



# Environmental Management Review (EMR) National Report: Lessons Learned in Conducting EMRs at Federal Facilities





This document was prepared by EPA's Federal Facilities Enforcement Office (FFEO) in the Office of Enforcement and Compliance Assurance. The study was directed by James Edward and Sarah Hart. Technical research, writing, editing, and document design/layout support was provided by SAIC under EPA contract No. 68-C6-0027.

*For additional copies of this document, please contact:*

The Federal Facilities Enforcement Office (2261A)  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, DC 20460

Tel: (202) 564-2510

Fax: (202) 501-0069

*Copies of the document also can be obtained on-line at the FFEO Web site:*

<http://www.epa.gov/oeca/fedfac/fflex.html>

In addition, updates to the document will be available on-line.

#### *Acknowledgment*

The Federal Facilities Enforcement staff gratefully acknowledges the contributions of EPA's Program Offices and the Regions in reviewing and providing comments on this document.

#### *Limitations of This Document*

This document is written to serve as a basic reference. Due to the rapidly changing area of environmental law, the reader is advised to consult the current version of the relevant statute or regulation for the most accurate information. Where the actual text of a statute, regulation, executive order, policy, guidance or other document differs from the description of such documents contained in this document, the actual text of the statute, regulation, executive order, policy, guidance or other document should be followed. This document does not constitute rule making by the Agency and may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency may take action at variance with this document and its internal implementation procedures.

## TABLE OF CONTENTS

|   |      |
|---|------|
| Section 1 - Overview  | -3-  |
| 1.0 Introduction  | -3-  |
| 1.1 The Future of EMRs  | -4-  |
| 1.2 Purpose of this Report  | -5-  |
| 1.3 EMRs and Their Role in Compliance Assistance Activities   | -5-  |
| 1.4 EMRs and the CEMP   | -6-  |
| 1.5 EPA Position Statement on EMSs and ISO 14001  | -8-  |
| 1.6 Lessons learned   | -8-  |
| Section 2 - EMR Background  | -11- |
| 2.0 Policy Development  | -11- |
| 2.1 EMS Standards & Guidelines  | -12- |
| 2.2 Benefits of an EMR  | -13- |
| Section 3 - EMR Pilot Program Methodology Assessment and Lessons Learned  | -17- |
| 3.0 Goals of the EMR Pilot Program  | -17- |
| 3.1 Different Regional Approaches to EMRs   | -18- |
| 3.1.a EPA Phase 3 Audit Protocol Approach   | -21- |
| 3.1.b EPA Phase 3 Audit Protocol/CEMP approach  | -21- |
| 3.2 Lessons Learned   | -21- |
| 3.2.a The IVRP did not result in enforcement actions or penalties at any facility receiving an EMR during the pilot program | -21- |
| 3.2.b Difficult to Stay within the Selected EMR Scope   | -21- |
| 3.2.c Ample preparation time is critical  | -22- |
| 3.2.d Avoid surprises   | -22- |
| 3.2.e Conduct pre-site visit meetings with site representatives   | -23- |
| 3.2.f Post-EMR evaluations help build a better EMR program  | -23- |
| 3.2.g Inform interview personnel of the EMR process as soon as possible   | -23- |
| 3.2.h Neutral on-site escorts can facilitate candid discussions   | -23- |
| 3.2.i Mixed EMR team with management and technical expertise worked best  | -24- |
| 3.2.j Produce report in a timely manner   | -24- |
| 3.2.k Note that an EMR is a snapshot in time  | -24- |
| 3.3 Federal facility comments/feedback on the Pilot Program   | -24- |
| 3.4 How Lessons Learned Resulted in Changes in the EMR Policy   | -25- |
| Section 4 - Summary of Federal Facility EMR Findings  | -27- |
| 4.0 Overview of findings and recommendations in EMR reports   | -27- |
| 4.0.a Strengths of facility EMSs  | -27- |
| 4.0.b Main areas for improvement of the facility EMSs   | -28- |
| 4.1 Recommendations implemented by facilities   | -31- |
| Section 5 - Conclusion  | -33- |
| Appendices  | -35- |

APPENDIX A - EMR Case Studies ..... -37-  
APPENDIX B - Final EMR Policy ..... -47-  
APPENDIX C - Process steps for a sample EMR ..... -59-  
APPENDIX D - EMR Tools and Related Compliance Assistance Resources ..... -61-

**SECTION 1**

**OVERVIEW**

*This section provides background information on EMRs, explains the purpose of this report, and provides the primary EMR Pilot Program lessons learned.*

**1.0 Introduction**

Since its inception in 1970, the Environmental Protection Agency (EPA) has used a variety of methods to help regulated organizations understand and comply with environmental regulations. During the agency's formative years, the regulated community primarily sought explanations of the relatively new regulations, as organizations reacted to changes in the regulatory environment. However, during the past decade, it has become inefficient for organizations to simply react to regulatory changes and issues of noncompliance.

*An EMR is "a review of an individual facility's program and management systems to determine the extent to which a facility has developed and implemented specific environmental protection programs and plans which, if properly managed, should ensure compliance and progress towards environmental excellence."*

EPA's Final EMR Policy  
December 1998

In increasing numbers, public and private sector organizations changed their focus from reactive to proactive, choosing to prevent pollution at the source. With fewer resources available to them, facility managers used improved tools to address complex environmental issues and to help ensure their site's long-term environmental compliance. Many environmental managers chose to revise their management systems to proactively address environmental issues. In conjunction with this paradigm shift, EPA increased the types and numbers of compliance assistance activities offered. One new tool added to EPA's compliance assistance tool kit for federal facilities was the Environmental Management Review (EMR). This report is intended to give federal facility managers new insights into the EMR process, describe how a review can benefit managers, and provide information on the results of and lessons learned from EMRs conducted at federal facilities during EPA's EMR Pilot Program, which began in May 1996 and ended in September 1998.

As defined in EPA's *Final EMR Policy for Federal Facilities*, an EMR is "a review of an individual facility's program and management

## *Overview*

systems to determine the extent to which a facility has developed and implemented specific environmental protection programs and plans which, if properly managed, should ensure compliance and progress toward environmental excellence.” The majority of the EMRs conducted during the pilot program did not review a facility’s entire environmental management system (EMS); rather, the focus was generally on selected portions of the facility’s systems. The facility staff and the EPA Region determined how much of the system was to be reviewed during each EMR.

### **1.1 The Future of EMRs**

Given the increased interest in the pilot program, EMRs are slated to be an integral part of EPA’s compliance and technical assistance toolbox at federal facilities for years to come. Agencies appreciated the technical assistance, the ways in which EMRs heightened environmental awareness at facilities, and how the EMRs focused on addressing environmental issues via a systematic approach. EPA and the regulated community alike recognize that it is more efficient to identify and address environmental matters before they become compliance issues. While compliance inspections will continue, EPA will also emphasize working cooperatively with federal facilities, using management system-based approaches, to reduce the facilities’ environmental impacts in the most effective manner possible.

EMRs are not regulatory inspections. However, when a facility volunteered to participate in the EMR program, it also agreed to abide by the program’s Incidental Violations Response Policy (IVRP). This policy recognized that there may be circumstances

when an EMR incidentally uncovers violations either through document review or while on site. The IVRP described how violations would be treated if they were incidentally uncovered at a federal facility participating in the EMR program. Although some of the participants raised concerns about the policy, there were no enforcement actions taken or

#### **Agencies Receiving an EMR During the Pilot Program**

- Air Force
- Army (2)
- Army Corps of Engineers(2)
- Army National Guard
- Bureau of Indian Affairs
- Bureau of Prisons
- Coast Guard (2)
- Department of Agriculture
- Department of Energy
- Department of the Treasury
- Environmental Protection Agency (3)
- Federal Aviation Administration
- Federal Emergency Management Agency
- Fish & Wildlife Service (2)
- National Aeronautics & Space Administration
- National Park Service
- Navy (2)
- U.S. Postal Service (3)
- U.S. Mint
- Veteran’s Health Administration

finances assessed as a result of EMRs conducted during the pilot program.

EPA encourages agencies to participate in the EMR program. The primary audience for this report is the federal facility managers responsible for ensuring compliance with applicable environmental regulations. The first step in becoming a participant is to contact the appropriate EPA Regional Federal Facility Coordinator. Appendix D provides contact

# Overview

information for those coordinators.

## **1.2 Purpose of this Report**

To comply with Executive Order (EO) 12088 (Federal Compliance with Pollution Standards), EPA's national and regional federal facility programs supply technical assistance to federal facilities to ensure cost effective and timely compliance with environmental regulatory requirements. EPA initiated a pilot program in 1996 to determine if EMRs were a useful tool for EPA staff to add to their compliance assistance toolbox for federal facilities.

EPA Regions 1, 6, and 10 conducted EMRs for several years prior to the pilot program. Twenty-nine reviews were conducted at federal facilities in seven EPA regions during the nationwide two and a half year pilot program. Twenty different federal agencies participated. The pilot program enabled EPA personnel to apply the lessons learned from conducting EMRs and, in turn, modify the program to better suit the needs of future participants.

| <b>Examples of Compliance Assistance Activities</b> |  |
|---|--|
| <u>Activity</u>                                     | <u>Focus Areas</u>                                 |
| <i>EMR</i>  | - <i>Management Activities</i>                     |
| <i>PPOA</i>   | - <i>Processes &amp; Materials</i>                 |
| <i>Compliance Audit</i>                             | - <i>Compliance with Environmental Regulations</i> |

This report:

- Provides background information on EMRs;
- Describes the essence of the EMR Pilot Program;
- Highlights the lessons learned from the program; and
- Forecasts the future of EMRs and their role in EPA's compliance assistance program.

## **1.3 EMRs and Their Role in Compliance Assistance Activities**

EPA compliance assistance information and activities seek to ensure that the regulated community understands its regulatory obligations. An effective compliance assistance program helps protect public health and the environment by making it easier for regulated entities to comply with applicable regulations. EPA's compliance assistance tools often include compliance audits, pollution prevention opportunity assessments, and EMRs.

Compliance audit teams review a facility's activities and processes and determine if any of the activities or their by-products meet the applicable environmental regulatory requirements. The subsequent audit report identifies the compliance gaps.

During a pollution prevention opportunity assessment (PPOA), the technical assistance providers review a facility's processes, focusing on material inputs and wastes generated, and work with the facility personnel to develop a list of projects that reduce or eliminate waste at the source.

Alternatively, an EMR focuses on the ways in which a federal facility manages its activities

## *Overview*

to decrease or eliminate the site's environmental impact, and how environmental considerations are formally woven into its processes and activities. It focuses on the system of policies and procedures the facility consistently uses to address environmental issues and maintain compliance with environmental regulations. The team reviews documents and interviews facility personnel to better understand the existing environmental management system (EMS), analyzes the system to identify and describe its strengths and areas for improvement, and recommends ways to enhance the effectiveness of the system. While the areas of focus may differ, all three of these compliance assistance activities benefit the federal community by assisting facility environmental management efforts.

### ***1.4 EMRs and the Code of Environmental Management Principles***

The Code of Environmental Management Principles for Federal Agencies (CEMP), developed by EPA in response to Executive Order (EO) 12856 (Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements), is a collection of five broad principles (management commitment, compliance assurance and pollution prevention, enabling systems, performance and accountability, and measurement and improvement) and underlying performance objectives that federal agencies can use as a guide to move toward effective environmental management.

Environmental management systems can be based on and compared to different sets of standards or guidelines. As the list below

demonstrates, a variety of EMS standards or guidelines exist worldwide. Some of these are used to develop systems for federal facilities throughout the United States:

- Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities
- Code of Environmental Management Principles for Federal Agencies (CEMP)
- International Organization for Standardization (ISO) 14001
- International Chamber of Commerce's (ICC) Business Charter for Sustainable Development
- Chemical Manufacturer's Association's Responsible Care Guidelines
- Protocols for Conducting Environmental Management Assessments of DOE Organizations

EMR participants should take steps to ascertain which standard or guideline should be used during the system review. The facility needs its parent agency or personnel at headquarters to determine if one guideline would be better than the rest. Federal facilities should also keep in mind that 16 agencies endorsed the CEMP, which may make the CEMP the best choice for use in developing an EMS. Lastly, each facility should determine which one of the guidelines best matches the site's existing management system structure.

Each standard or guideline examines a system from a slightly different point of view and emphasizes different parts of a management system. Later in this report (Section 2.1), there is an outline on the approach for three of the



## *O*verview

primary standards. For example, the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities*<sup>1</sup> touches on but does not focus on a system's ability to address emergency management issues, however, the *Implementation Guide for the Code of Environmental Management Principles for Federal Agencies*<sup>2</sup> has an entire section devoted to emergency preparedness. Differences such as this do not make one standard superior to another; they simply provide examples of the various lenses through which one can view an EMS.

In early September and October 1996, the International Organization for Standardization published the first five standards in the ISO 14000 series of environmental management system standards. On September 1, 1996, ISO officially published ISO 14001, "Environmental Management Systems - Specification with Guidance for Use." The ISO 14001 standard specifies requirements for establishing an environmental policy, determining environmental aspects & impacts of products/activities/services, planning environmental objectives and measurable targets, implementing and operating programs to meet objectives & targets, establishing a program for checking and correcting environmental programs, and conducting management system reviews.

---

<sup>1</sup> This document (EPA Document No. 300-B-96-012 A&B) can be obtained by contacting the U.S. EPA Federal Facilities Enforcement Office at 202-564-2461.

<sup>2</sup> This document (EPA Document No. 315-B-97-001) can be obtained by contacting the U.S. EPA Federal Facilities Enforcement Office at 202-564-2461.

