Environmental Management System Manual



The Texas A&M University System

Program Name: Environmental Management Office Name: Risk Management & Safety Doc. No.: ENVM-01-L1-S01-CH01-001

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Concurrence and Approval

Name and Position

This EMS Manual was developed for use by The Texas A&M University System EMS Members participating in the EMS, and has been reviewed and approved by the A&M System Environmental Manager.

Document Custodian:		
Gordon Evans, A&M Sys	stem Offices	
Approval:		
Gordon Swans In		
0	Gordon Evans (Environ Mgr, A&M System)	12-JAN-2018
Name and Position	Date	

Date

EMS Manual page 2 of 29

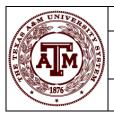
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Environmental Managament System	Program:	Environmental Management		
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001		
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Level 1	Date:	12-JAN-2018		
Level 1	Office:	Risk Management and Safety		

Change History

Revision	Interim	Effective	
Number	Change No.	Date	Description of Change
000	000	10/7/2009	Developed new EMS Manual.
000	001	06/21/2013	Modified document numbering, updated logo, and slightly revised format. Changed review and audit schedule from biennial/two years to triennial/three years. Paragraph 6. Required Reports was added to Section 16.
000	002	01/12/2018	Replaced logo with updated A&M System logo

EMS Manual page 3 of 29



The Texas A&M University System Environmental Management System Manual Doc. No.: ENVM-01-L1-S01-CH01-001 Rev No: 0.02 Date: 12-JAN-2018

Office:

Risk Management and Safety

Table of Contents

Concurrence	e and Approval	2
Change Hist	ory	3
Section 1.	Introduction to the EMS Manual and EMS Core Team	5
Section 2.	EMS Scope and Structure (ISO 14001 Section 4.1)	6
Section 3.	Approach to Developing the EMS (ISO 14001 Section 4.1)	7
Section 4.	Environmental Vision and Policy (ISO 14001 Section 4.2)	8
Section 5.	Leadership Roles and Responsibilities (ISO 14001 Section 4.4.1)	9
Section 6. 4.4.5 and 4.5	Documentation and Document and Record Control (ISO 14001 Section 4.4.4, 5.4)	10
Section 7.	Environmental Planning Process (ISO 14001 Section 4.3.1 and 4.3.3)	12
Section 8. Section 4.3.2	Emerging Issues, and Regulatory Review, and Other Requirements (ISO 14001 and 4.5.2)	14
Section 9. Section 4.4.0	Operational Alignment with Environmental Programs and Priorities (ISO 14001 6)	
Section 10.	Emergency Preparedness and Response (ISO 14001 Section 4.4.7)	17
Section 11.	Training, Awareness and Competence (ISO 14001 Section 4.4.2)	18
Section 12.	Communication and Public Relations (ISO 14001 Section 4.4.3)	19
Section 13.	Collecting, Trending and Reporting Data (ISO 14001 Section 4.5.1)	21
Section 14. 4.4.3)	Nonconformance and Corrective and Preventive Action (ISO 14001 Section 22	
Section 15. 4.5.5)	EMS Internal Audit and Environmental Compliance Audit (ISO 14001 Section 24	
Section 16.	Required Reports and Management Review (ISO 14001 Section 4.6)	26
Abbreviation	ns, Acronyms and Definitions	28

EMS Manual page 4 of 29

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The Texas A&M University System				
Environmental Management System	Program:	Environmental Management		
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001		
Manuar	Rev No:	0.02		
Level 1	Date:	12-JAN-2018		
Level 1	Office:	Risk Management and Safety		

Section 1. Introduction to the EMS Manual and EMS Core Team

This EMS Manual documents The Texas A&M University System (A&M System) environmental management system (EMS). The A&M System is committed to protect and enhance the environment and reduce adverse environmental impacts and, thus, has developed and implemented this EMS. This EMS Manual describes how The Texas A&M University System members (Members) conform to the environmental requirements of the A&M System. The EMS Manual was developed to adhere to the guidelines of the ISO14001:2004 standard; however, it is presently not the intention of The Texas A&M University System for the EMS to become certified to the standard. Instead the standard serves as a foundation for the development of the EMS.

The A&M System and Members manage their EMS using a process approach, the EMS performance cycle. The EMS performance cycle consists of four core functions that provide the framework for managing existing activities and any new activity that could potentially affect the environment: plan, act, verify and adjust, as outlined in section 4.3 of the A&M <u>System Environmental Policy</u>.

