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**ENVIRONMENTAL IMPLEMENTATION PLAN -
ENVIRONMENTAL APPRAISAL AND SURVEILLANCE**

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Chapter 16

Environmental Appraisal and Surveillance Program

Chapter was compiled and reviewed by Chike Amobi.

Site Program Overview

Introduction

This section of the *Environmental Implementation Plan (EIP)* provides guidance to line and staff organizations who are responsible for meeting Department of Energy (DOE Order 5482.1B) and operating contractor auditing requirements. The words appraisal and surveillance are used generically in this section to cover the broad terms used to describe degrees of activity in which performance is evaluated against environmental requirements and potential problems that are identified.

The Environmental Appraisal Program does not include occupational health, industrial health, or safety activities.

Summary

The Savannah River Site (SRS) environmental-appraisal/surveillance program is designed to monitor environmental performance and to ensure that regulatory requirements are met. The appraisal/surveillance program is a two-tiered system which consists of external and internal appraisals and surveillances. External appraisals/surveillances are conducted by organizations not reporting to SRS management. The internal appraisals/surveillances are conducted by site organizations referred to as organizations.

External appraisals include Environmental Protection Agency (EPA) and South Carolina Department of Health and Environmental Control (SCDHEC) regulatory appraisals, DOE-SR and DOE-HQ appraisals, and operating contractor reviews. These appraisals are the result of regulatory requirements, DOE orders, or operating contractor policies. The Environmental Protection Department (EPD) leads the coordination, planning, and scheduling support. The internal appraisal program consists of three types; management appraisals, program appraisals, and facility appraisals. All organizations developed and implemented a formal facility-appraisal program in February 1989. The first facility appraisal was completed during FY 89. To ensure consistency between departments, the SRS environmental appraisal procedure was completed in December 1988 and published in the *Environmental Compliance Manual*, 3Q, in 1991. EPD conducts both the management and program appraisals.

The management appraisal is a review of each organization's environmental program. The program appraisal is a detailed review of field conditions across the site for a single (or several closely related) regulatory program(s). The first management appraisal was completed in August 1988. **Appraisals** are conducted in conjunction with DOE external appraisals so that all program areas are covered on a three-year cycle. All organizations developed and implemented a formal facility-appraisal program by December 1988. The first facility appraisal was completed in March 1989. To ensure consistency between departments, the SRS environmental appraisal and site appraisal procedures were developed in the Environmental Compliance Manual.

Policy

The purpose of SRS's environmental-appraisal program is to monitor performance, determine compliance with applicable requirements, and ensure that environmental protection is maintained.

Background

The operating contractor is responsible for protecting human health, the environment, and other natural resources. At a minimum, this responsibility includes full compliance with applicable federal and state regulations, DOE orders, and operating contractor policy. Thus, site environmental goals must be linked closely to safety, quality, and production goals, and employees must be committed to protecting the environment.

To ensure compliance with regulatory requirements, an appraisal program, which is a self-assessment process, is an integral part of achieving environmental protection.

Existing Conditions

At SRS, environmental compliance is a line management responsibility. A formal internal environmental-appraisal program has been developed, as required by DOE Order 5482.1B and operating contractor guidelines. SRS organizations conduct informal appraisals to verify that environmental regulations are being met.

EPD provides the lead, logistical support for external environmental appraisals and surveillances.

EPD's responsibilities include responding to pre-appraisal questionnaires, developing an appraisal schedule, coordinating the appraisal with custodians, and assembling responses to appraisal deficiencies.

EPD also performs some pre-appraisal inspections in preparation for an external environmental appraisal. These inspections are used as a part of the sitewide internal environmental-appraisal system.

Objectives

The following are the Environmental Appraisal Program's objectives:

- *external appraisals*—provide technical and physical assistance to external agencies (DOE, SCDHEC, EPA, and others) during their appraisals of SRS
 - These external appraisals should reflect that SRS's environmental program is well organized and effective in complying with environmental regulations and in meeting DOE and the operating contractor's objectives.
- *Site Appraisal Program*—implement a sitewide environmental-appraisal program to monitor environmental performance, as well as comply with federal and state environmental regulations and the operating contractor's requirements
 - These site appraisals should reflect that SRS's environmental program is well organized and effective in complying with environmental regulations and in meeting DOE and the operating contractor's objectives.
- *internal surveillance*—monitor environmental practices to identify practices that could lead to non-compliance in the future
- *correct adverse condition*—identify, track, and correct conditions that potentially may cause adverse environmental impacts
- *management appraisal*—implement a management-appraisal program that will review how organizations run environmental programs

Strategy

The sitewide strategy to achieve the objectives of the environmental-appraisal and surveillance programs include the following:

- identifying regulatory and other requirements
- defining appraisal and surveillance functions including:
 - three appraisal tiers: facility, management, and program
 - two appraisal types: external and internal
 - internal surveillances
- developing appraisal and surveillance systems and procedures
- implementing a sitewide internal-appraisal and surveillance program.

