

# GENERIC PROTOCOL FOR CONDUCTING ENVIRONMENTAL AUDITS OF FEDERAL FACILITIES

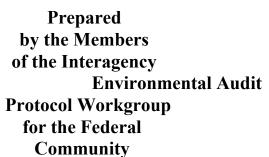
**Phase 3: Auditing Environmental Management Systems** 























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#### Introduction

#### A. Purpose

The primary purpose of conducting an environmental management systems assessment from an agency wide or macro level is to provide the facility management or agency headquarters staff with concise information pertaining to:

- C Strengths and weaknesses of environmental management systems and programs at either a specific facility or throughout the agency;
- C Adherence with Best Management Practices pertaining to environmental management systems and programs;
- C Compliance with the agency's policies which address environmental management systems and programs;
- C Identification of underlying causal factors contributing to the occurrence of observed compliance deficiencies; and
- C Noteworthy environmental management practices.

These assessments are also intended to provide facility management or headquarters staff with feedback on the effectiveness and benchmark performance of their environmental management systems and to identify opportunities for improvement.

Phase 3 reviews the "big picture" by assessing the overall functioning of established environmental management systems at a facility or throughout the entire agency. This document divides Phase 3 protocols into the eight organizational disciplines listed below and attempts to provide assistance to agency headquarters staff and facility management when they seek to understand and evaluate the systems which have been developed to manage and control environmental performance. In this review, the task of the assessor shifts from compliance auditor (Phase 1) and systems specific environmental program evaluator (Phase 2), to systems function evaluator of environmental performance at either the overall facility or at all facilities through the agency.

#### **B.** Scope and Format

The scope of an environmental management systems assessment includes eight disciplines which are based on key characteristics and elements of effective environmental management systems. These eight disciplines are the following:

- **C** Organizational Structure:
- **C** Environmental Commitment;
- **C** Environmental Protection Programs;
- **C** Formality of Environmental Programs;

- **C** Internal and External Communication;
- C Staff Resources, Training, and Development;
- C Program Evaluation, Reporting, and Corrective Action; and
- C Environmental Planning and Risk Management.

(NOTE: Pollution prevention is dealt with comprehensively in each of the sections of Phase 2 as it pertains to those disciplines. Additionally, a pollution prevention assessment guide has been provided as an Appendix to Phase 2.)

#### Each discipline is organized as follows:

- C Performance Objective: This is a general statement of the overall objective to be met in each discipline.
- C Key Evaluative Concerns: This section provides information on the major elements that will be evaluated in each discipline.
- C *Criteria*: These are specific criteria that should be satisfied in order to meet the overall performance objective for each discipline. Each criteria is identified by a capital letter. The criteria within a discipline have been grouped and organized along the lines of the major elements identified in Key Evaluative Concerns.

The bullets under each criterion are intended to provide guidance to the assessor in evaluating that criterion; they are not intended to be subcriteria. Additional bullets or lines of inquiry may be appropriate depending on the specific organization being reviewed.

Many Federal facilities have tenant organizations, usually other Federal agencies, but also state and local agencies and private parties. Even though these tenant organizations may be responsible for environmental compliance of their activity, the facility owner may be ultimately held accountable by regulators should compliance problems persist or should future liabilities be discovered. These protocols can be used to address environmental compliance and management issues associated with tenant organizations. The agreements between the facility owner and the tenant organization need to clearly establish environmental responsibilities of both the facility owner and tenant organization and the mechanisms that the facility owner will utilize to monitor compliance, including application of these protocols to the tenant organizations.

Federal facilities must observe the requirements of Executive Order (E.O.) 12088 to ensure that sufficient funding for compliance with applicable federal, state, and local environmental requirements are requested in the agency budget. The FEDPLAN planning process is a systematic methodology for identifying and prioritizing environmental requirements, and targeting resources necessary to address them. The process assists in establishing funding priorities for projects to meet statutory and regulatory requirements. Using a standardized format, Federal agencies must update their plans annually and submit them to the Office of Management and Budget (OMB) through EPA for review. EPA uses a computerized system (FEDPLAN-PC) to track these requirements from the

time they are first identified until they are executed. The procedures for developing Federal agency environmental plans are discussed in detail in the EPA document "Federal Agency Environmental Management Program Planning Guidance," dated October 1994.

#### C. Approach

In an assessment of facility wide environmental programs, the responsibility of the environmental management specialist is to assess these programs to determine whether they effectively meet the performance objectives and whether they have sufficient structure and formality to assure that activities are conducted in a manner that is consistent with environmental regulations and Federal agency policy.

The assessment is based on a combination of staff interviews and document reviews. Interviews are exceptionally important in conducting an Environmental Program Assessment. 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. Suggestions for the type of staff to interview and documents to review are provided in the appendix.

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# **Section 33**

**Assessing Environmental Programs Organizational Structure** 

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#### 1. Performance Objective

The structure of the organization being assessed should be such that environmental management functions are congruent and effectively integrated with other functions and processes. Roles, responsibilities, and accountabilities should be well defined and clearly communicated to effectively manage environmental issues. Authorities should be delegated to organizational levels that can ensure the effective implementation of environmental programs.

#### 2. Key Evaluative Concerns

In this assessment discipline, the organization of the environmental management organization will be reviewed and evaluated. Important characteristics of an effective organizational structure include well defined roles and responsibilities, sufficient authorities, appropriate layers of management, effective reporting relationships, and congruence of the environmental management organization with the larger Federal agency organization.

#### 3. Criteria

#### A. Management Organization

- 1) The organizational structure of the environmental management function is characterized by clear lines of authority and responsibility.
  - a. Review organizational charts, mission statements, and any other documentation of organizational design for the environmental management function.
  - b. Determine whether departmental missions and responsibilities related to environmental management are clearly defined and understood. Note any overlaps or conflicts of interest.
  - c. Determine which offices and individual(s) have authority and responsibility/accountability for various environmental management functions.
- 2) The environmental management function is organized in such a way that managers can be leveraged effectively, without being spread too thinly.
  - a. Determine the breadth and depth of responsibility of key environmental managers.
  - b. Determine whether environmental managers have too much responsibility to effectively carry out their jobs.

- c. Determine whether environmental managers have too little responsibility to be cost effective to the organization.
- 3) Reporting relationships within the environmental management function are well defined, clearly communicated, and effectively integrated into the overall organizational structure.
  - a. Interview mangers and environmental staff to understand these reporting relationships.
  - b. Determine where these relationships are defined and how they are communicated.
  - c. Evaluate whether actual reporting arrangements for environmental management (as determined through interviews) match those shown on existing organizational charts or on distribution lists. Note any differences.
  - d. Evaluate how well these reporting relationships and the environmental management organization fits in with the overall organization, e.g.,
    - -- Centralization versus decentralization; and
    - -- Line versus matrix organizational structure.
- 4) Environmental managers are positioned high enough in the organization and have sufficient organizational stature, independence, and authority to effectively implement environmental programs and to make decisions related to environmental protection.
  - a. Understand the amount of authority given to environmental managers at different levels and determine if it is sufficient to carry out their responsibilities.
  - b. Understand the approval process and the level of approval necessary for specific actions or projects.
  - c. Identify who has stop-work authority and how quickly they can affect a necessary response.
  - d. Note how many reporting levels separate the organization's most senior manager and the person in charge of environmental matters.
  - e. Determine whether there are too many layers of management between these two positions (the organization's most senior management and the environmental professional).

- f. Determine the effectiveness of communication between these two positions (the organizations most senior management and the environmental professional). (linkage with Section 37).
- 5) The integrity and effectiveness of the organizational structure is periodically reviewed and revisions are made when warranted.
  - a. Note how often it is reviewed and by whom.
  - b. Understand the criteria used to evaluate organizational structure.
  - c. Determine whether the organizational structure of the environmental management function has changed as a result of past reviews.
- B. Roles and Responsibilities (linkage with Section 38)
  - 1) Environmental roles and responsibilities are well defined, clearly communicated, and understood by all personnel whose activities may impact environmental performance.
    - a. Identify where and how these roles and responsibilities are defined, such as in program manuals or job descriptions.
    - b. Verify through interviews that individual jobs and responsibilities for environmental management match those in program plans and job descriptions.
    - c. Determine whether specific roles as required by Federal agency policy or Federal and state regulations have been assigned (e.g., NEPA Compliance Officer, Radiation Safety Officer).
    - d. Determine whether these roles and responsibilities are formally implemented.
    - e. Determine whether functional relationships between the environmental support group and the line units are formally defined and understood.
    - f. Review tenant/host agreement(s) to ensure environmental responsibilities are clearly defined between the tenant and the agreement holder.

