Department of Energy
Germantown, MD 20874-1290

July 15, 1999

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington D.C. 20004

Dear Mr. Chairman:

We are pleased to forward the revised Office of Oversight Environment, Safety, and Health (ES&H) Appraisal Process Protocols and associated Revision Report. The report outlines the scope and major modifications to the revised Protocols. This action completes Commitment 5.1.1 of the DOE Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 98-1, *Department of Energy Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight.*

If you have any questions, please contact me at 301-903-6457.

Sincerely,

S. David Stadler
Acting Deputy Assistant Secretary
Office of Oversight
Environment, Safety and Health

Enclosures
1) Office of Oversight Environment, Safety, and Health Appraisal Process Protocols Revision Report
2) Office of Oversight Environment, Safety and Health Appraisal Process Protocols, July 1999

OFFICE OF OVERSIGHT
ENVIRONMENT, SAFETY, AND HEALTH
APPRAISAL PROCESS PROTOCOLS
REVISION REPORT

SCOPE OF REVIEW OF EXISTING PROTOCOLS

The Office of Oversight revised its Environment, Safety, and Health (ES&H) Appraisal Process Protocols, in response to Commitment 5.1.1 of the Department of Energy (DOE) Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 98-1, *Department of Energy Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight*. This commitment states, "The Office of Oversight will review and modify as necessary its existing Protocols to enhance line management understanding of identified Safety Issues." The revised Protocols also satisfy The Secretary of Energy's March 3, 1999, memorandum on "Safety - Accountability and Performance" that requested the Office of Oversight to immediately develop protocols to define the process for planning, scheduling, and conducting Oversight evaluations. The ES&H Appraisal Process Protocols is a revision to the June 1996 Appraisal Process Guide.

Since our inception in December 1994, the Office of Oversight has evaluated DOE programs, processes, and systems that protect the workers, the environment, and the public. Our goals have been to assess line management's effectiveness in performance and implementation of ES&H policies and programs, add value to line management efforts in resolving identified Safety Issues, and improve the Department's overall safety posture. The independent Oversight appraisals have been consistent, multidisciplinary oversight processes that are continuously coordinated with line management.

The revised Protocols describe the process and principal activities used internally by the Office of Oversight to assess line management's effectiveness in implementation of ES&H policies and programs based on the Department's guiding principles and core functions for integrated safety management pursuant to DOE P 450.4, Safety Management System Policy. Changes outlined in the revised Protocols have been the result of changes in DOE program direction and guidance, insights gained from continuous self-assessments and lessons learned of our appraisal activities, and feedback from our customers and constituents. Many of these changes have already been implemented as we continuously strive to provide the most current, fully integrated, and coordinated appraisal methods focused on identifying the significant ES&H issues.

The Office of Oversight coordinated its actions regarding Commitment 5.1.1 with the Safety Management Implementation Team (SMIT) Leader, the Integrated Corrective Action Management Team (I-CAM) Leader, the Office of Nuclear Safety Policy and Standards, Department managers working on the DOE Corrective Actions Tracking System, and other DOE and contractor line managers. This was to ensure our revised Protocols would be in agreement and compatible with other actions being completed under the DOE Implementation Plan for DNFSB Recommendation 98-1.

The revised Office of Oversight ES&H Appraisal Process Protocols were disseminated to 85 DOE organizational elements including all Headquarters Cognizant Secretarial Offices; Operations and Field Office Managers; Area, Site, and Project Offices; National Laboratory Directors; DNFSB and its staff; and principal contractors at each DOE site for their review and comment. This gave Oversight customers and constituents an opportunity to review and comment on our revised internal procedures. Responses were formally received from 37 organizational elements with a total of over 200 comments. The comments and recommendations were reviewed and incorporated into the revised Protocols as appropriate. The Oversight ES&H Appraisal Process Protocols were then redistributed to the DOE organizations for a second review and published on July 15, 1999.

DESCRIPTION OF MODIFICATIONS

Changes were made to update the Appraisal Process Protocols. A summary of these changes is provided below.

- **Oversight Vision, Mission and Scope of Activities:** Updated the overall direction of Oversight incorporating revised DOE directives, feedback elicited from line management, activities addressed by the DNFSB, and results of Oversight appraisal lessons learned. This has included implementation and institutionalization of integrated safety management in all Oversight activities to enhance the protection of workers, the public, and environment.

- **Approach to Conducting Evaluations:** Modified the integrated safety management evaluation framework and process built around the seven guiding principles and five core functions. This included an updated outline of Oversight appraisal process activities and tasks through all phases of the appraisal process. Clarified discussions on interactions with Headquarters and site counterparts; and outlined the internal process used by Oversight managers in selecting and scheduling DOE sites for Oversight appraisal activities.

- **Safety Management Appraisal Template:** Updated the safety management appraisal "template" to describe the revised elements in the guiding principles and core functions supported by criteria used by the Office of Oversight to evaluate the effectiveness of integrated safety management systems within DOE. The template clarifies the interrelationships between the guiding principles and core functions of integrated safety management, and outlines criteria to describe the attributes of each principle and function. Improved the usability of the template as a diagnostic tool and reference guide to assist Oversight teams during all phases of appraisal activities. Included the revised template as an appendix to the Protocols.

- **Analysis of Results:** Detailed the continuous process for analyzing results during Oversight appraisal activities. Performance criteria for each guiding principle and core function were emphasized as a primary analysis tool throughout the appraisal process - including daily team meetings, rollup of information, midpoint analysis meetings, and final determination of ratings. Guidelines for collating, organizing, and analyzing the data; developing analysis; and presentation of the analysis results were added. Factors considered in these analysis activities were also listed.

- **Identification of Safety Issues, Opportunities for Improvement, and Noteworthy Practices:** Incorporated the definition, explanation, illustration, and listing of Safety Issues. Specific factors in identification of potential Safety Issues and how they should be addressed in the Oversight report have been clearly articulated. Also outlined are Opportunities for Improvement as recommendations intended to assist line management in resolving problems observed or enhancing ES&H programs and Noteworthy Practices identified during the conduct of an Oversight evaluation that could provide a valuable source of lessons learned for other DOE sites.

- **Interfaces for Safety Issues and Corrective Actions:** Described the development and identification of Safety Issues requiring cognizant line management evaluation and determination of appropriate corrective actions. Outlined Oversight's role in the line management corrective action process established by the Department's March 10, 1999, Implementation Plan for DNFSB 98-1 to address and resolve Safety Issues identified. This included a brief explanation of roles and responsibilities in the corrective action process, tracking of corrective actions, and Oversight follow-up on the status of the corrective actions.

- **Appraisal Validation Strategy:** Updated the appraisal validation strategy to enhance verification of data and information collected by the Oversight team members at various stages of the appraisal process. This included increased emphasis on interaction with site counterparts and site managers, on-the-spot validations summarizing observations and concerns, coordination of Safety Issues related to Headquarters and other organizations not located at the site, and continuous internal communications among the Oversight team members. Both formal and informal validation methods were outlined.

- **Oversight Evaluation Team Roles, Structure and Activities:** Revised the evaluation team activities in response to changes in the scope of the appraisal process and results of previous lessons learned. Increased emphasis was focused on team communications, technical and evaluation training and qualifications, and utilization of status reports to document evaluation activities. In addition, the composition, qualifications, and roles and responsibilities of the evaluation team members regarding technical and appraisal expertise, continuing individual and team training, and their specific evaluation activities were expanded.

- **Evaluation Planning Focus:** Oversight evaluation planning was revamped to increase concentration on the seven guiding principles and five core functions to identify specific data-gathering activities. The Oversight technical specialist role was expanded to apply the core functions for evaluating site performance of selected facilities, programs, and activities and the effectiveness of specific ES&H support disciplines related to those work processes. Highlighted the importance of the team leader's coordination with line management during the early planning phases to define key site documents including requirements listed or contained in site contracts and subcontracts. Detailed examples of a safety management evaluation plan and scoping visit briefing were added in the Protocols.

- **Report Writing Development and Review Process:** Updated the appraisal report format utilizing the conceptual framework outlined in DOE P 450.4 and the safety management template. Specific Safety Issues identified for corrective action and follow-up are being formally listed. Opportunities for Improvement and Noteworthy Practices have been incorporated as part of the report. A more detailed accounting of the final report development and review process involving the Oversight team and site management was also included.

- **Other Changes to Enhance the Process Protocols:**
  - Made more visible the team's identification and use of ES&H requirements, DOE directives, and site contracts.
  - Discussed different purposes served by the Oversight Safety Management Template and DOE Integrated Safety Management System (ISMS) Verification Team Leader's Handbook.
  - Described analysis support during the planning phase in searching qualitative and quantitative data sources.
  - Defined Cognizant Line Management, ES&H Management, External Stakeholders, Noteworthy Practices, Opportunities for Improvement, and Safety Issues.
  - Provided additional Samples and Examples of Appraisal Planning and Data Collection Activities and Reports.

CONCLUSION

The Office of Oversight has revised its Protocols for conducting independent appraisals as part of its continuing effort to enhance the quality and consistency of oversight activities and to complete Commitment 5.1.1 of the Implementation Plan for DNFSB Recommendation 98-1.

The Protocols describe the integrated safety management evaluation process used to review and assess line management's performance and implementation of DOE policy, orders, standards, guides, and other applicable ES&H requirements. While the Protocols concentrate primarily on the conduct of integrated safety management evaluations, the processes are also applicable to other oversight appraisal activities. Special studies, event reviews, follow-up assessments, focused reviews, and accident investigations may differ from the integrated safety management evaluations in scope, team size, duration, or report format, but the key elements of the Protocols remain applicable, such as planning and preparation; team code of conduct; interviews, observations, and walkdowns; open dialogue with line management; internal quality review; and validation of results. Furthermore, no two sites are alike, and accordingly, no two appraisals will be alike. The guidance provided in the revised ES&H Appraisal Process Protocols has been developed to be flexible and easily adapted as it is applied to each site, facility, and activity evaluated by the Office of Oversight.

The Office of Oversight will continue to update and improve the Appraisal Process Protocols to ensure we maintain the most credible, value-added product that meets the needs of DOE line management in their efforts to implement ES&H policies and programs and to protect workers, the public, and the environment.