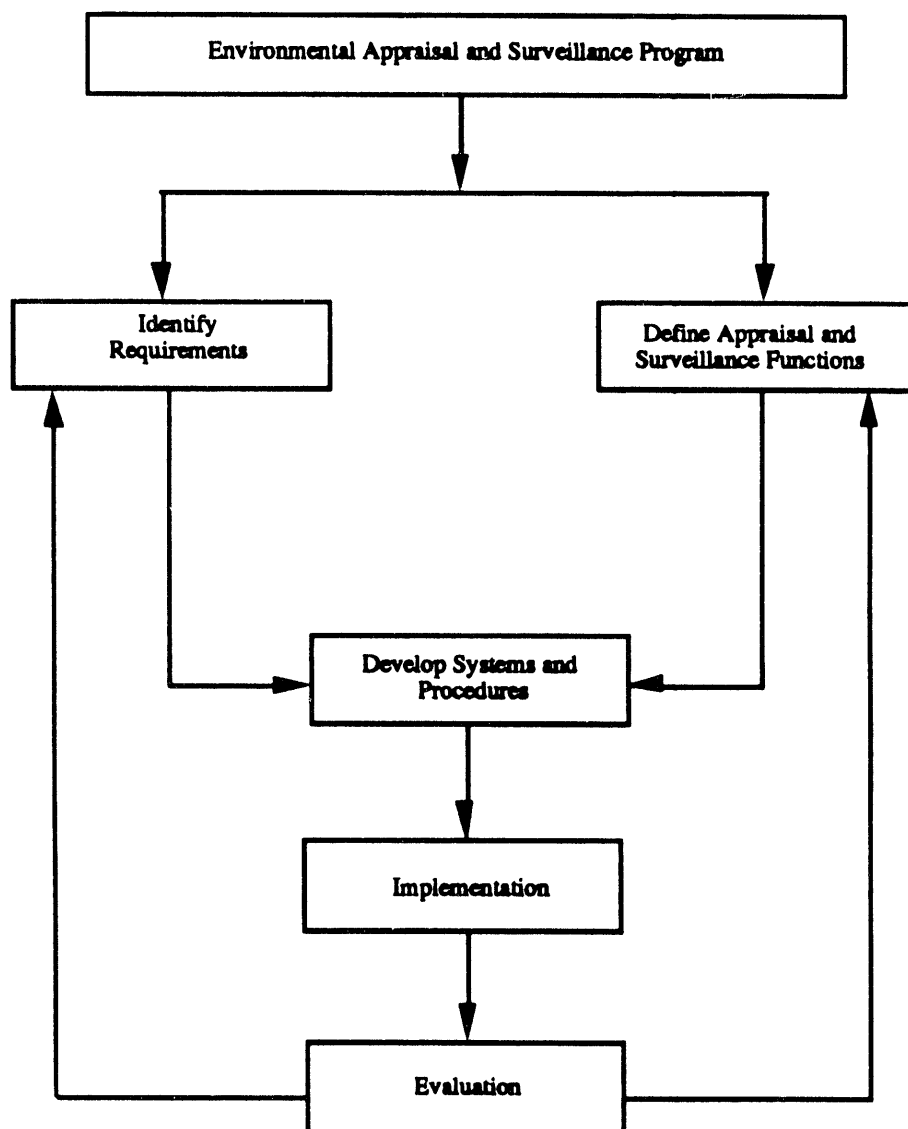


Figure 16-1. Environmental Appraisal and Surveillance Program Strategy

Appraisal tiers and types related to appraising organizations are shown in Table 16.1. SRS organizations which potentially can impact the environment are identified in Table 16.2. Table 16.3 lists most of the regulatory programs and other requirements that apply to the site. Programmatic details are discussed in the implementation section.