- 2) Roles, responsibilities, and accountabilities are supported by management systems and documentation such as job descriptions, performance standards, and performance appraisals.
  - a. Review job descriptions and performance standards for a sample of line management and operations staff to determine if appropriate environmental responsibilities are included.
  - b. Review performance standards for select personnel (line managers and operations staff) to verify that environmental performance is a written criterion.
  - c. Determine, through interviews, whether performance appraisals appropriately measure environmental performance for both environmental staff and non-environmental staff.
  - 3) Personnel responsible for environmental management are held accountable for their performance and the performance of those they manage.
    - a. Determine if awards are available for environmental activities or actions.
  - 4) A group independent of line management with responsibility for policy and standards development and oversight and technical support has been established. This group has the authority and management support to implement their responsibilities.
    - a. Determine whether responsibilities of these support groups are clearly defined.
    - b. Identify who:
      - -- Establishes organization-wide environmental policy and standards:
      - -- Provides environmental oversight of line organizations; and
      - -- Provides technical support for line organizations.
    - c. Determine how these environmental support groups fit into the overall organizational structure. Note the organizational placement of environmental support groups and whether they are independent of line management.
    - d. Determine whether these groups have appropriate levels of authority.

e.	Determine if environmental managers have been successful in implementing past initiatives.
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# **Section 34**

# **Assessing Environmental Programs Environmental Commitment**

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#### 1. Performance Objective

The organization should exhibit a commitment to environmental excellence demonstrated by top management support, line management accountability for environmental performance, and formal environmental policy.

#### 2. Key Evaluative Concerns

The focus of this audit discipline is the commitment to environmental excellence exhibited throughout the organization -- from top management through line management and staff. Top management support is critical to ensure environmental excellence and is necessary to emphasize the importance of and commitment to the organization's environmental goals. Top management support is evaluated based on demonstration of commitment to environmental programs and performance.

The existence of overall and issue-specific environmental policies is essential to establish both a framework for and a direction to the organization's environmental expectations. The organization's environmental policy will be evaluated in terms of comprehensiveness, compliance with environmental requirements, and provisions for environmental excellence that go beyond regulatory requirements.

Finally, to achieve environmental excellence, all personnel must take personal responsibility for environmental performance. Line management's commitment is evaluated based on the sense of responsibility for environmental protection shown by managers and operating personnel at all levels and in all functions.

#### 3. Criteria

#### A. Top Management Support

- 1) Top management clearly communicates its commitment to environmental protection through the issuance of formal statements and policies that explicitly state environmental goals and expectations, with full compliance as a minimum goal.
  - a. Determine whether top management's commitment to environmental protection has been stated in mission statements, annual reports, general environmental policy, or other broadly disseminated materials.
  - b. Determine whether top management includes environmental protection in internal or external speeches.
- 2) Top management demonstrates its commitment to environmental excellence through personal and managerial actions.

- a. Determine whether routine senior management meetings include discussion of environmental issues/programs.
- b. Determine if top management has supported environmental programs through sufficient allocation of resources (financial, technical) (linkage with Section 38 & Section 40).
- c. Identify personal actions that provide evidence of top management support, for example:
  - -- Initiation of environmental programs/projects;
  - -- Participation in professional associations;
  - -- Work with local community organizations; and
  - -- Participation in self-assessment reviews.
- d. Determine whether senior management has a clear set of goals and expectations regarding environmental performance and what they are (e.g., environmental compliance as a minimum expectation, goals that go beyond compliance, emissions reductions, etc.).
- e. Compare explicit goals to apparent implicit goals and identify any conflicting messages.
- f. Identify how senior management communicates its environmental goals and expectations to employees and, typically, how frequently the goals are communicated.
- 3) Top management's commitment is demonstrated through required routine reporting regarding environmental performance and the status of environmental initiatives. (linkage with Section 37)
  - a. Determine what formal reports are routinely prepared for top management and to what extent they address the organization's environmental status or performance.
  - b. For these reports, identify to whom they are sent, the type of information conveyed, and the level of detail provided.
  - c. If environmental information is not included in routine management reports, investigate whether top management utilizes or relies upon any informal means for determining the organization's environmental status or performance. If yes, identify the means and how it works.
  - d. Check for any formal written requests from top management for information on environmental status or performance.

- 4) Senior managers have a basic understanding of and appreciation for environmental requirements relevant to the scope of the operations for which they are responsible.
  - a. Through interviews, determine if senior managers understand general regulatory requirements, and have knowledge of internal environmental programs and responsibilities.
  - b. Determine what training or background these managers have related to environmental management.
- 5) Top management encourages openness and is receptive to input on environmental issues from all employees, as well as from the public at large. (linkage with Section 37)
  - a. Identify mechanisms by which employee input has been encouraged and identify examples.
  - b. Seek evidence that employee input is considered in environmental decisionmaking.
  - c. Identify mechanisms by which public input has been encouraged and identify examples.
  - d. Determine whether public input is considered in environmental decisionmaking.
- 6) Top management has created a culture of compliance, awareness, teamwork, and line responsibility for environmental management.
  - a. Based on input from other members of the Assessment Team, determine if such a culture exists in the organization and how this culture was established.
  - b. Determine top management's role in encouraging or discouraging such a culture.

#### **B.** Environmental Policy

- 1) A formal environmental policy statement that has been issued from a high enough level of authority within the organization to communicate its importance.
  - a. Determine the existence of and review the organization's formal written statement of environmental policy.

- b. Identify the individual and level within the organization from which the policy statement was issued.
- 2) Environmental compliance is formally established as the minimum acceptable standard.
  - a. Review the environmental policy statement and identify its principal environmental goals and objectives.
  - b. Determine whether the policy statement satisfies the Federal agency's goal of achieving environmental excellence.
  - c. Note whether implementation guidance or other supplemental, subsidiary statements clarify how the organization intends to meet its policy objectives.
- 3) The organization has established issue-specific policies for the major environmental issues consistent with the scope of its operations.
  - a. Determine whether the organization has issued any additional, issuespecific policies addressing more focused environmental concerns, e.g., underground storage tanks, PCBs, groundwater protection, hazardous waste, air emissions, NEPA, etc.
  - b. Assess whether issue-specific policies are consistent with the overall environmental policy.
- 4) Environmental policies are widely distributed, easily accessible, and understood throughout the organization.
  - a. Identify how environmental policies are communicated.
  - b. Based on interviews, determine the level of awareness and understanding of environmental policies.

#### C. Line Management Support

- 1) Individuals throughout the organization recognize the environmental aspects of their job responsibilities, and take personal responsibility for and demonstrate a sense of "ownership" of environmental protection.
  - a. Determine line management's sense of personal responsibility for environmental performance.
  - b. Determine whether line operating personnel and functional personnel understand how their individual jobs affect the

- organization's environmental performance and whether they make any specific connections between the two.
- c. Note specific instances which reveal management or staff attitudes or beliefs regarding the importance of their contribution to good environmental performance.
- d. Determine whether attitudes and behavior of management reinforce the message that line operating personnel are primarily responsible for ensuring good environmental performance.
- e. Determine the organization's sense of the relative importance of the roles of operating personnel and environmental staff in determining environmental performance.
- 2) Managers at all levels have formally stated and demonstrated their commitment to environmental excellence.
  - a. Identify and review managers' statements of this commitment, for example:
    - -- Memoranda;
    - -- Records of formal meetings; or
    - -- Bulletin board postings.
  - b. Identify actions that provide evidence of environmental commitment.
- 3) Managers at all levels and in all functions whose activities may impact environmental performance take responsibility and interest in limiting the environmental impacts of their operations.
  - a. Identify activities in which line managers are involved, for example:
    - -- They routinely observe field level compliance activities;
    - -- Participate in audits and self-assessments;
    - -- Write and review procedures; or
    - -- Serve on environmental advisory committees.
  - b. Determine what kind of environmental information line managers solicit and receive and how they obtain this information.
  - c. Review internal memos relevant to environmental management activities and manager meeting minutes to assess their level of involvement.
  - d. Determine what actions have been taken by line management in response to environmental accidents and occurrences.