Each Member has an active, high-level Environmental Advisory Council, also known by other names such as the Environmental Management Committee. The Environmental Advisory Council consists of a cross section of representatives, including: an environmental point person, environmental liaisons, faculty, staff and students. Key EMS roles are outlined in section 4 of the A&M System Environmental Policy.

Environmental Advisory Councils are responsible for developing an EMS Core Team for each Member location. The EMS Core Team (Core Team) is responsible for driving the development, implementation, and maintenance of the Member EMS. Core Team members also serve as EMS advocates. Core Teams may vary in size. Core Teams meet at a regular frequency. Their EMS responsibilities are defined throughout this EMS Manual.

EMS Manual page 5 of 29

8 W UNIVERS	The Texas A&M University System			
1876	Environmental Managament System	Program:	Environmental Management	
	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001	
		Rev No:	0.02	
	Level 1	Date:	12-JAN-2018	
		Office:	Risk Management and Safety	

Section 2. EMS Scope and Structure (ISO 14001 Section 4.1)

The A&M System EMS was developed and structured to be consistent throughout all Member locations. This Manual serves as the top level roadmap for the EMS and applies to all Members.

The EMS is formally documented using a hierarchical structure. There are four document levels in the EMS: level 1, level 2, level 3, and level 4. Level 1 is the top level document that serves as a guide for all EMS Members, the EMS Manual. Level 2 documents are program documents specific to an EMS Member. Level 3 documents are work instruction documents specific to an EMS Member. Work instructions may also be referred to as procedures. Level 4 documents refers to the records that document required information called for by a programs or work instructions.

The EMS Manual is owned, reviewed and updated by the System Offices. Level 2, 3 and 4 documents are reviewed and updated by the Member location that owns the document. The System Offices has developed other documents to be used by the Members while developing and updating their EMS documentation. Most System Offices level 2 programs address operational and compliance related material.

EMS Manual page 6 of 29



The Texas A&M University System				
Environmental Management System	Environmental Management			
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001		
Manual	Rev No:	0.02		
Level 1	Date:	12-JAN-2018		
Level 1	Office:	Risk Management and Safety		

Section 3. Approach to Developing the EMS (ISO 14001 Section 4.1)

Members plan and develop effective environmental management systems that help the Member location: avoid, reduce or control adverse environmental impacts of its activities; achieve environmental compliance with applicable legal requirements; conform to other organizational environmental requirements to which the organization subscribes; and, assist in continual improvement of environmental performance.

As Members plan and develop their EMS, a thorough analysis of their activities is required. Almost all activities have some impact on the environment, which may occur at any or all stages of the activity. An activity can vary from something as simple as making a photo copy to generating electricity. Impacts to the environment may be local, regional or global, short or long term, and have varying levels of significance. Diagram 1 illustrates a model of an activity, its inputs, the process, and the outputs. The process consists of the steps and actions taking place while performing the activity. A clear understanding of activities, as well as their inputs and outputs will provide the Member with necessary information during the EMS planning process required to: develop effective controls against adverse environmental impacts; achieve environmental compliance; achieve conformance to other environmental requirements; and, to assist in continual improvement of environmental performance.

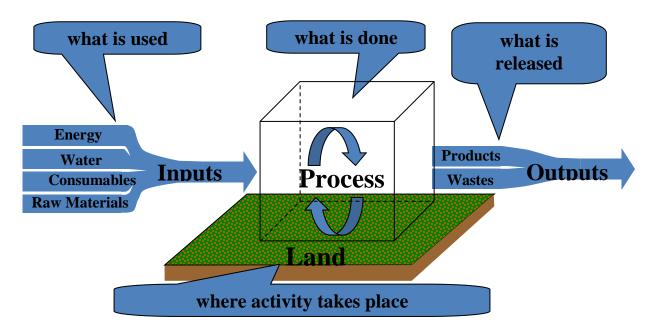


Diagram 1. Model of an Activity

EMS Manual page 7 of 29

AS W UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 4. Environmental Vision and Policy (ISO 14001 Section 4.2)

I. Scope

This EMS Manual section documents The Texas A&M University System's Vision and Policy requirements and provides guidance for Members in the development of their EMS vision and policy statements.

II. References

The development of this EMS Manual section referenced the ISO14001:2004 4.2.

III. Process

- 1. Individual Members develop policy statements that reflect their campus cultures and complement the system policy.
- 2. Member policy statements must:
 - a) Be appropriate to the nature, scale and environmental impacts of its interfaces, products or services:
 - b) Include a commitment to continual improvement and prevention of pollution;
 - c) Include a commitment to compliance with applicable EHS legislation and regulations, and with other requirements to which the organization subscribes, which relate to its environmental interfaces;
 - d) Provide a framework for setting and reviewing objectives and targets;
 - e) Be documented, implemented, maintained and communicated to all persons working for, or on the organization's behalf;
 - f) Be periodically reviewed to ensure that it remains relevant and appropriate to the organization.
- 3. In addition, the policy statement must reflect an emphasis on environmental stewardship and conservation and wise use of resources. Refer to the A&M <u>System Environmental Policy</u> as a reference.