Environment, Safety, & Health Appraisal Process Protocols

July 1999

Office of Oversight

Environment, Safety and Health
Department of Energy

OFFICE OF OVERSIGHT
ENVIRONMENT, SAFETY, AND HEALTH
APPRAISAL PROCESS PROTOCOLS

July 1999

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Office of Oversight
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Preface

The Office of the Deputy Assistant Secretary for Oversight prepared this Appraisal Process Protocols as part of its continuing effort to enhance the quality and consistency of oversight activities. These protocols describe the process and principal activities for evaluating DOE line management's effectiveness in environment, safety, and health (ES&H) programs. Line management is the unbroken linkage of management personnel responsible for an organization's direction, operations, and performance and effectiveness. In DOE, it is the chain of command that extends from the Secretary to the Cognizant Secretarial Officers (CSO), to the field organization managers, and to the contractors and subcontractors. Line management consists of DOE and contractor personnel organizationally or contractually responsible for work or job tasks, as well as effective safety.

These protocols describe the integrated safety management evaluation process used to review and assess line management's performance and implementation of DOE policy, orders, standards, guides, and other applicable ES&H requirements. While the ES&H Appraisal Process Protocols concentrate primarily on the conduct of integrated safety management evaluations, the processes are also applicable to other oversight evaluation activities. Special studies, event reviews, diagnostic assessments, focused reviews and accident investigations may differ from the integrated safety management evaluations in scope, team size, duration, or report format, but the key elements of the protocols remain applicable, such as: planning and preparation; team code of conduct; interviews, observations, and walkdowns; open dialogue with line management; internal quality review; and validation of results.

The process presented in this protocol has been developed to be flexible and easily adapted as it is applied to each site, facility, and activity evaluated. No two sites are alike, and accordingly, no two appraisals will be alike. The process described herein is to be used as guidance for Office of Oversight personnel. As part of the continuing effort to improve the ES&H Appraisal Process Protocols, we anticipate making periodic updates and revisions to them in response to changes in DOE program direction and guidance; insights gained from continuous self-assessments and lessons learned of our appraisal activities; and feedback from our customers and constituents. Therefore, users of this document, as well as other interested parties, are invited to submit comments and recommendations on the protocols to the Deputy Assistant Secretary for Oversight at any time.

Contents

Acronyms

ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
CAP	Corrective Action Plan
CATS	Corrective Action Tracking System
CF	Core Function
CSO	Cognizant Secretarial Office
DEAR	Department of Energy Acquisition Regulation
DNFSB	Defense Nuclear Facilities Safety Board
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
EH-2	DOE Deputy Assistant Secretary for Oversight
EPA	U.S. Environmental Protection Agency
ES&H	Environment, Safety, and Health
FRAM	Functions, Responsibilities, and Authorities Manual
GP	Guiding Principle
HQ	DOE Headquarters
ISM	Integrated Safety Management
M&O	Management and Operating (Contractor)
NRC	U.S. Nuclear Regulatory Commission
OSHA	U.S. Occupational Safety and Health Administration
QRB	Quality Review Board

Definitions

Appraisals are independent oversight activities that evaluate Departmental line management performance against Department orders, standards, policy, and other applicable requirements. Appraisals include safety management evaluations, focused reviews, special studies, and corrective actions follow-up reviews conducted by oversight teams from Headquarters.

Cognizant secretarial officer (CSO) is the senior outlay program official of: a Lead Program Secretarial Office—i.e., the Assistant Secretary for Defense Programs (DP), the Assistant Secretary for Environmental Management (EM), the Director of the Office of Science (SC), or an Other Program Secretarial Office, such as the Assistant Secretary for Energy Efficiency and Renewable Energy (EE), the Assistant Secretary for Fissile Energy (FE), the Director of the Office of Civilian Radioactive Waste Management (RW), or the Director of the Office of Nuclear Energy, Science and Technology (NE).

Cognizant line manager (CLM) is the Department of Energy field or headquarters element manager with direct safety responsibilities for DOE facilities, who is also directly responsible for the development, approval (when delegated such authority by the cognizant secretarial officer), and implementation of corrective action plans and associated corrective action completion, tracking and reporting. The cognizant line manager is also responsible for initiating action to elevate issues associated with corrective action plan development, implementation, and completion to higher authority for resolution when necessary.

Document is any record of information, regardless of physical form or characteristics, including, but not limited to, the following: (1) handwritten, printed, or typed matter; (2) painted, drawn, or engraved matter; (3) sound, magnetic, electromechanical, or optical recordings; (4) photographic prints, exposed or developed film, and still or motion pictures; (5) automatic data-processing input, memory, program, or output information or records such as punch cards, tapes, memory drums or disks, or visual displays; and (6) reproductions of the foregoing by any process.

External stakeholders are individuals or groups who are external to the Department and have interests in or are affected by the performance of the Department.

Focus areas are those areas in which attention of the evaluation team appears warranted based on factors such as performance history, significant change in mission or site status, recurring events or equipment failures, or line management requests.

Focused integrated safety management evaluations are similar to integrated safety management evaluations but may involve a smaller sample of organizations, facilities, and activities; or they may provide greater focus on areas of past performance problems.

Functional areas, as used in these protocols, are subdivisions of topical areas, as determined by the Office of Oversight. Examples of functional areas include criticality safety, conduct of operations, and chemical safety (see Appendix B).

Independent oversight is the objective and unbiased evaluation of the Department's performance by a group that is not subject to or influenced by the Department's programmatic or line organization. In the DOE, sole responsibility for independent internal oversight resides with the Assistant Secretary for Environment, Safety and Health. The oversight process is carried out in an unbiased manner by the Office of the Deputy Assistant Secretary for Oversight, which has no responsibilities for operations or programs, policy development, or providing technical assistance to line managers. Independent oversight does not include oversight and/or assessments conducted by line management.

Integrated safety management evaluation is a scheduled, comprehensive appraisal of integrated safety management systems, including their application to contract and project management and to specific activities and work with a potential for adverse impact to workers or public safety, or the environment.

Issue defines a condition that, if left uncorrected, could contribute to potential adverse impact on the environment, safety and health of the workers and/or the public. Issues developed during the conduct of the Oversight appraisal will be clearly identified in the appraisal report, and will require formal resolution and tracking by line management.

Line of inquiry refers to the steps taken by an evaluator while investigating a particular guiding principle or core function criterion, topical area, functional area, technical area, concern, or issue.

Line management is the unbroken linkage of management personnel responsible for an organization's direction, operations, and performance and effectiveness. In DOE, it is the chain of command that extends from the Secretary to the Cognizant Secretarial Officers (CSO), who set program policy and plans and develop assigned programs; to the field organization managers, who are responsible to the CSO for execution of these programs; and to the contractors and subcontractors who conduct the programs. Line management consists of DOE and contractor personnel organizationally or contractually responsible for work or job tasks, as well as effective safety.

Noteworthy practices are innovative approaches or practices related to environment, safety and health systems, programs, processes, or projects observed by the Oversight appraisal team that have proven effective in improving safety management systems and performance, and could be a valuable source of information and lessons learned for other DOE sites. These practices are outlined in the Oversight appraisal report.

Opportunities for improvement are suggestions offered by the Oversight appraisal team that may assist line management in identifying options and potential solutions to various issues identified during the conduct of the Oversight appraisal. These opportunities for improvement will be outlined in the appraisal report for line management consideration.

Performance test is a structured activity during which elements of a program—personnel, procedures, or equipment—are evaluated or measured to determine whether they can actually perform or produce what is required.

Ratings are indicators of the safety management performance levels, usually as related to the seven guiding principles or core functions of integrated safety management and associated criteria. The three ratings are Effective Performance (green), Improvement Needed (yellow), and Significant Weakness (red).

Safety, as used in these protocols, includes all aspects of environment, safety, and health programs.

Safety Issue defines conditions of concern identified during the conduct of an Oversight appraisal that could have an adverse impact on the environment, safety, or health of the site, its workers, and/or the public. These safety issues will be clearly addressed in the appraisal report, and will require formal resolutions and tracking by line management.

Safety Management refers to those systems required to ensure that an acceptable level of protection of the public, workers, and environment is maintained throughout the life of a facility or operation. The term "safety," when used in the context of safety management or the safety management program, specifically includes all aspects of environment, safety, and health.

Site profile is an Office of Oversight document that provides information on DOE sites, including background; characteristics; environment, safety, and health programs and items for management attention; major initiatives and activities; and performance.

Special studies, as used in these protocols, are appraisals of specific subject areas, policies, or trends. Special studies are conducted by teams with technical and managerial capabilities matched to the topic(s) and organization(s) being studied.

Technical areas, as used in these protocols, refer to the disciplines or subdisciplines of functional areas.

Topical areas are the major subdivisions under the DOE ES&H programmatic areas evaluated during appraisals. An example of a topical area is nuclear safety (see Appendix B).

Validation is the process of determining whether information is current, accurate, and complete. The Office of Oversight stresses validation during all appraisal activities.

Walkdown is a technique for observing the condition of site equipment and structures.

Walkthrough is a technique for observing simulated actions or discussing the steps to perform a procedure.

Section 1

INTRODUCTION TO THE OFFICE OF OVERSIGHT
Contents

1.1 Oversight Program Vision

The Office of Oversight's primary goal is to provide credible, objective, value-added information to identify needs and vulnerabilities in Department of Energy (DOE) programs related to environment, safety, and health (ES&H), and accident investigations. The Office of Oversight is a catalyst that promotes behavioral change to facilitate continuous improvement in the implementation and institutionalization of integrated safety management (ISM) and the protection of workers, the public, and the environment.

1.2 Office of Oversight Mission

The mission of the Office of Oversight is to provide the information and analysis needed to ensure that the Secretary of Energy; the Assistant Secretary for Environment, Safety and Health; cognizant secretarial officers, field office managers, and contractor and subcontractor management; Congress; and the public have an accurate and comprehensive understanding of the effectiveness of and trends in the Department's ES&H policies and programs, including ISM. A listing of Office of Oversight commitments and mandates is found in Table 1-1.

1.3 Scope of the Office of Oversight's Activities

General activities of the Office of Oversight are covered by public law (Section 203(a)(3)) of the Department of Energy Organization Act, P.L. 95-91, August 4, 1977) and mandated by DOE policy. The Office reports to the Assistant Secretary for Environment, Safety and Health and has sole responsibility within the Department for independent internal oversight of Departmental activities related to ES&H. In addition to its general mandates, the Office is responsible for specific commitments the Secretary has made to Congress governing Office operations in a variety of areas (Amendment 2171 to the Defense Authorization Act for Fiscal Year 1995, P.L. 103-107, Conference Report H.R. 103-107, Section 3163), and to the Defense Nuclear Facilities Safety Board (DNFSB) recommendations (e.g., DOE Implementation Plan for DNFSB Recommendation 98-1, DOE Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight).