### Standards and Guidelines By Which U.S. EMSs Are Developed

- *Federal Facilities Phase 3 Protocol for Conducting Environmental Audits at Federal Facilities*
- *CEMP*
- *ISO 14001*
- *International Chamber of Commerce's (ICC) Business Charter for Sustainable Development*
- *Chemical Manufacturer's Association's Responsible Care Guidelines*
- *Protocols for Conducting Environmental Management Assessments of DOE*

Currently, federal facility EMRs are based on either the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities* or the *CEMP*. Thus, EMR teams used either one of the two standards or a combination of the two to guide them through the review process. Section 2.1 of this report provides details on the linkages between the two standards, and Section 3.1 describes the different methods and standards used by the EPA regions.

#### **1.5 EPA Position Statement on EMSs and ISO 14001**

On March 12, 1998, EPA published in the Federal Register (63 FR 12094) its *Position Statement on EMS and ISO 14001*. In that *Position Statement*, EPA encourages:

- The use of EMSs that focus on improved performance, compliance, source reduction, and system

## *Overview*

- performance;
- Organizations to maintain accountability for the performance outcomes of their EMSs through measurable objectives and targets;
- The development of EMSs through an open and inclusive process with relevant stakeholders;
- Dissemination of information on the actual performance of EMSs to the public and government; and
- The review of EMSs to achieve superior environmental performance.

The Position Statement quotes verbatim from the North American Commission on Environmental Cooperation (CEC) Council Resolution #97-05 which states that, “adoption of EMSs based on ISO 14001 may foster improved compliance and performance, but does not constitute or guarantee compliance or in any way prevent governments from taking enforcement action where appropriate.” At this time, EPA does not base any regulatory incentives solely on the use of EMSs, or certification to ISO 14001.

The Federal Register notice also solicits comment on the categories of information and data that will be gathered through ISO 14001 pilot projects, including environmental performance, compliance, pollution prevention, environmental conditions, costs/benefits to implementing facilities, and stakeholder participation and the effect that such participation has on the public credibility of EMS implementation.

### **1.6 Lessons Learned**

During the course of the pilot program, many lessons were learned about the EMR process

itself, and common strengths and weaknesses of environmental management systems at federal facilities. The information below highlights what is explained in greater detail throughout the rest of this report.

### **EMR Process Lessons Learned**

- The IVRP did not result in enforcement actions or penalties at any facility receiving an EMR during the pilot program,
- It is difficult to stay within the selected EMR scope,
- Ample preparation time is critical,
- Avoid surprises,
- Conduct pre-site visit meetings with site representatives,
- Post-EMR evaluations help build a better EMR program,
- Inform personnel to be interviewed of the EMR process as soon as possible,
- Neutral on-site escorts can facilitate candid discussions,
- Combine management and technical expertise in an EMR team for best results,
- Produce reports in a timely manner, and
- Note that an EMR is a snapshot in time.

### **Common EMS strengths among federal facilities**

- Personnel acknowledge their environmental responsibilities and are committed to protecting the environment;
- Field staff routinely review facility environmental performance;
- Agencies participate in cooperative

## Overview

- environmental programs with other organizations; and
- Environmental considerations are incorporated into most planning processes.

### **Common EMS areas for improvement among federal facilities**

- Agencies and facilities lack adequate environmental staff and formal, annual training plans and mechanisms to track individual training needs and accomplishments;
- Facilities lack formal environmental management programs;
- Facilities lack facility-specific environmental policies, goals, objectives, or targets;
- Facilities lack commitment to going beyond compliance; facilities seek only to meet compliance requirements;
- Work being done does not match job descriptions and performance evaluations;
- Lessons learned (positive and negative) are not shared with other federal facilities, let alone with facilities within the same agency;
- Line and staff personnel are not asked for their opinion during the policy development process;
- Tenant organizations are not held responsible for adhering to a site's EMS; and
- Management is not aware of the work being done to minimize the site's impact on the environment.

*O**verview*

**THIS PAGE INTENTIONALLY LEFT BLANK**

## **SECTION 2**

### **EMR BACKGROUND**

*This section discusses the development of the Final EMR Policy, shows the relationships between different EMS standards and guidelines, and describes the benefits and the future of EMRs.*

#### **2.0 Policy Development**

Following a six-month development effort, the EMR Workgroup, which included staff of the Federal Facilities Enforcement Office (FFEO), the EPA Assistant Administrator for Enforcement and Compliance Assurance, and Federal Facility Coordinators from eight EPA regions, issued the Interim EMR Policy on May 31, 1996. Prior to issuance, the Interim Policy was formally reviewed by staff of the Office of Enforcement and Compliance Assurance (OECA) and the Regions.

The EMR Pilot Program began shortly thereafter to test the policy and guidance at individual federal facilities. Twenty-nine EMRs were conducted by seven Regional offices during the pilot program. Comments on the draft Final EMR Policy and guidance were received from OECA and regional offices, and revisions were made based on the concerns raised. A list of the major changes made to the Interim EMR Policy is included below, and those changes are further explained in Section 3.3 of this report.

#### **Changes Made To The Interim EMR Policy**

- *Facilities must disclose within 10 days violations incidentally discovered through the EMR process.*
- *EPA will generally not conduct inspections at the participating facility for six months after the EMR.*
- *The facility must submit only one report to EPA.*
- *Only EPA's signature is needed on the EMR confirmation letter.*
- *EPA can take various enforcement responses in response to discovered violations.*
- *EMR's relationship to ISO 14001 and the Code of Environmental Management Principles (CEMP)*

The Final EMR Policy (Appendix B) incorporates the lessons learned from the pilot program reviews.

## EMR Background

### 2.1 EMS Standards & Guidelines

As noted earlier, there are numerous standards and guidelines used by organizations to guide them through the EMS development process. The *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities* breaks a system into seven parts, or disciplines:

1. Organizational Structure
2. Environmental Commitment
3. Formality of Environmental Programs
4. Internal and External Communications
5. Staff Resources, Training, and Development
6. Program Evaluation, Reporting, and Corrective Action
7. Environmental Planning and Risk Management

The Code of Environmental Management Principles (CEMP), developed by EPA in response to the President's Executive Order (EO 12856) and in conjunction with personnel from 16 federal departments and agencies, breaks environmental management into five primary components of an effective EMS:

1. Management Commitment
2. Compliance Assurance and Pollution Prevention
3. Enabling Systems
4. Performance and Accountability
5. Measurement and Improvement

Lastly, the ISO 14001 standard views an EMS from a different set of five areas:

1. Environmental Policy
2. Planning
3. Implementation and Operation
4. Checking and Corrective Action

### 5. Management Review

Even though the primary EMS standard and guideline headings are not an exact match, there are a great number of similarities among the standards and guidelines. Table A provides information on the correlation between the EMR protocols, ISO 14001 sections, and the CEMP.

**TABLE A**

**CORRELATION BETWEEN EMR DISCIPLINES, THE CEMP PRINCIPLES, AND SECTIONS OF ISO 14001**

| <b>EMR DISCIPLINE</b>                              | <b>CEMP PRINCIPLE</b> | <b>ISO 14001 SECTION</b> |
|--|-----------------------|--------------------------|
| Organizational Structure                           | 1                     | 3                        |
| Environmental Commitment                           | 1                     | 1                        |
| Formality of Environmental Programs                | 2 & 3                 | 1, 3, & 4                |
| Internal & External Communications                 | 3                     | 3                        |
| Staff Resources, Development, and Training         | 3 & 4                 | 3                        |
| Program Evaluation, Reporting, & Corrective Action | 3 & 5                 | 4 & 5                    |
| Environmental Planning & Risk Management           | 2 & 3                 | 2 & 3                    |

**2.2 Benefits of an EMR**

A facility will discover that its EMS becomes a much more powerful management tool if continuous improvement is woven into the management system’s framework. A system should be dynamic, with procedures, policies, job descriptions, and performance reviews all changing as the organization evolves. There are numerous ways to update a facility’s management system; two of the more common are: 1) an annual internal EMS review and revision, and 2) an annual review conducted by an outside party. An EMR is an example of the second method (the EMR process steps are located in Appendix B).

By working collaboratively with EPA, a facility can obtain many benefits from a review of its system. The first benefit is that it is a voluntary and inexpensive way to determine the health of a facility’s EMS. A compliance inspection is a reactive, mandatory method used by EPA to address a facility’s environmental problems. However,

**Benefits of an EMR**

- *It is a collaborative & inexpensive means to enhance a facility’s EMS*
- *An outside party can discover issues overlooked by busy facility staff*
- *EPA’s wealth of regulatory and technical environmental expertise is made available to the facility*
- *The facility benefits from EPA’s ability to facilitate root cause analysis exercises*
- *It can lead to long-term environmental compliance and enhanced management accompanied by resource reduction*
- *It provides feedback on the effectiveness of a facility's system, benchmarks the facility's performance, and identifies opportunities for improvement.*

## EMR Background

volunteering for a free EMR creates a partnership between the facility and EPA. In fact, EPA officials view the reviews as a way to work together with facility staff to enhance the way they have chosen to systematically address environmental issues. The partnership created or improved by the EMR often helps break down communications barriers and provides evidence that EPA is no longer simply a command-and-control organization. EPA views federal facilities as customers and believes that EMRs are yet another useful way to partner in the effort to reduce the government's environmental impact. EPA has transitioned from a command-and-control agency to one encouraging collaboration and cooperation with other agencies.

Second, it is relatively easy for a facility to overlook an EMS's deficiencies, especially if there are no current noncompliance issues attributed to them. Many organizations find that a management system review conducted by an outside party uncovers areas of the EMS that could be improved, even after an internal review did not reveal such problems.

A third benefit to the facility is the opportunity to take advantage of EPA's regulatory and technical knowledge in a non-threatening environment. Granted, the official scope of an EMR is generally confined to the review of management systems that are designed to address environmental matters. However, while the EPA team is on-site, facility personnel are encouraged to open the lines of communication by asking questions about environmental issues, *e.g.*, compliance issues and pollution prevention opportunities, in order to tap into the wealth of environmental knowledge and expertise available to the facility. In addition, the on-site portion of the

review facilitates discussions between the Regional Federal Facility Coordinator and the facility personnel. These conversations often introduce facility personnel to many of the initiatives, conferences, and outreach activities offered by EPA of which facility staff are often unaware.

Fourth, in addition to uncovering deficiencies not yet discovered, an EMR team also can help the facility work through root cause analysis, identifying underlying causal factors which may contribute to environmental program deficiencies. For example, it is generally easy to find that a staff member has not been properly trained on environmental matters. However, it takes more time and effort to determine that the root cause of the problem is a faulty training schedule database. EPA's management system review experience, combined with the facility personnel's background knowledge of the facility's EMS, produce a strong team that can efficiently identify a deficiency's origin. Facilities become better equipped to proactively identify and minimize environmental impacts, in the context of shrinking budgetary allocations. With a trend toward downsizing in the government, facility managers need better tools to handle complex issues when resources decrease. EMRs enable a facility to optimize its system, which in turn helps to ensure long-term environmental compliance and improvements in environmental issue resolution.

Another benefit is that EMRs often provide feedback on the effectiveness of a facility's environmental management system. It can help a facility establish baselines so that it can benchmark its performance, and identify opportunities for improvement.



**THIS PAGE INTENTIONALLY LEFT BLANK**

### **SECTION 3**

#### **EMR PILOT PROGRAM**

#### **METHODOLOGY ASSESSMENT AND LESSONS LEARNED**

*This section describes the goals of the EMR Pilot Program, describes the different approaches to conducting EMRs, explains the lessons learned, and identifies the major changes to the EMR Policy.*

### **3.0 Goals of the EMR Pilot Program**

EPA is always searching for better ways to serve its customers. After passage of the Pollution Prevention Act of 1990 and the signing of Executive Order 12856 in 1993, the agency focused its efforts on creating programs to help federal facilities conduct PPOAs, develop pollution prevention plans, train personnel, and implement projects. In a similar fashion, EPA developed the EMR Pilot Program in response to the growing interest in environmental management systems. During the mid-1990s, environmental experts worldwide were touting the advantages of the facility environmental management system. In response to international interests, ISO 14001 was drafted and the standard became final in September 1996. On a parallel path, EPA issued the Interim Final EMR Policy and began the EMR Pilot Program in May 1996.

EMRs were conducted at federal facilities in the early 1990s in EPA Regions 1, 6, and 10. In addition, one of the recommendations in the 1994 Civilian Federal Agency (CFA) Environmental Task Force Report was that EPA provide more on-site compliance assistance via a comprehensive EMR program in all ten EPA Regions.

One of the goals of the pilot program was to determine how federal facilities would react to a nationwide review program. It was unclear how receptive they would be and how willing they would be to voluntarily grant EPA access. The facilities targeted for the pilot program were generally smaller sites, which may not

#### **EMR Pilot Program Goals**

- *Determine types/sizes of facilities where EMRs are most effective*
- *Determine federal facility's reaction to/willingness to participate in the program*
- *Determine if future EMRs had to include the entire facility EMS*
- *Test different EMR methodologies*
- *Gain experience and incorporate lessons learned into the Final EMR Policy*

have the resources to develop an EMS on their own. Since some of the CFA sites had limited experience interacting with EPA prior to the EMR Pilot Program, another goal was to determine how they would react to EPA's outreach efforts.

