

## BEAC CPEA Management System Examination Study Guide

### Introduction and General Structure of the Examination

#### Introduction

This study guide is intended to assist an applicant in preparing for the BEAC Management System Auditor Examination. The study guide consists of six sections:

- 1. General Structure of the Examination:** Gives an overview of the examination structure, pass/fail criteria, and timing;
- 2. Examination Outline:** Lists the topics and subject areas covered by the examination;
- 3. Sample Questions and Answers:** Provides examples similar to actual questions on the examination. Answers are provided for the example multiple choice and short answer questions, but not for the example essay questions;
- 4. Sources of Standards:** Lists internet (if available) or other sources of the complete standards;
- 5. Reference List:** Lists other books and documents that BEAC believes are generally accepted sources, which may be useful to the examinee and from which some of the questions may have been derived; and
- 6. Digests of Standards:** Provides an outline of various standards used in developing the examination questions.

Note: The study guide does not address “test-taking” strategies or tactics. If it has been some time since you last sat for an examination, it might be useful to refresh your memory of the basics. (e.g., *Read questions carefully. Don’t agonize too long over a troublesome question; skip it and come back later if time permits. Don’t make random guesses. etc.*)

#### 1. General Structure of the Examination

The BEAC Management System Auditor Examination consists of three parts:

- Part I. Basic Principles of Auditing (*131 multiple choice questions; answer all*)
- Part II. Management System Requirements (*50 multiple choice and 10 short answer questions; answer all*)
- Part III. Understanding Management System Standards (*6 essay questions; choose and answer 3 of the 6*)

You will be allowed two hours per part, for a total of six hours to complete the examination. *You will be provided copies of the digest contained in Part 6 of this study guide. Do not bring copies of the digests with you as they will be distributed at the exam.*

Parts I, II, and III of the examination are equally weighted; each is worth 150 points. The “pass/fail” criterion for the CPEA - Management Systems examination is 70% of the available points.

## BEAC CPEA Management System Examination Study Guide

### 2. Examination Outline

#### Part I. Basic Principles of Auditing

The questions in this Part are quite generic; they will apply in essentially the same way to environmental compliance or health and safety compliance auditing as they do to management system auditing. The questions will be multiple-choice questions—choose the best answer from 4 choices. Subjects covered in Part I include the following:

##### **Ethics and Standards of Conduct for Auditors**

This category relates to the candidate's understanding, judgment and perception of how an auditor should behave and react to ethical situations that can occur in the audit process. This may include some questions concerning BEAC, IIA, and TAR standards for auditing. Test questions focus on topics such as:

- Conflict of Interest
- Independence of Auditors
- Due Professional Care
- Material Facts and Disclosure
- Auditor Proficiency

##### **Audit Program Design**

This category includes issues related to the design, structure and key planning elements of audit programs. Test questions focus on topics such as:

- Senior Management Commitment
- Scope of Audit Programs
- Audit Tools
- Site Selection/Frequency of Audits
- Quality Assurance Mechanisms
- Auditor Staffing/Training

##### **Audit Activities**

This category relates to activities associated with actually conducting a specific audit. Test questions focus on topics such as:

- Pre-Audit Activities (e.g., gathering background information; contacting the facility, coordinating the audit team)
- On-site Activities (e.g., opening meeting and tour; assessing and evaluating systems, programs and procedures; gathering information: interviewing, reviewing documents and records, sampling, making inspections; handling sensitive situations; evaluating audit evidence and writing findings; closing meeting)
- Post-audit Activities (e.g., report preparation; legal protection/confidentiality of results; corrective action planning and tracking)

## BEAC CPEA Management System Examination Study Guide

### 2. Examination Outline

#### Part II. Management System Requirements

There will be 50 multiple choice and 10 short answer questions in this Part; they will be generally more complex than those in Part I. Many questions will be multi-part, asking for True/False answers to **each** of the a, b, c, d, etc., alternative answers. Other questions will present relatively brief scenarios that may deserve more than one reading before you decide on the answer.

Some of the questions in this Part relate to management systems in general. However, many questions will be quite specific and require recognition or recall of the detailed requirements of particular standards. (This portion of the examination may be viewed as analogous to Part II of the BEAC Environmental or Health and Safety Compliance examinations, which focus on applicable regulatory requirements.)

The standards/guidelines that were considered in developing questions for Part II included:

Standard/Guideline	Issuing Organization
<b>Environmental Standards</b>	
ISO 14000 – Environmental Management Systems	International Organization for Standardization
National Environmental Performance Track	U.S. Environmental Protection Agency
Compliance-Focused Environmental Management System	U.S. Environmental Protection Agency
Improving Environmental Performance and Compliance – 10 Elements of Effective Environmental Management Systems	North American Commission on Environmental Cooperation
<b>Health &amp; Safety Standards</b>	
Voluntary Protection Program	U.S. Occupational Safety & Health Administration
Occupational Health and Safety Management System	American Industrial Hygiene Association
<b>Industry Standards</b>	
Responsible Care® Management Systems (RCMS and RC14000)	American Chemistry Council
Model Environmental, Health & Safety (EHS) Management System	American Petroleum Institute
<b>Other</b>	
Sustainability Reporting Guidelines	Global Reporting Initiative

It is not expected that examinees will be familiar the specific details of **all** of the standards/guidelines listed above. However, it will be virtually impossible to obtain a passing score unless you are *generally* familiar with **most** of the standards/guidelines, and *very* familiar with the details of **three or more** of the standards/guidelines representing **more than one of the categories** (environmental, health & safety, industry, other), in the table above.

## BEAC CPEA Management System Examination Study Guide

### 2. Examination Outline

#### Part III. Understanding Management Systems

There will be six (6) essay questions in this Part. You should read them all, then choose the **three (3)** that you wish to answer.

Successful completion of Part III requires that you draw both on your knowledge of auditing principles (which was tested in Part I) and on your familiarity with the requirements of management system standards (which was tested in Part II). However, while Parts I and II focused on specific knowledge of [mostly] factual information, the essay questions in Part III are designed to measure your ability to analyze, think critically, integrate information, and express yourself clearly and logically.

For Part III, as for Part II, it will be virtually impossible to obtain a passing score unless you are familiar with the details of **three or more** of the standards/guidelines, representing **more than one of the categories** (environmental, health & safety, industry, other).