The independent oversight function is "independent" from the Department's line program offices (line management) in that

the Office of Oversight has no responsibilities for operations or programs, policy development, technical support, or technical assistance to line managers. This independent oversight complements line management oversight efforts in accordance with DOE Policy 450.5, Line Environment, Safety and Health Oversight. Line management is responsible for safety and for effective resolution of safety issues identified by the Office of Oversight while integrating and prioritizing such resolution activities with other safety management activities.

Table 1-1. Office of Oversight ISM Commitments and Mandates

- Assessment of effectiveness of program and field offices in carrying out programs relevant to ES&H at DOE facilities.
- Independence from line management, technical support, technical assistance, and policy development functions.
- Reports that are validated and provide analysis of the effectiveness of line safety management programs.
- Identification of ES&H issues; and incorporation of issues into the DOE Corrective Action Tracking System (see Section 9).
- Review of line management's proposed corrective action plans for identified issues.
- Monitor the status of corrective actions (see Section 9).
- Development, use, and maintenance of appraisal methodologies, performance standards, and criteria for assessing ISM systems and ES&H programs.
- Implementation of evaluations, reviews, and special studies to accomplish oversight objectives, with emphasis on management systems.
- Office procedures and protocols for Oversight reports to ensure quality and factual reviews.
- Annual report on ISM and ES&H performance across the DOE complex.
- Preparation and maintenance of semiannual site profiles for key DOE sites.

The scope of the oversight program includes a number of activities related to appraising DOE and contractor line management performance in ES&H. These can generally be grouped into three types of activities and/or products, as indicated in Figure 1-1: safety management evaluations, special studies, and oversight reports. A brief description of each of these activities follows.

- **Safety Management Evaluations**

Safety management evaluations of the line organization's performance and implementation of DOE orders, standards, policy, and other pertinent requirements are a cornerstone of the oversight program. An **integrated safety management evaluation** is a scheduled, comprehensive assessment of ISM systems, including their application

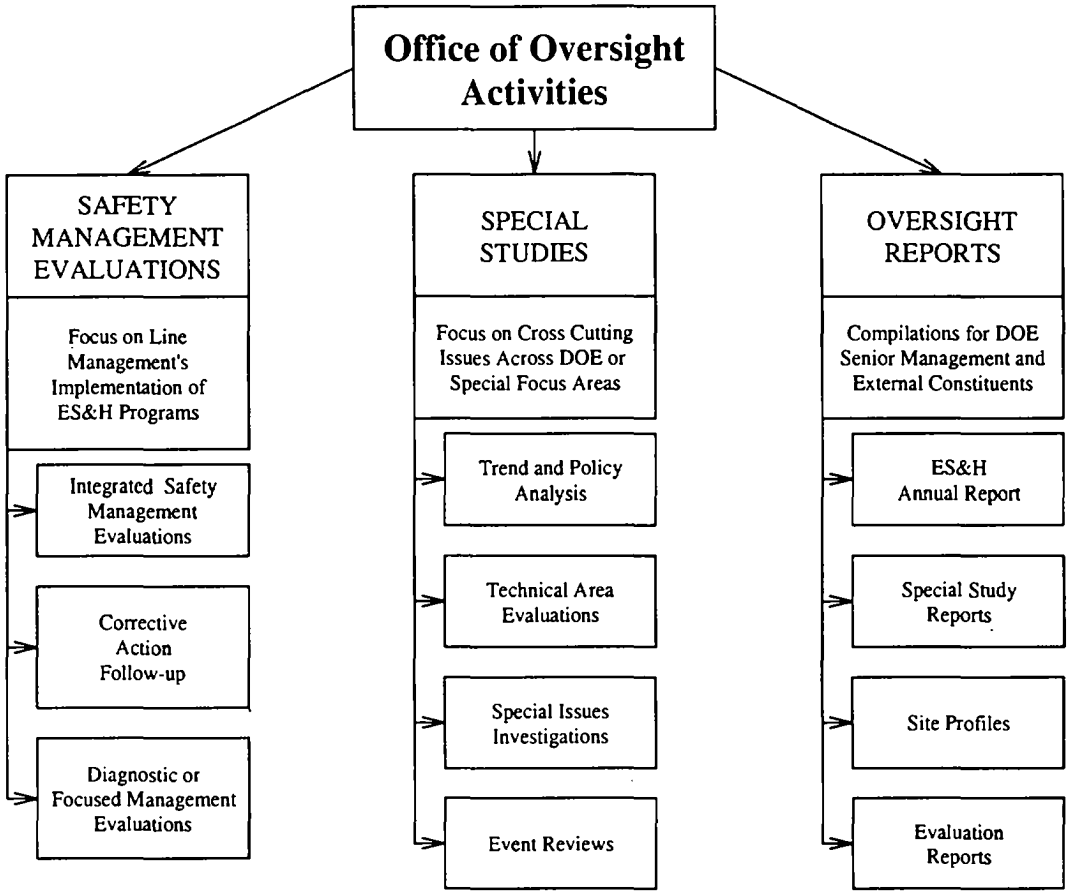

Figure 1-1. Office of Oversight Activities

to contract and project management and to specific activities and work with a potential for adverse impact to workers or public safety, or the environment. An integrated safety management evaluation's scope includes elements of line management's implementation of ISM systems (in accordance with DOE P 450.4, Safety Management System Policy) and ES&H programs and results in performance ratings determined by an established rating system. As part of the reporting process, a system of colors is used to represent ratings, which convey the status of a site's ES&H programs. This color rating system is described in Section 7. Less comprehensive or **focused integrated safety management evaluations** and **diagnostic evaluations** are similar to integrated safety management evaluations but may involve a smaller sample of organizations, facilities, and activities; or they may provide greater focus on areas of past performance problems. The objective is to identify the underlying causal factors and weaknesses in the implementation of guiding principles or core functions of ISM. For example, as the Office of Oversight monitors line management's progress in completing corrective actions through the DOE Corrective Action Tracking System, the need for a follow-up review may be determined to examine specific issues or actions. A diagnostic evaluation is a focused review that places emphasis on determining why performance problems exist. Other focused safety management evaluations may be conducted as broad reviews of progress in implementing or improving safety management and performance.

- **Special Studies**

Special studies are appraisals focusing on important issues that affect a cross-section of the Department's sites and programs or that concentrate on special focus areas. Special studies may involve multiple sites or individual facilities and may be conducted on short notice. They are flexible in form and format and reflect the established philosophy of the oversight program. An **event review** is conducted by the Office of Oversight to provide an independent onsite review of selected complex, significant, or repetitive events (separate from Type A accident investigation). The objective is to validate and/or improve the investigation, analysis, and reporting of occurrences and the dissemination of lessons learned. Special studies also include **analysis** of trends and DOE policies, evaluation of **specific technical areas**, and **investigations** of special safety issues. Special studies analyze the issues or events against the framework of ISM including the guiding principles and core functions. Performance ratings are usually not assigned for special studies.

- **Oversight Reports**

Oversight reports include the annual reports, site profiles, special study reports, safety management evaluation reports, and other reports requested by DOE senior line management. Performance ratings may be assigned based on the nature of the specific report.

1.4 Selection of Sites for Independent Oversight Activities

Office of Oversight managers select DOE sites for independent oversight activities. The principal objective of the site selection process within the Office of Oversight is to develop a prioritized list of Oversight appraisal activities for use in developing the Oversight Master Appraisal Schedule. The Office of Oversight goal is to conduct oversight activities at each major DOE site every 18 to 24 months.

Oversight managers periodically (at least semiannually) review site-specific data on ES&H performance trends provided by various data sources, such as issues and corrective action database systems, site documents, site profiles, operational data, other pertinent Oversight reports, and analytical insights developed through synthesis of safety performance data. The Oversight managers review this information to determine and prioritize recommended oversight appraisal activities (including integrated safety management evaluations) at DOE sites. Judgments are made for selecting site candidates and appropriate oversight activities by conducting a formal review and ranking of site characteristics in the areas of integrated safety management system implementation, organizational considerations, operational considerations, time since last reviewed by Oversight, and other considerations (e.g., external stakeholders). Other factors that may influence the site selection process include input from the Office of the Secretary, the Assistant Secretary of ES&H, or other internal stakeholders.

The site selection process results in preliminary recommendations for the types of appraisal activities, as well as the priority of these activities. The preliminary recommendations, including priority and basis of recommendations, are reviewed with the Deputy Assistant Secretary for Oversight.

The Oversight managers then determine resource requirements, make necessary changes, and develop consensus recommendations for the Office. The final recommendations for ES&H appraisal activities are consolidated, prioritized, and submitted to the Deputy Assistant Secretary for Oversight for approval. Upon approval, these recommendations are distributed as

the Oversight Master Appraisal Schedule for information to all Headquarters Level 1/Cognizant Secretarial Offices, Operations and Field Office Managers, Area/Site/ Project Offices, National Laboratory Directors, DNFSB, and principle contractors at each DOE site.

The Oversight managers meet at least semi-annually (September and March) to develop and/or review and update the Oversight Master Appraisal Schedule, resulting in:

- A schedule (the Oversight Master Appraisal Schedule) with specific dates for appraisal activities
- Updates of the Oversight Master Appraisal Schedule, as required, to reflect changes to dates for appraisals actively being planned in the near term by the Office.

The Oversight Master Appraisal Schedule represents a significant portion of the Office of Oversight assessments; however, the Office also is involved in activities that are reactive to emerging issues, conditions, or management initiatives. These activities are not generally included on the published schedule and may result from Secretarial initiatives, emerging generic issues, special studies, or event reviews.

Section 2

APPROACH TO CONDUCTING APPRAISALS
Contents

The oversight program provides a disciplined process for appraising and reporting to Department management and outside authorities, such as Congress and the DNFSB, on the implementation of the Department's ISM policy and the effectiveness of ES&H policies and programs. This section of the protocol describes the oversight program and appraisal philosophy, which is based on guiding principles and core functions of ISM.