Table 16.1. Environmental Appraisers

External Appraisals

Facility/Program

Corps of Engineers
Congressional

DOE-HQ/SR
Operating Contractor Corporate
Environment Protection Agency
General Accounting Office
Inspector General
SC Department of Health and
Environmental Control
National Academy of Sciences

Management

DOE-HQ/SR
Operating Contractor Corporate

Internal Appraisals

Operating Organization/Environmental
Protection Department
Operating Organizations

Environmental Protection Department

Table 16.2. Organizations

Site organizations subject to internal environmental-appraisals requirements

Organizations

Central Services Works Engineering
Construction Management
Defense Waste Processing Facility
Environmental Monitoring Section
Analytical Laboratories
Power Operations
Reactor
Reactor Materials
Separations
Site Services Division
SRTC
Tritium
Solid Waste and Environmental Restoration
High Level Waste Management

**Table 16.3. Applicable Environmental Regulatory Programs and Other Related Requirements for SRS
(Generic List)****EPA - Environmental Protection Agency**

RCRA	Resource Conservation and Recovery Act
HSWA	Hazardous and Solid Waste Amendments
CERCLA (SUPERFUND)	Comprehensive Environmental Response Compensation and Liability Act
CWA (WQA)	Clean Water Act
SDWA	Safe Drinking Water Act
CAA	Clean Air Act
NEPA	National Environmental Policy Act
FIFRA	Federal Insecticide Fungicide Rodenticide Act
TSCA	Toxic Substances Control Act
SARA	Superfund Amendments and Reauthorization Act
EPCRA	Emergency Planning and Community Right to Know Act

DOT - Department of Transportation

HMTA	Hazardous Materials Transportation Act
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DOL - Department of Labor

OSHA	Occupational Safety and Health Act
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DOE - Department of Energy

DOE Orders

SCDHEC - South Carolina Department of Health and Environmental Control

Industry Standards and Best Management Practices
State Regulations Implementing RCRA, CWA, CAA, SDWA requirements
NPDES Permit Regulations for Storm Water Discharges
Standards for Storm Water Management and Sediment Reduction
South Carolina Hazardous Waste Management Regulations

Implementation

The following programs have been implemented to meet the Environmental Appraisal and Surveillance Program objectives.

- External Appraisals (page 16-12)
- Internal Appraisals (page 16-14)
- External Surveillances (page 16-17)
- Internal Surveillances (page 16-18)

External Appraisals

(Compiled and reviewed by Chike Amobi)

Site Program Overview

External appraisals are conducted onsite by organizations not reporting to SRS management. These include EPA and SCDHEC, DOE-SR and DOE-HQ, operating contractor corporate headquarters, and public interest groups. These appraisals are the result of regulatory requirements, DOE orders, or operating contractor policies. EPD is the lead department for coordinating, planning, and scheduling support. EPD will track deficiencies and follow-up activities. The organizations are responsible for the field aspects of these appraisals.

Justification/Regulatory Requirements

External appraisals are conducted by regulatory agencies, DOE-SR and DOE-HQ, and operating contractor corporate organizations. These appraisals are conducted as the result of regulatory requirements, DOE orders, and operating contractor environmental policies.

Organizational Responsibility Summary

With the exception of corporate appraisals, external facility appraisals are initiated through the Department of Energy-Environmental Division (DOE-ED). EPD is notified by DOE of scheduled appraisals and is requested to work with the appraising organization. This work involves scheduling, planning, and coordinating the appraisal with facility custodians and other site contractors.

EPD works with DOE-ED, the appraising organization, and the organization to define the appraisal's scope and objectives. Similar actions by EPD are required to coordinate corporate appraisals with the operating contractor's headquarter personnel.

EPD is responsible for coordinating the appraisal by informing custodians of appraisal requirements, compiling and forwarding pre-appraisal information, arranging for physical support needs (i.e., office space and transportation), making appropriate security arrangements, and scheduling safety orientation. A detailed appraisal schedule is developed with the custodians and appraisers to ensure that appropriate people are available. Where feasible, each audit team will be accompanied by a member of EPD, who may participate in the appraisal activities. Similar actions by EPD are required to coordinate corporate appraisals with the operating contractor's headquarter personnel.

EPD obtains any progress reports from the appraisals and distributes these to the appropriate personnel. These reports may identify potential deficiencies or may include requests for additional information or schedule changes. EPD schedules the exit briefing with the appraisal team and representatives of audited organizations. EPD obtains the draft appraisal report, distributes it to the custodians for review, and

prepares the operating contractor's comments on the draft report to send to participants. When required, corrective-action reports are sent by EPD.