A third goal of the pilot program was to ascertain whether or not a facility's EMS could be reviewed discipline-by-discipline. Depending on the size and complexity of the facility, a comprehensive management system audit could take more than a week to complete and cost more than double of what a traditional EMR costs. As noted earlier, the majority of the pilot program EMRs did not review entire systems, instead they focused only on certain management system—disciplines (e.g., Communications, Environmental Commitment). Closely related to the third goal was the fourth

**Questions To Be Answered  
By The Pilot Program**

- *What should be the process for conducting EMRs?*
- *How would the Incidental Violation Response Policy (IVRP) affect the program and its acceptance?*
- *Upon which standard (i.e., the Federal Facilities Phase 3 Protocol for Conducting Environmental Audits at Federal Facilities, the CEMP, or ISO 14001) should the EMRs be based?*
- *What should be the format of the follow-up reports?*
- *Who should sign the confirmation letter (and should there even be a confirmation letter)?*

goal, which was to test different EMR methodologies to determine if one methodology was more successful than another. Section 3.1 further explains the different approaches used by EPA Regional Federal Facility Coordinators.

A final goal of the pilot program was to identify areas within the interim EMR policy that could be improved upon in order to craft a

more complete final policy. That goal was achieved by identifying the pilot program's lessons learned and using them to develop the final policy. The team charged with interim policy development relied on the experience gained from the limited number of reviews conducted in the early 1990s and the experience gained from being part of the ISO 14001 development process. However, there were still questions to be answered: What should be the process for conducting EMRs? How would the Incidental Violation Response Policy (IVRP) affect the program and its acceptance? Upon which standard should the EMRs be based - the *Federal Facilities Phase 3 Protocol for Conducting Environmental Audits at Federal Facilities*, the CEMP, or ISO 14001? What should be the format of the follow-up reports? Who should sign the confirmation letter (and should there even be a confirmation letter)? EPA's plan was to answer these and other questions by conducting EMRs and basing its answers on facts rather than supposition. EPA took full advantage of the nationwide program by allowing each Regional Federal Facility Coordinator to determine the ways in which EMRs would be conducted in the region. By providing regions with this flexibility, EPA could then understand the strengths and identify the weaknesses of each unique approach.

**3.1 Different Regional Approaches to EMRs**

Each Regional Federal Facility Coordinator had a slightly different vision regarding how EMRs should be conducted. The matrix in Table B summarizes the methodologies used by each region during the pilot project. Once again, the pilot program provided an opportunity to use different review methodologies and use the lessons learned from the different approaches to formulate the final EMR policy.

Some of the facilities that were asked to participate in the pilot program were

concerned about the IVRP. It should be noted that no enforcement actions were taken and no fines were issued under the IVRP during the pilot program. However, EMRs were instrumental in highlighting ways in which facilities could improve their processes and potentially reduce their environmental liabilities. During the course of the interview and document review process, EPA teams helped facilities identify potential environmental problems. In addition, the EMR assisted EPA personnel in focusing on which compliance assistance tools and activities would most benefit the facility in the future.

**TABLE B**  
**REGIONAL EMR METHODOLOGIES**

| <b>Region</b> | <b>Protocol Used</b>  | <b>Average On-site Time</b> | <b>Average Number of Disciplines Reviewed</b> | <b>Number of Pilot EMRs</b> | <b>IVRP Incidents</b> |
|---------------|---|-----------------------------|---|-----------------------------|-----------------------|
| Region 1      | Combination of the EPA Phase 3 audit Protocol and the CEMP                                | One day                     | All (5)                                       | 12                          | None                  |
| Region 2      | Developed a unique protocol for the USPS <sup>3</sup> based on EPA Phase 3 audit Protocol | Two days                    | 1   | 3                           | None                  |
| Region 3*     | N/A   | N/A                         | N/A   | N/A                         | N/A                   |
| Region 4      | Combination of the EPA Phase 3 audit Protocol and the CEMP                                | Two days                    | All (5)                                       | 3                           | None                  |
| Region 5      | EPA Phase 3 audit Protocol  | Two days                    | 2   | 2                           | None                  |
| Region 6      | EPA Phase 3 audit Protocol  | Two days                    | 3   | 5                           | None                  |
| Region 7*     | N/A   | N/A                         | N/A   | N/A                         | N/A                   |
| Region 8      | EPA Phase 3 audit Protocol  | Two days                    | 3   | 2                           | None                  |
| Region 9      | EPA Phase 3 audit Protocol  | Two days                    | 3   | 2                           | None                  |
| Region 10*    | N/A   | N/A                         | N/A   | N/A                         | N/A                   |

---

\* Regions 3, 7, and 10 did not conduct EMRs during the 2.5 year EMR Pilot Program. However, Region 10 conducted one EMR in FY 93.

3 As requested by the customer, EPA Region 2 created a new discipline (Environmental Policy Implementation) based on the seven existing EPA Phase 3 Audit Protocol disciplines, for the United States Postal Service (USPS) EMRs.

### **3.1.a EPA Phase 3 Audit Protocol Approach**

The column labeled “Protocol Used” in Table B indicates the type(s) of protocol used by each EPA region. Of the seven EPA Regions participating in the EMR Pilot Program, five used the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities* as the basis for their review, while the other two Regions elected to use a protocol that was a hybrid of the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities* and the CEMP. In general, those Regions opting to solely use the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities* elected to limit the review to two or three of the seven disciplines. All but one of the EMRs were conducted with the understanding that the facility already had an environmental management system and the EPA team was tasked to critique it. However, one facility told the team prior to its on-site arrival that the facility did not have an EMS; this facility asked EPA to assess the facility’s processes and recommend how the facility should create a management system.

### **3.1.b EPA Phase 3 Audit Protocol/CEMP approach**

Two regions (Regions 1 & 4) chose to create and use a protocol that was a hybrid of the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities* and the CEMP; this approach split an EMS into five disciplines. In addition, these regions also reviewed each facility’s entire system, instead of focusing on certain parts of the EMS. By giving the regions flexibility in the EMR methodology they used, EPA was able to determine the strengths and weaknesses of the different approaches.

## **3.2 Lessons Learned**

One of the primary goals of the EPA pilot program is to determine how the program could be optimized and where EMR team members should look for potential pitfalls. The 29 pilot program reviews not only identified areas for program improvement, but also highlighted potential problem areas in the EMR process of which team members should be aware. The following, in no particular order, describes these areas.

### **3.2.a The IVRP did not result in enforcement actions or penalties at any facility receiving an EMR during the pilot program**

Some facilities raised concerns about the IVRP prior to the EMR team going onsite. The primary concern was that by voluntarily allowing an EPA representative onsite, the facility would increase the likelihood of incurring a fine or having an enforcement action brought against it. However, there were no cases where the IVRP was invoked, and no enforcement actions, fines, or penalties were issued during the pilot program. These data underscore the point that an EMR is not an enforcement inspection and does not increase a participant's environmental liability.

### **3.2.b It is difficult to stay within the selected EMR scope**

It was difficult to stay within the confines of the EMR scope in instances where only partial EMS reviews were conducted. For example, in one review, two disciplines (Organizational Structure and Communications) were the focus. However, after reviewing certain documents and interviewing a few key personnel, it became apparent that a lack of formality in environmental programs was one root cause for the problems in the two focus areas. Thus, the EMR was altered in mid-course, with a third discipline added to the scope to help benefit the facility as much as possible.

In addition, it takes a great amount of effort to stick to the EMR scope because there is overlap among the seven disciplines. For example, questions concerning training (discipline number five) link with questions pertaining to environmental commitment (discipline number two). If there is a lack of environmental commitment, then often there are lapses in the facility's environmental training regimen. In this instance, the team must decide whether to ask questions pertaining to the facility's lack of environmental commitment (out of the scope's boundaries), or stick to the prescribed disciplines for review and risk doing a disservice to the customer. Since the final policy did not change on this matter in that it still describes an EMR as a partial system review, team members should be flexible and willing to alter the scope of the review if it is agreeable to all parties involved (*i.e.*, the facility and the EMR team).

### **3.2.c Ample preparation time is critical**

Since the EMR is usually something facility personnel have to do in addition to their daily duties, it is best to start the review process two months prior to the on-site visit. Facilities unfamiliar with environmental management reviews need extra time to understand the EPA program's goals and objectives, answer the pre-site visit questionnaire (see Appendix D for a sample questionnaire developed by Region 1), gather relevant documentation and send it to the EMR team, assist in the creation of an interview list, and confirm the availability of the potential personnel to be interviewed.

It is also beneficial for everyone involved if a list of milestones is developed prior to commencement of the EMR process; this helps reduce confusion regarding submittal dates.

#### **Lessons Learned**

- *The IVRP did not result in enforcement actions or penalties at any facility receiving an EMR during the pilot program*
- *It is difficult to stay within the EMR scope*
- *Ample preparation time is critical/create milestones*
- *Avoid surprises*
- *Conduct pre-site visit meetings with site representatives*
- *Post-EMR evaluations help build a better EMR program*
- *Inform personnel to be interviewed of the EMR process as soon as possible*
- *Neutral on-site escorts facilitate candid discussions*
- *Combine management and technical expertise in an EMR team for best results*
- *Produce report in a timely manner*
- *Note that an EMR is a snapshot in time*

### **3.2.d Avoid surprises**

Trust is a key issue in EMRs. The facility has volunteered access to its site. It is very important to obtain facility buy-in to the EMR, and to ensure the facility is not surprised by any part of the review process. For example, the facility should know well in advance which federal and state EPA staff is anticipated to participate. In addition, the EMR's scope

should be well established prior to the team's arrival, and should be changed only after consulting with appropriate facility personnel. If substitutions or changes must be made close to the on-site visit date, the facility must be given the chance to veto the change or cancel the review. Surprising a facility can lead to a long-term distrust of EPA and its associated activities, which is the exact opposite of the EMR program's intentions.

### **3.2.e Conduct pre-site visit meetings with site representatives**

Each federal agency has its particular mission and each facility is unique. It is important that EMR team members understand both the agency's mission and the facility's daily activities (especially those activities linked with potential or actual environmental impacts) prior to arriving for the on-site visit. Gathering and reviewing this vital information prior to the on-site visit allows the team to focus on confirming through document review and interviews what they know *should* be happening. In addition, site representatives are usually the people supplying the team with the information; the time spent talking with team members about the facility eases facility personnel's anxiety and gives the facility staff a sense of ownership of the review EMR process.

### **3.2.f Post-EMR evaluations help build a better EMR program**

Continuous improvement concepts should also be built into the EMR process. After conducting the review, EPA Federal Facility Coordinators should solicit facility's responses to the management review process. For instance, EPA could encourage facilities to incorporate their thoughts on the value of the EMR into the six-month facility report submitted to EPA, or the participants could fill out a post-review evaluation form (see Appendix D for a form used in EPA Region 8).

The ensuing comments and insights can identify which elements of the EPA program are strongest and which could be improved.

### **3.2.g Inform personnel to be interviewed of the EMR process as soon as possible**

Since the EMR team is usually on-site for only a day or two, time management is a key ingredient of a successful review. The ultimate scenario is for the team members to interview personnel who 1) comprehend the EMR process and understand why the review is being conducted, and 2) have copies of tangible evidence (*e.g.*, pages from a training database and associated procedures to keep the database updated) of a formal EMS that they can provide to the EPA team members. This scenario permits the team members to ask questions instead of answer them.

### **3.2.h Neutral on-site escorts can facilitate candid discussions**

A facility usually has one or two people (*e.g.*, environmental managers) who are in charge of the site's environmental programs. Facility personnel recognize this and sometimes tout the environmental manager's accomplishments during an interview if the manager is in the same room as the person being interviewed. Personnel being interviewed tend to be more candid and forthcoming with information and anecdotes about the environmental program when a neutral person acts as the team's escort.



**3.2.i Combine management and technical expertise in an EMR team for best results**

Although an EMR is focused on the ways in which a facility manages activities to achieve and maintain environmental compliance, technical environmental questions often arise during the course of an EMR site visit. It benefits both the team and the facility if, prior to the on-site visit, the facility identified its environmental permits/compliance requirements. The team leader could then ensure one of the EMR team members is knowledgeable of the facility's processes or of its permits/compliance requirements (or both).

**3.2.j Produce report in a timely manner**

It is beneficial to complete the EMR report in a timely manner and submit it to the facility for their review and response. Facility personnel often have numerous duties, so it is important to report as quickly as possible on the strengths of a facility's EMS as well as its areas for improvement. Facilities are more apt to implement EPA's recommendations if the on-site review experience is still familiar to facility personnel.

**3.2.k Note that an EMR is a snapshot in time**

The beginning of an EMR confirmation letter should stress that a review is a snapshot in time and will discover items of concern that in the future may not be problems at all. A few facilities requested that EPA delete certain negative report findings because the facility was either "planning on working on the problem," or "working on the problem." Instead of deleting these items, EPA generally noted at the beginning of the report that an EMR was an assessment of a dynamic organization and that EPA is reporting on the state of the facility's EMS at a given point in time based on interviews with select personnel and document reviews.

**3.3 Federal Facility Comments/ Feedback on the Pilot Program**

The following are general comments from personnel whose facilities participated in the EMR Pilot Program:

**Federal Facility EMR Feedback**

(+)

- *It gave the environmental staff a forum to advance EMS ideas within a structured framework.*
- *It is easier to "sell" an EMS [to upper management] that is looked on favorably by EPA.*
- *The EMR team was very well regarded*
- *Communication was highly rated.*
- *The EMR was helpful and better than expected.*
- *The EMR was a great tool for federal facilities to build relations with the regional EPA federal programs.*
- *The EMR is also a good program to receive a friendly environmental management audit, which ultimately will help the facility's environmental programs succeed.*

(-)

- *Some of the evaluation results were difficult to assess.*
- *The site would have benefitted from more information on the EMR protocol.*
- *Better planning and coordination would have given the EMR team a better snapshot picture of the site.*
- *We encourage all EMR members to sign the confirmation letter.*
- *The facility should provide a neutral escort for the EMR team interviews.*
- *The process needs to be explained in a laymen's format. Higher managers that are not environmentally trained don't understand the concept of EMS.*

- *Upper management likes to focus on the areas for improvement, not on the strengths of the EMS. EPA should find some way to highlight the positives (e.g., a proclamation or certificate signed by the EPA Region Director).*
- *Get buy-in from top management as soon as possible.*

### **3.4 How Lessons Learned Resulted in Changes in the EMR Policy**

Once the EMR pilot program was completed, EPA Regional Federal Facility Coordinators and other regional staff, and OECA HQ personnel submitted comments regarding changes that should be made to the interim EMR policy. Numerous changes were made to the interim policy and guidance, many of which were editorial revisions for clarification, or were the result of merging the originally separate EMR Policy and the EMR guidance. However, there were six significant revisions:

- **Changing the number of days the facility has to disclose incidentally discovered violations**

The interim EMR policy required facilities to disclose violations incidentally discovered during the review within 30 days. The final EMR policy and guidance changed that requirement to 10 days to ensure greater consistency with the EPA audit and self-disclosure policy.

