10-3: EMS Manual* as a first step toward developing your facility's EMS Manual.

Exhibit 10-1: **Element Review Questions**

Questions	Your Answers
Do we have **existing documentation of our EMS?** If yes, how is this EMS documentation **maintained**? (Electronically? In paper form?)	
Who is responsible for maintaining EMS documentation within our facility?	
Do we have an **EMS manual** or other summary document that describes the key elements of the EMS? If so, does this document describe the **linkages** among system elements?	
What does our EMS documentation consist of? (List components such as environmental policy, EMS manual, activity-level procedures or work instructions, emergency plans, etc.)	
Is our EMS documentation **integrated with other organizational documentation** (such as human resource plans or quality procedures)? If so, how do we ensure proper **coordination** between environmental and these other functions?	
How will we keep our EMS documentation **up-to-date**?	
Our next step on EMS documentation is to…	

Exhibit 10-2: **Worksheet** for **Development** of **EMS Documentation**

Documents	Determine Format: Who/ Date Completed	Develop Prototype/ Draft: Who/ Date Completed	Assign Writing: Who/ Date	Review Writing/ Compare to Prototype/Draft: Who/ Date	Add to Document List/ Date	Who Has Access	Location
Revisions to Existing Documents							
	/	/	/	/	/		
	/	/	/	/	/		
	/	/	/	/	/		
	/	/	/	/	/		
Documents to be Created							
	/	/	/	/	/		
	/	/	/	/	/		
	/	/	/	/	/		
	/	/	/	/	/		
Contact Person:		Date Completed:					

Exhibit 10-3: **EMS Manual**

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Exhibit 10-3: EMS Manual (continued)

Attachments

(A suggested list, examples for which are provided in the appropriate Modules listed below)

Attachment A	Policy (See *Module 3* for example)
Attachment B	Aspects, Objectives, and Targets (See *Module 5* for example)
Attachment C	Legal and Other Requirements (See *Module 4* for example)
Attachment D	Environmental Management Programs (See *Module 7* for example)
Attachment E	Structure and Responsibilities (See *Module 2* for example)
Attachment F	Training Matrix (See *Module 8* for example)
Attachment G	Master Document List (See *Module 11* for example)
Attachment H	Master Records List (See *Module 16* for example)
Attachment I	Procedures (See *Modules 4, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18* for examples)
Attachment J	Work Instructions (See *Module 12* for examples)

Exhibit 10-3: EMS Manual (continued)

1.0   Purpose

This manual defines the scope of the **[Facility Name's]**Environmental Management System (EMS) and provides a linkage of system documents to the various elements of the ISO 14001:1996 standard.

The principal elements of the system described in this manual are:

* Environmental Policy
* Environmental Aspects
* Legal and Other Requirements
* Environmental Objectives and Targets
* Environmental Management Programs
* Organizational Structure and Responsibility
* Training, Awareness, and Competence
* Communication
* Document Control
* Operational Control
* Emergency Preparedness and Response
* Monitoring and Measurement
* Nonconformance and Corrective and Preventive Action
* Records
* Environmental Management System Audit
* Management Review

2.0   Scope

The **[Facility Name]** EMS provides a mechanism for environmental management throughout all areas and departments. The environmental management system is designed to cover environmental aspects that a facility can control and directly manage and those it cannot control or directly manage but can be expected to have an influence.

3.0   Issue and Update

The control of this Manual is in accordance with the **[Facility Name]** environmental Procedure for Environmental Document Control. All copies of this Manual not marked "CONTROLLED DOCUMENT" are uncontrolled and should be used for reference purposes only.

Amendments to this manual will be issued by the Environmental Management Representative (EMR) or designee following approval by the Facility Manager.

Exhibit 10-3: EMS Manual (continued)

4.0 Environmental Policy

The **[Facility Name]** Environmental Policy (Policy) is endorsed by the Facility Manager. The policy covers all activities at the facility. The Policy includes a commitment to continual improvement and prevention of pollution as well as a commitment to meet or exceed relevant environmental legislation, regulations and other requirements. The Policy will be reviewed annually by top management, communicated to all employees, and made available to the public in accordance with the Environmental Communication procedure. See *Attachment A—Policy* for a copy of the **[Facility Name]** Environmental Policy.