2.1 Safety Management System Framework

DOE is responsible to Congress and the public for assuring that all operations conducted or controlled by DOE are performed in a way that protects or minimizes risk to the safety and health of operating personnel, the environment, and the public. The DOE Office of Environment, Safety and Health's Office of Oversight is charged with conducting independent oversight of the effectiveness of DOE's implementation of ISM and performance in protecting workers, the environment, and the public. The Office of Oversight performs that role through a variety of activities, including integrated safety management evaluations; special reviews and studies; accident investigations; and cross-cutting analyses of performance information. The foundation for Oversight evaluations, studies, and reports is DOE's Safety Management System Policy (DOE P 450.4), the Functions, Responsibilities, and Authorities Manual (FRAM, DOE M 411.1), existing contracts, and the following provisions of the Department of Energy Acquisition Regulation (DEAR, 48 CFR 970):

- 48 CFR 970.5204-2 requires integration of environment, safety and health into work planning and execution, as well as annual updates on the Safety Management System documentation, including safety objectives, measures, and commitments
- 48 CFR 970.5204-78 deals with laws, regulations, and DOE directives; and also permits the use and application of DOE-approved tailoring processes
- 48 CFR 970.1001 encourages performance-based contracting
- 48 CFR 970.5204-86 deals with conditional payment of fee, profit, or incentive.

Other regulations and DOE directives concerning work processes and quality improvement, such as the Quality Assurance Requirements (10 CFR 830.120) and Occupational Radiation Protection (10 CFR 835) are considered by the evaluation team.

The Safety Management System Policy establishes an objective that:

"The Department and Contractors must systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the public, the workers, and the environ-

ment. This is to be accomplished through effective integration of safety management into all facets of work planning and execution. In other words, the overall management of safety functions and activities becomes an integral part of mission accomplishment."

The policy, the corresponding DEAR provisions, and the FRAM are built around seven guiding principles and five core safety management functions, illustrated in Figure 2-1, that provide the necessary structure for any work activity that could affect the public, workers, and the environment.

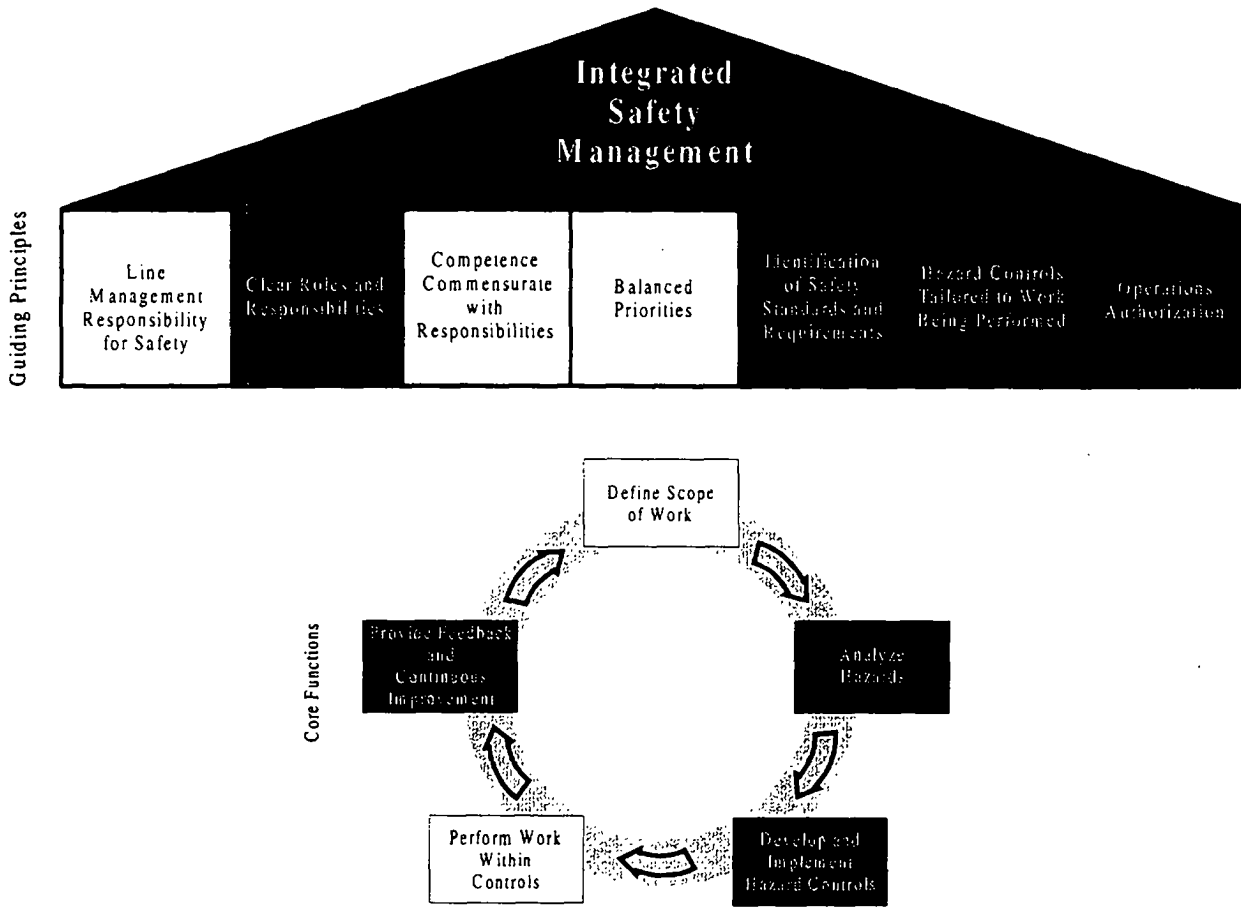

Figure 2-1. Seven Guiding Principles and Five Core Functions of Integrated Safety Management

[1] "Safety" throughout encompasses environment, safety, and health.

2.2 Oversight Safety Management Template

The Office of Oversight has developed a safety management appraisal "template," included in Appendix A, describing the elements of the guiding principles and core functions supported by criteria used to evaluate the effectiveness of safety management systems within DOE. The principles and functions are presented as an integrated list, similar to that presented in Integrated Safety Management System (ISMS) Verification Team Leader's Handbook, that recognizes the interrelationships between the two components (principles and core functions) of ISM. In some instances where there is great overlap between a principle and core function, the template combines the principle and corresponding function for simplicity, since the evaluation approach would be similar for both. The results of an Oversight evaluation may be presented around the list of seven guiding principles, or the list of five core functions, or both the principles and the functions in separate discussions. Each principle or function in the safety management template is supported by criteria that further describe the attributes of an effective safety management system. The interrelationships of the guiding principles (GPs) and core functions (CFs) of the safety management appraisal template are:

- Line Management Responsibility for Safety (GP-1)
- Clear Roles and Responsibilities (GP-2)
- Competence Commensurate with Responsibilities (GP-3)
- Balanced Priorities; Define the Scope of Work (GP-4, CF-1)
- Identification of Safety Standards and Requirements; Analyze the Hazards (GP-5, CF-2)
- Hazard Controls Tailored to Work Being Performed; Develop and Implement Hazard Controls (GP-6, CF-3)
- Operations Authorization (GP-7)
- Perform Work Within Controls (CF-4)
- Provide Feedback and Continuous Improvement (CF-5)

The Office of Oversight uses the safety management template to develop specific evaluation plans and as a reference guide for use during other Oversight activities. It is not intended as a checklist. Some criteria and attributes may not be relevant at a particular site, or a site's ISM system may satisfy a guiding principle or core function without satisfying all of the attributes. The template is intended as a diagnostic tool to assist Oversight teams, and line management, in identifying barriers to effective implementation of the guiding principles and core functions of integrated safety management.

Specific facilities, programs, or work activities are reviewed during the appraisal process to evaluate the performance of line management and programs, encompassing ES&H support disciplines involving technical, functional, and topical areas (see Appendix B). The key to understanding the evaluation process is understanding how the guiding principles and core functions, along with their associated criteria, are applied, regardless of the area evaluated, and how the results are rolled up to be evaluated and reported within the ISM framework.