- **Adding that inspections may be waived for six months after an EMR**

Facilities were concerned that voluntarily allowing EPA on-site could potentially subject the facility to a subsequent inspection. To allay concerns, EPA added a provision to the final EMR policy which states that EPA generally will not conduct

inspections at the facility receiving the review for six months, while the facility prepares its plan in response to EPA's EMR report. The policy also describes certain exceptions to this six-month window (e.g., statutory or regulatory mandates, tips or complaints).

- **Changing the number of facility reports**

The interim EMR policy required the facility to submit two reports to EPA after the review; a recommendation implementation plan within 60 days, and an implementation status report six months later. The final EMR policy reduced the number of reports to one. The facility must submit an implementation status report six months after receiving the final management review recommendations.

- **Changing the number of required signatures on the confirmation letter**

During the pilot program, EPA required a signature from both the facility and from EPA on the ground rules letter. In the final EMR policy, the letter is now being referred to as the "confirmation letter," and only one (EPA's) signature is required, although a facility representative may sign it as well.

- **Clarifying that EPA has various enforcement options under the EMR Program**

Facilities were concerned by the wording of the IVRP in the interim policy which implied that formal enforcement actions are taken for all types of violations. Considering that not all violations are the same, EPA

clarified in the final EMR policy that there are various enforcement actions, both formal and informal, that EPA can take in response to violations discovered during a review.

- **Adding the relationship between the EMR protocols, ISO 14001, and the Code of Environmental Management Principles (CEMP)**

During the pilot program, many facility personnel asked the EPA teams how EMRs related to the CEMP or ISO 14001. The existence of different EMS standards and guidelines show that there are many ways to analyze an EMS. The final EMR policy contains a discussion on the correlation between the EMR protocols, ISO 14001, and the CEMP.

## SECTION 4

### SUMMARY OF FEDERAL FACILITY EMR FINDINGS

*This section summarizes the common findings of the majority of the pilot program EMRs in terms of the strengths and weaknesses of the facilities reviewed.*

#### **4.0 Overview of findings and recommendations in EMR reports**

The facility EMSs reviewed during the course of the EMR pilot program differed markedly in thoroughness, formality, and complexity. The systems ranged from a set of disparate environmental programs in need of a formal program, to comprehensive, well documented, and formal systems. The following information discusses some common strengths and weaknesses encountered during the 29 pilot program EMRs.

##### **4.0.a Strengths of facility EMSs**

- ***Personnel acknowledge their environmental responsibilities and are committed to protecting the environment***

Facility staff acknowledge their environmental responsibilities and care about their site's and/or their job's environmental impacts. If given access to appropriate resources and training, interview results indicate that federal facility personnel are generally committed to protecting the environment.

- ***Field staff routinely review facility environmental performance***

Some agencies require audits or formal reviews of environmental performance on a

three- or five-year schedule. Interview results from some of the EMRs indicate that facility managers and/or key staff conduct informal reviews more frequently. However, implementation of recommendations from these reviews is inconsistent because of limited access to funds and technical assistance.

#### **Strengths of Facilities' EMSs**

- *Personnel acknowledge their environmental responsibilities and are committed to protecting the environment*
- *Field staff routinely review facility environmental performance*
- *Agencies participate in cooperative environmental programs with other organizations*
- *Environmental considerations are incorporated into most planning processes*

- ***Agencies participate in cooperative environmental programs with other organizations***

Many federal facilities support a variety of environmental tracking and outreach efforts in cooperation with other federal organizations. For example, federal facility staff monitor air

quality, track migratory birds, and provide educational programs for local schools.

- ***Environmental considerations are incorporated into most planning processes***

Federal facilities often undertake new projects; some are insignificant to the environment, while others have potentially significant environmental impacts. A mature EMS incorporates the environmental manager into the project planning process. The earlier the environmental manager is able to review project plans, the less time is wasted on project revisions and stop-work issues. Many of the facilities participating in the pilot program EMRs incorporated environmental considerations into the project planning process. However, facilities did this coordination mainly to satisfy NEPA requirements, not because it was part of a larger process of integrating environmental considerations into everyday activities.

#### **4.0.b Main areas for improvement of the facility EMSs**

- ***Agencies and facilities lack adequate environmental staff and formal, annual training plans and mechanisms to track individual training needs and accomplishments***

Environmental staffing levels at the facility, regional, and agency level are inadequate to ensure compliance with environmental regulations, let alone to provide technical assistance in pollution prevention and proactive environmental programs. In addition, while individual training records generally are maintained in personnel files, federal facilities may enhance environmental performance by reviewing environmental training needs and developing and monitoring annual training plans to ensure that staff attend environmental training necessary or

appropriate to their work assignments.

- ***Facilities lack formal environmental management programs***

The majority of facility personnel described actions that they take to reduce their site's environmental impacts. However, the personnel often indicated that the procedures described to the EMR team were informal, that is, not actually written anywhere. While this method of informal environmental management may work as long as the personnel remain constant, it is vulnerable to personnel turnover. For instance, if a person were to stop working at a facility, the experience and informal procedures designed to reduce the employee's environmental impact would leave with that person. Anyone replacing that employee would then have to start from the beginning and develop new procedures. Facilities should examine their processes and activities, identify which have the potential to create significant environmental impacts, and develop formal, written procedures to minimize those impacts. A continuous improvement element also should be incorporated into the procedures to ensure the facility periodically looks for ways to further minimize the processes' impacts. Facilities can use the *Generic Protocol (Phase 3) for Conducting Environmental Audits at Federal Facilities*, the CEMP, or ISO 14001 to develop the procedures.

- ***Facilities lack facility-specific environmental policies, goals, objectives, or targets***

Many agencies manage environmental issues via a “top-down” approach. Environmental policies are often developed at the headquarters level and distributed through organizational channels. However, the general policies written at the headquarters

level lack detailed guidance on implementation procedures for field facilities as well as site-specific oversight. Facilities should develop facility- and process-specific short- and long-term goals, objectives and targets, and implementation plans to support and complement the policies developed by agency headquarters.

- ***Facilities lack commitment to going beyond compliance; facilities seek only to meet compliance requirements***

Most of a federal facility’s environmental metrics are based on the number of violations or findings of non-compliance issued to a facility in a given year. Facilities thus take a reactive, rather than a proactive, approach to environmental management.

While an EMS is designed to assist a facility in achieving and maintaining compliance, the EMRs detected a lack of measurement elements that can help the facility look beyond its environmental compliance requirements and focus on continuous improvement. By initiating reductions in a site’s environmental burdens and liabilities, an environmental manager can demonstrate cost savings. A facility can save money by eliminating hidden costs and seeking pollution prevention solutions. In addition, focusing only on compliance can sometimes cloud an environmental manager’s vision as to the source of a waste or emission problem. A properly designed EMS employs root cause analysis techniques to address immediate and long-term environmental issues.

- ***Work being done does not match job descriptions and performance evaluations***

Facility personnel’s environmental compliance responsibilities should be incorporated into basic job descriptions or shop responsibilities so that performance evaluations are based on

### **Areas for Improvement for Facility EMSs**

- *Agencies and facilities lack adequate environmental staff and formal, annual training plans and mechanisms to track individual training needs and accomplishments*
- *Facilities lack formal environmental management programs*
- *Facilities lack facility-specific environmental policies, goals, objectives, or targets*
- *Facilities lack commitment to going beyond compliance; facilities seek only to meet compliance requirements*
- *Work being done does not match job descriptions and performance evaluations*
- *Lessons learned (positive and negative) are not shared with other federal facilities, let alone with facilities within the same agency*
- *Line and staff personnel are not asked for their opinion during the policy development process*
- *Tenant organizations are not held responsible for adhering to a site’s EMS*
- *Management is not aware of the work being done to minimize the site’s impact on the environment*

an accurate job description. Many of the facility staff interviewed described responsibilities that were not part of their position description. Managers usually had environmental responsibilities as part of their position descriptions, but environmental responsibilities were not included in the job descriptions of other personnel. A complete EMS effectively delegates environmental responsibilities to appropriately trained personnel.

Federal facilities should work with Office of Personnel Management (OPM) (or supplement OPM forms) by developing facility-specific position descriptions and performance evaluation forms to accurately portray the responsibilities and expectations of facility staff.

- ***Lessons learned (positive and negative) are not shared with other federal facilities, let alone with facilities within the same agency***

Technology and information transfer was an afterthought to many of the facilities visited during the EMR pilot program. Numerous facilities implemented pollution prevention projects that both reduced the site's environmental impacts and saved money. Successful processes and activities at one site can be disseminated in the form of case studies, allowing staff at similar facilities throughout the country to learn from the lessons learned. Thus, it would make sense to share the success stories with fellow federal facilities both inside and outside individual agencies. In addition, line and staff were not familiar with basic environmental information sources available electronically, such as *EnviroSense* and the *Joint Service P2 Technical Library*. The sharing of lessons

learned can be done via electronic bulletin boards, WWW sites, e-mail, and memoranda.

- ***Line and staff personnel are not asked for their opinion during the policy development process***

Successful environmental management programs often have buy-in both at the top of the organization and also at the line and staff level. Worker's attitudes about implementing a new policy change dramatically when the line and staff worker has been given the opportunity to help shape that policy. In addition, line and staff personnel are often the most knowledgeable about a process and are best able to determine how a proposed policy will affect operations and environmental management issues. Facilities should create policy development procedures that solicit employee input through the use of committees or open suggestion processes.

- ***Tenant organizations are not held responsible for adhering to a site's EMS***

Federal agencies often share building space with other federal agencies or have tenant organizations located within their installation's boundaries. If the site's landlord has not fully integrated all tenants into its EMS, the landlord may not know when/if a tenant is in danger of environmental noncompliance. All tenants, contractors, and concessionaires should be active members of the installation's environmental committees and communications distribution lists to ensure tenants receive the same environmental information as other installation personnel.

To facilitate oversight, tenants also should be required to comply with consistent, facility-wide reporting requirements.

- ***Management is not aware of the work being done to minimize the site's impact on the environment***

## *S*ummary Of Federal Facility Findings

Top management's environmental commitment is critical to a successful EMS. If top management is not familiar with the work of the facility or regional environmental manager, commitment and support, both in policy and funding, may be difficult to obtain. It is crucial for the environmental manager to report regularly to the site/facility manager. Top management should meet with environmental staff quarterly. Environmental managers should submit regular reports or provide briefings documenting progress in compliance and prevention, as well as current cost savings and short and long-term policy and funding needs. A representative of management should read and sign these reports to indicate awareness of the environmental status of each facility.

### ***4.1 Recommendations implemented by facilities***

EPA Regional Federal Facility Coordinators are just beginning to receive feedback from facilities that participated in the EMR pilot program. It is too early in the program to measure its overall effectiveness and/or to determine whether or not EPA's recommendations have been implemented. EPA plans to follow up with selected facilities which had EMRs during the pilot program to examine the impact of actions taken on their environmental management systems and overall performance.



**THIS PAGE INTENTIONALLY LEFT BLANK**

## **Section 5**

### **CONCLUSION**

---

After reviewing some of the environmental impacts of processes and activities at federal facilities, it has become obvious that environmental regulations alone are not enough to ensure against environmental degradation. In addition to enforcing the environmental regulations, EPA also is expanding its role as compliance assistance provider - - helping facilities prevent pollution so that clean-up is not required at a later date. EMRs are one element of that compliance assistance process.

The EMR pilot program was created to assist federal facilities in their environmental management activities and to implement EPA's interim final EMR policy. Based on feedback from the participating facilities, the program appears to have been a success.

Based on this success, EPA plans to conduct more EMRs at federal facilities, and will continue to offer the reviews as an integral part of EPA's overall compliance assistance efforts. EPA's goal is to use the management system reviews to further develop partnerships with other federal agencies, increase EPA's accessibility to federal facilities, and help those facilities move beyond compliance in a systematic manner. As the program matures and more EMRs are conducted, facilities can expect a more streamlined and efficient review process that will offer recommendations focused on the root causes of environmental concerns.

EPA looks forward to the opportunity to continue working cooperatively with federal facilities through the use of EMRs and other tools to further reduce their environmental impacts through a proactive approach to environmental management.

## C*onclusion*

**THIS PAGE INTENTIONALLY LEFT BLANK**

# Appendices

## Appendices



**APPENDIX A**

***EMR CASE STUDIES***

This Appendix contains synopses of four EMRs conducted at federal facilities during the pilot program. The information is provided to help the reader better understand the benefits of participating in the EMR program and the types of findings and recommendations that can be expected from the EMR process. Although the actual EMR reports are a matter of public record, *i.e.*, they can be accessed under FOIA, we chose to highlight only the EMRs findings and recommendations in a generic manner.

