

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS AND TRAINING

EPA-330/9-97-002R

**Compliance-Focused Environmental
Management System -
Enforcement Agreement Guidance**

August 1997
Revised January 2000
Revised December 2001
Revised August 2002

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REVISED

June 2005

INTRODUCTION

Since the late 1980s, civil multimedia compliance investigations conducted by the EPA National Enforcement Investigations Center (NEIC) have increasingly involved identifying causes of observed noncompliance. In a significant number of cases, the causes arise from inadequate environmental management systems (EMSs).¹ NEIC, in response, developed key elements for a compliance-focused EMS (CFEMS) model, which have been used as the basis for EMS requirements in several settlement agreements. The purpose of this guidance is to present those key elements and to show, through the attached example, how they can be incorporated into a settlement agreement.

To achieve maximum benefit from the CFEMS elements, the overall EMS in which they are incorporated should embody the “plan, do, check, and act” model for continuous improvement. Consequently, the compliance-focused EMS model described here is intended to supplement, not replace, EMS models developed by voluntary consensus standards bodies, such as the ISO 14001 EMS standard developed by the International Organization for Standardization.

A settlement agreement that requires an EMS should include a requirement that the organization conduct an initial review of its current EMS, followed by development of a comprehensive CFEMS that must be documented in a manual. The EMS manual must contain policies, procedures, and standards for the 12 key elements, at a minimum, and should also identify other, more detailed procedures and processes (e.g., inspections and self-monitoring) that may be located elsewhere at the facility. After the organization has had sufficient time to implement and refine the EMS (usually 2 to 3 years), the agreement should require at least one EMS audit by an independent third-party auditor, with results reported to both the organization and EPA. However, additional audits may be required, as individual circumstances dictate.

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The International Organization for Standardization (ISO) defines an EMS as "that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing, and maintaining [the organization's] environmental policy." The EMS provides the structure by which specific activities related to environmental protection and compliance can be effectively and efficiently carried out.

The intended result of this approach is twofold: first, to have the organization develop an EMS that will both improve its compliance with applicable environmental requirements and, second, to improve its environmental performance by achieving the organization's environmental targets and objectives.

The 12 key elements of a CFEMS addressed in this guide were compiled from a number of sources: EMS assessment protocols developed by Deloitte and Touche LLP of San Francisco for the Global Environmental Management Initiative (1992) and an industrial client (1994); ISO 14001 "Environmental management systems - Specification with guidance for use" (1996); National Sanitation Foundation EMS standards (NSF 110-1995); a November 14, 1986 EPA memorandum entitled "Final EPA Policy on the Inclusion of Environmental Auditing Provisions in Enforcement Settlements"; and the "due diligence" provisions of the current EPA "audit policy" (60 FR 66710 published December 22, 1996). Additional input was obtained through NEIC participation in several EPA EMS-related work groups including the Environmental Leadership Program (ELP) Pilot Project workgroup tasked with defining the EMS requirements for the full-scale program.

The current revision involved enhancing several of the elements. Refinement continues through settlement negotiations, and discussions with EPA staff, EMS consultants, and environmental personnel from several companies with medium-size and large facilities.

A general EMS provision for a settlement agreement and the 12 key elements are presented in the following sections. The prescriptive style has been retained to facilitate future use in settlement agreements.¹ Example consent decree language incorporating the EMS improvement approach described above is presented in Attachment A.

GENERAL EMS PROVISION

¹ *The 12 elements are closely inter-related components of an EMS for which subsystems and procedures must be developed and fully integrated if the entire program is to be effective. They are usually included in settlement agreements as a complete group; however, individual elements may need to be modified to reflect site-specific conditions and circumstances.*

A comprehensive compliance-focused Environmental Management System (EMS) shall be developed, implemented, and maintained by the organization. The EMS shall address, at a minimum, the 12 key elements listed below, and shall be described in an “Environmental Management System Manual.”

ENVIRONMENTAL MANAGEMENT SYSTEM MANUAL PROVISIONS

The EMS Manual shall be organized to clearly address the following key elements.

1. Environmental Policy

- a. This policy, upon which the EMS is based, must clearly communicate management commitment to achieving compliance with applicable federal, state, and local environmental statutes, regulations, enforceable agreements, and permits (hereafter, “environmental requirements”), minimizing risks to the environment from unplanned contaminant releases, and continual improvement in environmental performance. The policy should also state management’s intent to provide adequate personnel and other resources for the EMS.