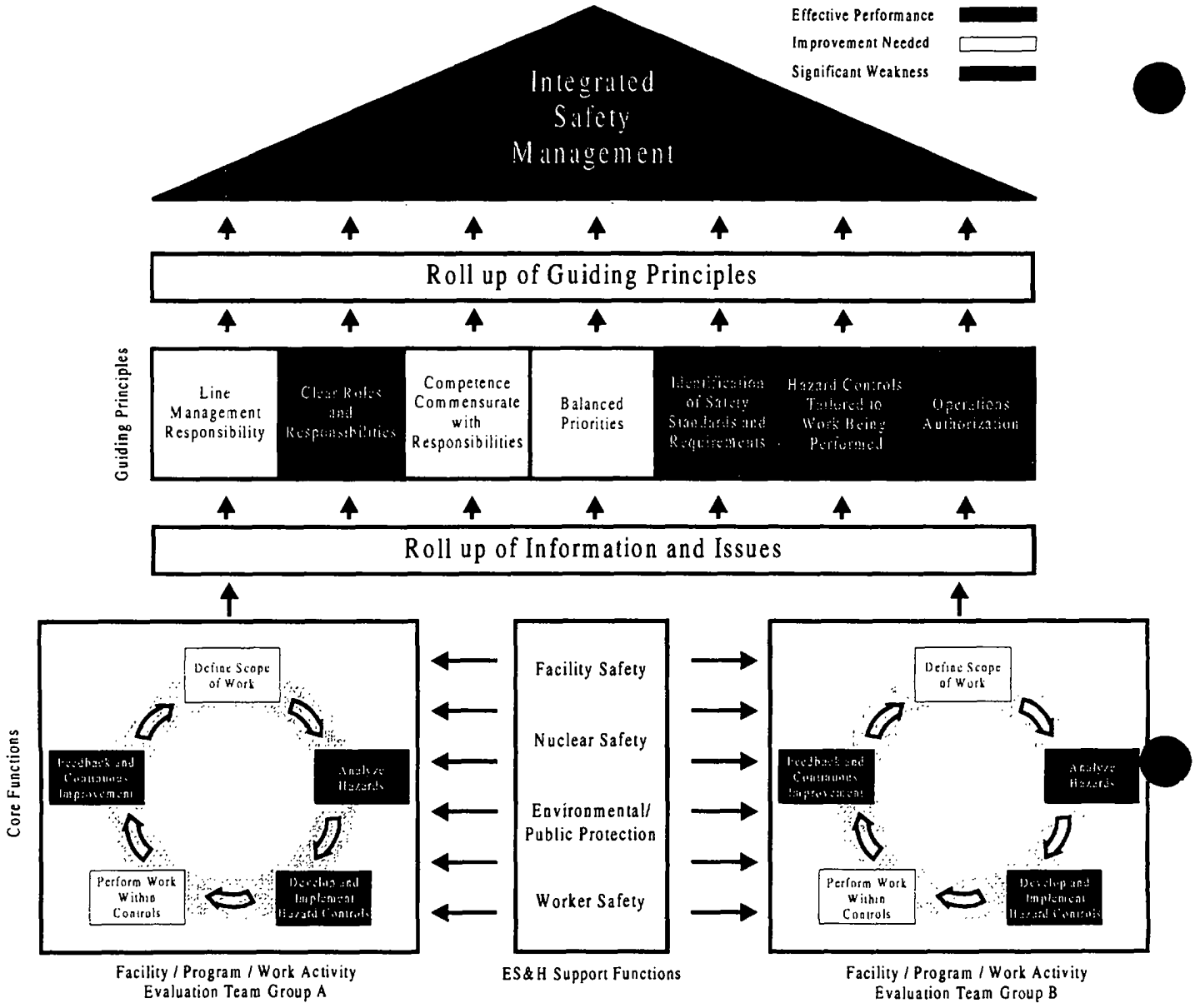

Figure 2-2. Typical Management Evaluation Rollup Process

Observations and issues are rolled up according to the safety management template shown in Appendix A. The typical rollup process is illustrated in Figure 2-2. Common issues and observations are consolidated, and the team reaches consensus on the major issues, guiding principles and core functions criteria ratings, and color ratings for ISM. This process requires the team members to communicate and coordinate with each other and with team management.

2.3 Comparison with the DOE ISMS Verification Team Leader's Handbook

As indicated above, the Oversight Safety Management Template and DOE ISMS Verification Team Leader's Handbook are

consistent in that both use the guiding principles and core functions and both recognize the interrelationships between them. However, the Template and Handbook serve different purposes. The DOE ISMS Verification Team Leader's Handbook is used by line management to assess the adequacy of the ISMS documentation and to determine if the system itself has been fully established. The Safety Management Template is used by the Office of Oversight to independently assess the efficacy of line management's ISMS verification process and to continually evaluate the effectiveness of ISM at all stages of the system's implementation.

2.4 The Integrated Safety Management Evaluation Process

An integrated safety management evaluation includes visits to Headquarters and field locations, as well as interfaces with contractor, subcontractor, and Department personnel; thus, it requires substantial coordination, communication, and cooperation among the many participants. Further, it may cover the broad range of facilities, and activities or may focus on only a few. The management evaluation process described here is sufficiently flexible to be used for a wide range of Oversight appraisals, while maintaining some degree of consistency. The management evaluation process for a site begins with Oversight management planning, continues with a series of major team activities and tasks, and ends with the completion of the final report and review of corrective action plans.

These major activities are briefly described below and in Table 2-1. More detail on these activities is provided in subsequent sections of these protocols. These major activities and tasks are not necessarily sequential; each major activity tends to overlap during the evaluation process.

A typical schedule includes three visits to the site and several activities at DOE Headquarters. These activities include:

- Management Planning and Preparation: Planning activities begin several weeks in advance of the team planning. During this period, a kickoff meeting is held with Headquarters managers representing the Lead Program Secretarial Office or other programs sponsoring work within the scope of the evaluation. Other activities include preparing the overall evaluation plan and schedule, conducting a scoping visit (usually three days in length) by management, selecting team members, and developing arrangements for administrative and logistical support.

- Team Planning and Preparation: Two-week period during which the evaluation team plans the activities for the evaluation, including preparing evaluation plans and schedules. Headquarters data collection activities, such as interviews and document reviews, are also conducted.

- Data Collection: Two-week period on site, during which the entire team conducts interviews and walkdowns, reviews documents, and begins analysis of data collected.

- Analysis and Report Writing: Two-week period for completing analysis and preparing the draft report for review and comment.

- Validation and Closeout: One-week period for the quality review of the draft report by the Oversight Management Quality Review Board (QRB; see Section 8.3), informal and formal validation of the draft report, onsite exit briefing, and provision of the draft final report to line management for factual accuracy review and written comment.

- Follow-up: Finalize the report; prepare lessons learned from the evaluation (i.e., after-action report; see Section 3.6), review the line management corrective

Table 2-1. Major Process Activities and Tasks

Activity		Major Tasks
Planning & Preparation	**Management Planning**	• Prepare overall plan and schedule • Notify site • Develop planning briefing • Conduct scoping visit • Identify focus areas; correlate with status of existing issues • Select and prepare team • Develop document request list and send to site • Arrange for logistical support • Make travel and lodging arrangements • Select performance tests
	Team Planning	• Review documents • Interview line managers and staff at DOE HQ • Revise document request list and send to site • Develop evaluation plan and schedule
Data Collection		• Conduct data collection activities • Analyze and consolidate data and issues • Document data • Validate results • Hold team meetings • Conduct line management briefings
Analysis and Report Writing		• Complete analysis and identify issues • Select ratings • Formulate ratings and conclusions • Prepare draft report
Validation and Closeout		• Informal or pre-validation reviews at the site • Quality review • Factual accuracy validation • Exit briefing • Line management review and comment • Incorporate comments • Prepare final report, incorporate issues into DOE database
Follow-up		• Review corrective action plan; provide comments • Resolve disputes, if necessary • Review line management tracking of corrective action implementation • Follow up on issues as appropriate • Conduct self-assessment and lessons learned of the Oversight appraisal processes (after-action report)

action plans, elevate issues to senior DOE management (if necessary), and follow up on issues and root causes as appropriate.

Typically, the major interaction between the evaluation team and site counterparts spans approximately seven weeks from the start of the team planning and preparation work at the Office of Oversight to the exit briefing on site (see Figure 2-3). Line management comments are received and considered, and the final report is published within four to six weeks of the exit briefing. The Office of Oversight enters the issues identified during the evaluation into the DOE Corrective Actions Tracking System. Within 60 days, line management approves and submits their corrective actions plan to Oversight for review and comment (see Section 9.3.2).

2.5 Identification of Requirements

The Oversight program vision statement identifies the program as a standards-based, performance-oriented evaluation of line management's effectiveness in ES&H programs. The evaluation of performance includes historical performance as indicated by management decisions and priorities, performance indicators, events, near-miss incidents, trends, and current performance as indicated by observation of safety management and field activities. The data collection during the evaluation focuses on the guiding principles, core functions, and supporting criteria, along with the site's ES&H requirements and DOE directives. Additional structure is given to the evaluation process by the site's ES&H requirements that have been established by site contracts.

The evaluation team uses the requirements in planning and assessing a site's performance in the facility/program/work activities observed and, using the model shown in Figure 2-2, rolling up the data collected and analyzed. The team will begin their evaluation using the set of requirements that have been defined in site contracts and subcontracts. In some cases, additional DOE directives or requirements may be identified that are site-, facility-, or project-specific (e.g., contract provisions, local ISMS descriptions, or requirements within Authorization Agreements). The evaluation team's expectations are that line management has contractually identified all applicable DOE directives and requirements, and Federal, state, and local regulations; and that these are incorporated into contracts, subcontracts, and other binding agreements. The evaluation team may also plan their assessment to examine the DOE-approved processes (e.g., Standards/Requirements Identification Document, Work Smart standards) set up by line management to evaluate work activities and associated hazards. The team evaluates the application, effectiveness, and appropriateness of the set of requirements selected by line management.

Additionally, in performing a safety management evaluation, the team may use the full spectrum of applicable requirements and directives to determine the effectiveness of ES&H program management and ISM system implementation. In that regard, the team evaluates the selection and implementation of the set of requirements to determine whether the set is sufficient to support ISM and to protect workers, the public, and the environment from hazards related to DOE activities.