- 4) Management and staff cooperate fully and openly with internal and external oversight groups. (linkage with Section 33 and Section 37)
  - a. Based on interviews with internal environmental staff and external oversight organizations, determine whether the relationship between the two is cooperative or adversarial.

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# **Section 35**

**Assessing Environmental Programs Environmental Protection Programs** 

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#### 1. Performance Objective

Programs should be in place to ensure compliance with applicable Federal, state, and local environmental protection laws and regulations, and internal Federal agency policies that are designed to protect the environment and public health and welfare.

#### 2. Key Evaluative Concerns

The purpose of this assessment discipline is to evaluate the extent to which the organization has developed and implemented specific environmental protection programs and plans which, if properly managed, should help maintain compliance and ensure movement towards environmental excellence. This category will be evaluated based on the existence, quality, and effectiveness of specific programs, including all necessary program elements.

Whereas the other protocol areas evaluate specific characteristics and elements of environmental management systems, this discipline will evaluate the implementation of these systems for issue specific environmental programs.

#### 3. Criteria

- A. Specific Environmental Protection Programs (EPPs)
  - 1) For each of the following programs identified in A-1 below determine whether a program is necessary and whether existing programs are sufficient to identify, quantify, and control risks.
    - a. Determine whether applicable environmental programs include the following program elements:
      - -- Formal policies and plans;
      - -- Identification and characterization of sources;
      - -- Understanding of applicable regulatory requirements;
      - -- Responsibilities;
      - -- Implementation procedures;
      - -- Recordkeeping and reporting systems;
      - -- Training; and
      - -- Program evaluation and oversight.
    - b. Evaluate the effectiveness of the organization's environmental programs.
  - 2) Effective environmental protection programs are in place to identify, control, and monitor air emissions.
  - 3) The organization has a program for the protection of surface waters including:

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- a. Identification of discharge points and sources;
- b. Applicable discharge permits, monitoring program, an effective Spill Prevention, Control, and Countermeasures Plan; and
- c. Reporting and recordkeeping systems.
- 4) The organization has a program for the protection of potable water supplies (including backflow prevention systems).
- 5) The organization has determined and documented the need for site specific groundwater protection programs. When necessary, a groundwater monitoring program has been established to address the needs of specific sites.
- 6) Programs are in place for the proper management and control of toxic and chemical materials to prevent or minimize their release into the environment, including programs for:
  - a. Procurement, handling, and storage of toxic and chemical materials;
  - b. Management and control of polychlorinated biphenyls;
  - c. Management and control of pesticides;
  - d. Management and control of petroleum, petroleum products, and chemicals in aboveground or underground storage tanks; and
  - e. Containment or removal of asbestos.
- 7) The organization has a program for the management of solid, hazardous, and radioactive waste, including:
  - a. Waste source identification;
  - b. Waste characterization;
  - c. Waste acceptance criteria, where appropriate;
  - d. Treatment, storage, and disposal practices;
  - e. Contingency plans;
  - f. Recordkeeping systems;
  - g. Training;

- h. Waste minimization; and
- i. A formalized pollution prevention program as outlined in relevant executive orders.
- 8) Programs are in effect that provide for environmental radiation protection through adherence to ALARA principals. Additional programs are in place that require:
  - a. Radiological environmental surveillance;
  - b. Evaluation of unplanned releases of radioactive materials; and
  - c. Evaluation of radiation exposure to the public.
- 9) The organization has a program to identify, remove, and/or routinely monitor underground storage tanks.
- 10) The organization has a program for compliance with Federal agency requirements for implementing NEPA, including screening/review and determination of the appropriate level of NEPA documentation for each proposed action.
  - a. Identify the system to assess the acceptability of contractors preparing NEPA documentation.
  - b. Determine whether environmental evaluations or checklists are used to initially screen every proposed action.
  - c. Identify the criteria and process used to recommend the level of NEPA documentation to the appropriate Federal agency authority for determination.

#### **B.** Specific Program Plans

- 1) The responsible field organization has prepared and routinely updated formal program plans for the following:
  - a. Groundwater protection management;
  - b. Waste minimization; and
  - c. Pollution prevention awareness.
- 2) The organization has developed an environmental monitoring and surveillance plan.

a. Determine whether the organization has a monitoring plan and whether it addresses all environmental monitoring needs and requirements relevant to the organization.

#### C. Other Programs Related to Environmental Protection

- 1). A program is in place to plan and effectively implement all actions required to manage responses to releases of hazardous substances to the environment from inactive waste sites or to releases of reportable quantities of hazardous materials.
  - a. Determine whether the organization has formal written emergency response plans, such as a Contingency Plan, Spill Prevention, Control, and Countermeasures (SPCC) Plan, etc. as required.
  - b. Assess whether these plans are clear, complete, and current as to who has the Emergency Coordinator responsibility, what emergency response equipment is available and where, and whether the emergency response procedures are site-specific.
  - c. Determine whether staff have received appropriate training in planned emergency response procedures. Does the organization hold periodic drills or other readiness exercises.
  - d. Review emergency response plan documents, internal records of emergency response drills, other readiness exercises conducted.
- 2) The organization has developed and implemented preventive maintenance programs to ensure proper operation of pollution control equipment. (linkage with Section 40)
  - a. Determine what has been the operating experience of this organization over the past year with respect to pollution control equipment outage and needed repairs.
  - b. Assess whether the organization has preventive maintenance programs in place and functioning for any critical operating and pollution control equipment.
  - c. Determine whether preventive maintenance schedules are automated or how responsible personnel know when a particular planned maintenance activity is to be performed.
- 3) The organization has emergency preparedness plans such as contingency plans, Spill Prevention, Control, and Countermeasures plans, and a

general emergency plan that addresses any potential hazard including natural disasters, fire, explosions, etc.

- a. Verify that emergency response plans and programs include all applicable elements, including roles and responsibilities, procedures, training, and equipment.
- b. Determine whether crisis management responsibilities are defined at all organizational levels.
- c. Review responsibilities in the emergency response plan against organizational charts and general responsibilities.
- 4) A Quality Assurance Program and organization is in place to assure that environmental programs provide adequate protection to the environment and to public health, and that environmental data are representative and defensible.
  - a. Determine whether environmental measurement activities are conducted following EPA-approved methods and procedures.
- 5) A P2 plan outlines a facility's environmental future with respect to all environmental impacts and compliance programs.
  - A. Pollution Prevention Plan Development Steps
    - Develop P2 goals;
    - Obtain Management commitment;
    - Establish a P2 team;
    - Develop a baseline;
    - Identify P2 activities and opportunities;
    - Develop criteria and rank the activities and opportunities; and
    - Conduct management reviews.
  - B. P2 Plan a P2 program is a road map describing:
    - P2 activities;
    - The status of activities in progress;
    - P2 goals; and
    - Reductions achieved through P2 activities.

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# **Section 36**

**Assessing Environmental Programs Formality of Environmental Program** 

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	B. Procedures
	C. Routine Facility Inspections
	D. Recordkeeping and Reporting

#### 1. Performance Objective

Formal systems and procedures should be in place to manage day-to-day environmental compliance. This includes systems to track and understand regulatory requirements and procedures for implementation of policies and programs, routine inspections, and systems for recordkeeping and reporting.

#### 2. Key Evaluative Concerns

In this audit discipline, the formality of environmental programs and supporting management systems for ensuring compliance will be evaluated. This discipline complements the Environmental Protection Programs discipline by focusing on the formal systems and controls that are in place to assure compliance of day-to-day operations. The assessment team will evaluate the existence and effectiveness of a formal system for tracking, interpreting, and distributing relevant regulatory requirements. The organization will also be evaluated on its implementation of environmental programs through specific guidance procedures and standards. The organization's system for the conduct of routine inspections to identify and prevent problems will be evaluated. Finally, systems for the maintenance and retention of records as well as assurance of necessary reporting will be assessed.