2. Organization, Personnel, and Oversight of EMS

- a. Describes, organizationally, how the EMS is implemented and maintained.
- b. Includes organization charts that identify units, line management, and other individuals having environmental performance, risk reduction, and regulatory compliance responsibilities.
- c. Identifies and defines specific duties, roles, responsibilities, and authorities of key environmental program personnel in implementing and sustaining the EMS (e.g., could include position descriptions and performance standards for all environmental

department personnel, and excerpts from others having specific environmental program and regulatory compliance responsibilities).

- d. Includes ongoing means of communicating environmental issues and information to all organization personnel, on-site service providers, and contractors, and for receiving and addressing their concerns.

3. Accountability and Responsibility

- a. Specifies accountability and environmental responsibilities of organization's managers, on-site service providers, and contractors for environmental protection and risk reduction measures, assuring compliance, required reporting to regulatory agencies, and corrective actions implemented in their area(s) of responsibility.
- b. Describes incentive programs for managers and employees to perform in accordance with compliance policies, standards and procedures.
- c. Describes potential consequences for departure from specified operating procedures, including liability for civil/administrative penalties imposed as a result of noncompliance.

4. Environmental Requirements

- a. 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 prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporating those changes into the EMS (i.e., regulatory "change management").

- b. Establishes and describes processes to ensure communication with regulatory agencies regarding environmental requirements and regulatory compliance.

5. Assessment, Prevention, and Control

- a. Identifies an ongoing process for assessing operations, for the purposes of preventing and controlling or minimizing reasonably foreseeable releases, ensuring environmental protection, and maintaining compliance with statutory and regulatory requirements. This section shall describe monitoring and measurements, as appropriate, to ensure sustained compliance. It shall also include identifying operations and waste streams where equipment malfunctions and deterioration, operator errors or deliberate malfeasance, and discharges or emissions may be causing, or may lead to: (1) releases of hazardous waste or other pollutants to the environment, (2) a threat to human health or the environment, or (3) violations of environmental requirements.
- b. Describes process for identifying operations and activities where documented standard operating practices (SOPs) are needed to prevent potential violations or unplanned pollutant releases, and defines a uniform process for developing, approving and implementing the SOPs.
- c. Describes a system for conducting and documenting routine, objective, self-inspections by department supervisors and trained staff, especially at locations identified by the process described in a. above, to check for malfunctions, deterioration, worker adherence to SOPs, unusual situations, and unauthorized releases.
- d. Describes process for ensuring input of environmental requirements or concerns regarding potential operator errors or deliberate malfeasance in planning, design, and operation of ongoing, new, and/or changing buildings, processes, equipment, maintenance activities, and products (i.e., operational “change management”).

6. Environmental Incident and Noncompliance Investigations

- a. Describes standard procedures and requirements for internal and external reporting of potential violations and release incidents.
- b. Establishes procedures for investigation, and prompt and appropriate correction of potential violations. The investigation process includes root-cause analysis of identified problems to aid in developing the corrective actions.
- c. Describes a system for development, tracking, and effectiveness verification of corrective and preventative actions.
- d. Each of these procedures shall specify self-testing of such procedures, where practicable.

7. Environmental Training, Awareness, and Competence

- a. Identifies specific education and training required for organization personnel, as well as process for documenting training provided.
- b. Describes program to ensure that organization employees are aware of its environmental policies and procedures, environmental requirements, and their roles and responsibilities within the environmental management system.
- c. Describes program for ensuring that personnel responsible for meeting and maintaining compliance with environmental requirements are competent on the basis of appropriate education, training, and/or experience.
- d. Identifies training on how to recognize operations and waste streams where equipment malfunctions and deterioration, operator errors or deliberate malfeasance, and discharges or emissions may be causing, or may lead to: (1) releases of hazardous

waste or other pollutants to the environment, (2) a threat to human health or the environment, or (3) violations of environmental requirements.

8. Environmental Planning and Organizational Decision-Making

- a. Describes how environmental planning will be integrated into organizational decision-making, including plans and decisions on capital improvements, product and process design, training programs, and maintenance activities.
- b. Requires establishing written targets, objectives, and action plans by at least each operating organizational subunit with environmental responsibilities, as appropriate, including those for contractor operations conducted at the facility, and how specified actions will be tracked and progress reported. Targets and objectives must include actions which reduce the risk of noncompliance with environmental requirements and minimizing the potential for unplanned releases.