Custodians are responsible for coordinating the field aspects of the appraisal. They work with EPD to develop and implement the appraisal schedule. If unplanned schedule changes occur, EPD is notified and is responsible for notifying impacted organizations as necessary. Custodians respond daily to progress report items. Custodians should attend the exit briefing to ensure that any concerns related to findings or observations are identified and discussed. Custodians review the draft appraisal report and notify EPD of any technical errors, inaccuracies, or deficiencies that should be challenged. Any necessary corrective action is completed by the custodians and written reports are sent to EPD. EPD will review and verify the status of any corrective action during annual management appraisals or during program appraisals.

Site Procedures and Documents

- ***Procedure Manual 3Q, Environmental Compliance Manual*** , ECM 13.2, **Environmental Compliance External Appraisals**

Internal Appraisals

(Compiled and reviewed by Chike Amobi)

Site Program Overview

An appraisal identifies items that could lead to noncompliances in the future. Appraisals reinforce the philosophy of best management practices. Internal appraisals are divided into facility, program, and management appraisals. Facility and program appraisals are conducted to verify field compliance with regulatory and corporate requirements, as well as to identify and correct conditions that might lead to adverse environmental impacts. Management appraisals are conducted to review the adequacy of administrative systems, operating procedures, and funding.

Internal appraisals are conducted by EPD and site organizations to monitor site environmental performance and to ensure compliance with regulatory requirements, DOE orders, and operating contractor environmental policies. The internal-appraisal program consists of facility appraisals, program appraisals, and management appraisals. To ensure consistency between departments, an *Environmental Compliance Manual 3Q* was completed in 1991. EPD is responsible for implementing management and program appraisals. The management appraisal consists of a review of each organization's environmental program. The program appraisal is a detailed review of environmental compliance conditions across the site for a single (or several closely-related) regulatory program(s).

Justification

Internal appraisals are conducted by EPD and site organizations. These appraisals are conducted to monitor site environmental performance and to ensure compliance with regulatory requirements, DOE orders, and operating contractor environmental policies. The internal-appraisal program supports the site's appraisal program.

Organizational Responsibility Summary

Organizations have established an environmental-appraisal program which involves at least one facility appraisal per year. Organizations, for the purpose of conducting appraisals, are designated in Table 16.2. Additional informal appraisals or informal inspections may be conducted by organizations to ensure that environmental performance is satisfactory. EPD will conduct an management appraisal of each organization to ensure compliance with regulations and verify effectiveness of each appraisal program. The management appraisal may include a field inspection. The program appraisals primarily are field inspections. They are scheduled and conducted so that in conjunction with external appraisals, all program areas are covered once every three years.

The support department within each organization is not subject to routine environmental appraisals. However, appraisals may be conducted, if required due to special circumstances.

Site Procedures and Documents

- *Procedure Manual 3Q, Environmental Compliance Manual*, ECM 13.1, Environmental Compliance Internal Appraisals

Criteria for Internal Appraisals

Appraisals

An appraisal may cover a spectrum of activities to evaluate environmental performance. The first step in planning an appraisal is to determine the scope (degree and focus) of the activity. An appraisal may focus on one or more specific area of environmental concern.

Appraisers

A facility appraisal team consists of two or more members. One member must have one or more of the following credentials:

- a formal course in environmental auditing
- participated in at least two formal environmental audits or appraisals
- at least one year of experience as an environmental professional.

Another member must be a custodian from the operation being appraised. In order to enhance impartiality, it is encouraged, but not required, to include one or more additional members from other site groups or people from the same organization who are not directly responsible for the program being appraised.

A management appraisal team must consist of three or more members. One member must be an EPD professional who has completed a formal course in environmental auditing. One member must be an environment professional, specializing in the environmental regulatory programs being surveyed.

A program appraisal team must consist of two or more members. The team leader must be an EPD environmental professional, specializing in the environmental regulatory program being surveyed.

Standards

The standard for site environmental appraisals is described in ECM-3Q procedures. *The Environmental Appraisal Manual* will be maintained by EPD. This manual will be based on operating contractor requirements and DOE orders, and will be compatible with the *DOE Comprehensive Environmental Protection Appraisal Plan*.

Followup

The appraisal team should review applicable reports from previous appraisals and verify the status of any corrective actions. Deficiencies from previous appraisals should be considered when developing the scope of an appraisal.

Facility Appraisals

A summary of the requirements needed to develop and implement the internal appraisal program follows. Each organization will develop and implement a formal environmental appraisal program. Formal documented facility appraisals will be conducted at least annually.