## BEAC CPEA Management System Examination Study Guide

### 3. Sample Questions and Answers

#### 3a. Sample Questions

##### Part I: Basic Principles of Auditing

1. Which of the following is not a basic element common to most audit program manuals:
  - a. Objectives
  - b. Scope
  - c. Subjects to be audited
  - d. Names of qualified auditors
  
2. The staff assigned to conduct an audit should:
  - a. Be comprised of members with a master's level or equivalent educational background.
  - b. Demonstrate overall aptitude in a multitude of industries.
  - c. Have qualifications commensurate with the scope and complexities of the audit assigned.
  - d. Be comprised only of members with QEP, CIH or CSP professional certification.
  
3. An auditor finds evidence in the facility files that directly contradicts a statement made by the EHS coordinator. The EHS coordinator refuses to admit his error and comes to the audit team leader and states that the audit team is free to review files, but no more interviews will be granted to that auditor. The best first course of action for the audit team leader is this situation is:
  - a. Contact the audit program director for assistance in resolving the conflict.
  - b. Work with the EHS coordinator to try to resolve the conflict.
  - c. Replace the auditor.
  - d. End the audit.

##### Part II: Management System Requirements

1. Under ISO 19011 (which superceded ISO 14010) , the auditors of a management system must be objective, independent, and competent. Which of the following circumstances would least fit the ISO requirement for independence and objectivity where compliance with a Corporate Standard was being evaluated at a site?
  - a. The auditor wrote the Corporate Standard for the subject s/he is auditing.
  - b. The auditor developed the Corporate Guidelines on how to implement the Standard for the subject s/he is auditing.
  - c. The auditor works at a plant in a different division and has to implement the Corporate Standard at his/her own plant.
  - d. The auditor is an outside consultant who assisted in developing the Corporate Standard.

## BEAC CPEA Management System Examination Study Guide

### 3. Sample Questions and Answers

2. Participants in the National Environmental Performance Track (NEPT) are required to set objectives and targets. Which one of the items on the following list is not required by NEPT for consideration when setting objectives and targets?
  - a. Preventing non-compliance
  - b. Preventing pollution at its source
  - c. Views of interested parties
  - d. Improving environmental performance
  
3. Management leadership is one of the requirements for OSHA VPP Star-Level. In contrast to ISO 14001, which requires designation of a Management Representative, VPP management leadership applies to all managers at the site rather than just one. Other than the fact that these requirements both deal with management personnel, describe one way that the OSHA VPP Star-Level Management Leadership requirement is the same as the ISO 14001 Management Representative requirement.  

---

---

---

### Part III: Understanding Management Systems

1. The NA Commission for Environmental Cooperation standard requires that the organization: *“establish specific objectives and targets for...sharing information with external stakeholders on environmental performance against all EMS objectives and targets.”* In a few sentences each, describe the steps you would complete in order to verify conformance to this requirement and what you would expect to learn at each step.
  
2. Is the following assertion True or False? *“If a facility’s environmental management system has been well-designed, compliance with applicable external (e.g., regulatory) and internal requirements is guaranteed.”* State your answer and, in two to three paragraphs, explain your reasoning. Then, again in paragraph form, present any plausible counter-arguments to your position and your reasons for rejecting them.
  
3. Describe three basic similarities and three basic differences between the requirements of the EPA National Enforcement Investigations Center (NEIC) Compliance-Focused Environmental Management System (CFEMS) and the EPA Performance Track (NEPT) Environmental Management System.

## BEAC CPEA Management System Examination Study Guide

### 3. Sample Questions and Answers

#### 3b. Answers to Sample Questions

##### Part I: Basic Principles of Auditing

###### Question 1

- a. Incorrect. Objectives are common elements of audit program manuals.
- b. Incorrect. The scope is commonly included in an audit program manual.
- c. Incorrect. The subjects to be audited are commonly included.
- d. **Correct.** The names of individual qualified auditors are generally not included in the manual. (Criteria for qualifying auditors may be in the manual, however.)

###### Question 2.

- a. Incorrect. Aptitude in a multitude of industries is not a requirement.
- b. Incorrect. An advanced degree is not a requirement for conducting audits.
- c. **Correct.** The necessary qualifications will vary with the cope and complexities of the audit assignment.
- d. Incorrect. These professional certifications are not requirements for staff assigned to conduct an audit.

###### Question 3.

- a. Incorrect. Escalating the conflict to the audit program director should be considered only if facility-level resolution is not achieved.
- b. **Correct.** Resolving both the factual issue(s) and the apparent personality clash at the facility level is the best first step.
- c. Incorrect. The auditor rightly expects to be supported and assisted in resolving the conflict.
- d. Incorrect. Ending an audit would be a very last resort, and not warranted in this case..

##### Part II: Management System Requirements

###### Question 1

- a. Incorrect: Writing the standard means that the auditor is familiar with it and its interpretation; however, the auditor had no direct connection with the site's implementation and thus is reasonably independent.
- b. **Correct:** Because s/he developed the implementation guidance, the auditor is likely to have preconceived ideas on exactly what the site should have in place. S/he may not be open to alternative implementation approaches that respond to site-specific circumstances and still meet the intent of the Standard.
- c. Incorrect: The auditor had no direct connection with the implementing site and, as a person in a different division is not directly influenced by a favorable outcome.
- d. Incorrect: The auditor, as an outside consultant who suggested the standard is not completely independent, but is the most independent of all of the suggested parties since s/he was not involved in either writing or implementing the standard.

## BEAC CPEA Management System Examination Study Guide

### 3. Sample Questions and Answers

#### Question 2

- a. Incorrect: NEPT specifically requires that this item be considered when setting objectives and targets.
- b. Incorrect: NEPT specifically requires that this item be considered when setting objectives and targets.
- c. **Correct:** The “views of interested parties” must be taken into account under ISO 14001, but this is not required in NEPT.
- d. Incorrect: NEPT specifically requires that this item be considered when setting objectives and targets.