**Site/Facility A**

**A. Facility overview**

The mission of the 35,000 acre site is to conserve and provide for the enjoyment of the scenery, the natural and historic objects and the wildlife on certain federal lands and to leave them unimpaired for the enjoyment of future generations.

**B. EMR Logistics and Scope**

During the two-day EMR, the two person team consisting of the EPA Regional Federal Facility Coordinator and an EPA contractor analyzed the site's EMS in conjunction with the site's Chief of Maintenance, a Maintenance Management Technician, and the Fire Management Coordinator/Spill Coordinator.

The protocol used for this EMR was a combination protocol containing elements of the *Code of Environmental Management Principles (CEMP)* and EPA's *Generic Protocol for Conducting Environmental Audits at Federal Facilities, Phase 3*. All five of the protocol's disciplines were included in this EMR. Those disciplines are: 1) Management Commitment, 2) Compliance Assurance and Pollution Prevention, 3) Enabling Systems, 4) Performance and Accountability, and 5) Measurement and Improvement.

**C. EMR Findings and Recommendations**

**Strengths of the EMS**

- If funds are available in a department's operating budget, Maintenance can simply purchase equipment or initiate new environmental projects. If funds are not available in the operations budget, the Superintendent must pursue funding through the region and headquarters.
- Site staff work very closely with the public in a continuous effort to enhance the public's experience at the site. Conservation easements represent an ongoing local tax issue. The organization has land use and zoning information available in GIS format. Recently, the site completed a visitor experience and resource protection study focusing on

measurable indicators of and standards for visitor use that can be used to develop management strategies. This analysis of visitor perception of crowding on the carriage road system utilized computer simulations to analyze visitor perceptions of resource use. The study suggested that enforcement of appropriate trail behavior and visitor education could resolve concerns. The site produced a video on trail behavior that is available through local bicycle shops and on local access television.

- The site has clearly defined, routine mechanisms to share information.
- Each employee creates an annual performance plan and goals, against which performance is measured. The system is flexible enough to allow a Supervisor to incorporate environmental tasks into the review criteria. For example, the Chief of Maintenance added responsibility for identifying less toxic product substitutes to the performance review criteria for the Maintenance Foreman.

**Areas where the EMS needs improvement**

- The site's HQ's Office of Environmental Affairs published pollution prevention fact sheets on a variety of topics including automotive service stations. According to site staff participating in the EMR, they do not utilize HQ as an information resource and are not familiar with the HQ's Commitment or fact sheets. The site does not have a Solid Waste Management Plan.
- The site does not have a full-time staff position responsible for coordination of environmental compliance. The site's Administrative Officer, whose duties include personnel, procurement and budget, receives written policy updates and places the information into three ring binders. It is his responsibility to notify Maintenance and other Divisions of changes that may affect their operations. Neither the headquarters or regional office appears to provide implementation follow-up to ensure that site staff has received policy and program updates and has access to the expertise to identify

## Appendix A - EMR Case Studies

responsibilities and implement them.

- The site has not implemented a facility-wide, formal environmental training plan.

### **Recommendations**

1. **Hire a minimum of one FTE to manage the overall environmental compliance program, provide on-site technical assistance and promote pollution prevention at the site.**
2. **Establish more formal procedures for environmental management planning and budget development.**
3. **Establish formal procedures for annual environmental compliance audits.**
4. **Establish a formal, annual training plan and track individual environmental training needs and accomplishments to ensure that all training requirements for staff performing duties with environmental impacts are met. Provide additional funding and opportunities for personnel environmental training development.**



## Site/Facility B

### **A. Facility overview**

The site provides environmental oversight to 36 facilities. The site's primary mission is flood control for more than 4,600 acres. It maintains only about 300 total acres; the State Department of Environmental Management (DEM), Division of Fish and Wildlife leases 4,000 acres and DEM's Division of Forests and Parks leases another 200 acres. There are some privately owned properties within the flood control area, but there are no habitable structures on these easement lands. DEM is responsible for public recreation areas and fisheries on the leased lands; the site provides oversight but lessees are not required to comply with the site's regulations.

### **B. EMR Logistics and Scope**

During the two-day EMR, the two person team consisting of the EPA Regional Federal Facility Coordinator and an EPA contractor analyzed the site's EMS in conjunction with the site's Environmental Compliance Coordinator; the River Basin Manager; a Project Manager; and a Park Ranger.

The protocol used for this EMR was a combination protocol containing elements of the *Code of Environmental Management Principles (CEMP)* and EPA's *Generic Protocol for Conducting Environmental Audits at Federal Facilities, Phase 3*. All five of the protocol's disciplines were included in this EMR. Those disciplines are: 1) Management Commitment, 2) Compliance Assurance and Pollution Prevention, 3) Enabling Systems, 4) Performance and Accountability, and 5) Measurement and Improvement.

### **C. EMR Findings and Recommendations**

#### **Strengths of the EMS**

- The site's environmental policies and procedures are codified in the *Environmental Review Guide for Operations (ERGO)*. ERGO is a manual containing a series of checklists that guide staff through the relevant environmental laws and regulations. The site published a sub-manual specific to

environmental issues relevant to Civil Engineering activities.

- The site has a career training plan based on job title requirements.
- The staff has initiated a number of community outreach efforts focusing on the environment. For example, staff operate a booth at the local Environmental Expo each year. Staff provide environmental programs and facility tours for local schools. The Junior Project Manager program brings students to the site for a day of role-playing. During Earth Day, staff traveled to a nearby town where they supported tree plantings and water quality education activities.
- Project staff conducts an annual internal review and develops a Corrective Action Plan. Project staff submits the Plan to a Manager who reviews it and sends it on to the District Environmental Coordinator. Staff updates the Corrective Action Plan every six months, in October and April. This requirement is spelled out in the site's Facilities Environmental Compliance Guidance Letter, "Environmental Compliance Assessments." During audits, performance is measured against established *Environmental-Natural Resources* and/or *Environmental Compliance Performance Measures*. ERGO checklists guide the assessment process.

#### **Areas where the EMS needs improvement**

- Facility employees do not appear to have a formal method for providing input to environmental decision making. They are not represented on the Environmental Steering Committee.
- While an official suggestion program allows employees to complete a form and send it to the District, such suggestions may not be reviewed by staff with authority to proceed toward implementation of suggestions.
- The District Environmental Compliance Coordinator tries to pass along regulatory information via e-mail to the four Managers in

## Appendix A - EMR Case Studies

his District and to the local facilities. He issues memoranda asking whether local offices have certain listed regulatory information. If they respond that they do not have the information, he will provide it. Given his other duties and limited staff, however, there is not always time for a comprehensive review of information needs to ensure that each facility has access to the appropriate federal, state and local compliance information as well as the site's policy memos and updates.

- There is no required environmental training for field personnel. Staff complete annual Individual Development Plans that may identify general training interests. However, there is no specific determination of environmental training needs. Park Rangers are regarded as generalists and receive training for broad responsibilities. The training for this title is not focused on environmental awareness, although the individual Ranger may have responsibility for hazardous waste management and may sign manifests.

### **Recommendations**

1. **Develop a formal environmental policy and program priority statement for the project.**
2. **Improve communications and access to regulatory information.**
3. **Seek additional environmental staff positions at the District and River Basin levels.**
4. **Provide additional environmental training.**
5. **Pursue additional funding for environmental programs.**

## Site/Facility C

### **A. Facility overview**

The main laboratory complex examined during the EMR occupies one building which houses offices and laboratories. The site also maintains a boat storage pad, fuel storage area, and a hazardous waste storage area in the back parking lot. The site conducts field sampling investigations and laboratory analysis. The planning of the field investigations and the laboratory analyses take place at the site. The facility is approximately one year old.

The site employs 138 people, about half of whom work in one of the 60 laboratories at the facility. The remainder of the facility is occupied by offices for the laboratory and non-laboratory personnel.

To comply with the Solid Waste Disposal Act (SWDA), non-hazardous solid wastes from all site-occupied facilities are collected by a contracted disposal service and disposed of at the local landfill.

The site's main laboratory complex established a recycling program for mixed-grade waste paper and for beverage cans. For the paper, each office is provided with a collection bin while centralized collection containers are located in Branch offices and hallways throughout the site. Janitorial staff collect paper from the centralized bins for pickup by the local recycling program.

The site has a program to properly dispose of biomedical wastes, in particular, sharps (e.g., needles, syringes with needles, scalpel blades).

### **B. EMR Logistics and Scope**

During the two-day EMR, the two person team consisting of the EPA Regional Federal Facility Coordinator, an Army representative, and two EPA contractors analyzed the site's EMS in conjunction with the site's full-time Safety, Health, and Environmental Management Program (SHEMP) Coordinator, the Maintenance contractor, and numerous laboratory personnel.

The protocol used for this EMR was a combination protocol containing elements of the *Code of Environmental Management Principles (CEMP)*

and EPA's *Generic Protocol for Conducting Environmental Audits at Federal Facilities, Phase 3*. All five of the protocol's disciplines were included in this EMR. Those disciplines are: 1) Management Commitment, 2) Compliance Assurance and Pollution Prevention, 3) Enabling Systems, 4) Performance and Accountability, and 5) Measurement and Improvement.

### **C. EMR Findings and Recommendations**

#### **Strengths of the EMS**

- The site has a full-time Safety, Health, and Environmental Management Program (SHEMP) Coordinator who works with an Occupational Safety and Health Committee (OHSC) comprised of safety, health, and environmental management representatives from each of the three branches and three program offices within the Division. These representatives set policy for and resolve any management problems regarding safety, health, and environmental management. New environmental initiatives can be implemented by the OHSC with the approval of senior management. In addition, there are two people on staff who act as the Pollution Prevention Committee. All of these representatives conduct these duties in addition to the duties listed in their respective job descriptions.
- The site implemented an excellent system used to track hazardous components of samples to ensure their proper disposal. This system provides a foundation for the entire EMS.
- Management sets the priorities to ensure that the EMS is vital to the organization as a whole.

#### **Areas where the EMS needs improvement**

- The site has established goals and a baseline for the pollution prevention program, but there is some question whether other programs, such as the solvent recycling, are being accurately measured and benchmarked.
- The majority of the environmental responsibility at the site falls essentially to one

## Appendix A - EMR Case Studies

employee (the SHEMP Coordinator). It may benefit the site to either delegate those responsibilities among several employees or document and formalize all of the environmental responsibilities to ensure continuity.

- Many procedures are established and acted on by verbal agreement; sometimes the verbal procedures confuse employees with minimal amounts of environmental compliance training.

### **Recommendations**

- 1. Formalize the verbal agreements and document these systems so they may be reviewed and revised, as necessary.**
- 2. Determine whether it is feasible to create a formal chemical adoption plan. Develop procedures for working with local labs to use the site's excess chemicals and materials if liability and RCRA issues can be overcome.**
- 3. Create a procedure to have the Maintenance contractor coordinate with the SHEMP Coordinator on facility work/routine maintenance that has an environmental impact.**

## Site/Facility D

### **A. Facility overview**

There are over 20 different organizations using the site's facilities. These tenants, referred to as "Resident Agencies," are taking advantage of the many resources found at the site. The Environmental Office is in charge of both overseeing environmental compliance activities and addressing environmental issues for the site.

The site is also host to a variety of temporary users, with short-term agreements, using specified facilities for specified periods of time. These range from a few days to a few months. The main point to remember is that the site has a wealth of capabilities to be used and management is flexible about the terms of use.

As a shared federal facility, operation costs are shared by the site and all Resident Agencies on a pro-rated reimbursable basis. As the airfield manager, the site is ready, willing and able to provide additional services to Resident Agencies as requested.

There are numerous operations and activities at the site which could create environmental impacts. For instance, the site is a fully functional federal airport with all the necessary facilities needed for aircraft operations. It also maintains a wide variety of facilities available for military personnel and their families. Of the site's major activities, the four which have the greatest potential environmental impact include: 1) Facility Modifications and Site Maintenance; 2) Wind Tunnel Testing; 3) Life Sciences; and 4) Space Sciences.

On September 5, 1995, the site's HQ issued an Agency-wide environmental policy. In response to that directive, the site's Environmental Office worked together with other organization offices in developing issue-specific environmental policies for a number of areas.

### **B. EMR Logistics and Scope**

During the two-day EMR, the three person team consisting of two EPA Regional Federal Facility personnel and an EPA contractor analyzed the site's EMS together with staff from the site's

Environmental Office.

The protocol used for this EMR was EPA's *Generic Protocol for Conducting Environmental Audits at Federal Facilities, Phase 3*. The protocol consists of seven disciplines: 1) Organizational structure; 2) Environmental commitment; 3) Formality of environmental programs; 4) Internal and external communication; 5) Staff, resources, training, and development; 6) Program evaluation, reporting, and corrective action; and 7) Environmental planning and risk management. The goal of the EMR was to determine how well the site's EMS compared to the following two disciplines: 1) environmental commitment, and 2) environmental planning and risk management.

### **C. EMR Findings and Recommendations**

#### **Strengths of the EMS**

- The site indicates its pursuit of environmental excellence through the development of issue-specific policies, through top management support, and by delegating environmental responsibilities to the line and staff level.
- Environmental considerations are generally incorporated into the site's planning processes. Facility projects and research and development projects go through an Environmental Division review prior to commencement.

#### **Areas where the EMS needs improvement**

- Since the line and staff personnel are in charge of addressing environmental issues, the site must ensure that their EMS contains a formal system to track environmental deficiencies through closure. Currently, the Environmental Office is wary of environmental deficiencies, but it does not formally track those deficiencies nor how the deficiencies were addressed.
- One way the site could improve its environmental risk management program is to conduct root cause analysis on environmental deficiencies to help ensure similar problems do not arise in the future.