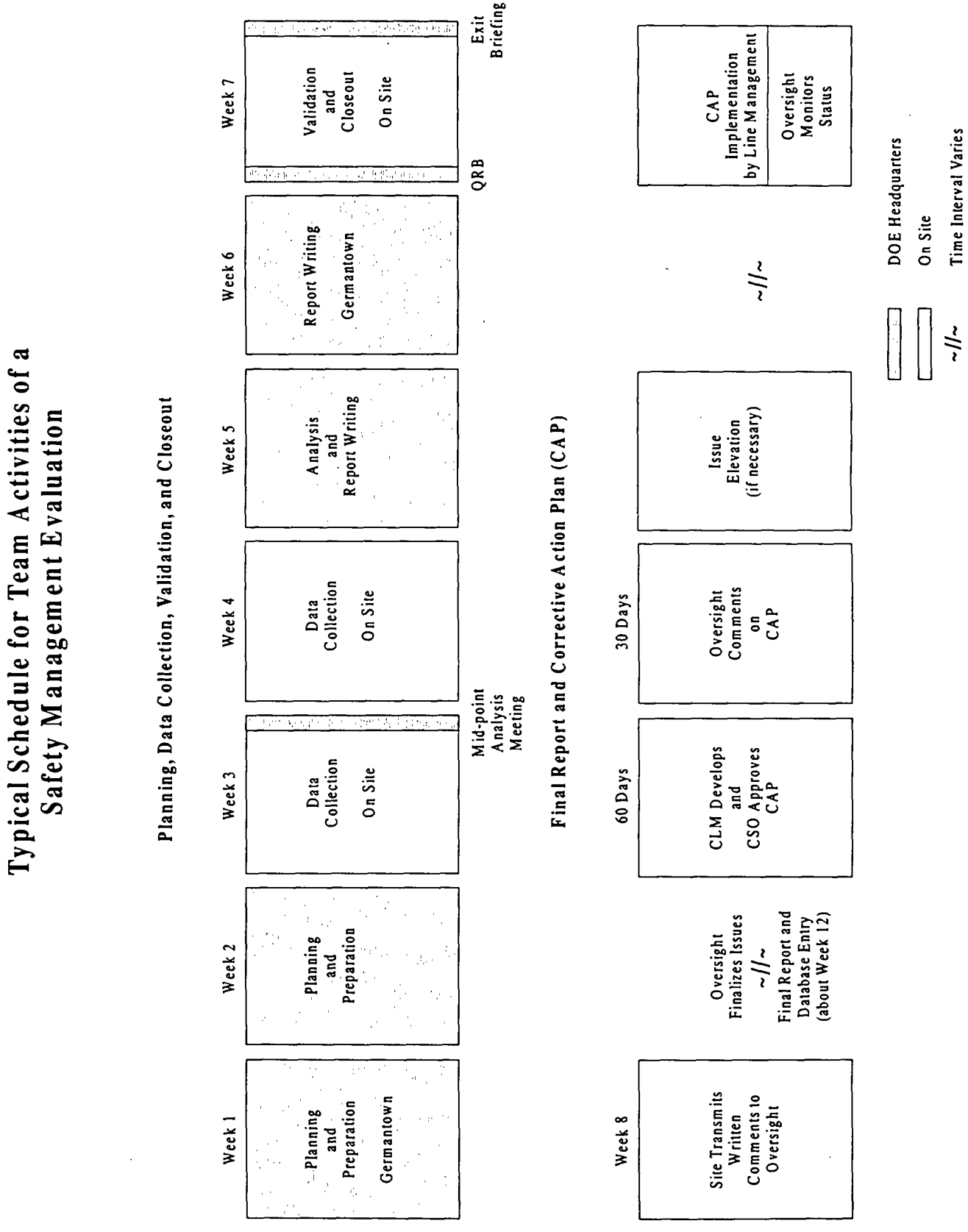

Figure 2-3. Evaluation Time Line

Section 3

THE EVALUATION TEAM
Contents

The Oversight evaluation team and its selection, structure, and communications are important elements of a successful evaluation. While each Oversight team is assembled to meet the needs of the management evaluation, certain core elements of each evaluation team are usually present in some form: Team Leader, group leaders, coordinators, and administrative support. This section of the protocols describes the Oversight evaluation team, including roles and responsibilities, team selection and structure, communications, conduct, and self-assessment.

3.1 Roles and Responsibilities

Each Oversight evaluation team has a number of different roles and responsibilities. These may differ from team to team because of the complexity and scope of the evaluation and the site being evaluated. During planning, the Team Leader recommends and refines a roster and team structure to best suit the particular needs of that evaluation. Table 3-1 lists the typical roles and responsibilities of positions involved in management evaluations.

3.2 Team Structure

The Oversight evaluation team structure greatly depends on the size and complexity of the evaluation. Elements common to most evaluation teams are discussed in this section of the protocols.

The team leader (a senior manager or senior professional of the Office of Oversight) assembles a team with the requisite technical and managerial experience to conduct the evaluation. The team members from the Office of Oversight and the independent consultants are safety and management professionals who possess cutting edge technical and appraisal activity expertise in their assigned field to perform the scope of the evaluation both efficiently and effectively. Office of Oversight team members maintain qualifications in their assigned technical areas in accordance with the DOE Technical Qualification Program (TQP). All team members continuously participate in individual and team training, professional development seminars, and workshops to maintain currency in their assigned technical areas, the Oversight appraisal protocols, ISM, and site operations.

A typical evaluation team organization, which is designed to promote a single integrated team effort, is shown in Figure 3-1. All team members and coordinators work together to pass along information and issues of mutual interest and to roll up observations and issues in accordance with

the template for each guiding principle and core function. This team organization is intended to facilitate the management of the team and the rollup of information, not to limit or impede access to the Team Leader or other team members by individual evaluators. Oversight team members are encouraged to keep each other informed of important issues or common lines of inquiry. For example, an evaluator who finds a problem in radiation protection training should pass this information to others on the team who are investigating training in other disciplines or at the management systems level. Doing so may expose a larger, more pervasive problem in management systems. Team members should not assume they are to function only within their particular management system or technical area. Rather, they should work together across disciplines and areas of expertise to share information, request assistance, and follow up on lines of inquiry. The evaluation and the resulting report is a compilation of the team's efforts, not of any single individual.

The **Team Leader** is responsible for leading and managing the evaluation team's efforts in their conduct of the evaluation activities, analysis of observations and results, and their ratings of the guiding principles and core functions. The leader ensures that the scope of the evaluation is accomplished and that the results are reported appropriately and timely. The Team Leader keeps Oversight management as well as site senior management informed of the team's progress throughout the evaluation.

The **Deputy Team Leader** supports the Team Leader, as necessary, during the evaluation. The deputy assumes the duties of the Team Leader when the leader is absent. On some teams, the Deputy Team Leader may have an additional role as a group leader. In some cases, a Deputy Team Leader may not be assigned (e.g., when only a small team is needed).

For large evaluation teams, one or more **Management Systems Group Leaders** may be assigned to coordinate the evaluation of the guiding principles and core functions. The Management Systems Group Leader ensures that the planning, data collection, and reporting activities of the management specialists support the rollup of safety management performance relative to the guiding principles and core functions. The group leader is responsible for preparing an assigned portion of the evaluation report and summarizes programmatic weaknesses for developing team conclusions and results of the evaluation.

Management specialists focus on line management and management systems, including policies, programs, accountabilities, mechanisms, procedures, and prioritization processes. Assigned to specific guiding principles and core functions, each management specialist evaluates management systems, as well as the focus areas selected during planning. (Focus areas are areas where additional team evaluation is warranted based on factors such as performance, significant change, recurring events, equipment failures, or line management requests.) In all cases, the management specialists collectively address all seven guiding principles and all five core functions.

One or more **Technical Group Leaders** may be assigned for some larger evaluation teams to coordinate technical areas being evaluated. This group leader is responsible for leading and managing a technical group during the evaluation of selected facilities, programs, or activities.

Table 3-1. Typical Evaluation Team Roles and Responsibilities

TEAM LEADER
• Leads and manages the evaluation team • Leads the evaluation, analysis, and rating of guiding principles and core functions • Recommends focus areas and team members • Conducts planning meetings • Establishes priorities and resolves issues • Ensures that the scope of the evaluation is accomplished • Monitors group activities • Redirects teams as necessary • Interfaces with site senior management • Responsible for quality and timeliness of report • Informs Oversight management of team's progress
DEPUTY TEAM LEADER
This position may not be assigned for some teams. • Supports Team Leader during the evaluation • Assumes the duties of the Team Leader if the Team Leader is absent • Performs other activities at the direction of the Team Leader (activities vary from evaluation to evaluation) • Serves other roles (e.g., Management Systems Group Coordinator) for smaller team
MANAGEMENT SYSTEMS GROUP LEADER(S)
For larger evaluation teams, there may be more than one Management Systems Group Leader for the guiding principles and core functions. For small teams, this position may also serve as the Deputy Team Leader. • Leads and manages the management systems group • Assures that the planning, data collection, and reporting activities of the management specialists concerning the rollup of items are relevant to the guiding principles and core functions • Interfaces with the Team Leader and other group leaders for reviews of daily reports and ES&H data collection templates, and helps prepare midpoint summary and Significant Safety Concern forms • Validates collected data • Prepares and reviews sections of the evaluation report, and develops associated Safety Issues and Opportunities for Improvement
TECHNICAL GROUP LEADER(S)
For larger teams, there may be more than one technical area group and technical group leader. • Leads and manages the technical group • Supports the management group in evaluating management systems by evaluating application of the core functions to selected facilities, programs, and activities • Coordinates planning • Makes group assignments and coordinates data collection activities • Prepares schedule • Validates collected data • Interfaces with the Team Leader and other group leaders for reviews of daily reports and ES&H data collection templates, and helps prepare midpoint summary and Significant Safety Concern forms • Prepares and reviews sections of the evaluation report, and develops associated Safety Issues and Opportunities for Improvement

Table 3-1. Typical Evaluation Team Roles and Responsibilities (Continued)

MANAGEMENT SPECIALISTS
• Plans for and conducts evaluations of management systems • Assists in preparing evaluation activities for the assigned areas, including developing a schedule of activities • Collects and validates data • Analyzes data and proposes Safety Issues and Opportunities for Improvement • Uses information from technical specialist group(s) to pursue management systems lines of inquiry • Apprises points of contact of observations • Apprises Team Leadership of evaluation activities and potential issues daily • Develops significant safety concern forms/data collection forms • Requests technical specialist group(s) to pursue lines of inquiry or to obtain examples of site technical performance related to management issues • Assists group leaders in rolling up data and information to guiding principles and core functions • Contributes to team analysis and selection of performance ratings for criteria and color ratings for principles and core functions
TECHNICAL SPECIALISTS
• Plans for and conducts evaluations of facilities, programs, or work activities • Assists in preparing evaluation activities for the assigned areas, including developing a plan and schedule of activities • Reviews DOE orders, standards and policies; statutes and regulations; industry standards; and best practices appropriate to the subject • Conducts appraisal activities and validates collected data • Conducts performance tests as appropriate • Evaluates application of core functions to selected facilities, programs, or work activity during the evaluation • Analyzes data and proposes Safety Issues and Opportunities for Improvement • Supports the management systems group in evaluating management systems by evaluating technical disciplines • Apprises points of contact of observations • Apprises Team Leadership of evaluation activities and potential issues daily • Develops Significant Safety Concern forms and data collection forms, as required • Contributes to team analysis and selection of performance ratings for criteria and color ratings for principles and core functions
TECHNICAL WRITER/EDITOR
• Ensures that the report is grammatically correct, consistent in style and format, and easy to read • Develops and maintains an acronym list for each report • Helps integrate conclusions and prepare the report

Table 3-1. Typical Evaluation Team Roles and Responsibilities (Continued)
ADMINISTRATIVE SUPPORT COORDINATOR
• Provides administrative and logistical support • Provides computer support, fax, telephones, and office space • Serves as point of contact for onsite support • Ensures control and accountability of classified documents • Supervises administrative staff • Serves as point of contact for site/facility-specific access and training requirements • Oversees the typing and production of daily reports, Significant Safety Concern forms, and the draft evaluation report