#### 3. Criteria

#### A. Regulatory Tracking and Translation

- 1) A formal system is in place to routinely track and interpret new and/or changes to Federal, state, and local regulations and Federal agency policies for the organization as follows:
  - a. Determine how the organization stays current with new and emerging environmental regulations and trends;
  - b. Identify who within the organization is responsible for regulatory tracking;
  - c. Determine how new regulations are interpreted as to their applicability to the organization and by whom. Determine the role of the legal department in this task;
  - d. Determine whether the organization has a formal system for ensuring that new requirements are incorporated into existing programs, policies, and procedures; and
  - e. Note the availability of regulatory reference material (compilations such as BNA, automated access via software, etc.), technical books, and other reference materials.

- 2) A process exists to ensure that guidance on new regulatory requirements is incorporated into organization or site-specific standard operating procedures, as appropriate:
  - a. Determine if there is a formal system in place to update environmental programs and procedures to reflect changes in regulatory requirements.
- 3) Relevant regulatory information is routinely distributed to field organizations in a timely manner:
  - a. Determine how and in what form regulatory information is transmitted to the field; and
  - b. Determine whether the appropriate people learn of the developments with sufficient lead time to take appropriate action.
- 4) Field organizations are provided sufficient guidance for compliance with new regulations or policies in the form of guidance documents, sample plans, and procedures:
  - a. Determine how this guidance is provided and by whom, such as through guidance manuals, training, memorandum, etc.;
  - b. Determine the level of guidance provided to the field along with regulatory distribution and assess the adequacy of this guidance; and
  - c. Interview field personnel and obtain their opinion of the adequacy of guidance.

#### B. Procedures

- 1) The organization has a formal, controlled process for reviewing, creating, updating, and approving new procedures:
  - a. Develop an understanding of this process, including types of approval, responsibilities, etc.; and
  - b. Test the system by identifying a sample of procedures to determine if they have been reviewed and updated, by identifying a new regulatory requirement, and by determining whether a procedure has been created and approved.
- 2) Procedures and standards are issued from an organizational level with the authority to mandate implementation (linkage with Section 33):

- a. Identify who issues environmental standards and their level of authority within the organization; and
- b. Assess whether the level of procedure issuance is sufficient to ensure implementation.
- 3) Formal standards and procedures have been developed for the implementation of specific environmental protection programs:
  - a. Determine whether the organization has written procedures for environmental activities associated with specific environmental programs, for example, inspections, reporting, emergency response, and NEPA;
  - b. Review a sample of program specific procedures to assess the quality and adequacy of instruction; and
  - c. Evaluate the process to review the technical content and adequacy of NEPA documentation.
- 4) There are procedures to ensure that any activities that might impact the environment are reviewed for environmental protection considerations:
  - a. Determine whether standard operating procedures include environmental protection standards; and
  - b. Determine whether the organization has a system to ensure that all procedures are reviewed and revised to include environmental protection considerations (linkage with Section 40).
- 5) Procedures are part of a formal, auditable document control system designed to ensure that personnel have ready access to current versions of procedures containing environmental requirements:
  - a. Develop an understanding of how procedures are organized and controlled, for example, whether procedures are centrally located or at each individual operating site, and whether they are controlled using a manual or computerized system;
  - b. Determine which environmental procedures are routinely accessible at the facility level; and
  - c. Verify accessibility by requesting a sample of specific procedures.
- 6) The organization has implemented a system to periodically review and update environmental procedures:

- a. Determine how often and by whom procedures are reviewed and updated;
- b. Determine how revised or updated procedures are communicated/distributed to the rest of the organization; and
- c. Determine whether there is a requirement for periodic review of procedures by users.
- C. Routine Facility Inspections (linkage with Section 35 and Section 39)
  - 1) The organization has a program for routine site and equipment inspections and compliance checks, including appropriate documentation:
    - a. Determine whether environmental or other staff conduct occasional or routine inspections to determine compliance with specific environmental legal and regulatory requirements, and check the frequency of these inspections;
    - b. Determine whether regular tests and inspections are performed on critical operating and pollution control equipment (e.g., electrostatic precipitators, scrubbers, air monitors, and environmental measurement devices);
    - c. Determine whether these inspections follow a formal written protocol or checklist; and
    - d. Determine whether results of inspections are documented and retained. Review documentation of a sample of routine inspections.
  - 2) The organization has a formal system for follow-up of exceptions noted in inspections, which is supported by management review:
    - a. Develop an understanding of the follow-up system and responsibilities;
    - b. Determine if there is a process for reporting exceptions to management;
    - c. Determine whether management reviews inspection documentation and corrective actions;
    - d. Determine if there is a tracking process to ensure that the corrective actions or repairs are taken in a timely manner; and

- e. Determine whether the organization has a system in place to minimize repeated exceptions as noted in inspections (e.g., through root cause analysis).
- D. Recordkeeping and Reporting (linkage with Sections 33 and 35)
  - 1) Systems are in place for the appropriate documentation and recordkeeping of environmental performance:
    - a. Develop an understanding of all systems that are in place for recordkeeping and document control:
      - -- Tracking of key regulatory schedules (e.g., permit renewals, report submissions, required training.);
      - -- Maintaining compliance records (e.g., inspection logs, source and/or ambient measurement data.); and
      - -- Preparing and submitting required regulatory reports (e.g., RCRA generator reports, hazardous material inventory and release reports, PCB inventory and disposal reports).
    - b. Determine whether the organization maintains appropriate documentation and records of environmental inventories, permits, and environmental performance for the following programs:
      - -- Water pollution control;
      - -- Air pollution control;
      - -- Hazardous waste management;
      - -- Reportable spill incidents;
      - -- PCB inventory and disposal;
      - -- Toxic Substance Control Act Section 8(c) and 8(e) files;
      - -- Training; and
      - -- **EPA.**
    - c. In general, assess the state of the organization's files and recordkeeping practices regarding these environmental records. Determine whether the files are complete, current, and readily accessible.
    - d. Determine the extent to which environmental information management is automated or manual.
    - e. Determine whether recordkeeping practices are formal and systematic.
  - 2) The organization has a document control system and record retention policy:

- a. Determine whether the organization has a formal records retention policy which covers environmental compliance and other related environmental information. In lieu of a formal policy, determine if there are guidelines provided to staff regarding environmental records retention;
- b. Assess whether individuals are knowledgeable of the record retention policy;
- c. Where applicable, verify that the organization retains environmental records for the retention period specified by regulation;
- d. Determine whether the system has the capability to track the status of NEPA compliance for planning, funding, approval, design, and construction phases of all proposed actions; and
- e. Determine whether the system accounts for classified documentation, if necessary.
- 3) There are systems in place to ensure that environmental reports required by Federal and state regulations and Federal agency policy are routinely prepared and submitted on a timely basis:
  - a. Determine how the organization ensures that environmental reports required by Federal or state regulations are routinely prepared and submitted to the appropriate regulatory agencies in a timely manner; and
  - b. Assess the effectiveness of the system by checking some reporting requirements such as the following:
    - -- Annual hazardous waste generator reports have been submitted to appropriate state or Federal EPA.
- 4) Environmental status reports with the appropriate level of detail are routinely prepared for internal management purposes and for reporting environmental concerns to higher levels of management in a timely manner (linkage with Section 33 and Section 34):
  - a. Identify what kind of reports are prepared, and determine the content and frequency of these reports;
  - b. Determine whether these reports include the full range of environmental issues/activities;

- c. Determine whether other systems for conveying environmental information are in place (e.g., regular meetings, reports, self assessments, etc.);
- d. Note whether environmental status information includes an appropriate level of detail to sufficiently inform senior management; and
- e. Note whether environmental status reports compare accomplishments to goals.
- 5) There are formal mechanisms to investigate, report, correct, track, and monitor trends in environmental problems and "incidents," and types and magnitudes of the problems that should be reported are well defined (linkage with Section 39):
  - a. Determine whether the organization has a formal written procedure for environmental incident investigation and reporting;
  - b. Review files of investigation reports to determine whether root causes of problems and incidents are identified and trended and whether there have been recurring problems; and
  - c. Determine whether corrective actions have been planned and implemented for these incidents.

## **Section 37**

## **Assessing Environmental Programs Internal and External Communication**

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#### 1. Performance Objective

Formal and informal channels of communication should be used to facilitate implementation of all environmental management systems and programs; to emphasize management commitment to environmental protection; to generate a sense of environmental awareness throughout the organization; and to manage relationships with external oversight organizations and others who are likely to be concerned with the success of the organization's environmental protection efforts.

