

BEAC Responsible Care® Auditor Examination Study Guide

1. Introduction and General Structure of the Examination

Introduction

This study guide is intended to assist an applicant in preparing for the BEAC CPEA Responsible Care® Management System Examination. Note that the examination and the BEAC CPEA certification covers both the American Chemical Council Responsible Care® (RCMS) and the RC14001 Management Systems. There are also some examination questions relating to two other fairly widely-implemented management system requirements: the Voluntary Protection Program of the U.S. Occupational Safety & Health Administration (OSHA VPP) and ISO 14001–Environmental Management Systems/ISO 19011–Guidelines for Quality and/or Environmental Management Systems Auditing of the International Organization for Standardization. These are included because it is considered important that a Responsible Care® auditor understand both the similarities and differences among the various systems.

Study Guide The study guide consists of seven 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 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 overview of each of the standards.
- 7. Exam Resource Material:** Extractions from various sources related to Responsible Care® codes.

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.*)

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1. Introduction and General Structure of the Examination

1. General Structure of the Examination

The BEAC Responsible Care® Auditor Examination is closed book and consists of three parts:

- Part 1. Basic Principles of Auditing (*131 multiple choice questions; answer **all***)
- Part 2. Responsible Care® Management System Requirements (*60 multiple choice and 7 short answer questions; answer **all***)
- Part 3. Understanding Responsible Care® Management System Standards (*4 essay questions; choose and answer **3** of the 4*)

Parts 1, 2, and 3 of the examination are equally weighted and scored as a percentage of the total points available in each Part. The "pass/fail" criterion for the CPEA Responsible Care® Auditor examination is 70% of the point total, calculated as the average of the percentage scores for the three individual Parts.¹

You will be allowed two (2) hours to complete each Part of the examination.

¹ All of the BEAC CPEA examinations are modular. The Parts are scored individually and a passing score for each Part is 70% of the points in that Part. If you have passed Part I of any of the BEAC CPEA examinations, you are not required to take Part I when you sit for another BEAC CPEA examination (either a retake of the same examination or the examination for a different BEAC certification). If you choose not to retake Part I, the Part I score from your earlier examination will be averaged with the scores for Part II and Part III of the new examination to determine the overall score for the new examination. If you choose to retake Part I, BEAC will use the higher of the two Part I scores in calculating your average score.

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2. Examination Outline

Part 1. 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 Responsible Care® 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, Institute of Internal Auditors (IIA), and The Auditing Roundtable 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)

Part 2. Responsible Care® Management System Requirements

Although there will be 60 multiple choice and 7 short answer questions in this Part, they will be generally more complex than those in Part 1. Many 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 requirements of particular standards. (This portion of the examination may be viewed as analogous to Part 2 of the BEAC Environmental

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2. Examination Outline

Compliance or Health and Safety Compliance examinations, which focus on applicable regulatory requirements.)

The standards/guidelines that were considered in developing questions for Part 2 included:

Standard/Guideline	Issuing Organization
ISO 14001–Environmental Management Systems and 19011–Guidelines for Quality and/or Environmental Management Systems Auditing	International Organization for Standardization
Voluntary Protection Program	U.S. Occupational Safety & Health Administration
RCMS Responsible Care® Management Systems technical specification RC 101.01	American Chemistry Council
RC14001 Responsible Care® Management Systems technical specification RC 151.03	American Chemistry Council

It is expected that examinees will be quite familiar with details of **all** of the standards/guidelines listed above. Part II was designed with the intent that 10% would relate to ISO, 10% to VPP, and 80% to RCMS, RC14001, and ACC generally in a balanced fashion.

Part 3. Understanding Management Systems

There will be four (4) essay questions in this Part. You should read them all, and then choose the **three (3)** that you wish to answer.

Successful completion of Part 3 requires that you draw both on your knowledge of auditing principles (which was tested in Part 1) and on your familiarity with the requirements of specific management system standards (which was tested in Part 2). However, while Parts 1 and 2 focused on specific knowledge of [mostly] factual information, the essay questions in Part 3 are designed to measure your ability to analyze, think critically, integrate information, and express yourself clearly and logically. For each answer, 80% of the possible points will be allocated to content and 20% to clarity of expression.

For Part 3, as for Part 2, it will be virtually impossible to obtain a passing score unless you are familiar with the details of the standards.

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3. Sample Questions and Answers

3a. Sample Questions

Part 1: 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 CIH, CPEA, CSP, or QEP professional certification.

3. An auditor finds evidence in the facility files that directly contradicts a statement made by the Responsible Care® coordinator. The Responsible Care® 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 in this situation is:
 - a. Contact the audit program director for assistance in resolving the conflict.
 - b. Work with the Responsible Care® coordinator to try to resolve the conflict.
 - c. Replace the auditor.
 - d. End the audit.