9. Maintenance of Records and Documentation

- a. Identifies the types of records developed in support of the EMS (including audits and reviews), who maintains them and where, appropriate security measures to prevent their unauthorized disclosure, and protocols for responding to inquiries and requests for release of information.
- b. Specifies the data management systems for any internal waste tracking, environmental data, and hazardous waste determinations.
- c. Specifies document control procedures.

10. Pollution Prevention Program

- a. Describes an internal program for preventing, reducing, recycling, reusing, and minimizing waste and emissions, including procedures to encourage material substitutions. Also includes mechanisms for identifying candidate materials to be addressed by program and tracking progress.

11. Continuing Program Evaluation and Improvement

- a. 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.
- b. Describes a program for periodic audits (at least annually) of facility compliance with environmental requirements by an independent auditor(s). Audit results are reported to upper management and potential violations are addressed through the process described in element 6 above.

12. Public Involvement/Community Outreach

- a. Describes a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

ATTACHMENT A

EXAMPLE CONSENT DECREE LANGUAGE
FOR EMS IMPROVEMENTS

REVIEWED
June 2005

REVISED

June 2005

Attachment A

EXAMPLE CONSENT DECREE LANGUAGE FOR EMS IMPROVEMENTS

I. **Definitions** *[includes only those definitions that are specifically relevant to the EMS Improvement provisions]*

a) “Action Plan” shall mean a comprehensive plan for bringing the Facility, as defined below, into full conformance with the EMS provisions specified in Paragraph 4 of this Consent Decree and fully addressing all Audit Findings identified in the Audit Report.

b) “Audit Finding” shall mean a written summary of all instances of non-conformance with the provisions of Paragraph 4 of this Consent Decree noted during the EMS audit, and all areas of concern identified during the course of the audit that, in the Consultant Auditor’s judgement, merits further review or evaluation for potential EMS, environmental, or regulatory impacts.

c) “Audit Report” shall mean a report setting forth the Audit Findings resulting from the audit of a Facility by the Consultant Auditor, which meets all of the requirements set forth in Paragraph 16 of this Consent Decree.

d) “Consultant Auditor” shall mean the independent third-party hired by the COMPANY and approved by EPA to conduct an EMS audit at the Facility, and who meets the requirements set forth in Paragraph 9 of the Consent Decree.

e) “Contractor” shall mean [contractor one name], any successor to [contractor one name] located on facility, [contractor two name], any successor to [contractor two name] located at the Facility and contractors providing the following services at the facility: [list of specific services such as asbestos removal; demolition; painting; waste handling, including vacuum truck operators; and construction].

f) “Corrective Measures” shall mean those measures or actions appropriate to bring a Facility into full conformance with the EMS provisions of Paragraph 4 of this Consent Decree.

g) “Environmental Requirements” shall mean all applicable federal, state, and local environmental statutes and regulations, including permits and enforceable agreements between the COMPANY and the respective environmental regulatory agency(ies).

h) “Facility” as used in the term “the Facility” or in the term “the COMPANY’s Facility” shall mean the [COMPANY name], facility located at [facility address, e.g., 600 South Kipling Road in Denver, Colorado].

i) “Initial Auditor(s)” shall mean individual(s) meeting the requirements of Paragraph A.1. below, who are selected and/or contracted to perform the Initial EMS Review and Evaluation.

A. Environmental Management System

1. Upon the effective date of this Decree, the COMPANY shall provide to EPA in writing: (a) the name, affiliation and address of the Initial Auditor(s) selected by the Defendant to conduct the Initial EMS Review and Evaluation; (b) evidence that each Initial Auditor(s) satisfies the qualification requirements of ISO 14012 (First edition, 1996-10-01), and that the team conducting the Initial EMS Review and Evaluation, in composite, has a working process knowledge of Facility or similar operations, and has a working knowledge of federal and state environmental requirements which apply to the Facility; and (c) the schedule, including milestones, for conducting the Initial EMS Review and Evaluation.
2. The COMPANY shall direct the Initial Auditor(s) identified pursuant to paragraph A.1 above to conduct and complete an Initial EMS Review and Evaluation (commonly referred to as a “gap” analysis) for both COMPANY and Contractor operations. The designated Initial Auditor(s) shall review and evaluate the current EMS, using the elements set forth in paragraph A.4. below, to identify where systems or subsystems have not been adequately developed or implemented. The results of the Initial EMS Review and Evaluation shall be documented in a report prepared by the Initial Auditor(s) and provided to the COMPANY. This report shall also be provided to EPA, upon request.
3. Based on the Initial EMS Review and Evaluation results and other information, the COMPANY shall develop a Comprehensive EMS for the Facility addressing, at a minimum, the twelve key elements presented in paragraphs A.4.a, below. The