EMS Manual page 8 of 29

AS W UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 5. Leadership Roles and Responsibilities (ISO 14001 Section 4.4.1)

I. Scope

This EMS Manual section documents The Texas A&M University System's Leadership Roles and Responsibilities program requirement and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.4.1.

III. Process

- 1. Each Core Team manages EMS tasks and responsibilities as required. The EMS Core Team makes a list of EMS related tasks based on the requirements of the EMS.
- 2. The EMS Core Team designates a person who is responsible for ensuring that EMS related tasks are completed and documented as required.
- 3. The Core Team clearly defines the expected role and responsibilities for each person assigned an EMS responsibility. The responsibilities will be communicated to the responsible person by several means, including verbal and written documentation.
- 4. Each Core Team ensures that there exists an EMS management representative appointed by top management for its Member location.
- 5. Each Core Team manages EMS objectives and targets by designating a responsible person and tracking targets for completion. The Core Team ensures that objectives and targets are clearly defined and have appropriate completion time frames.

EMS Manual page 9 of 29

SW UNIVERS	The Texas A&M	The Texas A&M University System		
	Envisormental Management System	Program:	Environmental Management	
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001	
		Rev No:	0.02	
	Level 1	Date:	12-JAN-2018	
		Office:	Risk Management and Safety	

Section 6. Documentation and Document and Record Control (ISO 14001 Section 4.4.4, 4.4.5 and 4.5.4)

I. Scope

This EMS Manual section documents The Texas A&M University System's Documentation and Document and Records Control program requirement, and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 sections 4.4.4, 4.4.5, and 4.5.4.

III. Process

- 1. All Members are requires to maintain a documented EMS based on the EMS Manual. Members are required to define and maintain consistent programs and processes to manage their EMS activities.
- 2. At a minimum the following list of documents and records must be controlled by Members:
 - a) environmental policy statement
 - b) objectives and targets
 - c) description of the scope of the environmental management system
 - d) list of EMS identified interfaces with their corresponding impacts
 - e) documents and records determined by the organization to be necessary to ensure the effective planning, operation, and control of processes that relate to its significant environmental interfaces
- 3. All controlled documents created for the EMS will be reviewed and approved by the appropriate person(s) assigned by the Core Team, the document approver.
- 4. The document approver is responsible for ensuring the document is:
 - a. accurate prior to issue
 - b. legible and readily identifiable
 - c. reviewed, updated and re-approved as necessary.
- 5. Once approved each document will receive a document number and be accessible through the Member's document control system. A level 2 document control program has been developed by the System Offices that describes the document numbering and revision method to be implemented by the Members.

EMS Manual page 10 of 29

8 W UNIVERS	The Texas A&M University System		
	Environmental Managament System	Program:	Environmental Management
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

- 6. Each controlled document will have the following information: document number, revision date, and a signature of the approval person.
- 7. Members ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the environmental management system are identified, dated, and that their distribution is controlled.
- 8. Any documents replaced with newer versions or are made obsolete, but which are kept for legal or other historical knowledge purposes will be clearly marked as 'OBSOLETE'.
- 9. All updates to a controlled document will be summarized in the revision history section of the document.
- 10. Records may be hard copy or electronic (preferred) and must be dated and complete. EMS records are maintained to document that the EMS is operating as specified and to allow for the review of the EMS's effectiveness.
- 11. Compliance records are maintained to document that environmental compliance is being demonstrated.
- 12. Records for actions taken for nonconformities, corrective action, and preventive action should be maintained.
- 13. Records are maintained so they are legible, identifiable and traceable to the EMS activity.
- 14. Records are to be stored and maintained in such a way that they are readily retrievable and protected.
- 15. Obsolete records are to be disposed of or made obsolete.

EMS Manual page 11 of 29

A UNIVERS	The Texas A&M University System		
	Environmental Management System	Program:	Environmental Management
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 7. Environmental Planning Process (ISO 14001 Section 4.3.1 and 4.3.3)

I. Scope

This EMS Manual section documents The Texas A&M University System's Environmental Planning program requirements and provides guidance for Members with the development of programs and procedures describing environmental interface identification, evaluation of interface significance, development of objectives and targets, and development of programs established for achieving its objectives and targets.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 sections 4.3.1 and 4.3.3.