Program Appraisals**Environmental Protection Department (EPD)**

EPD will conduct program appraisals to review environmental regulatory compliance conditions for a single or several closely-related regulatory programs across the site. These program appraisals and the external appraisals will cover all regulatory programs on a three-year cycle or more often as needed. *The Environmental Appraisal Manual* will be the guide for conducting a program appraisal. The program appraisals will be conducted by at least one EPD environmental professional who may, upon request, be accompanied by an environmental representative from the organization being surveyed.

Management Appraisals**Environmental Protection Department (EPD)**

EPD will conduct management appraisals at least once every three years. The focus of these appraisals will be management structure, organization, procedures, and resource allocations to carry out *EIP* objectives which include complying with applicable environmental requirements and regulations. The management appraisal also may include a facility inspection and informal discussions with personnel. The appraisals will be conducted by EPD.

External Surveillance

(Compiled and reviewed by Charles R. Dynarski)

External surveillances are conducted by DOE-SR. These surveillances are designed to monitor environmental performance and to ensure regulatory requirements are met. EPD is the lead department for coordinating, planning, and scheduling support.

Site Program Overview

In October 1992, a new DOE-SR surveillance process was designed using the WesTip process. Plans are to begin implementing of the new process in November 1993 with full implementation by late 1993.

DOE-SR and EPD will develop a draft three-month rolling surveillance schedule. The draft schedule will be distributed to all affected parties and to organizations such as safety and QA. The schedule is designed to help the operating line organizations schedule surveillances, audits, and walk downs and to allow other groups to piggyback on other surveillances, thus, reducing the total surveillance schedule and duplication of efforts.

There will be an emphasis on conducting joint surveillances between WSRC, DOE, and other internal WSRC groups. In addition to the joint surveillances, EPD and DOE surveillances also will be conducted. A surveillance exit briefing will be required to discuss the surveillance's observations, deficiencies, and method of disposition. Corrective-action response, corrective-action verification, tracking, and close out of the surveillance will be similar to past practices. The majority of the communications during the surveillance process will utilize the site's All in One system.

Justification

External surveillances are conducted by DOE-SR to monitor site environmental performance and to ensure compliance with regulatory requirements, DOE orders, and operating contractor environmental policies. The external-surveillance program supports the site appraisal program by verifying the completion of corrective-action responses.

Organizational Responsibility Summary

All organizations are responsible for ensuring that personnel and facilities under their control comply with environmental requirements. Organizations conducting external surveillances are responsible for participating in the required surveillance activity, preparing and implementing the corrective-action response, and identifying points of contact for the surveillance. While preparing the monthly surveillance schedule, organizations may request additional specific surveillances. Requested surveillances are added to the monthly schedule, and the results are reported to the organization requesting the surveillance.

Internal Surveillance

(Compiled and reviewed by Charles R. Dynarski)

A surveillance is similar to an appraisal, but is not as formal, and has a narrower scope which identifies items that could lead to noncompliance in the future. Surveillances reinforce the philosophy of best management practices. Internal surveillances are divided into facility, program, and verification surveillances. Facility and program surveillances are conducted to verify field compliance with regulatory and corporate requirements. They also are conducted to identify and correct conditions that might lead to an adverse environmental impact, and to review the adequacy of administrative systems, operating procedures, and funding. Verification surveillances are conducted to review the adequacy of corrective actions identified by an EPD internal environmental appraisal deficiency.

Site Program Overview

Internal surveillances are conducted by EPD to monitor site environmental performance and to ensure compliance with regulatory requirements, DOE orders, and operating contractor environmental policies. The program consists of facility surveillances, program surveillances, and verification surveillances. The EPD Environmental Surveillance Plan includes the program areas to be surveyed during the year, and the frequency of the review. The EPD professional for each program area also is listed. A detailed surveillance schedule will be issued each month based on the plan. A description of the program requirements is located in the *Environmental Compliance Manual*, procedure ECM 13.4, Environmental Compliance Surveillance Program Administration.

Justification

Internal surveillances are conducted by EPD. These surveillances are conducted to monitor site environmental performance and to ensure compliance with regulatory requirements, DOE orders, and operating contractor environmental policies. The internal-surveillance program supports the site appraisal program by verifying completion of corrective-action responses.

Organizational Responsibility Summary

All organizations are responsible for ensuring that personnel and facilities under their control comply with environmental requirements. Organizations conducting internal surveillances are responsible for participating in the required surveillance activity, preparing and implementing corrective-action response, and identifying points of contact for the surveillance.

While preparing the monthly surveillance schedule, organizations may request additional specific surveillances. Requested surveillances are added to the monthly schedule and the results are reported to the organization requesting the surveillance.

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