#### Question 3

Any of the following are acceptable answers (key words are underlined)

- a. Roles, responsibilities, and authorities must be clearly defined
- b. Roles, responsibilities, and authorities must be documented
- c. Roles, responsibilities, and authorities must be communicated
- d. Management must provide adequate resources for implementing the EMS/OHS-MS
- e. Both have responsibilities for management system implementation (to a greater or lesser extent)
- f. Both are accountable for meeting their respective responsibilities

### Part III: Understanding Management Systems

No answers are provided for the sample essay questions.

## BEAC CPEA Management System Examination Study Guide

### 4. Sources of Standards

#### *Environmental Standards*

1. *ISO 14001 – Environmental Management Systems – Specification with guidance for use*, International Organization for Standardization, 1996. (not available as web download; can be ordered from the American National Standards Institute [ANSI] Electronic Standards Store, document number JIS Q 14001:1996; )
2. *ISO 14004 – Environmental Management Systems – General guidelines on environmental management principles, systems and supporting techniques*, International Organization for Standardization, 1996. (not available as web download; can be ordered from the ANSI Electronic Standards Store, document number JIS Q 14004:1996)
3. *ISO 14010 – Guidelines for Environmental Auditing – General Principles*, International Organization for Standardization, 1996. (not available as web download; can be ordered from the ANSI Electronic Standards Store, document number JIS Q 14010:1996; superseded by ISO 19011:2002)
4. *ISO 14011 – Guidelines for Environmental Auditing – Audit Procedures - Auditing of environmental management systems*, International Organization for Standardization, 1996. (not available as web download; can be ordered from the ANSI Electronic Standards Store, document number JIS Q 14011:1996, superseded by ISO 19011:2002)
5. *ISO 14012 – Guidelines for Environmental Auditing – Qualification criteria for Environmental auditors*, International Organization for Standardization, 1998. (not available as web download; can be ordered from the ANSI Electronic Standards Store, document number JIS Q 14011:1996, superseded by ISO 19011:2002)
6. *ISO 19011 – Guidelines for Quality and/or Environmental Management Systems Auditing*, International Organization for Standardization, 1998. (not available as web download; can be ordered from the ANSI Electronic Standards Store, document number 19011:2002)
7. *National Environmental Performance Track – Program Guide*, EPA240-F-01-002, U.S. Environmental Protection Agency, Washington, D.C., October 2001.  
<http://www.epa.gov/performancetrack/program/index.htm>  
<http://www.epa.gov/performancetrack/programguide.pdf>
8. *Compliance-Focused Environmental Management System – Enforcement Agreement Guidance*, EPA-330/9-97-002R, U.S. Environmental Protection Agency, National Enforcement Investigations Center, Denver, CO, Revised December 2001.  
<http://www.epa.gov/compliance/resources/publications/incentives/ems/ems12elemr.pdf>
9. *Guidance Document: Improving Environmental Performance and Compliance – 10 Elements of Effective Environmental Management Systems*, Commission for Environmental Cooperation, Montreal, Quebec, June 2000.  
<http://www.epa.gov/Compliance/resources/policies/incentives/ems/cecguidedoc.pdf>

## BEAC CPEA Management System Examination Study Guide

### 4. Sources of Standards

#### **Health and Safety Standards**

1. *Voluntary Protection Program*, U.S. Occupational Safety & Health Administration, Washington, D.C., 53 FR 26339, July, 12, 1988, <http://www.osha.gov/dcsp/vpp/index.html>
2. *Revisions to the Voluntary Protection Programs to Provide Safe and Healthful Working Conditions*, 65 FR 45650-45663, July 24, 2000
3. *Safety and Health Program Management Guidelines: Issuance of Voluntary Guidelines*, Occupational Safety & Health Administration, U.S. Department of Labor, Federal Register 54:3904-3916, January 26, 1989.  
[http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=FEDERAL\\_REGISTER&p\\_id=12909&p\\_text\\_version=FALSE](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=12909&p_text_version=FALSE)
4. *Occupational Health and Safety Management System: An AIHA Guidance Document*, AIHA OHSMS 96/3/26, American Industrial Hygiene Association, Fairfax, Virginia, March 1996. (not available as web download; can be ordered from [www.aiha.org](http://www.aiha.org))

#### **Industry Standards**

1. *Responsible Care®*, American Chemistry Council, Arlington, Virginia, 1988, <http://www.americanchemistry.com> from this site, choose Responsible Care, then under “About Responsible Care” choose General Information, this will take you to a description of the elements of Responsible Care. <http://www.responsiblecaretoolkit.com/overview.asp> This url takes you to the toolkit, but, to get the RCMS 14001 technical specifications document requires a password.
2. *Model Environmental, Health & Safety (EHS) Management System – A Voluntary Tool for Companies Interested in Developing an EHS Management System or Enhancing an Existing System*, American Petroleum Institute, API Publication 9100A, Washington, D.C., October 1998. (not available on the web; can be obtained from API, 1220 L Street, N.W., Washington, DC. 20005)
3. *Guidance Document for Model EHS Management System*, American Petroleum Institute, API Publication 9100B, Washington, D.C., October 1998. (not available on the web; can be obtained from API, 1220 L Street, N.W., Washington, DC. 20005)

#### **Other**

*Sustainability Reporting Guidelines*, Global Reporting Initiative, 2002. (can be downloaded from [www.globalreporting.org](http://www.globalreporting.org))

## BEAC CPEA Management System Examination Study Guide

### 5. Reference List \*

- *A Common Body of Knowledge for the Practice of Internal Auditing* – Institute of Internal Auditors
- *Standards for the Performance of EHS Audits* – The Auditing Roundtable
- *Standard for the Design and Implementation of an Environmental, Health and Safety Audit Program*, The Auditing Roundtable
- *Standards for the Professional Practice of Internal Auditing* – Institute of Internal Auditors
- *Standards for the Professional Practice of Environmental, Health and Safety Auditing*, BEAC
- *Competency Framework for Environmental Health and Safety Auditors*, BEAC
- *Code of Ethics*, The Auditing Roundtable
- *Code of Ethics*, BEAC

*Corporate Social Responsibility: The WBCSD's journey*, Global Reporting Initiative, 2000 (can be downloaded from [www.globalreporting.org](http://www.globalreporting.org))

*The ISO 14001 Implementation Guide: Creating an Integrated Management System*, S. L. Jackson, John Wiley & Sons, Inc., 1997

*Moving Ahead with ISO 14000: Improving Environmental Management and Advancing Sustainable Development*, P.A. Marcus and J.T. Willig, eds., John Wiley & Sons, Inc., 1997

\* This reference list is given as suggestions only. BEAC does not endorse any particular reference.