III. Process

- 1. The EMS Core Team is responsible for collecting Member data to establish environmental interfaces. An interface is an element of a Member's activities or services that interacts with the environment. This interaction changes the environment either in an adverse or beneficial way, and wholly or partially results from the site's activity or services.
- 2. The EMS Core Team is responsible for developing the Member's list of interfaces. The list of interfaces is to be reviewed at a regular frequency to ensure its accuracy.
- 3. The list of interfaces should be revisited in conjunction with management of change reviews for changes or additions. The Member should not wait for the periodical review period to update the existing list of interfaces.
- 4. The EMS Core Team is responsible for reviewing and ranking interfaces and their impacts for significance at a regular frequency to ensure its accuracy. This exercise may be in the form of a workshop/brainstorming session. The EMS Core Team will come to agreement on the significance of each interface using a consistent method such as the Intelex software system or another method. If another method is used, it must be described and documented.
- 5. After ranking the list of interface impacts, the interfaces should be prioritized by significance and those impacts with the most significant environmental impact identified.
- 6. The EMS Core Team is responsible for setting goals, objectives and targets, for the reduction of the environmental impact(s) from the most significant interfaces. The number of

EMS Manual page 12 of 29

A WUNIVERS	The Texas A&M	The Texas A&M University System		
	Environmental Management System	Program:	Environmental Management	
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001	
		Rev No:	0.02	
	Level 1	Date:	12-JAN-2018	
		Office:	Risk Management and Safety	

objectives and targets to be defined is decided by the EMS Core Team after evaluation of the Member's interface list.

- 7. All significant interfaces will be reviewed when determining objectives and targets by the EMS Core Team. The following will be considered by the EMS Core Team when setting objectives and targets:
 - a. Urgency (Does the area identified as a significant interface need immediate improvement?)
 - b. Legal and other requirements
 - c. Significant environmental interfaces
 - d. Technological options
 - e. Financial, operational, and business requirements
 - f. Availability of human and financial resources
- 8. The EMS Core Team ensures the objectives and targets are consistent with the environmental policy statement and that they are reviewed and updated at a regular frequency.
- 9. Each objective and target must be:
 - a. quantified where applicable
 - b. set within a relevant time frame
 - c. relevant to each functional level
 - d. understood by relevant staff at each level
 - e. assigned to responsible persons at relevant functions and levels
- 10. When new tasks or activities are identified and the list of impacts is amended, the objectives and targets should be evaluated.
- 11. The EMS Core Team is responsible for establishing, implementing and maintaining environmental management programs (EMPs) developed for achieving objectives and targets. EMPs should include:
 - a. the means and time frame by which objectives and targets are to be achieved
 - b. assigned to responsible persons at relevant functions and levels
- 12. The EMS Core Team is responsible for reviewing the EMPs and ensuring that new operating procedures and changes in operating procedures have been incorporated, that obsolete items have been removed, and that interface rankings reflect current conditions.

EMS Manual page 13 of 29

AM
1876

The Texas A&M University System				
Environmental Management System	Program:	Environmental Management		
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001		
Manual	Rev No:	0.02		
Level 1	Date:	12-JAN-2018		
Level 1	Office:	Risk Management and Safety		

Section 8. Emerging Issues, and Regulatory Review, and Other Requirements (ISO 14001 Section 4.3.2 and 4.5.2)

I. Scope

This EMS Manual section documents The Texas A&M University System's Emerging Issues, and Regulatory Review, and Other Requirements program requirement and provides guidance for Members with the development of programs and procedures describing the process for identifying, maintaining, reviewing and updating the legal and other registry to ensure compliance with local, state and federal regulatory and other requirements. This process also describes a method for identifying emerging legislative and regulatory issues as related to the EMS.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.3.2.

III. Process

- 1. The EMS Core Team is responsible for designating a responsible person to research, identify, review, update and maintain the Member's Legal and Other Registry.
- 2. The Legal and Other Registry should be current and applicable to current Member activities. The responsible person updates the Legal and Other Registry as necessary.
- 3. The responsible person is to stay informed and evaluate applicable current, emerging and new legal and other requirements, and evaluate said requirements for specific Member operations.
- 4. Several methods may be utilized to stay informed of current or emerging regulations. The responsible person documents the method(s) used. These include but are not limited to:
 - a. communication with federal, state, and local regulatory agencies and authorities
 - b. continuing education and training
 - c. seminars, trade shows, and workshops where proposed legislative activities and trends are monitored
 - d. trade association and membership organization newsletters
 - e. consultation with contracted environmental laboratory and engineering professionals
 - f. internet websites and services
 - g. regulatory publications

EMS Manual page 14 of 29

AN UNIVERS	The Texas A&M University System		
	Environmental Management System	Program:	Environmental Management
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

- 5. The responsible person reviews current legal and other regulatory related questions in response to personnel or management of change activities.
- 6. The responsible person ensures appropriate personnel are aware of legal and other requirements and of any possible changes as they occur.
- 7. The responsible person is responsible for communicating compliance requirements identified on the Legal and Other Registry to appropriate personnel.
- 8. The Core Team should drive the development of written EMS programs as deemed necessary that address legal and other requirements.