#### 2. Key Evaluative Concerns

The focus of this audit discipline is an evaluation of internal and external communication systems. The effectiveness of internal communication systems will be determined through an evaluation of the understanding of roles and responsibilities and the awareness of environmental policies, procedures, and programs throughout the organization. The extent and effectiveness of external communications will be assessed on the basis of consistency of the external dialogue, monitoring of external concerns, and external recognition of the organization's environmental commitment.

#### 3. Criteria

#### A. Internal Communication

- 1) Environmental information is effectively communicated through formal or informal means throughout the organization (top-down, bottom-up, and lateral):
  - a. Determine whether these formal channels exist and in what form (reports, meetings, memoranda, etc.);
  - b. Determine whether there are regular line management and environmental staff meetings that adequately cover environmental issues; and
  - c. Evaluate the flow of communication between line management and operating staff, as well as between various functional areas.
- 2) There is a formal system in place to allow personnel to anonymously communicate (without retribution) environmental concerns to upper levels of management for resolution:
  - a. Determine whether such a system exists, how it works, to whom concerns are reported, and what type of action is taken;
  - b. Determine whether personnel at various levels in the organization are aware of its existence;

- c. Note any evidence that the system is used and whether it is considered useful; and
- d. Evaluate demonstrated management support for the system.
- 3) Informal channels of internal communication are encouraged as a means of developing cooperation and commitment to environmental protection:
  - a. Identify the informal modes of communication used in the organization and assess their effectiveness; and
  - b. Determine whether environmental staff across programs, facilities, and units share information and assist each other on environmental problems.
- 4) Environmental awareness is continually reinforced throughout the organization via the use of newsletters, bulletin boards, videotapes, officewide programs, or other means (linkage with Section 37):
  - a. Identify communication modes used to promote environmental awareness;
  - b. Note observations of environmental awareness promotion throughout the facility; and
  - c. Compare environmental awareness with health and safety awareness for perspective.
- 5) Formal communication of environmental protection directives is timely and effectively reaches all responsible elements of the organization (linkage with Sections 33 and 36):
  - a. Determine how quickly the following environmental information is communicated to management:
    - -- Routine environmental status information;
    - -- Incident or major issue information; and
    - -- Controversial issues requiring NEPA.
  - b. Determine how quickly new environmental requirements, programs, or other information is communicated to the field.
- 6) Employee environmental concerns are solicited and addressed, and both concerns and responses are documented:
  - a. Identify employee environmental concerns that have and have not been addressed;

- b. For those that were addressed, note the organization's response and whether the concerns were documented;
- c. For those that were not addressed, identify reasons why; and
- d. Note whether well-founded concerns expressed in one facility or group are shared with other facilities or groups that might have similar problems.
- 7) The effectiveness of communication is demonstrated by a widespread awareness and acceptance of the organizational commitment to environmental protection (linkage with Section 34):
  - a. Through interviews, assess the general understanding of and appreciation for environmental issues exhibited by organization employees.
- 8) Effective working relationships exist between headquarters and field environmental staff as well as between staff and line personnel whose functional responsibilities impact environmental performance:
  - a. Check for close working relationships between environmental staff, line management, and other key functional specialists within the organization (e.g., engineering, legal, purchasing);
  - b. Note any examples where networking by environmental staff with other professionals has resulted in decisions or actions that have increased the effectiveness of the environmental management function; and
  - c. Note any evidence of lack of cooperation between line and oversight groups.

#### B. External Communication

- 1) The organization has a good working relationship and cooperates fully and openly with external oversight organizations:
  - a. Determine whether the organization has frequent, proactive interaction with regulatory agencies and keeps them informed of the environmental status of the organization;
  - b. Determine whether the relationship between environmental staff and external oversight organizations appears cooperative or adversarial, based on interviews with representatives of both; and

- c. If appropriate, interview regulatory representatives to obtain their perspective of the working relationship.
- 2) The organization has defined who will serve as the internal points of contact with external parties and has identified the points of contact within appropriate external parties:
  - a. Identify the key internal points of contact for interaction with external organizations; and
  - b. Determine whether the organization has identified points of contact in external organizations.
- 3) A program exists for communicating with external parties such as regulatory agencies, environmental groups, and the local community to provide them with the information and the opportunity to be involved in key decisions related to environmental protection:
  - a. Determine what kinds of communication programs the organization has with the local community (e.g., community relations plan, education, visitation of facilities, public reading rooms, etc.);
  - b. Based on interviews with facility staff, assess how the organization interacts with environmental groups;
  - c. Identify any complaints from neighbors, and determine how the organization handles them;
  - d. Identify recent key decisions by the organization that have related to environmental protection. Determine whether external agencies, organizations, or individuals were provided the opportunity to be involved; and
  - e. Based on interviews with regulatory agencies, environmental groups, and representatives of the local community, determine whether external organizations perceive that they have had such opportunities.
- 4) Formal communication of environmental risks and protection efforts occurs frequently, is timely, and effectively reaches external organizations, including regulatory agencies, environmental groups, and representatives of the local community:
  - a. Evaluate whether environmental risks and protection efforts are communicated to such contacts routinely or only on an infrequent basis, noting whether the information is timely; and

- b. Based on outside interviews, determine whether the information is received and is perceived to be comprehensible. Determine whether recipients believe they are being kept up to date on the organization's activities that may impact environmental performance.
- 5) The environmental concerns of external parties are addressed, and both the concerns and responses are documented:
  - a. Review files to determine whether external concerns have been documented and addressed; and
  - b. For those that were addressed, note the organization's response and whether the concerns were documented and trended.
- 6) The effectiveness of communication is demonstrated by a widespread external recognition of the organization's commitment to environmental protection:
  - a. To the extent possible, determine the recognition of this commitment among regulatory agencies, environmental groups, and representatives of the local community.
- 7) The organization periodically assesses the effectiveness of external communications, makes changes as necessary, and documents the results of the evaluations and changes made:
  - a. Determine how the organization assesses effectiveness and what changes have resulted from such an evaluation.

## **Section 38**

**Assessing Environmental Programs Staff Resources, Training, and Development** 

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#### 1. Performance Objective

Programs should be in place to ensure that staff resources are sufficient to effectively develop and implement the organization's environmental protection programs. The organization should have a formal program in place to ensure that all personnel have received environmental protection training appropriate for their job responsibilities. The organization also should provide staff development and career advancement opportunities for environmental staff.

#### 2. Key Evaluative Concerns

In this discipline, the assessment team will determine whether environmental staffing resources are sufficient from a quantitative and qualitative perspective to properly address the organization's environmental risks. Job responsibilities and performance appraisal processes will be reviewed for evidence of the importance of individual environmental performance. The degree of formality, completeness, and appropriateness of the organization's systems for identifying and satisfying environmental skills training needs and for providing opportunities for career development will also be assessed.

#### 3. Criteria

#### A. Environmental Staffing

- 1) Environmental staffing levels are sufficient to achieve environmental performance goals. This includes dedicated environmental support staff and others with collateral duties (e.g., line managers with other support functions):
  - a. Determine how the organization assesses environmental staffing needs:
  - b. Determine whether staffing addresses identified needs;
  - c. Determine whether requests for additional environmental staff have been approved or denied and why;
  - d. Identify environmental programs or projects that have not been undertaken or completed because of insufficient environmental staff; and
  - e. Note any other evidence of insufficient environmental staff to assure compliance, for example:
    - -- compliance deficiencies whose root causes are inadequate resources;
    - -- excessive overtime; and/or
    - -- excessive use of contractors.