Part 2: Management System Requirements

1. Under ISO 19011 (which superseded 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 where compliance with a Corporate Standard was being evaluated at a site?
 - a. The auditor wrote the Corporate Standard for a subject and is auditing the subject.
 - b. The auditor developed the Corporate generic plan on this subject and is auditing the subject.
 - 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.

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3. Sample Questions and Answers

2. Organizations implementing RC14001 are required to set objectives and targets. Which one of the items on the following list is not required by RC14001 for consideration when setting objectives and targets?
 - a. Best practice in the organization's industry category
 - b. The views of interested parties
 - c. Legal compliance
 - d. Continual improvement

3. Management leadership is one of the requirements for OSHA VPP Star-Level. In contrast to RC14001, 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 RC14001 Management Representative requirement.

Part 3: Understanding Management Systems

1. RC14001 requires an organization to *"establish, implement, and maintain a performance management system for employees that recognizes environmental, health, safety, security, and Responsible Care® excellence."* 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 Responsible Care® management system has been well-designed, compliance with applicable external (e.g., regulatory) 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 RCMS and the VPP with respect to management of health and safety issues.

4. Plant BH-2 is a large complex located 3 miles from the nearby town. During your interviews and investigations of their community outreach program, you find a lot of activity including:
 - A well-organized CAP (Community Advisory Panel) meets at least 6 times per year, has a paid facilitator with average community attendance of 85%.
 - The plant emergency response program is integrated into the LEPC for planning, drills, and communication.
 - Twice yearly surveys to measure and assess the community concerns, and
 - An annual public report held at a neutral location with light refreshments and door prizes.

3. Sample Questions and Answers

When you ask for their documented program, they hand you several files of correspondence, meeting minutes, and goals performance reports. They tell you that no other documentation exists and since plant communications staff have been participating for a long time and know their job well they don't see a need for taking the time to document the program.

Evaluate this situation for both RCMS and RC 14001 specifications. Describe differences and similarities. State clearly whether there is a non-conformance to each standard; if there is write a finding.

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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 scope 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:** By providing a generic plan or program, the auditor is less likely to be able to determine whether (a) the generic plan was appropriate and suitable or (b) if an alternative was suitable. This auditor would be more likely to concentrate on whether the generic plan that s/he proposed had been properly implemented.
- 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 assisted in development of the standard is not completely independent, but is the most independent of all of the suggested parties since s/he was not involved in implementing the standard at the corporate or facility level.

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3. Sample Questions and Answers

Question 2

- a. **Correct:** The organization should "consider its technological options," but is not required to aspire to best practice within its industry category.
- b. Incorrect: RC14001 specifically requires that this item be considered when setting objectives and targets.
- c. Incorrect: RC14001 specifically requires that this item be considered when setting objectives and targets.
- d. Incorrect: RC14001 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 3: Understanding Management Systems

No answers are provided for the sample essay questions.

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4. Sources of Standards

1. *Responsible Care® Management System (RCMS)® Technical Specification*, RC 101.02, American Chemistry Council, Arlington, Virginia, 2004, can be downloaded at no charge from http://www.rctoolkit.com/cert_procedures.asp.
2. *Responsible Care® Management System (RCMS)® –Implementation Guidance*, RC 102.00, American Chemistry Council, Arlington, Virginia, 2004, available for purchase at http://www.rctoolkit.com/cert_procedures.asp, product ID: 610467, Price: \$350.00
3. *RC14001 Technical Specification*, RC 151.03, American Chemistry Council, Arlington, Virginia, 2005, available for purchase at http://www.rctoolkit.com/cert_procedures.asp, product ID: 610474D, price: \$120.00.
4. *RC140001 Auditor Guidance (RC152.03)*, <http://www.rctoolkit.com>
5. *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) Note: The RC14001 standard contains the complete text of ISO 14001.
6. *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)
7. *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)
8. *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)
9. *Voluntary Protection Program*, U.S. Occupational Safety & Health Administration, Washington, D.C., 53 FR 26339, July, 12, 1988, can be downloaded at no charge from <http://www.osha.gov/oshprogs/vpp/>
10. *Performance and Program STANDARDS for the Professional Practice of Environmental, Health and Safety Auditing*, BEAC. Copy provided to applicants or can be purchased at www.beac.org.

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5. Reference List *

- *Competency Framework for Environmental Health and Safety Auditors*, BEAC
- *Code of Ethics*, BEAC

The above items can be downloaded at no charge from the BEAC website, www.beac.org

- *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
- *Code of Ethics*, The Auditing Roundtable

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

*Items in this reference list are given as suggestions only. BEAC does not endorse any particular reference.