EMS Manual page 15 of 29

A UNIVERS	The Texas A&M University System		
	Environmental Management System	Program:	Environmental Management
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 9. Operational Alignment with Environmental Programs and Priorities (ISO 14001 Section 4.4.6)

I. Scope

This EMS Manual section documents The Texas A&M University System's Operational Alignment with Environmental Programs and Priorities requirement and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.4.6.

III. Process

- 1. The EMS Core Team is responsible for ensuring that EMS programs and procedures being developed are consistent with the Member's environmental policy statement.
- 2. The EMS Core Team is responsible for establishing, implementing and maintaining environmental management programs (EMPs) for the EMS. Some EMPs are directly related to achieving objectives and targets, others may not be, for example a compliance based program that does not have an associated objective and target.
- 3. The EMS Core Team is responsible for communicating operating criteria to affected persons.
- 4. Operating programs and procedures are to be controlled documents available to affected persons.
- 5. The EMS Core Team ensures that operational programs and procedures are communicated across relevant levels, and that affected personnel are informed of any changes to operational programs and procedures that they are required to practice.
- 6. Contractors and vendors who supply the Member with products and materials are required to comply with EMS criteria, policies and operational programs and procedures.

EMS Manual page 16 of 29

N UNIVERS	The Texas A&M University System		
	Environmental Management System	Program:	Environmental Management
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 10. Emergency Preparedness and Response (ISO 14001 Section 4.4.7)

I. Scope

This EMS Manual section documents The Texas A&M University System's Emergency Preparedness and Response program requirement and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.4.7.

III. Process

- 1. The EMS Core Team is responsible for ensuring that any EMS requirements specified in the Member's Emergency Management Plan and the Business Continuity Plan are supported by the Core Team as necessary.
- 2. The EMS Core Team assists as necessary in testing emergency preparedness and response procedures on a regular frequency.

EMS Manual page 17 of 29

1876

The Texas A&M University System					
Environmental Management System	Environmental Management				
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001			
Manual	Rev No:	0.02			
Level 1	Date:	12-JAN-2018			
Level 1	Office:	Risk Management and Safety			

Section 11. Training, Awareness and Competence (ISO 14001 Section 4.4.2)

I. Scope

This EMS Manual section documents The Texas A&M University System's Training, Awareness and Competence program requirement, and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.4.2.

III. Process

- 1. The EMS Core Team designates a person who is responsible for ensuring that all EMS training requirements are managed as required by the EMS.
- 2. The responsible person ensures that training records are maintained, and reviews training records periodically to ensure employees have received required training.
- 3. The responsible person identifies training topics that assist in maintain and improving the Member's EMS. Training topics are reviewed periodically to determine if they are current and applicable. New training topics are added as needed.
- 4. The responsible person ensures that specific training that helps control environmental impacts is developed and administered.
- 5. The training will be administered by knowledgeable staff or contractor.
- 6. The responsible person identifies job specific training required for the employees.
- 7. The responsible person ensures that job specific training is made available to employees.
- 8. Members are responsible for ensuring that any person performing tasks for it or on its behalf, who has the potential to cause a significant environmental impact identified by the EMS, is competent on the basis of appropriate education, training or experience. Competency records must be kept on file for review.
- 9. Each Member integrates EMS training with the hiring process.
- 10. All new hires will be scheduled for training upon hiring or being assigned to areas within a department.

EMS Manual page 18 of 29

N UNIVERS	The Texas A&M University System		
	Environmental Management System	Program:	Environmental Management
1876	Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 12. Communication and Public Relations (ISO 14001 Section 4.4.3)

I. Scope

This EMS Manual section documents The Texas A&M University System's Communication and Public Relations program requirement and provides guidance for Members in the development of their specific programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 4.4.2 and 4.4.3 sections.