## 6. Digests of Standards

The following pages provide an outline of various standards used in developing the examination questions. For standards that are in the public domain (e.g., EPA or OSHA standards), the digests may include verbatim [but truncated] quotations from the standard. For standards that are not publicly available and/or are copyrighted, an attempt has been made to paraphrase the intent of the standard.

Potential examinees are cautioned that they are expected to be **familiar with the details of three or more** of the standards, which implies that they will have read and studied each of those standards in its entirety. These digests do not meet the criterion of "*familiarity with the details*" of the standard but may suffice to meet the criterion of "*general familiarity*." They may also serve to refresh the memory with respect to standards that have been reviewed in detail.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.1. ISO 14001

##### **ENVIRONMENTAL MANAGEMENT SYSTEM ELEMENTS (1996)**

**Environmental Policy** - Top management must develop a formal statement of the organization's commitment to the environment. The statement must be communicated to employees, available to the public and implemented.

**Environmental Aspects** - Procedures must be in place to identify environmental aspects of products, activities and services. Aspects with significant impact on the environment must be included in Environmental Objectives.

**Legal And Other Requirements** - Procedures must be in place identify and insure access to relevant laws and regulations and other requirements to which the organization adheres.

**Objectives And Targets** - Each function and level of the organization shall establish environmental objectives and goals consistent with the Policy, environmental impacts, views of other parties and other factors.

**Environmental Management Program** - The organization shall establish a program to achieve objectives and targets. Designation of responsibility for implementation action and a time schedule are to be included.

**Structure and Responsibility** - Roles and responsibilities are to be defined, documented and communicated. Management must provide required resources.

**Training, Awareness and Competence** - Employees whose work may create significant environmental impact must be trained and competent in carrying out their environmental responsibilities.

**Communication** - Procedures must be maintained for internal and external communication on the EMS and environmental aspects.

**EMS Documentation** - The organization must maintain a description of the core elements of its EMS and their interaction.

**Document Control** - A procedure to ensure effective management and control of EMS documents must be in place.

**Operational Control** - Procedures must be in place to ensure that operations identified as having significant environmental impact are properly controlled.

**Emergency Preparedness and Response** - Procedures shall be in place to identify potential for and respond to emergency situations.

**Monitoring and Measurement** - Procedures to monitor key environmental aspects, performance against objectives and regulatory compliance shall be in place.

**Nonconformance and Corrective and Preventive Action** - Procedures defining responsibility for and action to be taken to address nonconformance and institute corrective action must be in place.

**Records** - A formal EMS record management program shall be in place.

**EMS Audit** - Procedures shall be in place for periodic EMS audits and reports to management on findings.

**Management Review** - Top management shall periodically review the EMS.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.2 EPA NATIONAL ENVIRONMENTAL PERFORMANCE TRACK

##### General

The National Environmental Performance Track (NEPT) program is designed to recognize and encourage top environmental performers—those who go beyond compliance with regulatory requirements to attain levels of environmental performance and management that benefit people, communities, and the environment. In addition to the EMS requirements below, NEPT requires: (A) demonstrated environmental performance and commitment to continued improvement; (B) public outreach and performance reporting; (C) record of sustained compliance with environmental requirements; (D) site visits to a sample of locations; (E) annual performance report.

##### Environmental Management System (EMS) Elements

**Policy** A written environmental policy, defined by top facility management, that includes commitments to: compliance with both legal requirements and voluntary commitments; (2) pollution prevention (based on a pollution prevention hierarchy where source reduction is the first choice); (3) continuous improvement in environmental performance, including areas not subject to regulations; and (4) sharing information about environmental performance and the operation of the EMS with the community.

**Planning** Identification of significant environmental aspects and legal requirements, including procedures for integrating anticipated changes to the facility's requirements or commitments in the EMS. Measurable objectives and targets to meet policy commitments and legal requirements, to reduce the facility's significant environmental impacts, and to meet the performance commitments made as part of the facility's participation in the program. In setting objectives and targets, the facility should consider the following criteria: preventing non-compliance, preventing pollution at its source, minimizing cross-media pollutant transfers, and improving environmental performance.

**Implementation and Operation** Established roles and responsibilities for meeting objectives and targets of the overall EMS and compliance with legal requirements, including a top management representative with authority and responsibility for the EMS. Defined procedures for: (1) achieving and maintaining compliance and meeting performance objectives; (2) communicating relevant information regarding the EMS, including the facility's environmental performance, through-out the organization; (3) providing appropriate incentives for personnel to meet the EMS requirements; and (4) document control, including where documents related to the EMS will be located and who will maintain them. General environmental training programs for all employees, and specific training for those whose jobs and responsibilities involve activities directly related to achieving objectives and targets and compliance with legal requirements. Documentation of the key EMS elements, including the environmental policy, significant environmental aspects, objectives and targets, a top management representative, compliance audit program, EMS audit program, and over-all EMS authority. Operation and maintenance programs for equipment and for other operations that are related to legal compliance and other significant environmental aspects. An emergency preparedness program.

**Checking and Corrective Action** An active program for assessing performance and preventing and detecting non-conformance with legal and other requirements of the EMS, including an established compliance audit program and an EMS audit program. An active program for prompt, corrective action of any non-conformance with legal requirements and other EMS requirements.

**Management Review** Documented management review of performance against the established objectives and targets and the effectiveness of the EMS in meeting policy commitments. A facility will retain EMS documentation and provide a summary of its performance, including performance against objectives and targets, and a summary of the results of compliance and EMS audits, in its Annual Performance Report.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.3 EPA NATIONAL ENFORCEMENT INVESTIGATIONS CENTER COMPLIANCE FOCUSED ENVIRONMENTAL MANAGEMENT SYSTEM – ENFORCEMENT AGREEMENT GUIDANCE (1997, REVISED 2001)

##### General

This guidance is intended to identify and describe the key elements of an EMS when incorporated into a settlement agreement following civil multimedia compliance investigations conducted by the EPA National Enforcement Investigations Center (NEIC).