Reference Material
ISO 14001 Standard (4.2)

Applicable Procedures
Communication with Stakeholders (EP-004)

5.0 Environmental Aspects

The **[Facility Name]** Cross Functional Team (CFT) identifies the environmental aspects that the facility controls and over which it may be expected to have an influence, and determines which of those aspects are considered significant. Discussions regarding significance are recorded in CFT meeting minutes. These aspects are reviewed at least semi-annually by the CFT or when there is a new or changed process or activity at the facility. The EMR maintains CFT minutes and other records. A list of all aspects by area and department is included in *Attachment B—Aspects, Objectives, and Targets*.

Reference Material
ISO 14001 Standard (4.3.1)

Applicable Procedures
Identification of Legal and Other Requirements (EP-001)
Obtaining Agency Approval (EP-002)
Environmental Aspects, Objectives and Targets, and Programs (EP-003)
Environmental Review for New Purchases, Processes, and Products (EP-010)

6.0 Legal and Other Requirements

[Facility Name] has established an environmental procedure for the purpose of identifying, accessing, and communicating legal and other requirements that are applicable to the facility. Additional information is also available through legal publications. Local regulations are identified, accessed, and communicated by the EMS Coordinator. At least annually, the EMS Coordinator will review the most current national, regional, provincial, state, and local legal and other requirements as applicable to **[Facility Name]**. See *Attachment C* for a list of Legal and Other Requirements.

Reference Materials
ISO 14001 Standard (4.3.2)

Applicable Procedures
Identification of Legal and Other Requirements (EP-001)

7.0 Environmental Objectives and Targets

The CFT has developed objectives and targets for each significant environmental aspect. These objectives and targets define:

1. The performance objectives (Investigate/Study, Control/Maintain, or Improve) for each significant environmental aspect;

Exhibit 10-3: EMS Manual (continued)

2. The specific, quantified targets that define those performance objectives; and

3. The planned deadlines for the achievement of those targets.

Objectives and targets are developed considering: significant environmental aspects; technological options and financial, operational, and business plans; and the views of interested parties. *Attachment B—Aspects, Objectives, and Targets* identifies the facility's objectives and targets.

Reference Material
ISO 14001 Standard (4.3.3)

Applicable Procedures
Environmental Aspects, Objectives and Targets, and Programs (EP-003)
Environmental Review for New Purchases, Processes, and Products (EP-010)

8.0   Environmental Management Programs

The CFT establishes environmental management programs (EMPs) as a means to achieve objectives and targets. These programs define the principal actions to be taken, those responsible for undertaking those actions, and the scheduled times for their implementation. The EMPs are developed by the CFT and approved by top management (refer to Section 5.0 Environmental Aspects). The EMPs are in *Attachment D—Environmental Management Programs*.

Reference Material
ISO 14001 Standard (4.3.4)

Applicable Procedures
Environmental Aspects, Objectives and Targets, and Programs (EP-003)
Environmental Review for New Purchases, Processes, and Products (EP-010)

9.0   Organizational Structure and Responsibility

Environmental management system roles, responsibilities, and authorities are defined at relevant functions and levels within the facility. Top management provides the resources essential to the implementation and control of the environmental management system, including: training; human resources; specialty services; financial resources; and technical and informational services. The EMR has primary responsibility for establishing, operating, and maintaining the EMS. A CFT provides routine EMS support and reports directly to the EMR.

Reference Material
ISO 14001 Standard (4.4.1)

Applicable Procedures
No procedure is required, but EMS Responsibilities Form is applicable documentation.

10.0   Training, Awareness, and Competence

The **[Facility Name]** identifies, plans, monitors, and records training needs for personnel whose work may have a significant impact upon the environment. **[Facility Name]**has an environmental procedure to train employees at each relevant function and level so they are aware of the environmental policy, significant environmental aspects, their roles and responsibilities in achieving conformance with the

Exhibit 10-3: EMS Manual (continued)

policy and procedures, and with the requirements of the environmental management system. The training coordinator is responsible for maintaining employee training records. Appropriate records are monitored and reviewed on a scheduled basis. Competency is determined by the employee's supervisor as specified in EP-021. An environmental training plan is in *Attachment F—Training Matrix*.

Reference Material
ISO 14001 Standard (4.4.2)

Applicable Procedures
Environmental Training and Awareness (EP-008)

11.0 Communication

[Facility Name] has established and will maintain a procedure for internal and external communications regarding environmental aspects and the EMS.