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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., 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.

Copies of these digests will be available to you as part of your examination package.

AMERICAN CHEMISTRY COUNCIL RESPONSIBLE CARE[®] MANAGEMENT SYSTEM (RCMS) ELEMENTS

Responsible Care[®] - 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[®] 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[®] 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[®] 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[®] Management System – The means of implementing, managing and integrating Responsible Care[®] 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[®] 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.

AMERICAN CHEMISTRY COUNCIL
RESPONSIBLE CARE® 14001 MANAGEMENT SYSTEM (RC14001) ELEMENTS

Responsible Care® 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® and health and safety. The statement must be supported by demonstrations of personal commitment from senior management to Responsible Care® 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®, health, safety and security 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® 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® and other requirements to which the organization adheres.

Objectives, Targets, and Programmes – Each function and level of the organization shall establish objectives and goals consistent with the Policy, Environmental, Responsible Care® and Health and Safety impacts, views of other parties and other factors. 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.

Resources, Roles, Responsibility and Authority – Roles and responsibilities are to be defined, documented and communicated. Management must provide required resources.

Competence, Training, and Awareness – Employees whose work may create significant Environmental, Responsible Care® and Health and Safety impacts must be trained and competent in carrying out their Environmental, Responsible Care® 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® and Health and Safety aspects.

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

Control of Documents – 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® 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® and Health and Safety aspects, performance against objectives and regulatory compliance shall be in place.

Evaluation of Compliance – An organization must have procedure(s) to evaluate compliance with applicable requirements, both legal and other (voluntary). The results of the evaluations must be documented and records kept.

Nonconformity, Corrective Action and Preventive Action – Procedures defining responsibility for and action to be taken to address nonconformance and institute corrective action must be in place.

**AMERICAN CHEMISTRY COUNCIL
RESPONSIBLE CARE® 14001 MANAGEMENT SYSTEM (RC14001) ELEMENTS *(continued)***

Control of Records – A formal RC14001 Management System record management program shall be in place.

Internal 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.

ISO 14001

ENVIRONMENTAL MANAGEMENT SYSTEM ELEMENTS

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, Targets, and Programs – 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. 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.

Resources, Roles, Responsibility, and Authority – 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.

Evaluation of Compliance – An organization must have procedure(s) to evaluate compliance with applicable requirements, both legal and other (voluntary). The results of the evaluations must be documented and records kept.

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.

OSHA

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

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.)

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.

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7. Extracts from Responsible Care® Codes

The following pages are extracts from several Responsible Care® codes. These are simple extracts and have not been edited except for deletion of parts that do not pertain to the subject or questions asked in the exam. Note that, except for the Security Code, the Codes of Practice are non-mandatory, but provide useful guidance for an organization in establishing and maintaining its Responsible Care® system.

Copies of these extracts will be available to you as part of your examination package. You are free to use this material for reference but beware that it may cost you a loss of time on the exam. Manage your time wisely.

7. Extracts from Responsible Care® Codes

Community Awareness Emergency Response (CAER)

Relationship to Guiding Principles

This Code helps achieve several of the Responsible Care® Guiding Principles:

- *To seek and incorporate public input regarding our products and operations.*
- *To provide information on health or environmental risks and pursue protective measures for employees, the public and other key stakeholders.*
- *To practice Responsible Care® by encouraging and assisting others to adhere to these principles and practices.*

Selected Code Management Practices For Community Awareness:

An ongoing assessment of community questions and concerns about the facility.

An outreach program to educate responders, government officials, the media, other businesses and the community about the facility's emergency response program and risks to the community associated with the facility.

A continuing dialogue with local citizens to respond to questions and concerns about safety, health, and the environment, and to address other issues of interest to the community.

A policy of openness that provides convenient ways for interested persons to become familiar with the facility, its operations, and products, and its efforts to protect safety, health, and the environment.

A regular evaluation of the effectiveness of the ongoing community communications efforts.

Selected Code Management Practice for Emergency Response and Preparedness

A current, written facility emergency response plan which address, among other things, communications and the recovery needs of the community after an emergency.

7. Extracts from Responsible Care® Codes

Distribution / Carriers

Relationship to Guiding Principles

This code helps achieve several Responsible Care® Guiding Principles:

- *To work with customers, carriers, suppliers, distributors and contractors to foster the safe use, transport and disposal of chemicals;*
- *To operate our facilities in a manner that protects the environment and the health and safety of our employees and the public;*
- *To practice Responsible Care® by encouraging and assisting others to adhere to these principles and practices..*

Selected Code Management Practices For Distribution/Carriers

Regular evaluations of chemical distribution risks which consider the hazards of the material, the likelihood of accidents/incidents and the potential for human and environmental exposure from release of the material over the route of transport.