##### Environmental Management System Manual Provisions

**Environmental Policy.** The policy must clearly communicate management commitment to achieving compliance with applicable environmental requirements and continual improvement in environmental performance including management's intent to provide adequate resources for the EMS.

**Organization, Personnel, and Oversight of EMS.** Identifies and defines specific duties, roles, responsibilities, and authorities of key environmental program personnel in implementing and sustaining the EMS. Includes ongoing means of communicating environmental issues and information to all organization personnel,

**Accountability and Responsibility.** Specifies accountability and environmental responsibilities of organization's managers, on-site service providers, and contractors for environmental protection practices. Describes potential consequences for departure from specified operating procedures, including liability for penalties imposed as a result of noncompliance.

**Environmental Requirements.** Describes process for identifying, interpreting, and effectively communicating environmental requirements to affected organization personnel, on-site service providers, and contractors, and then ensuring that facility activities conform to those requirements (i.e., ongoing compliance monitoring). Specifies procedures for regulatory "change management".

**Assessment, Prevention, and Control.** Identifies an ongoing process for assessing operations, for the purposes of preventing and controlling releases, ensuring environmental protection, and maintaining compliance with statutory and regulatory requirements. Describes a system for conducting and documenting routine, objective, self-inspections by department supervisors and trained staff.

**Environmental Incident and Noncompliance Investigations.** Describes standard procedures and requirements for internal and external reporting of potential violations and release incidents.

**Environmental Training, Awareness, and Competence.** Identifies specific education and training required for organization personnel, as well as process for documenting training provided.

**Environmental Planning and Organizational Decision-Making.** Describes how environmental planning will be integrated into organizational decision-making. Requires establishing written targets, objectives, and action plans.

**Maintenance of Records and Documentation.** Identifies the types of records developed in support of the EMS (including audits and reviews), who maintains them and where, and protocols for responding to inquiries and requests for release of information. Specifies the data management systems for any internal waste tracking, environmental data, and hazardous waste determinations. Specifies document control procedures.

**Pollution Prevention Program.** Describes an internal program for preventing, reducing, recycling, reusing, and minimizing waste and emissions, including procedures to encourage material substitutions.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

Also includes mechanisms for identifying candidate materials to be addressed by program and tracking progress.

#### **6.3 EPA NATIONAL ENFORCEMENT INVESTIGATIONS CENTER COMPLIANCE FOCUSED ENVIRONMENTAL MANAGEMENT SYSTEM – ENFORCEMENT AGREEMENT GUIDANCE (continued)**

**Continuing Program Evaluation and Improvement.** Describes program for periodic (at least annually) evaluation of the EMS, including incorporating the results of the assessment into program improvements, revisions to the manual, and communicating findings and action plans to affected employees, on-site service providers, and contractors. Describes a program for periodic audits (at least annually) of facility compliance with environmental requirements by an independent auditor(s).

**Public Involvement/Community Outreach.** Describes a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.4 NORTH AMERICAN COMMISSION FOR ENVIRONMENTAL COOPERATION **GUIDANCE DOCUMENT: IMPROVING ENVIRONMENTAL PERFORMANCE AND COMPLIANCE: 10 ELEMENTS OF EFFECTIVE ENVIRONMENTAL MANAGEMENT SYSTEMS (2000)**

##### General

This document sets out what the three North American governments (Canada, Mexico, and the United States) have agreed is important to address in implementing environmental management systems (EMSs). The governments have chosen to focus on two goals: compliance with environmental laws and environmental performance that moves beyond compliance in both regulated and non-regulated areas.

##### Elements for Improving Environmental Performance and Compliance

**Environmental Policy.** The EMS should be based upon a documented and clearly communicated policy. This policy should set out the organization's commitment towards a cleaner environment.

**Environmental Requirements and Voluntary Undertakings.** The EMS should provide a means to identify, explain and communicate all environmental requirements and voluntary undertakings to all employees, on-site service providers and contractors, whose work could affect the organization's ability to meet those requirements and undertakings.

**Objectives and Targets.** The organization should ensure that the EMS establishes specific objectives and targets for: (A) achieving and maintaining compliance with environmental requirements; (B) environmental performance demonstrating continuous improvement in regulated and non-regulated areas; (C) pollution prevention that emphasizes source reduction; (D) sharing information with external stakeholders on environmental performance against all EMS objectives and targets.

**Structure, Responsibility and Resources.** The organization should ensure that it is equipped with sufficient personnel and other resources to meet its objectives and targets. The EMS should spell out procedures and steps for achieving those objectives and targets.

**Operational Control.** The EMS should identify and provide for the planning and management of all the organization's operations and activities with a view to achieving the EMS objectives and targets.

**Corrective and Preventive Action and Emergency Procedures.** The organization, through its EMS, should establish and maintain documented procedures for preventing, detecting, investigating, promptly initiating and tracking corrective action, and reporting any occurrence that may affect the organization's ability to achieve the EMS objectives and targets.

**Training, Awareness and Competence.** The EMS should establish procedures to ensure that all personnel (including employees, on-site service providers, and contractors) whose job responsibilities affect the ability to achieve the EMS objectives and targets, have been trained and are capable of carrying out these responsibilities.

**Organizational Decision-making and Planning.** The EMS should describe how these 10 elements will be integrated into the organization's overall decision-making and planning.

**Document Control.** The EMS should establish procedures to ensure maintenance of appropriate documentation relating to its objectives and targets and should also ensure that those records will be adequate for subsequent evaluation and improvement of the operation of the EMS.

**Continuous Evaluation and Improvement.** The EMS should require periodic, documented and objective auditing of the organization's performance in achieving these objectives and targets and on how well the EMS assists the organization in achieving those objectives and targets.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.5 OSHA

#### **VOLUNTARY PROTECTION PROGRAMS (VPP) MANAGEMENT SYSTEM REQUIREMENTS FOR STAR WORKSITES (2003)**

##### **General.**

The Star Program recognizes the very best workplaces that are in compliance with OSHA regulations and that operate outstanding safety and health management systems for worker protection. To be eligible, both the 3-year Total Case Injury Rate and the 3-year Day Away/Restricted/Transfer rate must be below the most recently published BLS national average for the specific industry sector. (During the transition to OSHA 300 log system, rates  $\leq 110\%$  of the national average are acceptable.)