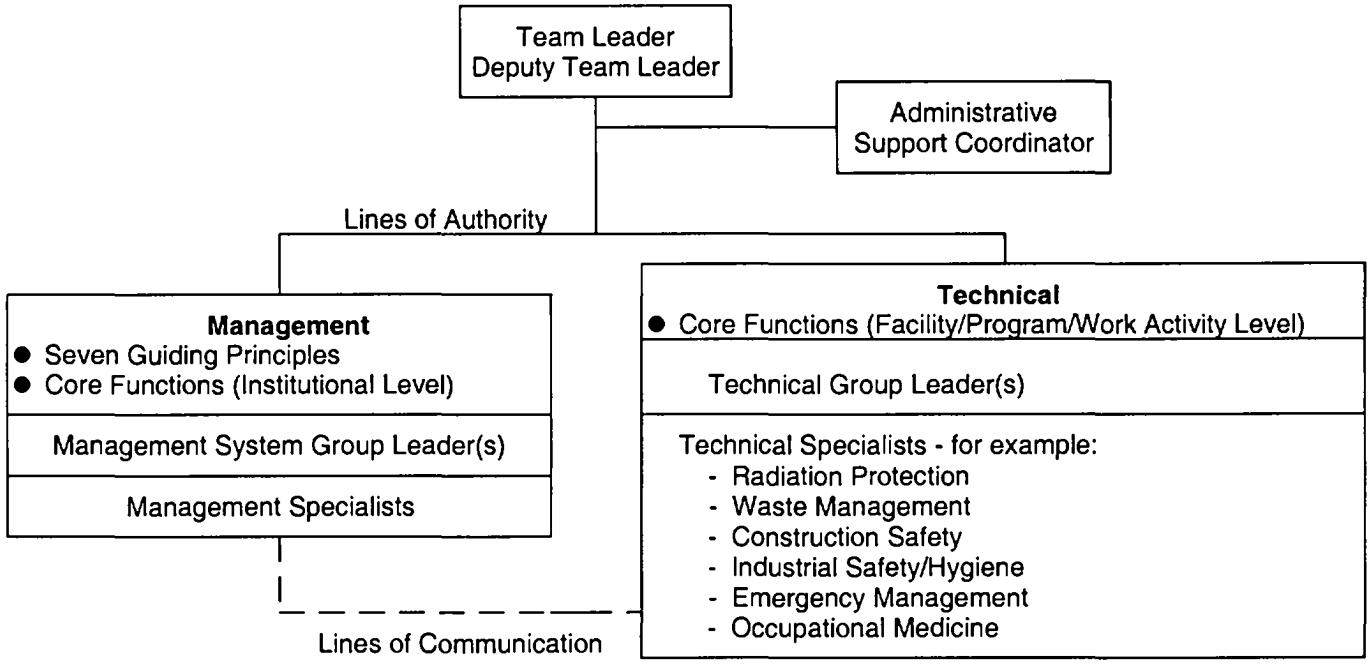

Figure 3-1. Typical Evaluation Team Structure

The Technical Group Leader manages the planning efforts, assigns evaluation tasks, and coordinates the data collection activities of the technical specialists. The group leader is responsible for the rollup of issues and programmatic weaknesses developed by the technical specialists for use in the preparation of assigned sections of the evaluation report.

Technical specialists evaluate the implementation of the five core functions, as defined in Section 2, for specific operations and work activities, such as operations, experimental activities, maintenance, waste management, or environmental restoration. These functions provide the necessary structure for work activities that could affect workers, the public, or the environment and that should govern work at the institutional, facility, project, and activity level. The technical specialists also collect other data for valuating the guiding principles and focus areas (see Sections 2 and 8).

The Oversight team is supported by an **Administrative Support Coordinator** who oversees the administrative and logistical support required by the team. The coordinator serves as the point of contact for onsite support.

3.3 Team Selection

Appropriate team members must be selected to evaluate the management, technical, and focus areas selected for review. The final team composition cannot be set until the areas to be evaluated have been determined during the scoping and planning efforts (see Section 4). However, the Team Leader, Deputy Team Leader, and Administrative Support Coordinator may be selected at the start of planning, before scope determinations have been made. Also, certain technical and management specialists may be assigned to the team from the outset based on the known mission and major facilities at the site to be evaluated. This initial group works together during planning to identify not only the scope of the evaluation but also the personnel to conduct evaluations in the areas under the scope.

As planning for the evaluation progresses, Oversight Team Leaders refine the scope and focus of the evaluation and may also amend the team roster to reflect these changes. Team members may be asked to accept additional assignments, new team members may be added to address particular technical areas, and team members may be dropped as the planning process progresses. The Office of Oversight and Team Leaders structure and compose the team as they see fit to meet the needs of the safety management evaluation.

3.4 Team Communications

Effective, frequent communication is one of the most important keys for a successful management evaluation. This includes communication among team members and between the team and Office of Oversight management, line management, and other interested external stakeholders. The team's communications with external stakeholders (such as citizens advisory boards or regulating agencies) are extremely important to the evaluation, and they are involved during various phases of the review. Several different types of meetings and briefings, described in this section, are necessary to maintain team communications during the evaluation. Table 3-2 presents some key factors that contribute to holding a successful team meeting.

In addition to meetings, certain tools described in 3.4.2 below (such as written daily reports and significant safety concern forms), offer effective methods of communicating with the team to supplement face-to-face exchanges. The Office of Oversight computer database is used to develop daily reports, templates, and schedules, as well as to aid in binning information from the daily reports in accordance with the safety management template (see Section 5.4).

Effective communications within the team cannot be limited to formal meetings or written internal status reports. Team members must exchange information as needed to produce a consistent, integrated evaluation. Typical forums for such communication are ad hoc face-to-face meetings, telephone conversations, and even in the car while riding to the site or over lunch. (Classified information is only discussed in approved places and by approved means.)

3.4.1 Team Meetings

- **Daily Team Meetings**

The team normally meets at the end of each day to discuss what was learned during that day and to update each other on data and

Table 3-2. Keys to Successful Team Meetings

Before the meeting:
- Prioritize key points.
- Group or "bin" information and results in accordance with guiding principles and core functions.
- Be prepared to discuss cross-cutting issues at the meeting.
- Assign a spokesperson, when appropriate.
- Plan what you will present.

At the meeting:
- Set time limits.
- Report main issues only.
- Be concise and to the point.
- Don't pontificate.
- Don't go through a "laundry list" of activities.

information reported on previous days. This internal team meeting is also used to prioritize and coordinate activities for the following day. Team members review and discuss observations from the day's activities and analyze key observations and areas requiring follow-up. In some cases, technical and management specialists may meet separately. Providing a forum for exchanging information among team members, these daily meetings help the team identify and formulate integrated views of the status, strengths, and weakness of a site's programs. Daily meetings also help the team prepare for later meetings with the Team Leader for a more focused discussion of the most important results and issues that their group will pursue during data collection. Internal daily report forms (see 3.4.2 below), prepared in conjunction with the team meetings, provide a temporary written means of communicating concerns, issues, positive findings, and emerging lines of inquiry within the team.

- **Daily Site Management Debriefings**

The Team Leader has an informal daily meeting or debriefing (usually at the beginning of each day) with site DOE and contractor senior line management to communicate the previous day's activities, emerging issues, and administrative items; and to obtain feedback. This debriefing achieves three main purposes:

- Site personnel can learn about the evaluation team's observations, including potential strengths and issues as they develop.
- Site personnel can provide information that may clarify, strengthen, or perhaps mitigate the emerging issues.
- Site management can suggest additional sources of information about specific emerging issues.

After this briefing, appropriate line managers may participate in follow-up discussions to get more detailed information or periodic updates on the concerns, issues, and implications. This succession of daily meetings keeps the team and line management informed of the team's progress and emerging issues throughout the evaluation and is an important element of the Oversight validation process.

- **Evaluation Midpoint Team Meeting**

At the midpoint of the two-week evaluation period on site, an internal team meeting is held to discuss the potential strengths, issues, and tentative results emerging from data collection and analysis, as well as to identify additional items requiring evaluation or attention. The team also collectively reprioritizes the following week's activities based on the information that has been collected to date. The product of this meeting is a mid-point briefing to DOE and contractor management on preliminary results.

3.4.2 Status Reports

A number of written status-reporting tools are available to help document and communicate information among team members and in some instances with the site's senior line management. Among these are a daily report form, a significant safety concern form, and an ES&H data collection template. These are briefly described in this section, and samples are provided in Appendix C. The Team Leader prepares a daily overview report to the Deputy Assistant Secretary for Oversight; an example is provided in Appendix C-1. Other tools associated with planning and report writing are covered separately in this protocol.

Some of the most widely used forms are:

- **Daily Report Form**

The daily report form (see Appendix C-2) is used as an internal team communication and analysis tool. This form allows team members to record their activities for the day along with observations, supporting evidence, difficulties encountered, and key activities for the following day. The intent is to keep the Team Leader and other team members informed of each team member's progress and observations. The daily report should be concise and to the point, thus allowing the team's group leaders to review them quickly and follow up during the evening team meeting. Team members should allow 20 to 30 minutes each day to complete their daily report forms and bin items from the data collection templates before the evening meeting.

- **Significant Safety Concern Form**

During the evaluation, the team may discover a significant safety concern that requires prompt action by the site. Unsafe conditions or activities that may represent an immediate threat to health and safety should be immediately pointed out to workers/supervisors on the scene. It should also be reported to the Team Leader and line management as soon as possible. If necessary the Team Leader should immediately consult with the Deputy Assistant Secretary for Oversight.

A Significant Safety Concern form (see Appendix C-3) has been developed for those instances that require written notification to line management of the problem. The form provides a formal mechanism to transmit the information about the concern to the site. The significant safety concern form is approved by the Team Leader before being provided to DOE management for response. Depending on the type of safety concern identified, the site may be able to resolve the concern immediately on the spot. For example, if a worker is performing work on a roof without fall protection in an imminent danger situation, the safety concern can be immediately resolved by line management stopping the work and having the worker come off the roof. In this case, a significant safety concern form may not be appropriate. However, for concerns that require a plan of action and for initiation of actions more quickly than provided for by the normal corrective action process, such as to resolve the discovery of an inoperable safety system, the team may document the concern on a Significant Safety Concern form.

- **ES&H Data Collection Template**

The data collection template (see Appendix C-4), which outlines the guiding principles, core functions, and associated criteria, provides a convenient method for team members to document and communicate information from an evaluation of a particular technical or focus area.

Team members may use the data collection template to (1) organize the data they have collected to support writing the report and (2) help verify that all criteria under the guiding principles and core functions have been adequately addressed. Data and information are recorded under the appropriate guiding principle, core function, and associated criteria.

3.5 Team Conduct

The cooperation and assistance of site personnel are essential for conducting a successful safety management evaluation or appraisal. Site personnel are heavily involved in all aspects of an evaluation.