III. Process

- 1. The EMS Core Team assigns a person responsible for EMS internal and external communication matters.
- 2. The responsible person ensures that personnel among the various levels and functions of the organization receive internal EMS communication pertaining to, but not limited to, the following:
 - a. environmental policy statement
 - b. environmental objectives and targets
 - c. job related environmental aspects and impacts
 - d. job related programs and procedures
- 3. Different methods of communication may be employed to communicate EMS information, including but not limited to:
 - a. bulletin boards
 - b. email
 - c. intranet sites
 - d. department meetings
- 4. The EMS Core Team ensures that persons within the organization know who the person responsible for internal and external communication matters is, and that persons know they may communicate environmental questions, comments or concerns directly to said responsible person either by phone, email, written or other means as appropriate.
- 5. The EMS Core Team ensures that employees have a means of communicating anonymously.

EMS Manual page 19 of 29

N UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
	Manuar	Rev No:	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

- 6. All external communications to and from external sources must go through the responsible person.
- 7. The responsible person reviews all EMS communication before sending it to any external source.
- 8. External EMS related information is routed to the responsible person once it is received from any external source.
- 9. Personnel, particularly those who are most likely to receive EMS related information or inquiries from external sources, should know how to contact the responsible person.
- 10. External EMS related inquiries and responses shall be documented. These records will be reviewed at the Management Review Meeting.
- 11. When external EMS related inquiries are received the following information should be collected and maintained by the responsible person. This information is presented during the Management Review Meeting.
 - a. Member location
 - b. Date
 - c. Time
 - d. Visited by / Called by / Contacted by
 - e. Name of external entity
 - f. Name, address and phone number
 - g. Subject
 - h. Discussion
 - i. Person who handled the communication
 - j. Any actions stemming from inquiry (if so include response time)

EMS Manual page 20 of 29

AS W UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
	Manual	Rev No: 0.02	
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 13. Collecting, Trending and Reporting Data (ISO 14001 Section 4.5.1)

I. Scope

This EMS Manual section documents The Texas A&M University System's Collecting, Trending and Reporting Data requirement and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.5.1.

III. Process

- 1. The EMS Core Team assigns a responsible person to monitor and measure significant environmental interfaces.
- 2. The responsible person collects, trends, documents and reports information regarding EMS performance such:
 - a. as audit findings from program and procedure review; EMS records; and, effectiveness of operational controls
 - b. EMS nonconformities
 - c. regulatory non compliances
 - d. relevance of interface and significance master list
 - e. progress in meeting the environmental objectives and targets
- 3. The responsible person identifies monitoring and measurement equipment that is to be calibrated or verified.
- 4. The responsible person ensures that monitoring and measurement equipment is calibrated at established frequency and that associated records are maintained.
- 5. The responsible person is responsible for providing EMS information for the Management Review Meeting.

EMS Manual page 21 of 29

AN UNIVERS	The Texas A&M University System			
1876	Environmental Management System Manual	Program:	Environmental Management	
		Doc. No.:	ENVM-01-L1-S01-CH01-001	
	Manual	Rev No: 0.02	0.02	
	Level 1	Date:	12-JAN-2018	
		Office:	Risk Management and Safety	

Section 14. Nonconformance and Corrective and Preventive Action (ISO 14001 Section 4.4.3)

I. Scope

This EMS Manual section documents The Texas A&M University System's Nonconformance and Corrective and Preventive Action program requirement and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.5.3.

III. Process

- 1. The EMS Core Team assigns a person responsible for managing nonconformances and corrective and preventive actions.
- 2. The responsible person establishes, implements and maintains programs and procedures for dealing with actual and potential nonconformities and for managing corrective and preventive actions.
- 3. The responsible person ensures that personnel understand what a nonconformity is, and how to identify and report a nonconformity.
- 4. When nonconformities are identified, they are reviewed and investigated with the purpose of identifying the root cause.
- 5. The root cause investigation should evaluate the need for actions to mitigate the environmental impact(s) due to the nonconformance.
- 6. The responsible person ensures that appropriate persons are involved in the root cause investigation.
- 7. The investigation should determine the cause(s) and identify actions in order to avoid the recurrence of the nonconformance.
- 8. The responsible person ensures that there is a method in place to evaluate potential nonconformances and determine actions that may prevent potential nonconformances from occurring.