purpose of developing the Comprehensive EMS is to assist the COMPANY in its efforts to comply with federal, state and local environmental requirements.

4. Within two hundred seventy (270) days of the effective date of this Decree, the COMPANY shall complete the preparation of an “Environmental Management System Manual” which shall describe and document the Comprehensive EMS and contain an EMS implementation schedule for each of the described systems and subsystems not already implemented. For each of the elements identified in Paragraph A.4.a, below, as appropriate, the manual shall describe the EMS, in detail, by explaining how the activity or program is or will be: (a) established as a formal system, subsystem or task, (b) integrated into ongoing department operations, and (c) continuously evaluated and improved.
 - a. The Environmental Management System Manual shall describe respective management systems, subsystems, and tasks for the following elements:

NOTE: The 12 key elements of the compliance-focused EMS (or alternate standard) are inserted here.

5. The COMPANY shall submit the entire Environmental Management System Manual to EPA for review and comment within thirty (30) days of its completion.
6. EPA will provide comments on the Environmental Management System Manual within ninety (90) days of EPA's receipt of such Manual unless EPA notifies the COMPANY in writing that additional time for review is required.
7. The COMPANY shall, within thirty (30) days of receipt of EPA's comments on the proposed EMS Manual, submit to EPA a supplement to the EMS Manual or a written response, as appropriate, addressing EPA's comments.

8. Upon the COMPANY's receipt of EPA's comments, The COMPANY shall immediately commence implementation of the EMS in accordance with the schedule contained in the EMS Manual. The COMPANY shall submit implementation status reports to EPA on a quarterly basis (i.e., reports due in January, April, July, and October), beginning not earlier than sixty (60) days from receipt of EPA's comments on the manual. The status reports shall be due on the 15th day of the reporting month and every quarter thereafter until implementation is complete. [Status report details may be added here.]

9. Within twenty (20) months of the date of entry of this Consent Decree, the COMPANY shall propose to EPA for approval, the selection of an independent Consultant Auditor who (a) was not involved in the Initial EMS Review and Evaluation, (b) meets the qualification requirements of ISO 14012 (First edition, 1996-10-01); and (c) has expertise and competence in the regulatory programs under federal and state environmental laws. The Consultant Auditor shall be paid by the COMPANY in an amount sufficient to fully carry out the provisions of this Consent Decree. The Consultant Auditor must not directly own any stock in the COMPANY or in any parent or subsidiary, and must have no other direct financial stake in the outcome of the EMS audit conducted pursuant to this Consent Decree. The Consultant Auditor must be capable of exercising the same independent judgment and discipline that a certified public accounting firm would be expected to exercise in auditing a publicly held corporation. If the COMPANY has any other contractual relationship with the Consultant Auditor, the COMPANY shall disclose to EPA such past or existing contractual relationships. EPA will notify the COMPANY in writing of its approval or disapproval as expeditiously as possible.

10. If EPA determines that the proposed Consultant Auditor does not meet the qualifications set forth in the previous paragraph, or that past or existing relationships with the Consultant Auditor would affect the Consultant Auditor's ability to exercise the independent judgment and discipline required to conduct the EMS Audit, such Consultant Auditor shall be disapproved and another Consultant

Auditor shall be proposed by the COMPANY within thirty (30) days of the COMPANY's receipt of EPA's determination.