## **Recommendations**

- 1. Develop procedures to routinely distribute environmental information to all site personnel.**
- 2. Identify what regulations apply to each activity and ensure the courses provided to the staff performing task associated with that activity receive the right type of training.**
- 3. Create a procedure to update environmental courses as regulations change.**
- 4. Develop procedures to ensure environmental issues have been properly addressed by line and staff personnel and contractors once projects are complete.**
- 5. Modify existing hazardous material procedures to ensure all materials are taken back during the appropriate time frame.**

**THIS PAGE INTENTIONALLY LEFT BLANK**

## **APPENDIX B**

### ***Final EMR Policy***

#### **Environmental Management Review Policy and Guidance for Federal Facilities**

In accordance with Executive Order 12088, our national and regional federal facility program has the responsibility to provide technical advice and assistance to federal facilities to ensure their cost effective and timely compliance with applicable requirements. In addition, the President called on the federal government to be the leader in achieving and maintaining a clean environment. The provision of an Environmental Management Review (EMR) is one increasingly important means of providing this technical assistance for federal sector leadership.

An Interim EMR Policy was issued in May 1996, and a pilot program was undertaken to test out the Interim Policy. Numerous EMRs were conducted as part of the pilot program, and this EMR Policy constitutes the final policy and is based upon revisions determined to be necessary after the pilots. The EMR Policy lays out the definition of an EMR, the operating principles under which EMRs are to be conducted by the EPA Federal Facility Program, and the context in which EMRs will be conducted by EPA. The EMR Guidance is a technical accompaniment to the EMR Policy, and is intended to assist EPA personnel in conducting EMRs.

#### **A. EMR Policy**

##### **I. Definition and Benefits of an Environmental Management Review**

An Environmental Management Review is a review of an individual facility's program and management systems to determine the extent to which a facility has developed and implemented specific environmental protection programs and plans which, if properly managed, should ensure compliance and progress towards environmental excellence. Because of the programmatic nature of an Environmental Management Review (EMR), the focus of this review is on the quality and/or implementation of the program, not on actual compliance requirements. EMRs provide the federal facility information pertaining to:

- o Strengths and areas for improvement of environmental management systems and programs at federal facilities;
- o Identification of underlying causal factors which may contribute to the occurrence of compliance deficiencies, and development of long-term environmental compliance by helping to build an environmental management program foundation;
- o Review of each of the individual components of an environmental management system (such as those listed below); and
- o Assistance on the effectiveness of their systems, bench marking their performance, and identification of opportunities for improvement.

EMRs are not enforcement inspections. The EMRs are technical assistance site visits. They differ from a compliance inspection or audit, which aim to capture a facility's compliance picture at a given point in time. EMRs attempt to facilitate an understanding of the underlying causes of current or potential compliance problems and to develop suggestions for actions to correct them. They attempt to facilitate an understanding of the environmental management system (EMS) process and identify some of the more obvious weaknesses and strengths of the facility's existing EMS. EMRs assist federal facilities in developing long-term environmental compliance by helping to build an environmental management program foundation. EMRs are intended to help facility personnel understand how real environmental improvements can be achieved, by probing beyond the immediate symptoms of non-compliance and attempting to identify and address underlying causes such as



## Appendix B - Final EMR Policy

management system deficiencies. Further, they are not intended nor should they replace a facility's own efforts to self-audit. Finally, an EMR is not a

Pollution Prevention Opportunity Assessment, although a review of a facility's pollution prevention program as it relates to their environmental management system (EMS) may be conducted during an EMR.

EPA has conducted technical assistance visits at federal facilities as part of its pollution prevention opportunity assessments program. Now, by conducting Environmental Management Reviews, EPA hopes to cooperatively provide facilities with advice about effective environmental management. The facility has the choice as to whether and how to use the advice, but EPA believes that engaging in an EMR visit will foster a good working relationship between the Agency and the federal facility, encourage a continued dialogue on environmental issues, and help improve environmental performance.

### **II. Scope of an Environmental Management Review**

The scope of an EMR includes disciplines that are based on key characteristics and elements of effective environmental management systems. There are a number of common elements for most EMS models. For example, the Code of Environmental Management Principles for Federal Agencies (CEMP), developed by EPA in response to Executive Order 12856 and in conjunction with representatives from 16 federal departments and agencies, includes management commitment, compliance assurance and pollution prevention, enabling systems, performance and accountability, and measurement and development. The ISO 14001 EMS standard includes environmental policy, planning, implementation and operation, checking and corrective action, and management review. The seven EMR disciplines listed below (along with the corresponding CEMP Principles and ISO 14001 Sections) are from Phase 3 of the *Generic Protocol for Conducting Environmental Audits of Federal Facilities*. They are:

- o Organizational Structure (CEMP Principle 1 and ISO 14001 Section 4.4)
- o Environmental Commitment (CEMP Principle 1 and ISO 14001 Section 4.2)
- o Environmental Planning and Risk Management (CEMP Principles 2 & 3 and ISO 14001 Sections 4.3 & 4.4)
- o Staff Resources, Training, and Development (CEMP Principles 3 & 4 and ISO 14001 Section 4.4)
- o Formality of Environmental Programs (e.g. p2, auditing, compliance) (CEMP Principles 2 & 3 and ISO 14001 Sections 4.2, 4.4 & 4.5)
- o Internal and External Communication (CEMP Principle 3 and ISO 14001 Section 4.4)
- o Program Evaluation, Reporting, and Corrective Action (CEMP Principles 3 & 5 and ISO 14001 Sections 4.5 & 4.6)

While the wording of the EMR disciplines and the elements of CEMP and ISO 14001 are not identical, the overlap, correlation and similarity are great. An EMR is a tool that can help facility personnel attain the CEMP and move toward conformance with ISO 14001. This is because an EMR will provide a review of the individual components of the facility's EMS, as well as provide the facility with information regarding areas for improvement of the EMS, feedback on the effectiveness of their systems, and bench marking their performance.

An EMR is not a full-fledged Environmental Management Systems Audit. A management systems audit would provide a thorough, systematic evaluation of all elements of a facility's implementation of an environmental management system. EPA currently does not have the resources to conduct an in-depth environmental management systems audit, which most often requires a week or several weeks stay at a given facility, and significant resources depending on the size and type of facility. EPA envisions that an EMR may cover anywhere from one to seven areas depending on EPA and the needs of the facility. The determination of this need can be accomplished through consultations between EPA and the federal facility.

## Appendix B - Final EMR Policy

An EMR is based on a combination of staff interviews, pre-site visit document reviews and a site visit at the facility. Interviews are especially important in conducting an environmental management review. They provide the primary means of understanding the organizational relationships, roles and responsibilities, policies, and systems that form the framework for the management of environmental matters. More importantly, they often reveal differences in the actual versus the documented practices. Document review is important to verify the formality of the system and confirm interview information. A site visit is necessary to verify an EMS' implementation and effectiveness.

Depending on the characteristics of the federal facility such as the degree of sophistication of the environmental management program, the EMR could take place over the course of a day's visit or up to a week. Those participating may include representatives from the EPA Regional Federal Facility program, Headquarters and Regional technical assistance offices, other federal Agencies, contractors, and/or State Environmental Agencies. As appropriate, EPA regional offices can conduct joint EMRs with their states, and should contact the appropriate state technical assistance program as part of the development process for an EMR.

### Where EMRs Are Likely to Be Conducted

Federal facility participation in an EMR under all circumstances is voluntary. In general, EPA would prefer to conduct EMRs at facilities where there is a potential for environmental impact (e.g., facility is a permit holder or notifier under one or more environmental statutes), and/or at facilities that have limited resources for hiring a private consultant or where their Agency does not already have an internal environmental management system audit program. This is more likely to be the case at smaller agencies such as civilian federal agencies (CFAs). This is consistent with the nature of the overall findings of the *Strategy for Improving Environmental Management Programs at CFAs*, which recommended training, technical support, and compliance assistance for CFAs. However, EPA may conduct an EMR at larger facilities if invited by the facility or where an EMR will be useful to follow-up on an enforcement action to identify root causes.

There may be some factors that could prohibit EPA from conducting an EMR at a facility. If a facility is subject to an open criminal investigation, it should not be selected for an EMR. However, if a facility is a recent recipient of an enforcement action, this would not prohibit EPA from conducting an EMR at that facility. In fact, an EMR may be helpful in determining the root cause(s) of the violation(s). In cases of a state enforcement action, EPA should contact the state as part of the development process for the EMR.

### **III. Operating Principles**

The following are intended to provide EPA staff with general guidelines or operating principles for conducting EMRs at federal facilities:

- a. An EMR visit is not an inspection.
- b. Participation in an EMR by a federal facility is voluntary, and facilities are invited to request an EMR. A federal facility may also be contacted at least one to two months in advance of a visit to solicit interest, and to ask for appropriate written documentation of their environmental management system.
- c. While the primary focus and intent of the EMR program is at the facility level, EMRs may also be appropriate at the regional and/or agency headquarters level. Agency headquarters are encouraged to contact EPA about having an EMR conducted at the headquarters and/or regional level. It would be helpful if agency headquarters would encourage individual facilities to participate in an EMR.
- d. The date for the EMR is mutually arranged between the federal facility and EPA. Information regarding the topics that will be covered in the review will be discussed prior to the visit.
- e. The facility will receive a confirmation letter prior to the EMR visit which will generally lay out the

## Appendix B - Final EMR Policy

- ground rules for the EMR. The confirmation letter will be signed by the appropriate EPA Regional manager, and may be co-signed by the facility manager as well (See Attachment One for examples of suggested components of a confirmation letter.) The confirmation letter will also ensure that EMR staff have access to the appropriate personnel and documents at the facility, as well as summarize the conditions of the Incidental Violations Response Policy (See Section IV).
- f. Each EMR visit will include an in-briefing and an exit-briefing or close-out session in which preliminary EMR results are shared with the host facility. Provisions for additional technical assistance such as a future pollution prevention assessment can be discussed at this time.
  - g. Within 60 days after the visit, the EPA regional office will provide the facility with a written report regarding the facility's environmental management system and provides recommendations for further activities. EPA and the facility can make arrangements for the sharing of draft findings prior to issuance of the final report. This EMR report will not contain information on incidental violations. All communication with the federal facility with respect to incidental violations will be conducted separate from the EMR report.
  - h. To better inform the federal facility's headquarters office about the potential resource needs that may result from the EMR report, EPA may share a copy of the final report with headquarters, unless the federal facility requests EPA to do otherwise.
  - i. The facility will, no later than six months after receipt of the EPA EMR report, produce a response plan that lays out how they plan to address the EMR findings and reports on progress made to that point. During this six-month period, EPA generally will not conduct inspections at the facility receiving the EMR unless such inspection is required by statute, regulation, or EPA policy involving compliance with environmental statutes, or unless good cause exists including belief of misrepresentation or falsification of any report required by law, to determine whether the facility may present an imminent and substantial danger to public health or the environment, or to investigate a tip, complaint or other information concerning potential civil or criminal violations at the facility.
  - j. Within approximately twelve months of the EPA EMR report, the EPA regional office will informally contact the facility to get an update on, for example, the areas of change that resulted from the EMR, any staffing or resources changes, and any other appropriate information regarding the facility's response to the recommendations made in the EPA EMR report.

### **IV. Incidental Violations Response Policy (IVRP)**

The purpose of an EMR is not to assess the compliance status of a federal facility. There may, however, be circumstances when an EMR incidentally uncovers violations either through document review or while on site. EPA's Office of Enforcement and Compliance Assurance (OECA) has developed enforcement response policies for several programs with industry such as the Environmental Leadership Program, the Common Sense Initiative, and Project XL that detail how violations will be treated if they are discovered as part of these programs. The Incidental Violations Response Policy (IVRP) described below details how violations will be treated that are incidentally uncovered at a federal facility that is participating in the EMR program. As previously stated, EMRs are not enforcement inspections. In fact, situations presenting enforcement issues have occurred very infrequently in the EMRs conducted at federal facilities to date.

#### **Imminent and Substantial Endangerment**

In cases where the EMR team finds situations that may cause an imminent and substantial endangerment to public health or the environment or serious actual harm, EPA expects the facility to address the situation immediately and retains the right to respond as necessary.

#### **Other Violations**

## Appendix B - Final EMR Policy

OECA's Federal Facilities Enforcement Office (FFEO) is responsible for ensuring that federal facilities take all necessary actions to prevent, control and abate environmental pollution. FFEO uses a comprehensive approach encompassing compliance assistance, compliance oversight and enforcement, and systematic reviews of federal agency environmental plans and programs to ensure that federal agencies are in compliance and taking steps toward pollution prevention. Generally, EPA bases its initial response to a violation on the type of violation and the potential risk posed by the violation. Although the pertinent statute/regulation and media-specific or program-specific guidance governs the type of initial EPA response, they can vary from a Notice of Violation (NOV)/Notice of Noncompliance (NON), to an Order or Compliance Agreement without penalties, to a Complaint or Order assessing penalties.

Consistent with EPA's Audit Policy (*Incentives for Self-Policing*, 60 FR 66706, December 22, 1995), and in the context of the EMR program and the IVRP, following the identification of a violation(s) as a result of an EMR, the federal facility will be required to disclose the violation(s) in writing to EPA within 10 days of its identification. In addition, the federal facility must correct the violation(s) within 60 days of its disclosure to EPA, certifying in writing that the violation(s) has been corrected, and take appropriate measures as determined by EPA to remedy any environmental or human harm due to the violation(s).

If more than 60 days will be needed to correct the violation(s), the federal facility must notify EPA in writing before the 60-day period has passed. The facility must then enter into a written compliance agreement that:

- o establishes a specified period for correcting all outstanding violations; and
- o incorporates interim milestones that demonstrate reasonable progress toward compliance and sets forth the additional correction period and any additional steps to be undertaken by the facility to achieve compliance.