Implementation of chemical distribution risk reduction measures that are appropriate to the risk level.

Internal reporting and investigation of chemical distribution accidents/incidents, and implementation of preventive measures.

Regular reviews of company employee, carrier, distributor and contractor compliance with applicable regulations and company requirements.

A process for qualifying carriers of all modes and types (common, contract, private and customer controlled) that transport chemicals to and from company facilities that emphasizes carrier safety fitness and regulatory compliance, and includes regular reviews of their performance and compliance.

Feedback to carriers on their safety performance and suggestions for improvement.

A process for selecting distributors and other facilities that store or handle the company's chemicals in transit that emphasizes safety fitness and regulatory compliance and includes regular reviews of their performance and compliance.

Feedback to distributors and operators of other facilities that store or handle chemicals in transit on their safety performance and suggestions for improvement.

7. Extracts from Responsible Care® Codes

Product Stewardship

Relationship to Guiding Principles

This Code helps achieve several of the Responsible Care® Guiding Principles:

- *To make health, safety, the environment and resource conservation critical considerations for all new and existing products and processes*
- *To provide chemicals that can be manufactured, transported, used and disposed of safely*
- *To support education and research on the health safety and environmental effects of our products and processes*
- *To work with customers, carriers, suppliers, distributors and contractors to foster the safe use, transport and disposal of chemicals*
- *To provide information on health or environmental risks and pursue protective measures for employees, the public and other key stakeholders*

Selected Code Management Practices For Product Stewardship:

Establish and maintain information on health, safety, and environmental hazards and reasonably foreseeable exposures from new and existing products.

Characterize new and existing products with respect to their risk using information about health, safety, and environmental hazards and reasonably foreseeable exposures. Establish a system that initiates re-evaluation.

Establish a system to identify, document, and implement health, safety and environmental risk-management actions appropriate to the product risk.

Provide health, safety and environmental information to distributors. Commensurate with product risk, selects, works with and periodically reviews distributors to foster proper use, handling, recycling, disposal and transmittal of appropriate information to downstream users. When a company identifies improper practices involving a product, it will work with the distributor to improve those practices. If, in the company's independent judgment, improvement is not evident, then the company should take further measures – up to and including termination of the business relationship.

Provide health, safety and environmental information to direct product receivers. Commensurate with product risk, work with them to foster proper use, handling, recycling, disposal, and transmittal of appropriate information to downstream users. When a company identifies improper practices involving a product, it will work with the product receiver to improve those practices. If, in the company's independent judgment, improvement is not evident, then the company should take further measures – up to and including termination of product sale.

7. Extracts from Responsible Care® Codes

Security Code

Under the Security Code – which addresses facility, cyber and transportation security – companies are required to conduct comprehensive security vulnerability assessments of their facilities, implement necessary security enhancements, and obtain independent verification that such enhancements have been made. Implementation of the Code, according to a strict timeline, is mandatory for members of the American Chemistry Council and Responsible Care Partner companies. The Responsible Care Security Code has been widely recognized by local, state and federal governments as a model for other U.S. industries.

How the Responsible Care Security Code Works

- **Prioritization and Assessment of Sites.** Companies prioritize their facilities according to a four-tier system based on vulnerability. Security vulnerability assessments (SVAs) are then conducted at all facilities according to a schedule determined by the prioritization process.
- **Implementation of Security Measures.** After completing the SVA process, companies implement security enhancements designed to control or mitigate the identified risks.
 - **Protecting Information and Cyber-Security.** Protecting information and process control systems is a critical component of sound security management and an essential part of the Security Code.
 - **Training, Drills and Guidance.** Emergency preparedness remains a hallmark of the Responsible Care initiative. Training, drills and guidance for employees, contractors, service providers and others enhance security awareness and capabilities across the business of chemistry.
 - **Communications, Dialogue and Information Exchange.** Communications is an important part of the Security Code, which emphasizes cooperation among chemical producers, customers, suppliers, shippers and government agencies.
 - **Response to Security Threats and Incidents.** Companies evaluate, respond, report and communicate security threats as appropriate. Security incidents trigger a similar process with additional steps to conduct an investigation and take corrective action.
 - **Continuous Improvement.** The Security Code includes planning, establishing goals and objectives, monitoring progress and performance, analysis of trends, and development and implementation of corrective actions.
- **Independent Verification.** Facilities undergo independent audits by credible third-parties to assure that they have implemented necessary security enhancements.