##### **Comprehensive Safety and Health Management System Requirements.**

**Management Leadership and Employee Involvement.** Management demonstrates its commitment in 14 specific ways, including: establishing, documenting, and communicating to employees and contractors clear goals that are attainable and measurable, objectives that are relevant to workplace hazards and trends of injury and illness, and policies and procedures that indicate how to accomplish the objectives and meet the goals. Employees must be involved in the safety and health management system in at least three meaningful, constructive ways in addition to their right to report a hazard. Avenues for employees to have input into safety and health decisions include participation in audits, accident/incident investigations, self-inspections, suggestion programs, planning, training, job hazard analyses, and appropriate safety and health committees and teams. Employees must be trained for the task(s) they will perform. Contract workers must be provided with safety and health protection equal in quality to that provided to employees. There must be a system to annually evaluate the safety and health management system.

**Worksite Analysis.** A hazard identification and analysis system must be implemented to systematically identify basic and unforeseen safety and health hazards, evaluate their risks, and prioritize and recommend methods to eliminate or control hazards to an acceptable level of risk. Through this system, management must gain a thorough knowledge of the safety and health hazards and employee risks. The required methods of hazard identification and analysis include: (A) baseline safety and industrial hygiene hazard analysis; (B) hazard analysis of routine jobs, tasks, and processes; (C) hazard analysis of significant changes; (D) pre-use analysis; (E) documentation and use of hazard analyses; (F) routine self-inspections; (G) hazard reporting system for employees; (H) industrial hygiene program; (I) investigation of accidents and near-misses; and (J) trend analysis.

**Hazard Prevention and Control.** Management must ensure the effective implementation of systems for hazard prevention and control and ensure that necessary resources are available, including: (A) certified professional resources; (B) hazard elimination and control methods; (C) hazard control programs; (D) occupational health care program; (E) preventive maintenance of equipment; (F) tracking of hazard correction; (G) disciplinary system; (H) emergency preparedness and response.

**Safety and Health Training.** Training must be provided so that managers, supervisors, non-supervisory employees, and contractors are knowledgeable of the hazards in the workplace, how to recognize hazardous conditions, signs and symptoms of workplace-related illnesses, and safe work procedures. Managers and supervisors must understand their safety and health responsibilities and how to carry them out effectively. New employee orientation/training must include, at a minimum, discussion of hazards at the site, protective measures, emergency evacuation, employee rights under the OSH Act, and VPP. Persons responsible for conducting hazard analysis, including self-inspections, accident/incident investigations, job hazard analysis, etc., must receive training to carry out these responsibilities. Training attendance must be documented. Training curricula must be up-to-date, specific to worksite operations, and understandable for all employees. Persons who have specific knowledge or expertise in the subject area must conduct training.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.6 OSHA

#### **SAFETY AND HEALTH PROGRAM MANAGEMENT GUIDELINES: ISSUANCE OF VOLUNTARY GUIDELINES** (1989)

##### **General.**

Employers are advised and encouraged to institute and maintain in their establishments a program which provides systematic policies, procedures, and practices that are adequate to recognize and protect their employees from occupational safety and health hazards. An effective program includes provisions for the systematic identification, evaluation, and prevention or control of general workplace hazards, specific job hazards, and potential hazards which may arise from foreseeable conditions. It will seek to prevent injuries and illnesses, whether or not compliance is at issue. The extent to which the program is described in writing is less important than how effective it is in practice.

##### **Four Major Elements.**

- Management commitment and employee involvement
- Worksite analysis
- Hazard prevention and controls
- Safety and health training

##### **Recommended Actions**

**Management Commitment and Employee Involvement.** State clearly a worksite policy on safe and healthful work and working conditions. Establish and communicate a clear goal for the safety and health program and objectives for meeting that goal. Provide visible top management involvement in implementing the program. Provide for employee involvement in the structure and operation of the program and in decisions that affect their safety and health. Assign and communicate responsibility for all aspects of the program. Provide adequate authority and resources to responsible parties. Hold managers, supervisors, and employees accountable for meeting their responsibilities, so that essential tasks will be performed. Review program operations at least annually.

**Worksite Analysis.** Conduct comprehensive baseline worksite surveys for safety and health and periodic comprehensive update surveys. Analyze planned and new facilities, processes, materials, and equipment. Perform routine job hazard analyses. Provide for regular site safety and health inspection. Provide a reliable system for employees, without fear of reprisal, to notify management personnel about conditions that appear hazardous and to receive timely and appropriate responses; and encourage employees to use the system. Provide for investigation of accidents and "near miss" incidents, so that their causes and means for their prevention are identified. Analyze injury and illness trends over time.

**Hazard Prevention and Control.** Establish procedures so that all current and potential hazards are corrected or controlled in a timely manner using: (A) engineering techniques where feasible and appropriate; (B) procedures for safe work which are understood and followed by all affected parties, as a result of training, positive reinforcement, correction of unsafe performance, and, if necessary, enforcement through a clearly communicated disciplinary system; (C) provision of personal protective equipment; and (D) administrative controls, such as reducing the duration of exposure.

**Safety and Health Training.** Ensure that all employees understand the hazards to which they may be exposed and how to prevent harm to themselves and others from exposure to these hazards, so that employees accept and follow established safety and health protections. Ensure that supervisors carry out their safety and health responsibilities effectively, ensure that they understand those responsibilities and the reasons for them. Ensure that managers understand their safety and health responsibilities, so that the managers will effectively carry out those responsibilities.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.7 AIHA

#### **OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM: AN AIHA GUIDANCE DOCUMENT** (1996)

##### General

The Management System is intended to prevent, reduce, or eliminate work-related fatalities, injuries and illnesses. It is applicable to any organization that wishes to maintain, improve, or implement a new occupational, health, and safety (OHS) management system.

##### Management System Requirements

**OHS Management Responsibility.** Senior management shall develop an OHS policy for the organization that is committed to: compliance with relevant standards, prevention of injuries and illnesses; meaningful employee involvement. This policy must be understood at all levels of the organization. Goals and objectives must be developed. Responsibility, authority, and relationships must be defined. A management representative must be appointed. The OHS management system must be reviewed periodically.

