

Section 3: EMS Documents and Records

The EMS documents are written procedures, policies, work instructions, manuals, etc. used to keep your EMS working and functioning as you planned and intended. EMS documents describe your organization's daily EMS tasks and how they are accomplished. EMS documentation ensures that activities and operations are consistent through the use of up-to-date procedures and work instructions. Example EMS documents could include your aspect analysis system procedure, your environmental policy statement, your emergency response plan, or a work instruction on shutting down your air compressors in case of an emergency.

EMS records, on the other hand, present objective evidence, or proof, that your organization is following EMS procedures, policies, work instructions, and manuals, etc., as intended. Examples include training records, audit checklists, your list of significant aspects, and management review meeting notes.

To ensure that your employees work from the most current procedures, work instructions, and manuals, controlling your documents becomes very important. In addition, both documentation and records will help you explain your processes to auditors and other external interested parties, as well as allow your organization to effectively preserve institutional knowledge that would otherwise stay "between the ears" of your personnel.

Step-by-Step Guide to Controlling Documents and Records

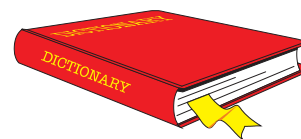
- Step 1) Assess EMS Document Control and Records Requirements
- Step 2) Review Current Document Control and Records Procedures
- Step 3) Integrate/Develop a System Procedure(s) for EMS Documents and Records
- Step 4) Check Your Documents and Records for EMS Conformance



Step 1) Assess EMS Document Control and Records Requirements

From the beginning of your EMS implementation, you will be creating EMS system procedures and other documents of your processes that you will use to manage your EMS and meet EMS requirements. System procedures provide the basis for your EMS, and although it takes some time to create EMS procedures at the early stages of implementation, don't fret! Once in place, your EMS documents simply need to be periodically reviewed and modified as necessary to keep them current.

Key Section Terms



Controlled Documents – Policies, procedures, manuals, and other documents part of your EMS that require control and are maintained. A controlled document is one that is reviewed for relevance to your activities on a regular schedule (typically annually) to ensure that the most current version is being used "in the field."

EMS Manual – An EMS document that describes your core system elements and how the different elements are interrelated—a "roadmap" for your EMS. Auditors find a manual very useful when verifying your EMS.

EMS Records – Reports, checklists, training, and other data generated that provides verification that your organization is following the EMS as intended.

System Procedure – An EMS (ISO 14001) required document that establishes purpose, scope, roles & responsibilities, the tasks to be completed, and where and how the associated records and documents are maintained.

Work Instruction – Documented work tasks at your facility that provide a detailed understanding of how specific work process(es) are accomplished. For example, an instruction or checklist on the proper disposal of recyclables (batteries, oils and greases, rags, etc.) in your auto maintenance shop.

EMS Required System Procedures

- ◆ Environmental Aspects
- ◆ Legal and Other Requirements
- ◆ Communication
- ◆ Document Control
- ◆ Operational Control (for Significant Aspects)
- ◆ Emergency Response
- ◆ Nonconformance and Corrective and Preventative Action
- ◆ Records

Other Commonly Produced EMS Procedures

- ◆ Objectives and Targets
- ◆ Environmental Management Programs
- ◆ Management Review

Other Typical EMS Documentation

- ◆ Maintenance Manuals
- ◆ Work Instructions
- ◆ Contractor Contact Information
- ◆ Contracts
- ◆ Permits and Related Guidance Material

Example EMS Records

- ◆ Training Records
- ◆ Delivery Logs/Bills
- ◆ Calibration Results
- ◆ Audit Reports and Checklists
- ◆ A List of Your Significant Aspects
- ◆ Management Review
- ◆ Meeting Notes

In addition to EMS system procedures, your organization will rely upon other documentation specific to operations and services. This documentation (e.g., work instructions, maintenance manuals, etc.) will be referenced in your EMS system procedures and your EMS Manual and is used to instruct employees on how to execute specific tasks. Examples include a work instruction for calibrating a pH meter and a manual for maintaining your air compressors.

EMS Records

EMS records are a direct result of your EMS procedures and activities and demonstrate that your organization is doing what the EMS documentation says you are doing.

Your EMS records should be traceable to and identified with an activity or operation, maintained for review, and disposed of if no longer applicable.

NOTE



In order to meet EMS requirements, maintain EMS records including EMS Awareness Training, EMS Audit Checklists, a Significant Aspect List, etc. However, do not forget about maintaining records related to your environmental aspects. For example, an air permit or a calibration record, if in areas that can lead to significant impacts, need to be tracked and maintained as EMS records and available for your EMS auditors review.

Step 2) Review Current Document Control and Records Procedures

Once you have taken a look at the EMS requirements for maintaining your EMS documents and records, review what procedures/systems you have in place to meet the requirements and those that will work best for your wastewater facility.