Reference Material
ISO 14001 Standard (4.4.3)

Applicable Procedures
Communication with Stakeholders (EP-004)

12.0 Environmental Management System Documentation

This Manual identifies all documents relevant to the EMS. A copy of EMS documents, other than visual aids and records, can be obtained from the EMR or designee. System procedures and forms are provided in *Attachments I—Procedures* and *J—Work Instructions*.

Reference Material
ISO 14001 Standard (4.4.4)

13.0 Document Control

[Facility Name] has established an environmental procedure for controlling all documents related to the environmental system. This procedure describes where documents can be located and how and when they are reviewed. The procedure ensures that current versions are available and that obsolete documents are promptly removed from use or are suitably identified. Controlled documents are obtainable from the EMR or designee. A list of controlled documents is provided in *Attachment G—Master Document List*.

Reference Material
ISO 14001 Standard (4.4.5)

Applicable Procedures
Document Control (EP-014)

14.0 Operational Control

The CFT is responsible for identifying operations and activities associated with significant environmental aspects that require operational controls in procedures, work practices, or environmental management programs.

These documents define the mechanisms for the establishment, implementation and maintenance of the EMS and ensure that the system is maintained in accordance with the environmental policy, objectives, and targets and is communicated to suppliers and contractors.

• System Procedures (See *Attachment I—Procedures*) cover the management and control of both

Exhibit 10-3: EMS Manual (continued)

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the EMS and the principal environmental aspects that the system manages. These procedures are facility-wide in their application.

- Work Instructions (See ***Attachment J—Work Instructions***) cover the environmental control of specific operational activities and are usually activities specific in their application.

Reference Material
ISO 14001 Standard (4.4.6)

15.0 Emergency Preparedness and Response

[Facility Name] has an environmental procedure to identify the potential for and to respond to accidents and emergency situations and for preventing and mitigating the environmental impacts that may be associated with them. Emergency methods are reviewed by the CFT on an annual basis and after the occurrence of accidents or emergency situations.

Reference Material
ISO 14001 Standard (4.4.7)

Applicable Procedures
Emergency Preparedness and Response (EP-007)

16.0 Monitoring and Measurement

[Facility Name] has established an environmental procedure to monitor and measure the key characteristics of its operations and activities that can have a significant impact on the environment. This procedure includes calibration and maintenance requirements and ensures that records will be retained.

[Facility Name] has established an Environmental Regulatory Compliance Program. Procedure EP-017 outlines the requirements to periodically review regulatory compliance and report results to management on a yearly basis.

Reference Material
ISO 14001 Standard (4.5.1)

Applicable Procedures
Environmental Management System and Regulatory Compliance Audits (EP-017)
Monitoring and Measurement (EP-009)

17.0 Nonconformance and Corrective and Preventive Action

[Facility Name] has an environmental procedure for defining responsibility and authority for handling and investigating nonconformances, for taking action to mitigate impacts, and for initiating and completing corrective and preventive action. Any changes in procedures resulting from corrective and preventive actions are implemented and recorded. The Audit Program Leader maintains these records.

Reference Material
ISO 14001 Standard (4.5.2)

Applicable Procedures
Corrective and Preventive Action (EP-015)

Exhibit 10-3: EMS Manual (continued)

18.0 Records

[Facility Name] has an environmental procedure for the identification, maintenance, and disposal of environmental records. These records include training records and the results of audits and reviews. They are readily retrievable and protected against damage, deterioration, and loss. The Areas and Departments maintain their own environmental records. Record and document retention is also specified in the procedure. A list of relevant records is provided in **Attachment H—Master Records List**.

Reference Material
ISO 14001 Standard (4.5.3)

Applicable Procedures
Environmental Records (EP-005)

19.0 Environmental Management System Audit

Periodic system audits are conducted to ensure that the EMS has been properly implemented and maintained. The results of these audits are provided to management. Audits are performed according to a schedule that is based on the environmental importance of an activity, the results of previous audits, and the audit schedule. All auditors are trained and audit records are kept with the Audit Program Leader.

Reference Material
ISO 14001 Standard (4.5.4)

Applicable Procedures
Environmental Management System and Regulatory Compliance Audits (EP-017)

20.0 Management Review

Top management reviews all elements of the EMS annually to ensure its continuing suitability, adequacy, and effectiveness. Meeting minutes record these reviews and are kept by the EMR or designee.

Reference Material
ISO 14001 Standard (4.6)

Applicable Procedures
Environmental Management System Management Review (EP-006)

21.0 Record of Revisions

Revision Date	Description	Sections Affected