**OHS Management Systems.** The organization must maintain an OHS management system and manual. Procedures must be integrated into operational procedures and practices. There must be systematic consideration of control of potential health and safety hazards, controls, emergency procedures; medical surveillance; records; and performance measures.

**OHS Compliance and Conformance Review.** The organization must assess applicability of external requirements and maintain compliance. Goals and objectives must be established consistent with policy. Efforts must be made to measure progress towards objectives and targets.

**OHS Design Control.** Qualified personnel must be involved in process design and development. Documented procedures must be in place to control and verify workplace and equipment designs. Design changes and modifications must be identified and documented.

**OHS Document and Data Control.** There must be documented procedures to control OHS documents and data.

**Purchasing.** There must be systematic procedures controlling the review of health and safety aspects of purchased goods and services, including contractor services.

**OHS Communication Systems.** There must be an effective system to communicate OHS information such as: making appropriate OHS documents accessible; communicating exposure information to employees; encouraging employees to report signs and symptoms of exposure.

**OHS Hazard Identification and Traceability.** Documented procedures should exist for identifying OHS hazards.

**Process Control for OHS.** Plans to identify and control hazards from purchasing through use and disposal must be in place.

**OHS Inspection and Evaluation.** Procedures must be in place to verify compliance with organization OHS requirements. Inspections shall result in corrective actions to correct deficiencies. These shall prevent incoming materials or devices from use until they have been examined.

**Control of OHS Inspection, Measuring, and Test Equipment.** Documented procedures to calibrate and maintain OSH measuring equipment shall be maintained.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM: AN AIHA GUIDANCE DOCUMENT (*continued*)

**OHS Inspection and Evaluation Status.** There must be a method of monitoring the results of the inspections/evaluations that are necessary to maintain a safe work place. Data evaluation procedures should be explicit.

**Control of Nonconforming OHS Processes or Devices.** Any process or device that does not conform to OHS system specifications must be controlled until it can be brought into compliance. Affected employees must be notified of the nonconformance.

**OHS Corrective and Preventive Action.** Corrective and preventive actions must be defined in documented procedures. The organization should conduct investigations of work-related fatalities, injuries and illnesses and identify root causes in developing corrective actions to prevent recurrence of the incidents.

**Handling, Storage and Packaging of Hazardous Materials.** There must be documented procedures for handling, storage and packaging of hazardous materials. An inventory of these materials must be kept and they must be appropriately labeled.

**Control of OHS Records.** Document control and record retention procedures for identification, access, filing, disposal, etc. of OHS records must be in place and documented.

**Internal OHS Management System Audits.** Internal audits of the OHSMS must be done by persons independent of the audited activity/function. Results must be documented and corrective actions instituted and tracked.

**OHS Training.** The organization must do a training needs assessment to ensure that personnel are qualified for the tasks they perform. Initial and periodic re-training by qualified OHS personnel must be provided..

**Operations and Maintenance Services.** Outside contractors who provide operations and maintenance services should be included within the scope of the OHSMS. The organization must document procedures for ensuring that the contractor activities conform to the OHSMS requirements.

**Statistical Techniques.** Appropriate statistical techniques must be used in developing monitoring plans and in evaluating OHS data.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.8 AMERICAN CHEMISTRY COUNCIL RESPONSIBLE CARE<sup>®</sup> MANAGEMENT SYSTEM (RCMS) ELEMENTS (2003)

**Responsible Care<sup>®</sup>** - The American Chemistry Council's (ACC's) comprehensive environmental, health and safety (EH&S) performance improvement initiative designed to effectively manage operations, products and respond to stakeholder concerns. It is an obligation of ACC membership.

**Responsible Care<sup>®</sup> Guiding Principles** – The accepted precepts to which all ACC Member and Partner organizations must adhere and in part include: ethical leadership that benefits society, the economy and the environment; creating products and services that make life better for people around the world, both today and tomorrow; an enduring commitment to Responsible Care<sup>®</sup> in the management of chemicals worldwide; continuous progress toward the vision of no accidents, injuries or harm to the environment; and public reporting of global health, safety and environmental performance.

**Codes of Management Practices** - Responsible Care<sup>®</sup> implementation is accomplished through the RCMS, the origin of the initiative is grounded in 7 Codes of Management Practices: Security, Community Awareness & Emergency Response, Employee Health and Safety, Process Safety, Distribution, Pollution Prevention, and Product Stewardship.

**Responsible Care<sup>®</sup> Management System** – The means of implementing, managing and integrating Responsible Care<sup>®</sup> with overall organization activities structured around the Plan-Do-Check-Act model to drive performance and continuous improvement. Key components of the RCMS include; policy, planning and goal setting, definition of responsibilities, measurement, corrective action and continuous improvement.

**Policy and Leadership** - Senior management is responsible for setting and implementing a formal Responsible Care<sup>®</sup> policy establishing the direction and principles of action; overarching performance goals; and levels of responsibility within the organization against which all subsequent actions are judged. Leadership is the action exhibited to implement and enhance the value of the Responsible Care ethic.

**Planning** - An ongoing process addressing: (A) the identification and assessment of relevant regulations and industry standards, (B) the evaluation of product, process and distribution risks, (C) the identification and assessment of employee and community concerns about the organization's environmental, health and safety performance, (D) setting priorities and goals (objectives and targets) for performance improvement, and (E) identifying resource needs associated with these programs.

**Implementation, Operation and Accountability** – Actions taken to fulfill the documented, dynamic, continuous improvement processes incorporating the capabilities and mechanisms necessary to focus and align strategies, resources, activities and structures; to achieve and communicate policy commitments, objectives and targets, including the setting of goals, the preparing and assuring competence of employees, and documentation critical to execution, reporting and communication.

**Performance Measurement, Corrective and Preventive Action** – Organizations are to measure, monitor, evaluate and communicate actual performance against the organizations objectives and targets, including: performance indicators, performance reviews, accident and incident investigation, compliance audits, data records, and recommending and taking corrective actions to execute critical tasks.