- ◆ Will a paper or electronic process, or maybe a combination of both, work best?
- ◆ Who has the responsibility and authority for creating and revising documents?
- ◆ Which documents should be controlled and how do you ensure that employees refer to the correct versions?
- ◆ Does your organization currently employ a standard document format and numbering system?
- ◆ Does the current system meet EMS requirements?

Step 3) Integrate/Develop a System Procedure(s) for EMS Documents and Records

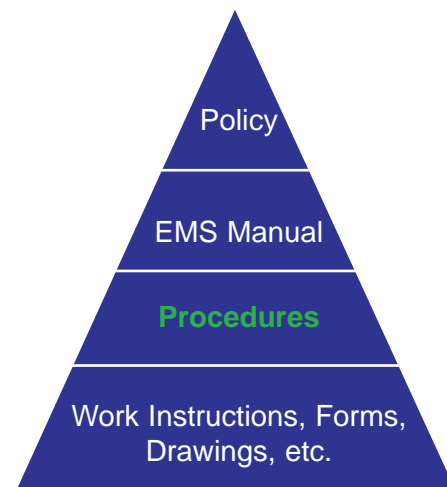
When you're satisfied that your process for managing and controlling your documents and records conforms to the EMS requirements, integrate that process with your current systems or document both processes in a system procedure.

Your team should develop an EMS system procedure for Document Control that ensures documents are:

- Easily located
- Periodically reviewed
- Readily available to personnel that need them
- Removed immediately if obsolete and replaced with current versions.


In addition, your procedure must clearly identify who is responsible for preparing documents, making necessary changes, and ensuring that documents are kept current. In other words, your organization needs a clearly defined system that designates authority for review and approval of documentation at various levels.

For samples of Document Control and Records procedure(s) from wastewater facilities, see Appendix A.



A **Document Control and Records Management system procedure(s)** is required for this element. A system procedure defines the purpose (why the procedure is needed), scope (to what operations/areas/staff the procedure applies), roles & responsibilities (who needs to complete the tasks), and the tasks that need to be completed for this element.

COACH'S CORNER



Many wastewater and public organizations write one procedure for controlling and maintaining both their EMS documents and records. Take a look at what you have in place and integrate or develop a method that works best for your facility.

Step 4) Check Your Documents and Records for EMS Conformance


About two or three months after you have documented and implemented your Document Control and Records Management procedure(s) check and see if the procedure(s) is working according to your plan. Here are some questions to investigate:

Document Control Check ✓

- 1) Are the document control and record management procedures being followed in practice?
- 2) How do you verify that current versions of documents/procedures are being used?
- 3) Are your documents legible and dated?
- 4) Do you have a process to remove obsolete documents?

Three Keys to Success

(from wastewater facilities):



1. Prepare a document control index that shows all of your EMS documents and the history of their revision. Include the index (or master list) in your EMS Manual.
2. If your wastewater organization uses computers extensively, consider using an electronic EMS document and records management system. This can help you manage and track changes. See the PEER Center (www.peercenter.net) for a survey of available EMS software.
3. Clearly explain the difference between EMS documents and records and how they are managed.

Three Lessons Learned

(from wastewater facilities):

1. Develop a document management system early in the EMS implementation so that EMS documentation will be immediately managed. Use your existing document format and control system if you have one.

2. Create a file folder on your Intranet that will house and control the most current versions (and change history) of your EMS documents instead of printing and distributing multiple revisions. Remind staff that **ONLY** the electronic version is the most current and the one that is to be followed.

3. Establish a records retention policy and stick to it. Consider what is required for your compliance obligations.



Three Things to Avoid

(from wastewater facilities):

1. Creating an EMS Manual that is too lengthy. Keep your manual to no more than 1/2 to 1 page per EMS system element. Remember, easy to understand and to the point equals easy to implement.

2. Not establishing clear procedures on who can generate and make changes to your EMS and environmental documents. Limiting access and control of documents will make tracking and updating them easier.

3. Collecting and maintaining EMS records that do not add value. If records have no value or are not specifically required, don't collect them. Start with compliance records and records that you use to track your objectives and targets and significant aspects.

Records Management Check ✓

- 1) Have you identified what EMS records need to be maintained?
- 2) Have you determined the period of time necessary for retaining your environmental records?
- 3) How are your records stored and retrieved (electronic vs. hard copy)?
- 4) Are you maintaining all the records as required for your EMS?
- 5) Are records easily accessible?

The EMS Manual (ISO 14001, 4.4.4)

It is recommended that you maintain a summary of your EMS that:

- ◆ Describes the basics of your system's 17 core elements (and how the elements relate to each other), and
- ◆ Provides where you can find related documentation.

An EMS Manual or "roadmap" summarizes how the pieces of your EMS fit together and can be a very useful tool. Think of it as your EMS's roadmap to all 17 EMS elements.

For a sample EMS Manual from a wastewater facility, see Appendix A.






COACH'S CORNER

An EMS Manual is a great tool for your internal and 3rd-party auditors to follow to determine what your system looks like and how all your elements fit and link together. The Manual will reference procedures, work instructions, records, etc. relevant to each EMS element and provides auditors (and your own staff) with a "snapshot" of your system.