EMS Manual page 22 of 29

8 W UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual Level 1	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
		Date:	12-JAN-2018
		Office:	Risk Management and Safety

- 9. The responsible person ensures that corrective and preventive actions are reviewed for effectiveness. When actions are found to be not effective, alternate actions should be determined.
- 10. The responsible person assigns corrective and preventive actions to appropriate person for completion. The person assigned to complete the corrective or preventive action will report and provide updates on any obstacles while resolving the nonconformance.
- 11. The responsible person may close corrective and preventive actions after the action is verified using sufficient objective evidence to ensure the issue was resolved.
- 12. Corrective and preventive actions taken shall be appropriate to the magnitude of the problems and the environmental impacts encountered.
- 13. As part of managing change, the responsible person ensures that necessary changes due to nonconformances and corrective and preventive action to the environmental management system are documented and implemented.
- 14. The responsible person is responsible for tracking the following information for corrective and preventive actions stemming from nonconformities:
 - a. date nonconformance occurred
 - b. date nonconformance was reported
 - c. source of nonconformance and detailed description
 - d. type of nonconformance issue (compliance or EMS)
 - e. any regulatory rule reference
 - f. for internal audit nonconformances (findings) the assignment of major, minor, recommendation or observation should be noted
 - g. person(s) responsible for corrective and preventive actions
 - h. timeline and target dates for corrective and preventive action to be completed and verified for effectiveness
 - i. any resources or information necessary for successfully resolving nonconformance
- 15. The responsible person ensues that corrective ad preventive actions are recorded and communicated to top management during the Management Review Meeting.

EMS Manual page 23 of 29

AS W UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
	Manual	Rev No: 0.02	
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Section 15. EMS Internal Audit and Environmental Compliance Audit (ISO 14001 Section 4.5.5)

I. Scope

This EMS Manual section documents The Texas A&M University System's Internal EMS and Environmental Compliance Audit program requirements and provides guidance for Members with the development of programs and procedures.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 4.5.2 and 4.5.5 sections.

III. Process

- 1. Internal EMS audits are conducted to ensure that the EMS conforms to planned arrangements and that programs and procedures have been properly implemented and maintained.
- 2. Internal EMS audit results are required to be documented, and to be presented at the Management Review Meeting.
- 3. The EMS Core Team is responsible for assigning a responsible person to coordinate the internal EMS audit on a specified frequency. The Core Team should take into consideration several factors when setting an internal EMS audit frequency, including: any EMS concerns, significant interfaces; and, objectives and targets.
- 4. The internal EMS audit may be conducted as a single event or as multiple. The responsible person approves and modifies the audit schedule as needed.
- 5. The responsible person assigns the audit team and lead auditor. Auditors are to be qualified and will ensure objectivity and the impartiality in the audit process.
- 6. Auditors may be qualified by education, certification and/or experience. The responsible person maintains auditor qualification records, such as resumes or certifications. Auditors may be contract personnel.
- 7. Internal EMS auditors evaluate the conformance of EMS programs and procedures, including environmental records and results from the previous audits.

EMS Manual page 24 of 29

8 W UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual Level 1	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
		Date:	12-JAN-2018
		Office:	Risk Management and Safety

- 8. If a nonconformance is identified during the internal EMS audit, the auditor(s) obtain objective evidence to be included in the corrective action report.
- 9. The responsible person generates corrective actions for all internal EMS audit findings and manages actions to closure.
- 10. An environmental compliance audit is to be completed every three years to verify legal compliance.
- 11. An environmental compliance audit evaluates compliance to regulatory and any other requirements to which the Member may subscribe.
- 12. The environmental compliance audit results are required to be documented and presented at the Management Review Meeting.
- 13. The EMS Core Team is responsible for assigning a responsible person to coordinate the member environmental compliance audit.
- 14. Environmental compliance audits may be conducted as a single event or as multiple events. The responsible person approves and modifies the audit schedule as needed.
- 15. Environmental compliance auditors are to be qualified and ensure objectivity and the impartiality in the audit process. Auditors are to be qualified by education, certification and or experience. The responsible person maintains auditor qualification records.
- 16. If a noncompliance is identified during the environmental compliance audit, the auditor communicates findings to the Member Environmental Manager, who initiates discussions with appropriate personnel including the legal department.
- 17. All corrective action related to compliance findings will be handled directly by the Environmental Manager.

EMS Manual page 25 of 29

IS76
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The Texas A&M University System					
Environmental Management System	Environmental Management				
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001			
Manuar	Rev No:	0.02			
Level 1	Date:	12-JAN-2018			
Level I	Office:	Risk Management and Safety			

Section 16. Required Reports and Management Review (ISO 14001 Section 4.6)

I. Scope

This EMS Manual section documents The Texas A&M University System's Management Review requirements and provides guidance for Members with the development of programs and procedures, as well as guidance on scheduling internal and external reporting of EMS or environmental programs status.

II. References

The development of this EMS Manual section referenced the ISO 14001:2004 section 4.6.