**Management Review and Reporting** - At appropriate intervals, management will review the RCMS to ensure its continuing suitability. Reviews must be broad enough to address the Responsible Care dimensions of the organization's activities, products or services, including those aspects associated with reporting to stakeholders and senior management; reviewing of performance by senior management relative to the organization's goals; and changing goals, policies or priorities as needed.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.9 AMERICAN CHEMISTRY COUNCIL

#### RESPONSIBLE CARE<sup>®</sup> 14001 MANAGEMENT SYSTEM (RC14001) ELEMENTS (2003)

**Responsible Care<sup>®</sup> 14001** - A standard combining Responsible Care and ISO 14001, the internationally recognized technical specification for Environmental Management Systems.

**Policy** - A formal statement of the organization's commitment to the environment, the Guiding Principles of Responsible Care<sup>®</sup> and health and safety. The statement must be supported by demonstrations of personal commitment from senior management to Responsible Care<sup>®</sup> and foster openness in dealing with stakeholders, taking into account public and employee inputs. In addition, it must be implemented, communicated to employees and available to the public.

**Aspects** - Procedures must be in place to identify environmental, Responsible Care<sup>®</sup>, health and safety aspects of products, activities and services, in addition to focusing on transportation risk assessment systems and product risk information management systems. Aspects with significant impact on the environment, Responsible Care<sup>®</sup> and health and safety must be included in objectives.

**Legal And Other Requirements** - Procedures must be in place identify and insure access to relevant laws and regulations and Responsible Care<sup>®</sup> and other requirements to which the organization adheres.

**Objectives And Targets** - Each function and level of the organization shall establish objectives and goals consistent with the Policy, Environmental, Responsible Care<sup>®</sup> and Health and Safety impacts, views of other parties and other factors.

**Management Program** - The organization shall establish a program to achieve objectives and targets and assess risk for new, existing, and changes to existing products and processes. Designation of responsibility for implementation action and a time schedule are to be included.

**Structure and Responsibility** - Roles and responsibilities are to be defined, documented and communicated. Management must provide required resources.

**Training, Awareness and Competence** - Employees whose work may create significant Environmental, Responsible Care<sup>®</sup> and Health and Safety impacts must be trained and competent in carrying out their Environmental, Responsible Care<sup>®</sup> and Health and Safety responsibilities.

**Communication** - Procedures must be maintained for internal and external communication on the RC-14001 Management System and Environmental, Responsible Care<sup>®</sup> and Health and Safety aspects.

**Management System Documentation** - The organization must maintain a description of the core elements of its RC-14001 Management System and their interaction.

**Document Control** - A procedure to ensure effective management and control of RC-14001 Management System documents must be in place.

**Operational Control** - Procedures must be in place to ensure that operations identified as having significant Environmental, Responsible Care<sup>®</sup> and Health and Safety impacts are properly controlled.

**Emergency Preparedness and Response** - Procedures shall be in place to identify potential for and respond to emergency situations.

**Monitoring and Measurement** - Procedures to monitor key Environmental, Responsible Care<sup>®</sup> and Health and Safety aspects, performance against objectives and regulatory compliance shall be in place.

**Nonconformance and Corrective and Preventive Action** - Procedures defining responsibility for and action to be taken to address nonconformance and institute corrective action must be in place.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### AMERICAN CHEMISTRY COUNCIL RESPONSIBLE CARE<sup>®</sup> 14001 MANAGEMENT SYSTEM (RC14001) ELEMENTS *(continued)*

**Records** - A formal RC14001 Management System record management program shall be in place.

**Management System Audit** - Procedures shall be in place for periodic RC14001 Management System audits and reports to management on findings.

**Management Review** - Top management shall periodically review the RC14001 Management System.

## BEAC CPEA Management System Examination Study Guide

### 6. Digests of Standards

#### 6.10 AMERICAN PETROLEUM INSTITUTE MODEL ENVIRONMENTAL, HEALTH & SAFETY (EHS) MANAGEMENT SYSTEM (1998)

##### General

The MEHSMS is a voluntary system by which organizations can either develop an EMS or enhance an existing system. It is organized around a “plan, do, assess, adjust” framework.

##### Elements of the MEHMS

**Management Leadership, Responsibilities & Accountability.** Policies include commitment to compliance with applicable regulations, pollution prevention, and EHS performance improvement. Active, visible management involvement is required; employee involvement is encouraged. Responsibilities, authorities, and accountabilities established, communicated, and executed at all levels. Performance appraisal process for individuals and units considers EHS performance.

**Risk Assessment & Management.** There is a system to identify and mitigate risks early in the R&D and planning for new products/processes. Risk assessments are updated periodically and as part of management of change. Acquisition/disposal of assets involves EHS review.

**Compliance and Other Requirements.** Applicable requirements (laws, regulations, permits, codes, etc.) are known and compliance is assessed periodically. Emerging requirements are tracked and communicated.

**EHS Management, Planning & Programs.** EHS objectives and targets, including schedule for meeting them, are set and procedures to achieve targets are established. Procedures are reviewed and updated as necessary.

**Personnel, Training & Contractor Services.** Procedures are in place to ensure that both organization and contractor employees are qualified, trained, and monitored with respect to EHS performance.

**Documentation and Communications.** Documents necessary for sound operation, to communicate potential hazards of materials are accessible and kept current. Document and record control procedures are in place.

**Facilities Design & Construction.** EHS personnel are involved at all stages of the process. EHS reviews are done at various stages of the process, including pre-startup review.

**Operations, Maintenance, & Management of Change.** Operating, maintenance, and inspection procedures are in place, up to date, and available. Critical equipment is maintained at pre-set intervals. Emissions, wastes, and potential groundwater contamination are actively managed.

**Community Awareness & Emergency Response.** Community expectations and concerns are recognized and responded to. Plans are in place for responding to emergencies/crises and appropriate equipment and facilities are available.

**EHS performance Monitoring & Measurement.** Management periodically monitors key aspects of operations. Monitoring equipment is calibrated and maintained.

**Incident Investigation, Reporting & Analysis.** HSE compliance incidents and near misses are investigated, root causes identified and corrected. “Lessons learned” are communicated.

**EHS Management System Audit.** Trained auditors conduct periodic audits at pre-determined intervals based on history and risk.

**Management System Review & Adjustment.** Management conducts periodic reviews of the EHSMS.