The total period of time for correction is not to exceed one-year, except in cases where pollution prevention is used as the means of correction, in which case the facility could have a total of 18 months for correction. The correction period may be limited based on statutory/regulatory requirements, as well as media-specific policy and guidance regarding significant non-compliers.

Consistent with EPA's Audit Policy, this IVRP does not apply to criminal violations, repeat violations,

---

Identification of a potential violation can either occur during the EMR visit or after the EPA staff on the EMR team consults with other appropriate regional staff. EPA will generally take no longer than 10 days after the EMR visit to contact the federal facility with information about any additional violations that result from this consultation.

In special cases an EPA region may grant a facility more than a year to correct violations due to the particular budget constraints at the facility. A region must first make the Federal Facilities Enforcement Office aware of the situation prior to granting additional time to the facility. A region should also make a facility aware that such facility may be inspected to verify that the facility has corrected violations pursuant to this IVRP.

See also the *Audit Policy Interpretive Guidance* for additional definitions and information concerning the EPA Audit Policy.

The specific violation (or closely related violation) can not have occurred previously within the past three years, or is not part of a pattern of federal, state or local violations by the facility's parent Agency, which have occurred within the past five years. A violation is: (a) any violation of federal, state or local environmental law identified in a judicial or administrative order, consent agreement or order, complaint, or notice of violation, conviction or plea agreement; (b) any act or omission for which the regulated entity has

## Appendix B - Final EMR Policy

violations that resulted in serious actual harm (or may have presented an imminent and substantial endangerment to) human health or the environment, violations of the specific terms of any judicial or administrative order or consent agreement, or actions to address recurrences of violations.

In those instances where the media-specific or program-specific guidance calls for the assessment of a penalty, EPA will completely waive the gravity-portion of such penalty for federal facilities that disclose and correct violations detected during the EMR as described above. EPA reserves the right to collect any economic benefit that may have been realized as a result of noncompliance. Economic benefit may be waived, however, where EPA determines that it is insignificant.

Where EPA and or the state is concerned about appropriate response from the facility, EPA reserves its rights to respond as it deems appropriate to instances of non-compliance. Except where explicitly noted, nothing in this policy should be construed to limit any legal authority EPA may have.

---

previously received penalty mitigation from EPA or a state or local agency.

## **B. EMR Guidance**

### **I. Purpose:**

This guidance is intended as a technical accompaniment to the EPA Environmental Management Review Policy for Federal Facilities. Its purpose is to assist EPA Headquarters and EPA Regional personnel in conducting Environmental Management Reviews (EMRs). This document will outline key areas of performance that should be considered when EPA staff and contractors are conducting EMRs. The guidance refers the users of this guidance to the *Generic Protocol for Conducting Environmental Audits of Federal Facilities* (EPA Document No. 300-B-96-012 A&B) for reference to expected performance criteria during the conduct of an EMR ( performance objectives, key evaluative concerns, and criteria) and are therefore not restated within this guidance. The definition of an EMR as well as the scope of these reviews are discussed in Section II of the EMR Policy. This technical guidance will not define a specific technical approach to be followed in all circumstances. Instead, the guidance emphasizes the planning (Section II) and communications (Section III) aspects of the EMR process, and also provides discussion on the use of protocols and checklists during the EMR process (Section IV). These sections were developed to help ensure consistency in the quality of the work to be performed, and to ensure that the expectations between the EPA regions and the participating federal facilities on the outcome of the EMR process are one and the same.

To a great extent, the success of the EMR program will depend on the quality of the products and service provided to federal facility participants. For this reason, FFEO strongly recommends that EPA staff and EPA contractors participating in the EMRs are trained in environmental audit procedures, and especially in the techniques of auditing environmental management systems. To help ensure an appropriate degree of expertise, Section VI of this guidance outlines training considerations (e.g., skills) needed by EPA staff and contractors.

### **II. Planning:**

EPA regional staff responsible for organizing and conducting the EMR should spend a significant amount of time planning for the site visit. Careful planning is crucial to ensuring that the limited time typically available for the site visit is used most effectively. Careful planning also minimizes the time necessary for follow-up activities after the site visit, and reduces the burden on facility management by efficiently utilizing the time and talents of their staff during the EMR process. The factors to consider in planning an EMR: (1) the goals and scope of the EMR; (2) the size and complexity of the facility operations; (3) the regional staff's familiarity with the site; (4) resources available for conducting the EMR; and (5) the desired form and content of the final EMR report.

If a contractor will be accompanying the EPA regional staff while conducting the EMR, regional staff should develop a scope of work that clearly establishes roles and protocols for each phase of the EMR (i.e., pre-visit, on-site, post-visit). If in-house regional staff are conducting the EMRs, the Federal Facility Coordinator or other regional member in charge of the EMR should select team members and assign roles and responsibilities. Regardless of who performs the EMRs, as part of the planning phase, EPA regional staff should ensure that the members of the EMR team:

1. clearly understand the goals and scope of the EMR;
2. upon reviewing preliminary information, are familiar with the facility's operations, environmental management policies, compliance history, waste streams and other environmental releases;
3. have the correct checklists and protocols and understands how to use them;
4. agree to follow the detailed EMR agenda formulated specifically for that facility;
5. are aware of potential health and safety issues and are prepared to handle them on-site; and
6. understand how information collected on-site will be presented in the EMR final report.

### **III. Communications With Facility Management:**

Once contact is initiated by either EPA, the facility management, or federal agency headquarters staff who have expressed an interest in having an EMR conducted at a particular site, EPA staff and federal facility management should discuss, in detail, the purpose and scope of the EMR, especially the ground rules for engaging in the process. Additionally, facility management should be briefed on the Operating Principles contained in Section III of the EMR Policy, including the outcome of the process (i.e., development of a written report) and the time frame under which that occurs. Following these discussions, a confirmation letter/ground rules letter will be sent to the facility prior to conducting the EMR planning process and site visit (see Section III (e) and Attachment One of the EMR Policy) to ensure that all parties understand the conditions under which the EMR will be conducted. This letter will also ensure that EMR staff have access to the appropriate personnel and documents at the facility, and also document that all participants are aware of terms and conditions of the Incidental Violations Response Policy (IVRP) discussed in Section IV of the EMR Policy. Examples of suggested components of a sample confirmation letter are included as Attachment One of the EMR Policy document.

EPA regional environmental staff should also use the confirmation letter to confirm the scope and dates of the EMR site visit, and to establish points of technical contact (POC) for both parties. In addition, EPA staff involved in the EMR will have an opportunity to propose an agenda for the site visit, and to send a pre-site visit questionnaire which will be helpful in determining the specific focus of the EMR. All EPA regional staff members involved in the EMR should be mindful of the fact that the facility to be visited is volunteering for this effort and, therefore, developing and maintaining a positive relationship with the facility POC is vital to the success of the EMR. Taking care to set the right tone when contacting facility personnel is critical. Important points to communicate to facility management include:

1. **The purpose of the EMR:** Both facility management and EPA regional staff assigned to conduct the EMR should be fully aware of the EMR's goals and scope, and the EPA EMR Policy document. In addition, facility management and staff should understand how the EMR results will be used both by their agency headquarters personnel (if appropriate) and by EPA. Facility understanding of how the EMR results will be used and how it may impact facility operations and relationship with EPA is particularly important.
2. **Information needs and critical persons needed for interview:** EPA regional staff conducting the EMR should work with facility management to develop a list of information needs and persons to be interviewed as part of a site visit, including management and line and staff personnel at all levels at the facility. To accomplish this task, a pre-site visit questionnaire should be forwarded to facility management in advance of the site visit to alert facility management of the documents that should be available for review (e.g., organizational charts, job-descriptions and environmental planning documents), and the facility staff that the EMR team will want to interview during the site visit. A timely and well crafted pre-site visit questionnaire will save EPA regional staff considerable time by answering fundamental questions about the facility practices and policies, and allowing the regional staff to focus the site visit on the critical issues and matters requiring a more in-depth review. FFEO has provided an appendix to the EPA Phase III protocol, *Selecting Documents to Review and Individuals to Interview for Environmental Management Assessments*, to assist personnel in this phase of the EMR process. EPA Region 1 has also developed a pre-site visit questionnaire that may prove useful for other Regions (See Attachment Two).
3. **Time schedules:** Regional environmental staff should work with the facility to develop an appropriate agenda and schedule for the EMR. The time schedule will depend on the size and complexity of the facility and the number of individuals that need to be interviewed.

### **IV. Protocols/Checklists:**

Because the scope of the EMR site visit will likely involve a review and assessment of more than one of the environmental organizational disciplines outlined in Section II of this technical guidance and Section II of the

## Appendix B - Final EMR Policy

EMR Policy, FFEO recommends that Phase III of the EPA *Generic Protocol For Conducting Environmental Audits of Federal Facilities* be consulted by EPA regional staff when developing the actual working documents and specific tools for a given site. The Phase III Protocol will provide specific guidance to EMR team members in evaluating the facility activities, and in documenting the procedural elements that are to be reviewed during the EMR. The Protocol also identifies performance objectives, and key evaluative concerns and criteria related to each of the organizational disciplines to be evaluated. Once the scope of the EMR is agreed upon by EPA regional staff and facility management, the EMR team conducting the review should select the appropriate performance objectives and criteria needed from the Phase III Protocol, and develop the appropriate protocols and checklists for that site. EPA Region 1 has also developed an EMR protocol which incorporates many items from the Phase III Protocol, and is organized around the Code of Environmental Management Principles for Federal Agencies (CEMP) (See Attachment Three). Both of these documents may be helpful to EMR team members in other Regions developing protocols and checklists for a specific site.

A checklist is an actual on-site tool developed specifically for the facility that is being reviewed. A checklist is dynamic, and should reflect only the areas to be evaluated for a particular facility based upon information gathered from the pre-site visit questionnaire, and pre-site visit communications with facility management. FFEO recommends that EPA staff conducting EMRs either develop a unique checklist for each facility undergoing a review, or annotate and modify existing checklists to reflect the specific scope agreed upon for a particular facility visit. Points to consider in developing or using a checklist include:

- o Is the checklist applicable to the type of facility being evaluated?
- o Is it pertinent to the organizational disciplines being reviewed?
- o Is it consistent with the goals and scope of the EMR for that particular facility ?

Protocols and checklists are essential tools for assuring that an EMR has adequately addressed all issues that need to be examined during an EMR. However, they are not static (i.e., one size fits all), and should reflect the unique considerations and differences attributable for each federal facility program and management system being reviewed. Protocols and checklists also are not a substitute for critical and independent judgement or decision making, and should only be used as a reference point to affirm that key criteria and evaluative areas have been examined.

### **V. Training and Development of Expertise:**

The success of the EMR program depends on the quality of the service being provided to facility management. Since federal agencies and their facilities will be looking to EPA for guidance in improving their overall environmental management systems, EPA staff and contractors conducting EMRs should be able to demonstrate having both appropriate knowledge of the issues included in the scope of the EMR, and sufficient training and proficiency prior to participating in EMRs.

The qualifications of the staff assigned to conduct EMRs should be commensurate with the objectives, scope and complexities of that particular EMR assignment. Although EMRs will vary in scope, they all require some degree of professional assessment of apparent problems as well as some verification and documentation of the facility's systems for the full range of potential hazards - not just those related to compliance requirements. While the balance between assessment and verification will vary, in general the EPA staff member's background should include at a minimum:

- o technical training and experience appropriate to the work called for by the particular EMR;
- o an understanding of basic auditing theory and procedures, and the experience needed to apply it in particular situations;
- o a working knowledge of environmental regulations, evaluation criteria in the Phase 3 Protocol, and



## *A*ppendix B - Final EMR Policy

- general EMS standards appropriate to the scope of the EMR; and
- o general familiarity with the type of operations to be reviewed, and the issues likely to be encountered within the scope of the EMR.

While the precise mix of experience and knowledge that is desirable can vary, the EMR team as a whole should represent sufficient depth in these four areas of experience.

**Attachment One**  
**Examples of Suggested Components of a Sample Confirmation Letter**

The confirmation letter for an EMR could include the following elements:

- a. specific objectives of the EMR--a brief discussion of which components of an environmental management system the review will focus on;
- b. a statement that an EMR is not an inspection.
- c. brief discussion of EPA's expectations of the federal facility with respect to requests for access to specific staff, parts of the facility, access to info, etc.
- d. a brief explanation of the Incidental Violations Response Policy (IVRP) and any necessary definitions. Emphasize that instances involving the IVRP are very infrequent.
- e. a brief explanation of how the site visit will be conducted, what documents will be requested in advance, what federal facility personnel will be interviewed, etc.
- f. a disclaimer that the facility is responsible for compliance with all applicable regulations regardless of whether or not they have an EMR.
- g. a statement that the facility will, no later than six months after receipt of the EPA EMR report, produce a response plan that lays out how they plan to address the EMR findings and reports on progress made to that point.
- h. a statement that the EMR is available through FOIA.