- 2) Personnel with environmental responsibilities have the relevant background and training to carry out their responsibilities:
  - a. Determine what qualifications are necessary for environmental staffing and other positions with environmental responsibilities;
  - b. Review a sample of resumes for selected environmental staff, and note the following:
    - -- educational training in environmental management;
    - -- diplomas and certifications of environmental training (internal and external); and
    - -- relevant work experience in environmental management.
  - c. Environmental support staff demonstrate sufficient knowledge and familiarity with the organization's operations, environmental issues, and programs and procedures to effectively carry out their respective environmental protection responsibilities.
- 3) Staffing for environmental protection activities is provided in a timely manner:
  - a. Determine whether additional staff with environmental responsibilities are added as the need arises or whether there is a significant delay; and
  - b. Determine whether environmental activities requiring immediate attention (e.g., a spill or a determination of environmental noncompliance) are responded to in a timely manner.
- 4) A system is in place to identify both short-term and long-term environmental staffing requirements, both within the environmental support group and within line units with environmental responsibilities:
  - a. Determine how short- and long-term environmental staffing requirements are determined; and
  - b. Determine whether this staffing assessment includes both the environmental support staff and line management needs.
- B. Job Descriptions and Performance Evaluations (linkage with Section 33 B)
  - 1) Appropriate job descriptions are established and maintained for environmental positions:

- a. Review formal written job descriptions for environmental staff to determine whether they are current, complete, and reflective of existing duties; and
- b. Identify other positions in each department that include environmental responsibilities. Review the formal written job descriptions for these other key line management and operating personnel and assess whether job descriptions incorporate any statements regarding environment-related duties and responsibilities.
- 2) Performance standards used in the performance appraisal process include the environmental aspects of individual job responsibilities, including line management responsibilities for environmental performance. Environmental factors are given comparable emphasis to safety and productivity factors:
  - a. Determine whether explicit measures of performance have been identified for specific jobs, including both environmental staff and line management personnel;
  - b. Determine whether environmental criteria receive substantially less emphasis than other criteria such as productivity and safety; and
  - c. Determine whether periodic staff performance reviews include explicit measures of environment-related job performance. Note examples of environmental performance criteria used.
- 3) Good environmental performance is rewarded in practice, and poor performance is penalized:
  - a. Identify reward, incentive or bonus systems (financial or nonfinancial) for environmental staff and other personnel with environmental responsibilities;
  - b. Determine what actions are taken for poor environmental performance; and
  - c. Identify other methods used for praise or corrective action, such as verbal feedback, memorandums, internal announcements, etc.
- C. Environmental Training Programs
  - 1) Environmental training programs are defined in controlled documents such as a training program manual:

- a. Understand how environmental training requirements are determined and where they are explicitly identified, for example, training plans;
- b. Determine if a training manual or other documents describe environmental training programs.
- 2) There is a process in place to identify and evaluate environmental training needs for all personnel. These needs are incorporated into individual professional development plans:
  - a. Determine whether the organization has assessed its environmental training needs, including type of training and staff requiring it;
  - b. Determine whether environmental skill training requirements (e.g., regulatory hazardous materials handling, emergency and spill response) have been identified for all job classifications where employees' work activities can affect environmental performance;
  - c. Determine whether environmental training is included in job descriptions and/or individual professional development plans, and
  - d. Determine how the organization ensures that employees receive the necessary training at appropriate intervals.
- 3) The environmental training program is supported by appropriate training materials and qualified trainers:
  - a. Review training materials, and determine whether the materials (e.g., written, audiovisual) are appropriate and adequate to the purpose; and
  - b. Review resumes of trainers, and determine whether the trainers have the appropriate educational background and experience for the particular training they deliver.
- 4) There is a formal process to ensure that training courses are developed at an appropriate depth and provide adequate coverage of Federal and state regulations and internal policies and procedures:
  - a. Develop an understanding of the process for ensuring that all relevant regulatory requirements are covered in training courses.
- 5) All levels of personnel -- from operators to lower, middle, and upper management -- undergo some level of environmental awareness training (linkage with Section 34):

- a. Determine who receives environmental awareness training;
- b. Determine whether environmental awareness training is given to all line personnel whose activities may impact environmental management and compliance, as well as to their supervisors;
- c. Determine what environmental training and awareness activities, if any, the organization specifically directs toward middle and upper level management; and
- d. Determine whether contractors are included in awareness training.
- 6) Environmental protection training is included in new employee and contractor orientation training, and environmental protection training requirements have been established for temporary employees and visitors:
  - a. Determine whether the organization routinely conducts a formal orientation program for all new employees and contractors, and assess the adequacy of the training content; and
  - b. Review training records to determine if all new employees and contractors have attended orientation training.
- 7) Training activities are documented and the training recordkeeping system is auditable, complete, and current:
  - a. Determine how the organization maintains employee environmental training records and who is responsible for this activity;
  - b. Identify certain training required by regulations (e.g., hazardous waste training), and determine whether all individuals performing these tasks have had the necessary training;
  - c. Select a sample of environmental and nonenvironmental employees and review training records to determine if they are accurate, complete, and current;
  - d. For these same individuals, compare actual training completed with training needs identified for their position or in their individual staff development plan; and
  - e. Assess whether the training recordkeeping system is easily accessible, complete, and current.
- 8) There is a formal documented process for the periodic evaluation of the effectiveness of training programs:

- a. Determine whether and how evaluations of the training program are conducted;
- b. Review the results of the latest evaluation, and check changes made in response to the evaluation;
- c. Interview selected personnel regarding their training, and determine the retention level of their training; and
- d. Determine whether training feedback mechanisms (e.g., tests, course feedback forms) are provided to evaluate effectiveness of training.

#### D. Staff Development Opportunities

- 1) The organization provides career opportunities and advancement for environmental staff within the program, where possible, or in other programs/facilities:
  - a. Determine whether well-established career paths exist within the environmental management function. Identify these paths, and determine whether they can lead to top management positions or whether they eventually reach "dead-ends;"
  - b. Identify line positions that are of the same government grade (or that are shown in the organization's hierarchy to be at the same organizational level) as the various environmental support positions;
  - c. Determine whether environmental support personnel and these "line peers" are considered equally eligible for lateral job changes that provide breadth of experience, and for advancement up the organization's management ladder. To gather evidence, ask senior management, line management, supervisors of environmental support personnel, line personnel, and environmental support personnel; and
  - d. Identify any middle or senior management staff that have environmental support experience.
- 2) In staff development efforts, environmental support staff are encouraged to acquire management and professional skills to build their supervisory and management potential:
  - a. Through interviews with environmental support staff, determine whether they are encouraged and given opportunities to acquire management skills; and

- b. Compare training records of environmental support personnel and "line peers" to determine whether training in skills necessary for management-level promotions are offered equally to both groups. Examples of such training include managerial skills, supervisory competencies, presentation techniques, media relations, policy/program development, and negotiation skills.
- 3) Cross-functional training is available and encouraged to maintain and expand staff capabilities:
  - a. Determine what kinds of programs exist to perform cross-functional tasks or to move from one department to another in an effort to expand the staff skills base.

## **Section 39**

Assessing Environmental Programs
Program Evaluation, Reporting and Corrective Action

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#### 1. Performance Objective

The organization should have self-assessment and oversight programs in place to effectively evaluate environmental protection activities, anticipate and report environmental concerns, and implement corrective actions. The major objective of self-assessment programs is to establish accountability and excellence at the "grassroots" level, thereby involving people who are the most familiar with the operations and their management. Self-assessment is a continual line management activity that acquires, assimilates, documents, and reports through all levels of an organization on the effectiveness, adequacy, efficiency, and economy of its activities. Self-assessment should establish a culture of accountability and continuous improvement as well as foster excellence in all program activities.

#### 2. Key Evaluative Concerns

The purpose of this audit discipline is to evaluate programs that assess the design adequacy and implementation effectiveness of environmental protection systems as well as the reporting and follow-up activities associated with these appraisals. Program evaluation includes a review of all major audits, appraisals, and self-assessments. It does not include routine inspections, which are addressed in the Formality of Programs section of this protocol.

Programs will be evaluated on the basis of their design and implementation to ensure adequate breadth and depth of coverage. Reporting and followup will be assessed for adequacy of formal systems to clearly communicate, in a timely fashion, the results of the reviews to appropriate levels of management. Finally, the system for periodic trends analysis of all findings to identify underlying programmatic and management deficiencies will be evaluated.

#### 3. Criteria

#### A. Self-Assessment and Appraisal Programs

The depth of detail required and the magnitude of resources expended for self-assessment should be commensurate with the element's relative importance to environmental compliance and/or other facility-specific requirements. Self-assessment should incorporate both internal self-assessments and independent technical and management appraisals.