III. Process

- 1. The EMS Core Team coordinates a triennial Management Review meeting to be attended by cross functional top managers at the Member location. The Management Review Meeting is an upper management review and assessment of the EMS, its purpose is to ensure the EMS continuing suitability, adequacy and effectiveness.
- 2. The EMS Core Team ensures that the information that is required to be presented and discussed at the meeting is prepared and made available to the persons who will be attending the Management Review Meetings.
- 3. The EMS Core Team assigns a person to takes notes during the Management Review Meeting. This person is responsible for documenting discussions and ensuring that decisions and actions related to the possible changes to the environmental policy statement, objectives, targets and other elements of the EMS are recorded. This person will also keep attendance records for the meeting.
- 4. The following information, at a minimum, is required to be presented and discussed at the Management Review Meeting.
 - a. results from EMS internal audits including the status of corrective actions
 - b. results from regulatory and other required audits, including the status of corrective actions
 - c. status of action items from previous management review
 - d. current EMS policy statement
 - e. current objectives and targets and their status
 - f. summary of any agency inspections
 - g. EMS monitoring and measuring data and data trends
 - h. List of significant interfaces

EMS Manual page 26 of 29

N UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual Level 1	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
		Rev No:	0.02
		Date:	12-JAN-2018
		Office:	Risk Management and Safety

- i. status of corrective and preventative actions
- j. concerns identified through internal communication program
- k. any logged external communication items
- l. planned changes, changing circumstances and/or recommendations for improvement
- 5. Outputs from the Management Review are to be consistent with the commitment to continual improvement of the EMS.
- 6. Required Reports The A&M System Offices will publish and maintain reporting requirements and schedule for documenting EMS status in the annual System Risk Management Report to the Chancellor and Board of Regents. In addition, members should develop regulation or permit-required reports (e.g., public water systems; hazardous waste; Tier 2) according to their respective schedules and due-dates. Finally, as a part of EMS maintenance as well as environmental program compliance, each member should develop a compliance and reporting calendar, including internal scheduled activities (e.g., monthly inspections and/or testing; reviews) as well as required external reports (e.g., Tier 2 report).

EMS Manual page 27 of 29



The Texas A&M University System					
Environmental Management System	Program:	Environmental Management			
Environmental Management System Manual	Doc. No.:	ENVM-01-L1-S01-CH01-001			
Manual	Rev No:	0.02			
Level 1	Date:	12-JAN-2018			
Level I	Office:	Risk Management and Safety			

Abbreviations, Acronyms and Definitions

Controlled Documents: Official EMS documents, which require a standard format and may require periodic review and revision. Following the proper procedures for controlled documents ensures that the most recent copy of a document is used.

EMS Documentation: Policies and procedures relating to the management of EMS related documents. These documents include, but are not limited to, the EMS Manual, EMS Policies and Procedures, and Operational Procedures.

Uncontrolled documents: Documents that have no control techniques applied to them, do not require approval and are not limited in their use. Uncontrolled documents or uncontrolled copies of controlled documents must not be used in performing EMS-related tasks.

Continual improvement: recurring process of enhancing the environmental management system in order to achieve improvements in overall environmental performance consistent with the organization's environmental policy statement.

Corrective action: action to eliminate the cause of a detected nonconformity.

Environment: surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.

Environmental interface: element of an organization's activities or products or services that can interact with the environment and cause an environmental impact.

Environmental impact: any change to the environment whether adverse or beneficial, wholly or partially resulting from an organization's environmental interface.

Environmental management system (EMS): part of an organization's management system used to develop and implement its environmental policy and manage its environmental interfaces.

Environmental objective: overall environmental goal, consistent with the environmental policy that an organization sets itself to achieve.

Environmental performance: measurable results of an organization's management of its environmental interfaces.

Environmental policy: overall intentions and direction of an organization related to its environmental performance as formally expressed by top management.

EMS Manual page 28 of 29

A UNIVERS	The Texas A&M University System		
1876	Environmental Management System Manual	Program:	Environmental Management
		Doc. No.:	ENVM-01-L1-S01-CH01-001
	Manual	Rev No: 0.02	0.02
	Level 1	Date:	12-JAN-2018
		Office:	Risk Management and Safety

Environmental target: detailed performance requirement, applicable to the organization or parts thereof, that arises from the environmental objectives and need to be set and met in order to achieve those objectives.

Internal audit: systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the environmental management system audit criteria set by the organization are fulfilled.

Nonconformity: non-fulfillment of a requirement.

Preventive action: action to eliminate the cause of a potential-nonconformity.

Procedure: specified way to carry out an activity or a process.

EMS Manual page 29 of 29