NOTE

Under an ISO 14001-based EMS, maintaining "control" of your documents means that your EMS procedures, work instructions, manuals, and policies, etc. are managed to ensure that they are reviewed, current, dated, legible, and removed from circulation if they are out of date. For an example of what to look for to ensure that a document is controlled, take a look at the sample page at the end of this section. The circled areas demonstrate that the document is assigned, reviewed, and kept current.



Document Control and Records Management

(Cut out this section for handy reference)




The **Purpose** of this EMS element is to:

- Write or modify your document control procedures to ensure documents are managed and kept up to date.
- Write or modify your records management procedures to ensure that all records are tracked and maintained.

The **Results** of this EMS element are:

- A document control procedure (EMS Document) for assuring that EMS procedures, work instructions, manuals, and policies are available at locations where they apply; and that they are periodically reviewed, are current, accurate, complete, and effective.
- A records management system (EMS Document) for assuring that all records required to support your organization's EMS are identified, controlled and accessible.

Before you Begin this EMS element:

- Consider your organization's current document and records management control procedures and tools.
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ISO 14001 Requirements	Links to Other EMS Elements	Required Documents & Records	Optional Documents & Records
<p><i>Document Control</i></p> <p>The organization shall establish and maintain a procedure for controlling all documents required by this International Standard to ensure that</p> <ul style="list-style-type: none"> a) They can be located; b) They are periodically reviewed, revised as necessary and approved for adequacy by authorized personnel; c) The current versions of relevant documents are available at all locations where operations essential to the effective functioning of the environmental management system are performed; d) Obsolete documents are promptly removed from all points of issue and points of use, or otherwise assured against unintended use; and e) Any obsolete documents retained for legal and/or knowledge preservation purposes are suitably identified. <p>Documentation shall be legible, dated (with dates of revision) and readily identifiable, maintained in an orderly manner and retained for a specified period. Procedures and responsibilities shall be established and maintained concerning the creation and modification of the various types of document.</p>	<p>Demonstrate document control on EMS required and recommended procedures, work instructions, manuals, policies, etc.).</p>	<p>Document Control Procedure</p>	<p>Master List of Documents</p>

ISO 14001 Requirements	Links to Other EMS Elements	Required Documents & Records	Optional Documents & Records
<p><i>Records</i></p> <p>The organization shall establish and maintain procedures for the identification, maintenance and disposition of environmental records. These records shall include training records and the results of audits and reviews.</p> <p>Environmental records shall be legible, identifiable and traceable to the activity, product or service involved.</p> <p>Environmental records shall be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss. Their retention times shall be established and recorded. Records shall be maintained, as appropriate to the system and to the organization, to demonstrate conformance to the requirements of this International Standard.</p>	<p>A number of EMS elements will generate environmental records that need to be tracked and maintained, including:</p> <ol style="list-style-type: none"> 1) Training 2) Communication 3) Monitoring and Measuring 4) Nonconformance and Corrective and Preventative Actions 5) EMS Audits 	<p>Records Management Procedure</p>	<p>Master Records List</p>



Standard Operating Procedure - EMS-0100.002 Name: EMS Document Control Procedure	Corresponding Requirements: ISO Standard: 4.4.5 EMS Manual: 4.4.5 NBP Element: 12
Prepared By: Beth Eckert, Environmental/Administrative Manager	Revision #: 7 Revision Date: 5/12/03
Approved By: Beth Eckert, Environmental /Administrative Manager Signature:	Effective Date: 1/1/00 Page 1 of 1

Demonstrates EMS Document Control

EMS Document Control Standard Operating Procedure

- 1.0 Purpose
- 1.1 The following procedure covers the various requirements for control of existing documents and development of new documents.
- 2.0 Associated Equipment
- 2.1 None
- 3.0 Associated Reference Material
- 3.1 ISO 14001 Standard: ANSI/ISO 14001-1996 Environmental management systems - Specifications with guidance for use
- 3.2 National Biosolids Partnership - Elements of an Environmental Management System for Biosolids
- 3.3 EMS Document Control Checklist - EMS-0101.002A
- 3.4 City of Gastonia: Environmental Management System Manual - EMS-0100.000
- 3.5 Crowders Creek Operations Document Control Matrix: WCR-0101.000
- 3.6 Long Creek Operations Document Control Matrix: WLC-0101.000
- 3.7 Long Creek Laboratory Document Control Matrix: WLC-0101.100
- 3.8 Crowders Creek Laboratory Document Control Matrix: WCR-0101.000
- 3.9 Pretreatment Document Control Matrix: WPR-0101.000
- 3.10 Resource Recovery Farm/Biosolids Document Control Matrix: WRF-0101.000
- 3.11 Procedure template located in the EMS & Divisionwide directory of the read-only drive on the computer network. (Should be used as a guide in procedure development).

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