- 1) Facilities and departments have implemented on-going formal, written programs that include both internal assessments and independent oversight appraisals:
  - a. Determine whether these programs include appropriate elements/components, such as:
    - -- formal program charter;

- -- comprehensive scope;
- -- defined schedules;
- -- standard operating procedures for self-assessment;
- -- formal reporting system;
- -- root cause analysis;
- -- formal corrective action system;
- -- formal process to identify trends;
- -- formal mechanisms to communicate root causes, trends, and lessons learned throughout the organization;
- -- formal self-assessment training program;
- -- full cooperation with external oversight or assessment organizations; and
- -- line management-fostered atmosphere of continual selfevaluation and quality improvement.
- b. Determine whether the organization has a formal, documented environmental self-assessment program;
- c. Determine whether the program covers compliance with internal policies and procedures, applicable governmental laws and regulations, and best management practices;
- d. Determine whether subordinate offices and facilities have a self-assessment program;
- e. Identify the environmental programs (e.g., air, surface water, drinking water, groundwater, hazardous and solid waste, etc.) that are evaluated in self-assessments;
- f. Determine responsibilities, frequency, and process for conducting self-assessments; and
- g. Determine whether self-assessment activities are integrated both within the line organization and across staff functions to ensure a comprehensive self-assessment process.
- 2) Responsibilities and authorities for self-assessment activities are clearly defined (linkage with Section 35):
  - a. Determine who is responsible for implementing the self-assessment and appraisal programs;
  - b. Determine if these individuals are sufficiently independent and have enough authority to effectively perform this responsibility; and

- c. Determine whether organizational staff are specifically dedicated to environmental appraisals or, if not, how the organization staffs appraisals.
- 3) Frequency of self-assessments and appraisals is congruent with the program's goals:
  - a. Determine how frequently self-assessments and appraisals are conducted and how the organization determines frequency schedule; and
  - b. Assess whether this frequency is sufficient to meet program goals.
- 4) Focused functional appraisals are conducted on specific issues to reduce the organization's long-term environmental liabilities (linkage with Section 40):
  - a. Determine whether the organization has a system to identify problem areas that require focused assessments;
- 5) Audits/appraisals are conducted by professionals who are trained and qualified:
  - a. Determine how assessors are selected and what qualifications or criteria are used in the selection process.
- 6) Audits/appraisals are conducted using formal, written guidance documents and are documented:
  - a. Determine whether guidance documents, audit protocols, checklists, and other tools are used in the preparation and conduct of the self-assessments and appraisals; and
  - b. Determine whether notes are taken during the audits and retained for future reference.
- 7) Self-assessment program implementation is addressed in budget planning and budget requests (linkage with Section 40):
  - a. Determine whether environmental self-assessments have been factored into strategic planning in terms of resource and budgetary requirements.
- 8) The systems used for environmental program evaluations are periodically critiqued and modifications are made as necessary:

- a. Determine what system is in place to review environmental program evaluations;
- b. Determine how often these programs are evaluated; and
- c. Identify changes made to the assessment program as a result of program review.

#### B. Reporting and Follow-up

- 1) Assessment results are documented in formal reports distributed in a timely manner to appropriate levels of management:
  - a. Identify all self-assessments and appraisals that have been conducted over the last few years and determine if reports were prepared; and
  - b. Review past self-assessment and appraisal reports. Identify level of reporting detail and individuals on distribution list. Assess whether reports reach high enough levels of management and wide distribution to related functions (e.g., legal, engineering, etc.). Assess whether reports provide adequate detail.
- 2) Corrective actions to address root cause of findings are developed and implemented by line management:
  - a. Determine how corrective actions are prioritized;
  - b. Determine that corrective action plans are approved by both the oversight group and senior management prior to implementation; and
  - c. For each self-assessment/appraisal that has been conducted, determine if a corrective action plan was developed by the appropriate department, approved by management, and implemented.
- 3) Corrective actions are independently tracked to ensure their completion, objectively verified at completion, and formally closed out:
  - a. Determine whether the organization and field offices have a system to track progress of corrective actions; and
  - b. Assess the adequacy of progress on existing corrective action plans.
- 4) "Lessons learned" programs are implemented to seek out improvement opportunities for environmental performance:

- a. Determine whether the organization has developed a program or system for learning from past problems and sharing this information across the organization.
- 5) Trend analysis of findings is conducted on a periodic basis to identify underlying programmatic or management root causes:
  - a. Determine if any trend analysis is conducted and how frequently; and
  - b. Review the results of these analyses and inquire about actions taken to correct root causes.
- 6) Performance indicators for environmental protection have been defined and are tracked and analyzed for trends:
  - a. Determine what performance indicators have been established; and
  - b. Determine how performance indicators are tracked and analyzed for trends.

## **Section 40**

# Assessing Environmental Programs Environmental Planning and Risk Management

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	B. Risk Management

#### 1. Performance Objective

The organization should plan for environmental management activities to ensure that environmental resources needs are adequately addressed and the organization's environmental goals can be met. Planning for environmental protection should be integrated with planning for other organizational functions.

The organization should have a formal system to identify environmental hazards, assess the resulting environmental risks of those hazards, and mitigate risks.

#### 2. Key Evaluative Concerns

This assessment discipline focuses on the environmental planning and risk management processes. It evaluates the extent to which technical and financial planning related to environmental management is conducted and integrated into overall organizational planning. In addition, this discipline addresses the organization's system for identifying, assessing, and addressing potential environmental risks, including risk management program design and approach, issues identification, and management involvement.

#### 3. Criteria

#### A. Environmental Planning and Budgeting

- 1) Environmental planning is conducted with comparable formality to planning for other organizational functions and includes both short- and long-term planning:
  - a. Determine the extent to which environmental planning decisions result from a formal, organized planning process;
  - b. Determine the frequency of formal environmental planning and the planning horizon (e.g., one year, five years, 10 years);
  - c. Compare how staffing and budgetary requirements for the environmental management function and other organizational functions are determined;
  - d. Determine whether environmental planning is viewed as a strategic element in the organization's long-term success;
  - e. Determine whether the facility has a system to identify projects planned in the next year or two that will need NEPA review;
  - f. Determine whether the agency's Environmental Plan is developed in accordance with EPA guidance contained in *Federal Agency*

Environmental Management Program Planning and then forwarded to OMB through EPA for formal review in accordance with E.O. 12088.

- 2) Environmental protection considerations are adequately included in planning for other organizational functions:
  - a. Review strategic and/or organizational plans, annual budget documents, proposed major capital projects, and property acquisitions and determine whether they include environmental considerations; and
  - b. Identify any recent instances where environmental concerns raised through a program/project planning process have influenced proposed operating plans, financial plans, or other factors.
- 3) Environmental issues are represented by qualified personnel in key strategic and operations planning meetings/committees:
  - a. Review minutes of planning meetings to determine if environmental personnel were involved; and
  - b. Determine whether environmental issues were considered in planning meetings or activities.
- 4) In the planning process, the organization has a system for establishing priorities and weighing competing factors, with environmental protection receiving equal weight to production:
  - a. Assess whether priority setting (i.e., selecting projects for budget) reflects environmental excellence goals;
  - b. Investigate environmental projects that have been delayed or canceled, and determine if these projects received equal consideration to other projects;
  - c. Determine whether plans for environmental management take into account and adequately reflect the implications of proposed operating and financial plans and initiatives; and
  - d. Assure that all environmental projects are reviewed to ensure that assigned priorities reflect guidance issued by EPA in *Federal Agency Environmental Management Program Planning* and are reported to OMB in the agency's annual plan.

- 5) Commitment of funds for environment-related activities is satisfactory to serve the organization's environmental performance goals, through both capital and maintenance projects:
  - a. Compare capital budget requests and annual budget allocations for environmental programs/projects to determine whether adequate funds have been committed to environmental protection; and
  - b. Determine whether all environmental items, including staff and technical resources, have been identified in budget requests.
- 6) Environmental protection is an integral part of the budget and planning process:
  - a. Review budget requests and allocations for line operations and other functional areas to determine if they include environmental costs;
  - b. Determine whether environmental concerns are taken into consideration in budget decisions; and
  - c. Ensure that all project funding necessary to comply with environmental standards is included in the agency's budget plans and reported in the annual agency OMB environmental plan to EPA in accordance with Federal Agency Environmental Management Program Planning guidance.
- 7) The organization has assessed its needs for pollution control technologies and other technical equipment to achieve its performance goals:
  - a. Determine how the organization assesses its technical equipment needs to maintain compliance and reduce risks;
  - b. Identify programs or systems that keep the organization updated on the latest pollution control technology and ensure that best available technology is used for maintaining compliance and reducing risks; and
  - c. Determine whether environmental excursions and noncompliances are analyzed to identify whether technology can be improved to eliminate or reduce similar episodes in the future.
- 8) The organization has a system in place for the control and oversight of purchased materials, equipment, and services supporting environmental protection activities to ensure that they meet environmental specifications:

a. Determine how the organization ensures that new chemicals, equipment and/or contractors meet regulatory requirements and comply with organizational policies on environmental protection.