11. THE COMPANY shall identify any and all site-specific safety and training requirements for the Consultant Auditor(s), and shall ensure that the requirements are met prior to conducting the audit.
12. THE COMPANY shall require the Consultant Auditor to prepare a draft EMS Audit Plan and provide it to THE COMPANY and EPA for review and comment. The draft EMS Audit Plan shall be submitted within two (2) months after the EPA's approval of the Consultant Auditor.
13. Within 30 days of receipt of EPA's comments the COMPANY shall direct the Consultant Auditor to develop a final audit plan that incorporates EPA's comments which shall be followed during conduct of the EMS Audit performed pursuant to this Consent Decree. The COMPANY shall direct the Consultant Auditor to concurrently submit the final EMS Audit Plan to EPA and the COMPANY upon completion. The audit shall be completed within 60 days of submission of the final EMS audit plan.
14. The COMPANY shall require the Consultant Auditor to conduct an EMS Audit to evaluate the adequacy of EMS implementation, from top management down, throughout each major organizational unit at the Facility, and to identify where further improvements should be made to the EMS. The EMS Audit shall be conducted in accordance with ISO 14011 (First edition, 1996-10-01), using ISO 14010 (First edition, 1996-10-01) as supplemental guidance. The Consultant Auditor shall assess conformance with the elements specified in Paragraph 4 above and with the EMS Manual, and shall determine the following:
 - a. Whether there is a defined system, subsystem, program, or planned task for the respective EMS element;

- b. To what extent the system, subsystem, program, or task has been implemented, and is being maintained
 - c. Adequacy of each Operation's internal self-assessment procedures for programs and tasks composing the EMS;
 - d. Whether the COMPANY is effectively communicating environmental requirements to affected parts of the organization, Contractors and on-site service providers;
 - e. Whether further improvements should be made to the EMS;
 - f. Whether there are observed deviations from the COMPANY's written requirements or procedures; and,
 - g. Whether continuous improvement is occurring
15. Designated representatives from EPA and other environmental regulatory agencies may participate in the EMS audit as observers. The COMPANY shall make timely notification to designated regulatory contacts regarding audit scheduling in order to make arrangements for observers to be present. COMPANY personnel may also participate in the on-site audits as an observer(s), but may not interfere with the independent judgement of the Consultant Auditor.
16. Audit Reports. The COMPANY shall direct the Consultant Auditor to develop and concurrently submit an Audit Report to the COMPANY and EPA for the EMS Audit as required by this Consent Decree, within sixty (60) days following the completion of the on-site portion of the audit. The Audit Report shall present the Audit Findings and shall, at a minimum, contain the following information:
- a. Audit scope, including the period of time covered by the audit;
 - b. The date(s) the on-site portion of the audit was conducted;
 - c. Identification of audit team members;
 - d. Identification of the COMPANY representatives and regulatory agency personnel observing the audit;
 - e. The distribution for the EMS Audit Report;

- f. A summary of the audit process, including any obstacles encountered;
 - g. Detailed Audit Findings, including the basis for each finding and each Area of Concern identified;
 - h. Identification of any Audit Findings corrected or Areas of Concern addressed during the audit, and a description of the corrective measures and when they were implemented; and,
 - i. Certification by the Consultant Auditor that the EMS Audit was conducted in accordance with the provisions of this Decree.
17. If the Consultant Auditor believes that additional time is needed to analyze available information or to gather additional information, the COMPANY may request that EPA grant the Consultant Auditor such additional time as needed to prepare and submit the Audit Report. EPA's decision whether to grant additional time shall be final and unreviewable.
18. Follow-Up Corrective Measures. Upon receiving the Audit Report, the COMPANY shall conduct a root cause analysis of the identified Audit Findings, as appropriate, and shall investigate all Areas of Concern. Within sixty (60) days of receiving the Audit Report for each Facility, the COMPANY shall develop and submit to EPA for review and comment, an Action Plan for expeditiously bringing the Facility into full conformance with the EMS provisions in Paragraph 4 of this Decree and the EMS Manual, and fully addressing all Areas of Concern. The Action Plan shall include the result of any root cause analysis, specific deliverables, responsibility assignments, and an implementation schedule.
19. EPA shall review the Action Plan and provide written comments within thirty (30) calendar days following receipt.
20. After making any necessary modifications to the EMS Action Plan based on EPA comments, if any, the COMPANY shall implement the Action Plan in accordance with the schedules set forth therein

21. Within thirty (30) days of after all items or activities in the Action Plan have been completed, the COMPANY shall submit a written Action Plan Completion Certification to EPA signed by the Facility manager (i.e., plant manager).