**THIS PAGE INTENTIONALLY LEFT BLANK**

**APPENDIX C**

***Process steps for a sample EMR***

| <b>TASK #</b> | <b>TASK</b>   | <b>DATE OF COMPLETION</b>                    |
|---------------|---|--|
| 1             | U.S. EPA provides federal facility with a draft Confirmation Letter for comment and a pre-site visit questionnaire for completion | May 18, 1998                                 |
| 2             | Federal facility provides U.S. EPA with Confirmation Letter comments  | June 1, 1998                                 |
| 3             | Federal facility submits to U.S. EPA completed EMR pre-site visit questionnaire   | June 1, 1998                                 |
| 4             | Federal facility submits to U.S. EPA samples and copies of documents requested in the Confirmation Letter                         | June 8, 1998                                 |
| 5             | Confirmation Letter is signed by both U.S. EPA and federal facility   | June 15, 1998                                |
| 6             | Federal facility submits to U.S. EPA a list of personnel available for on-site interviews   | July 10, 1998                                |
| 7             | U.S. EPA submits EMR protocol to federal facility for distribution to personnel who will be interviewed                           | July 13, 1998                                |
| 8             | U.S. EPA submits to federal facility EMR logistical plan  | July 20, 1998                                |
| 9             | U.S. EPA develops draft interview schedule and submits to federal facility for comment  | July 27, 1998                                |
| 10            | Federal facility submits to U.S. EPA interview schedule comments  | July 30, 1998                                |
| 11            | U.S. EPA submits to federal facility final interview schedule   | August 7, 1998                               |
| 12            | On-site portion of the EMR - document review and interviews   | Two days during the week of August 17, 1998  |
| 13            | U.S. EPA submits to federal facility EMR findings and recommendations   | 60 days after on-site portion of the EMR     |
| 14            | Federal facility submits to U.S. EPA a plan to implement certain EMR recommendations  | 60 days after receipt of the U.S. EPA report |
| 15            | Federal facility submits to U.S. EPA an implementation progress report  | Six months after submitting initial report   |

**A**ppendix C-Process Steps For A Sample EMR

**THIS PAGE INTENTIONALLY LEFT BLANK**

**APPENDIX D**

**EMR TOOLS AND RELATED COMPLIANCE ASSISTANCE RESOURCES**

**Regional Federal Facility Coordinator Contact Information**

Anne H. Fenn  
US EPA Region I (CT, MA, ME, NH, RI, VT)  
One Congress St.-Suite 1100  
Mail: SPP  
Boston, MA 02114-2023  
Tel: 617-981-1805  
Fax: 617-918-1810  
[fenn.anne@epa.gov](mailto:fenn.anne@epa.gov)

Jeanette Dadusc  
US EPA Region II (NJ, NY, PR, VI)  
290 Broadway - 21th Fl.  
New York, NY 10007  
Tel: 212-637-3492  
Fax: 212-637-4086  
[dadusc.jeanette@epa.gov](mailto:dadusc.jeanette@epa.gov)

Bill Arguto  
US EPA Region III (DE, DC, MD, PA, VA, WV)  
841 Chestnut St.  
Philadelphia, PA 19107  
Tel: 215-814-3367  
Fax: 215-566-2783  
[arguto.william@epa.gov](mailto:arguto.william@epa.gov)

Stacy Howard  
US EPA Region IV (AL, FL, GA, KY, MS, NC, SC, TN)  
61 Forsyth St., SW  
Atlanta, GA 30303  
Tel: 404-562-9633  
Fax: 404-562-9598  
[howard.stacy@epa.gov](mailto:howard.stacy@epa.gov)

Lee Regner  
US EPA Region V (IL, IN, MI, MN, OH, WI)  
77 West Jackson Blvd.  
Chicago, IL 60604  
Tel: 312-353-6478  
Fax: 312-353-5374  
[regner.lee@epa.gov](mailto:regner.lee@epa.gov)

Joyce Stubblefield  
US EPA Region VI (AR, LA, NM, OK, TX)  
Mail: 6EN-XP  
1445 Ross Ave.  
Dallas, TX 75202  
Tel: 214-665-6430  
Fax: 214-665-7446  
[stubblefield.joyce@epa.gov](mailto:stubblefield.joyce@epa.gov)

Diana Jackson  
US EPA Region VII (IA, KS, MO, NE)  
901 N. 5th St.  
Mail: RA/ECO  
Kansas City, KS 66101  
Tel: 913-551-7744  
Fax: 913-551-7941  
[jackson.diana@epa.gov](mailto:jackson.diana@epa.gov)

Dianne Thiel  
US EPA Region VIII (CO, MT, ND, SD, UT, WY)  
999 18th St. - Ste. 500  
Mail: 8P-P3T  
Denver, CO 80202-2466  
Tel: 303-312-6389  
Fax: 303-312-6044  
[thiel.dianne@epa.gov](mailto:thiel.dianne@epa.gov)

Sara Segal  
US EPA Region IX (AZ, CA, HI, NV, AS, GU, TT)  
75 Hawthorne St., CMD-2  
San Francisco, CA 94105  
Tel: 415-744-1569  
Fax: 415-744-1598  
[segal.sara@epa.gov](mailto:segal.sara@epa.gov)

Michele Wright  
US EPA Region X (ID, OR, WA, AK)  
1200 6th Ave., OEC-157  
Seattle, WA 98101  
Tel: 206-553-1747  
Fax: 206-553-7176  
[wright.michele@epa.gov](mailto:wright.michele@epa.gov)

**ENVIRONMENTAL MANAGEMENT REVIEW (EMR)  
Process Evaluation -- Team**

**Thank you for participating in this management system review. In an effort to continuously improve our process, we are asking for your evaluation and suggestions. Your candid insights will be extremely helpful to us.**

*How well prepared did you feel you were for the EMR?*

|   |             |                 |                   |
|---|-------------|-----------------|-------------------|
| <i>Knowledge of objectives and process</i>          | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |
| <i>Understanding of organization to be reviewed</i> | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |
| <i>Understanding of EMR criteria</i>                | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |

*How efficient was the process?*

|                          |             |                 |                   |
|--------------------------|-------------|-----------------|-------------------|
| <i>Preparation</i>       | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |
| <i>On-site</i>           | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |
| <i>Synthesis of data</i> | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |

*How effective were communications?*

|   |             |                 |                   |
|---|-------------|-----------------|-------------------|
| <i>Within the team</i>                  | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |
| <i>With organization being reviewed</i> | <i>very</i> | <i>somewhat</i> | <i>not at all</i> |

*Were your views and ideas heard and accommodated?*

*very* \_\_\_\_\_ *somewhat* \_\_\_\_\_ *not at all*

*How useful were the tools we used?*

*very* \_\_\_\_\_ *somewhat* \_\_\_\_\_ *not at all*

*How thorough was the process?*

*very* \_\_\_\_\_ *somewhat* \_\_\_\_\_ *not at all*

*How useful was the outcome to the organization reviewed?*

*very* \_\_\_\_\_ *somewhat* \_\_\_\_\_ *not at all*

*How challenging was the process?*

*very* \_\_\_\_\_ *somewhat* \_\_\_\_\_ *not at all*

*How close was the actual experience to your expectations?*

*better* \_\_\_\_\_ *close* \_\_\_\_\_ *worse*

*How useful to you was the process as a learning experience?*

*very* \_\_\_\_\_ *somewhat* \_\_\_\_\_ *not at all*

*How could the process be improved? (Please be specific. Continue on reverse if necessary)*

**ENVIRONMENTAL MANAGEMENT REVIEW (EMR)**  
**Process Evaluation -- Site**

**Thank you for participating in this management system review. In an effort to continuously improve our process, we are asking for your evaluation and suggestions. Your candid insights will be extremely helpful to us. (Feel free to skip questions that do not apply.)**

*How well prepared did you feel you were for the EMR?*

*Knowledge of objectives and process* very somewhat not at all

*Understanding of EMR criteria* very somewhat not at all

*How efficient was the process?*

*Preparation* very somewhat not at all

*On-site* very somewhat not at all

*How disruptive to the organization was the activity?*

very somewhat not at all

*How effective were communications from the team?*

very somewhat not at all

*Were your views and ideas heard and accommodated?*

very somewhat not at all

*How useful were the tools we used?*

very somewhat not at all

*How thorough was the process?*

very somewhat not at all

*How accurate were the observations?*

very somewhat not at all

*How useful were the recommendations?*

very somewhat not at all

*How timely was the report?*

very somewhat not at all

*How helpful was the overall experience?*

very somewhat not at all

*How close was the actual experience to your expectations?*

better close worse

*How professional were the team members?*

very somewhat not at all

*How knowledgeable were the team members?*

very somewhat not at all

*How objective were the team members?*

very somewhat not at all

*How flexible were the team members?*

very somewhat not at all

*How responsive were the team members?*

very somewhat not at all

*How could the process be improved? (Please be specific. Continue on reverse if necessary)*



**A** *ppendix D-EMR Tools And Related Compliance Assistance Resources*

**THIS PAGE INTENTIONALLY LEFT BLANK**

**A**ppendix D-EMR Tools And Related Compliance Assistance Resources

**EPA ENVIRONMENTAL MANAGEMENT REVIEWS  
FOR FEDERAL FACILITIES  
FACILITY PRE-SITE QUESTIONNAIRE**

**I. FACILITY CONTACT INFORMATION**

NAME OF FACILITY: \_\_\_\_\_

FACILITY  
DIRECTOR/COMMANDER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

TELEPHONE: \_\_\_\_\_ FAX: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

FACILITY ENVIRONMENTAL COORDINATOR: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

TELEPHONE: \_\_\_\_\_ FAX: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

PARENT ORGANIZATION:  
\_\_\_\_\_

PARENT ORGANIZATION  
ENVIRONMENTAL MANAGER:  
\_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

TELEPHONE: \_\_\_\_\_ FAX: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

**II. FACILITY ORGANIZATIONAL STRUCTURE**

**A** ppendix D-EMR Tools And Related Compliance Assistance Resources

1. Please describe your facility's mission/major activities:
  
2. How does your facility fit into the organizational structure of your parent agency?
  
3. Has your parent agency issued a formal, organization-wide environmental policy and standards? When?
  
4. Does your parent agency provide environmental assistance and/or oversight? How does your parent agency collect reporting data from and/or provide environmental information to your facility? Who is your facility's point of contact with your parent agency?
  
5. How does your Environmental Program fit into your facility's organizational structure? What is the facility's annual budget? What is the level of funding for the Environmental Program?
  
6. Do any other facility staff or programs have environmental management responsibilities? If yes, please explain.
  
7. How is your facility Environmental Management Program organized? How many staff at your facility have full-time or part-time environmental responsibilities? Briefly describe the general responsibilities of your Environmental Program.
  
8. What is the internal process for implementing new environmental initiatives? What is the approval process and how are funds allocated for new environmental initiatives?
  
9. What methods are used to track and measure facility environmental performance? How frequently is such measurement performed?

PLEASE PROVIDE COPIES OF THE FOLLOWING:

\_\_\_\_\_ Parent agency organization chart

**A**ppendix D-EMR Tools And Related Compliance Assistance Resources

- \_\_\_\_\_ Parent agency environmental policy and standards
- \_\_\_\_\_ Staffing and organization chart for your facility
- \_\_\_\_\_ Samples of supporting documentation for reporting and communication networks such as meeting notices, meeting minutes, memoranda, etc.
- \_\_\_\_\_ Samples of written Environmental Program performance and status reports
- \_\_\_\_\_ Samples of facility-specific environmental policies and procedures

Please complete the following chart. The information will help the EMR team determine what environmental issues should be planned for and taken into account by your facility. When completing the chart, please indicate the policies, procedures, and personnel that are pertinent to the various aspects of the media/program.

Appendix D-EMR Tools And Related Compliance Assistance Resources

III. FACILITY BACKGROUND INFORMATION

| MEDIA PROGRAM REVIEW |                   |                        |                     |                     |                       |                             |                          |
|----------------------|-------------------|------------------------|---------------------|---------------------|-----------------------|-----------------------------|--------------------------|
| MEDIA/<br>PROGRAM    | PLANS/<br>PERMITS | SOURCES/<br>DISCHARGES | UNDERSTAND<br>REGS? | MGMT.<br>PROCEDURES | PERSONNEL<br>TRAINING | RECORDKEEPING/<br>REPORTING | OVERSIGHT/<br>EVALUATION |
| CAA                  |                   |                        |                     |                     |                       |                             |                          |
| SDWA                 |                   |                        |                     |                     |                       |                             |                          |
| UIC                  |                   |                        |                     |                     |                       |                             |                          |
| FIFRA                |                   |                        |                     |                     |                       |                             |                          |

**A**ppendix D-EMR Tools And Related Compliance Assistance Resources

| MEDIA PROGRAM REVIEW             |                   |                        |                     |                     |                       |                             |                          |
|----------------------------------|-------------------|------------------------|---------------------|---------------------|-----------------------|-----------------------------|--------------------------|
| MEDIA/<br>PROGRAM                | PLANS/<br>PERMITS | SOURCES/<br>DISCHARGES | UNDERSTAND<br>REGS? | MGMT.<br>PROCEDURES | PERSONNEL<br>TRAINING | RECORDKEEPING/<br>REPORTING | OVERSIGHT/<br>EVALUATION |
| NPDES                            |                   |                        |                     |                     |                       |                             |                          |
| WETLANDS                         |                   |                        |                     |                     |                       |                             |                          |
| RCRA<br><br>Generator<br>Status: |                   |                        |                     |                     |                       |                             |                          |

Appendix D-EMR Tools And Related Compliance Assistance Resources

| MEDIA PROGRAM REVIEW |                   |                        |                     |                     |                       |                             |                          |
|----------------------|-------------------|------------------------|---------------------|---------------------|-----------------------|-----------------------------|--------------------------|
| MEDIA/<br>PROGRAM    | PLANS/<br>PERMITS | SOURCES/<br>DISCHARGES | UNDERSTAND<br>REGS? | MGMT.<br>PROCEDURES | PERSONNEL<br>TRAINING | RECORDKEEPING/<br>REPORTING | OVERSIGHT/<br>EVALUATION |
| TSCA/PCBS            |                   |                        |                     |                     |                       |                             |                          |
| UST                  |                   |                        |                     |                     |                       |                             |                          |



United States  
Environmental Protection Agency  
(2261A)  
Washington, DC 20460

Official Business  
Penalty for Private Use  
\$300



Printed on recycled paper