#### B. Risk Management

- 1) A formal environmental risk management program has been established and is operational. This program includes objectives, approach, procedures, and risk evaluation criteria:
  - a. Identify the elements of the organization's risk management program, and determine if the program is complete; and
  - b. Review internal guidelines or criteria, quantitative or qualitative, used to determine whether a particular environmental risk arising out of operations would be deemed "acceptable" or "unacceptable".
- 2) A formal, systematic review of the organization's operations/activities is periodically conducted to identify and manage environmental risks:
  - a. Develop an understanding of and assess the process used to evaluate risks;
  - b. Determine how often and by whom these reviews are conducted, and
  - c. Determine what actions have been taken to mitigate or manage identified risks.
- 3) The organization has developed programs or standards to manage environmental risks not covered by regulatory requirements (linkage to Section 35):
  - a. Identify examples of how risk assessment has led to the development or enhancement of environmental protection programs.
- 4) All new projects, programs, or activities that may impact the environment are carefully reviewed to identify and address environmental risks as early as possible. A formal project/program review and approval process, which includes environmental considerations, has been established:
  - a. Besides NEPA, identify what types of projects are reviewed for environmental performance/impact (e.g., capital projects, R&D projects, facility-level maintenance modifications);
  - b. Determine whether these reviews are performed only under certain circumstances or routinely for all projects;

- c. Determine the focus of the reviews and whether the project may raise any significant environmental compliance issues or lead to any potentially significant environmental risks;
- d. Determine whether project environmental reviews typically follow a standard approach and whether there is any formal guidance on the approach;
- e. Identify the criteria used for assessing the impacts of a project (e.g., dollar value, project type, etc.); and
- f. Review records or files of environmental reviews that have been performed.

# **Protocol for Conducting Environmental Management Assessments of Federal Facilities/Organizations**

**Appendix** 

## Appendix- Selecting Documents to Review and Individuals to Interview for Environmental Management Assessments

The following discussion provides suggestions, by protocol discipline, for the most useful types of documents to review and general types of individuals to interview in the process of performing an Environmental Management Assessment.

#### **Organizational Structure**

The following types of individuals should be interviewed for this protocol area:

- Representatives from the agency as well as subcontractors to determine roles, responsibilities, reporting relationships, authorities, and level of coordination;
- EHS staff and top management at the facility to determine the reporting "distance" between the person with primary responsibility for environmental support and the overall management of the organization and to assess the appropriateness of layers of management and span of control; and
- *EHS and line staff* to understand the functional relationship of EHS to other parts of the organization and to determine the organizational stature of the EHS office within the organization.

The following types of documents should be reviewed:

- Documents that define organizational responsibility, authority, or accountability for environmental programs
- Organization charts
- Position or job descriptions for line and staff personnel
- Environmental planning documents
- Formal measures used in assessing job performance

#### **Environmental Commitment**

The following types of individuals should be interviewed for this protocol area:

- *Top management* to determine level of knowledge, personal involvement in environmental affairs, and inclusion of environmental issues in routine senior management meetings;
- Management and line staff at all levels and across all functional areas to determine level of environmental commitment, sense of "ownership" of environmental protection, degree to which environmental policies are distributed and understood, and allocation of human, financial, and technical resources; and
- Staff in non-environmental specialty areas to determine the level of general environmental awareness.

The following types of documents should be reviewed:

• Environmental planning documents

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- General environmental policy statements
- Issue-specific policies addressing focused environmental concerns
- Environmental program descriptions and implementation plans
- Senior management statement of support for environmental programs, including reports, speeches, and newsletters
- Accounts of employee or organization involvement in or work with environmental task forces, environmental professional associations, or local community organizations
- Samples of routine environmental reports to upper management
- Minutes of senior management meetings

#### **Environmental Protection Programs**

The following types of individuals should be interviewed for this protocol area:

• EHS staff and line management as well as subcontractors to determine level of development or implementation of environmental programs or plans

The following types of documents should be reviewed:

- Environmental program plans required by the agency
- Environmental monitoring and surveillance plans
- Source and emission inventories for air and water pollution control
- NESHAPs agreement
- Toxic and chemical materials management plan
- Emergency response and remedial action plan
- Environmental incident reporting procedures
- Preventative maintenance and inspection procedures
- Reports to management or regulatory agencies

#### **Formality of Environmental Programs**

The following types of individuals should be interviewed for this protocol area:

- Personnel responsible for tracking agency requirements and relevant environmental regulations to determine if the organization is up-to-date on new, proposed, and emerging regulatory issues;
- Personnel responsible for the development and implementation of procedures and standards to determine the level of congruence with the agency's conduct of operations policy;
- Personnel responsible for conducting routine site walk-through inspections and followingup on inspection findings to determine adequacy of the system; and
- Personnel responsible for record-keeping and document control to assess the document control system

The following types of documents should be reviewed:

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- Policies and procedures relating to project and field office implementation of environmental requirements
- Environmental protection plans
- Standard operating procedures for the site
- Regulatory tracking protocols and procedures
- Inspection checklists and logs
- Examples of a variety of environmental records and reports, including incident and environmental performance reports

#### **Internal and External Communication**

The following types of individuals should be interviewed for this protocol area:

- Personnel responsible for communication of environmental information (e.g., goals, performance, policies, and procedures) to understand how formal and informal communication channels are used
- *Management and line staff* to determine extent to which environmental information is distributed within the organization
- Important external stakeholders, such as environmental groups, state and Federal environmental regulators, and management to determine extent of communication with and knowledge of the facility

The following types of documents should be reviewed:

- Samples of the scope of environmental management reports
- Staff meeting minutes
- Internal newsletters which contain environmental information
- Forms and guidelines for internal anonymous reporting of environmental issues
- Documentation of information provided to and awareness programs for external stakeholders
- Press releases relating to environmental issues

#### Staff Resources, Training, and Development

The following types of individuals should be interviewed for this protocol area:

- Personnel responsible for securing an adequate level of environmental staffing to understand to assess the system to identify short- and long-term environmental staffing and resource requirements;
- A sample of *management and line staff at all levels* of the organization to determine if there is an adequate level of staffing for environmental functions and to determine the level of environmental training throughout the organization;
- *Training office personnel* to assess the training program and the process to evaluate and establish the organization's training needs; and
- Career development office personnel to identify career opportunities for environmental staff.

The following types of documents should be reviewed:

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- Documents requests and justifications for additional staff with environmental responsibilities
- Hiring plans
- A sample of resumes for environmental and non-environmental staff who have environmental responsibilities
- Training program manuals
- Training records for a range of individuals within the organization, including environmental support personnel and their "line peers"
- Job descriptions and performance criteria for line management and operating personnel
- Individual professional development plans

#### Program Evaluation, Reporting, and Corrective Action

The following types of individuals should be interviewed for this protocol area:

- Personnel responsible for conducting and/or managing the self-appraisal process to assess the design of the process
- *Top management* to determine how self-appraisal information is used within the organization
- A sample of managers and line staff responsible for implementing corrective actions

The following types of documents should be reviewed:

- Formal descriptions of the oversight program or process, including responsibilities of key staff
- Self-appraisal program budget allocation
- Audit and appraisal reports
- Corrective action plans
- Documentation of follow-up activities for corrective actions
- Trend analysis and performance indicator reports

#### **Environmental Planning and Risk Management**

The following types of individuals should be interviewed for this protocol area:

- Environmental planning personnel to evaluate budgeting, priority-setting and allocation of resources activities
- Staff with the budgeting office to determine if environmental planning is integrated with other organizational planning functions (e.g., development of operating and capital budgets)
- Risk management personnel to evaluate the adequacy of systems to identify and minimize environmental hazards

The following types of documents should be reviewed:

- Short- and long-term business plans and strategic plans
- Formal risk management documents, such as readiness review plans or risk assessments
- Environmental risk tracking and trending reports

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