They make important contributions to the overall success of an evaluation and are especially important to successful data collection. Team members should therefore maintain the highest standards of professional conduct while working with site personnel. Professional behavior is inherently valuable to the goals of the evaluation. Team members are encouraged to establish positive and cooperative working relationships with site personnel in accordance with the collaborative and open approach practiced by the Office of Oversight.

The guidelines for professional conduct and relationships with personnel, including counterparts, are summarized in Table 3-3.

Table 3-3. Guidelines for Team Member Conduct

- As official representatives of Headquarters, team members' behavior should always be beyond reproach.
- Be tactful, courteous, and properly attired.
- While on site, comply with all local rules and regulations.
- Avoid criticizing the site or site personnel.
- Avoid adversarial relationships.
- Be sensitive to the pressures and stress experienced by the people being evaluated.
- Establish good relationships with site personnel.
- Do not be excessively aggressive or unduly condescending or informal.
- Avoid displaying a superior attitude or appearing as an authority figure or expert.
- Refrain from telling jokes or humorous stories to site personnel involved in the evaluation.
- Avoid excessive chatter about yourself and your experiences.
- Avoid vulgar language, obscene body language, or flippant remarks.
- Do not become involved in actions that could lead to sexual harassment, or charges of sexual harassment.
- Be discreet when socializing.
- Contractors must be careful to avoid any conflicts of interest or appearance of conflicts of interest.
- Do not discuss job possibilities or leave a resume with personnel from the site/facility.
- Keep all initial planning internal to the Office of Oversight.
- Develop positive, professional relationships with points of contact.

These guidelines apply to all evaluation team members. A more detailed code of conduct for team members is given in Appendix D. It is important that this code be read and understood by all team members.

3.6 Self-Assessment of Evaluation Team (After-Action Report)

The evaluation team's self-assessment of the evaluation process serves as an important element in refining the Office of Oversight's systematic approach to improving its evaluations. The lessons learned from each evaluation help ensure that each subsequent evaluation is better than the previous one. Ongoing self-assessments help to maintain an efficient, current, customer-oriented evaluation process.

Each team member should complete the following tasks before the end of the evaluation process:

- Identify concerns about the adequacy of evaluation policies, procedures, administration, and logistics, either in a group discussion or individually. Provide this post-evaluation feedback to the Team Leader for further action.

- Collect and prepare evaluation data and information to be maintained by the Office of Oversight at Headquarters. Provide this data to the Administrative Support Coordinator for cataloging and filing for subsequent follow-up activities.

Post-evaluation feedback, also referred to as "lessons learned" or the "after-action report," is solicited from each participant involved in the evaluation. Team management comments on this feedback information are evaluated for subsequent action by Office of Oversight management. This information is shared with the other Oversight managers and team leaders.

Section 4

PLANNING FOR THE EVALUATION
Contents

The thoroughness and quality of the planning process significantly affects all activities associated with the evaluation. Planning activities should concentrate on the guiding principles and core functions and provide for a clear flowdown from the guiding principles and core functions, through the associated criteria, to the specific evaluation activities. The culminating evaluation plan should identify specific data-gathering activities. Evaluation planning involves gathering and continuously analyzing information, making ongoing decisions based on the analysis, and preparing future evaluation activities based on these decisions.

There is a limited amount of time available on site to collect data. The team must therefore conduct detailed planning that concentrates on identifying the program elements to examine, based on ES&H concerns, vulnerabilities, hazard or risk, and site-specific activities or focus areas. The team must also determine the optimum methods for evaluating those elements against the guiding principles and core functions.

Planning activities also include:

- Making necessary notifications
- Developing a team roster and structure
- Identifying support needed for the evaluation
- Developing detailed evaluation activities and data collection plans
- Determining site security and access requirements
- Identifying evaluation tools and methods for the evaluation.

Refer to Figure 2-3 in Section 2 for a view of how planning fits into the overall evaluation time line.

4.1 Focusing on Line Management and the Guiding Principles and Core Functions

Planning should concentrate on how best to evaluate line management implementation of the guiding principles and core functions in accordance with the associated performance criteria. To better evaluate the program structure, the management specialists plan a process for evaluating management programs against the guiding principles, core functions, and associated performance criteria. The management specialists also coordinate with the technical specialists in understanding their scope of work and how it relates to the guiding principles and core functions. The technical specialists plan for evaluating site performance in applying the five core

functions for selected facilities, programs, and activities. Technical specialists may evaluate the effectiveness of specific ES&H support disciplines (e.g., industrial hygiene, radiation protection) related to those work processes. The scope includes a top-down evaluation of line management.

Focus areas are topics for which additional evaluation team attention appears warranted based on such factors as performance history, significant change in mission, recurring events, equipment failures, or line management requests. Focus areas are specific to the site and are investigated by all team members, but receive particular attention from the management specialists. Examples of focus areas include subcontractor safety performance, employee involvement in safety, and staffing/critical skills. Table 4-1 provides examples of ES&H support disciplines in specific work processes that have been evaluated in prior evaluations.

Table 4-1. Examples of Work Processes and ES&H Support Disciplines

ES&H Support Disciplines	*Work Processes*				
	Facility Operations	**Facility Maintenance**	**Construction**	**Environmental Restoration**	**Experimental Activities**
Radiation Protection **Industrial Hygiene** **Industrial Safety** **Criticality Safety, etc**	Evaluate Core Functions	Evaluate Core Functions	Evaluate Core Functions	Evaluate Core Functions	Evaluate Core Functions

Planning should concentrate on developing evaluation activities that help determine how the guiding principles, core functions, and associated criteria are integrated into the structure and performance of the management program. Table 4-2 illustrates how planning activities for evaluating Guiding Principle #5, Criterion 2, "Identification of Standards and Requirements," might be organized.

Table 4-2. Example of Planning Activities that Address a Specific Guiding Principle and Criterion

Guiding Principle #5
Criterion 2, "Identification of Standards and Requirements"

Management Specialists

1. Identify DOE and contractor programs that identify applicable requirements for the site.
2. Identify the process line management uses to transmit applicable requirements from DOE to the contractor.
3. Identify the process used to transmit applicable requirements from contractor management to the workers.

Technical Specialists

1. Identify a sample of requirements that apply to a specific focus area or facility, and verify that the requirements are communicated to and understood by those who must implement them.
2. Compare source documents to procedures to determine whether requirements are being implemented at the field level.
3. Observe work and adherence to requirements.

4.2 Management Planning Activities

Management planning for an evaluation, also known as pre-planning, consists of activities carried out by the Office of Oversight management and evaluation Team Leaders prior to assembling the evaluation team. The purpose of this planning is to determine the scope of the evaluation, assign a team roster, notify the site, conduct a scoping visit, and begin preparation of an evaluation plan. This section of the guide describes the activities that typically occur during management planning.

Soon after their selection of the Team Leaders, the evaluation team management (consisting of evaluation team leaders and Office of Oversight management) begins preparing for the scoping visit and the team planning meeting. To organize the results of this preparation, a management planning (pre-planning) briefing package is prepared that provides an overview of the evaluation for the team. The evaluation milestones, tentative functional areas, focus areas, site description and mission, and other useful information may be provided to help inform the team and get everyone "reading off the same page." The Oversight analysis group provides assistance in collecting, organizing, and analyzing data in support of the evaluation. A summary of the analysis activities is shown in Appendix C-5. In addition, team management may prepare other materials and presentations for briefing team personnel and site management during the scoping visit and at the start of the evaluation visit. An example of a scoping visit briefing package is shown in Appendix C-6.

4.2.1 Site Notification of Scoping Visit and Data Collection and Analysis Visit

The Deputy Assistant Secretary for Oversight develops the annual schedule of planned independent oversight activities for the DOE complex and disseminates a copy of the schedule to all DOE operations and field offices. For a planned integrated safety management evaluation, the evaluation team management typically arranges preliminary dates and schedules for the onsite visits with the appropriate operations or field office. The Office of Oversight sends a formal notification to DOE line management (i.e., the lead cognizant secretarial officer and the cognizant line manager) of the schedule of the scoping and data collection and analysis visits. The notification memorandum includes a formal request for selected documents related to safety management systems, processes, mechanisms, and those reflecting safety management effectiveness. Typical contents of this memorandum are shown in Table 4-3.

Table 4-3. Typical Scoping Visit Notification Memorandum Contents

- Dates of scoping visit
- Purpose of visit
- Names of people attending
- Administrative support requirements
- Requested presentations and tours of facilities
- Documents needed for the visit
- Visit schedule/agenda

4.2.2 Scoping Visit

The site scoping visit is a key activity that helps focus the evaluation early in the planning process. The scoping visit is performed by evaluation team management and selected management and technical specialists several weeks before the planning and evaluation visit. The purposes of the scoping visit are summarized in Table 4-4.

The scoping visit lasts approximately three days. A schedule of activities for the scoping visit is prepared prior to the visit and provided to the site with the notification memorandum. A typical scoping visit schedule is shown in Figure 4-1. During this Oversight management preparation and planning phase of the evaluation, a scoping visit is also scheduled with the Headquarters cognizant secretarial office.

Table 4-4. Purposes of the Scoping Visit

- Understand the DOE and contractor organizational structure and approach to management
- Obtain site documents
- Tour facilities
- Identify focus areas for the evaluation
- Identify and obtain information from stakeholders
- Identify DOE and contractor points of contact or counterparts (site and Headquarters)
- Convey the purpose, preliminary scope, and approach for the evaluation
- Develop a follow-up document request list
- Establish the scope of the evaluation
- Coordinate logistical arrangements

	Tuesday	Wednesday	Thursday
AM	• Travel to site • Inbrief for Field Office/Contractors by Office of Oversight (Invite Stakeholders)	• Badging/Dosimetry • Tour Facilities	• Interviews/Discussions with: - M&O Contractor - Field Office Managers • Review Upcoming Events
PM	• Briefing by Site: - ES&H management - Issues - Initiatives • Interviews/Discussions with: - Field Office and Contractor Managers - Stakeholders	• Tour Facilities	• Travel Home

Figure 4-1. Sample Evaluation Team Scoping Visit Schedule

4.2.3 Team Roster

With the information obtained during the scoping visit, Office of Oversight management and the Team Leader identify a roster of team roles and responsibilities and designate appropriate personnel to fill each position. The roster is approved by the Deputy Assistant Secretary for Oversight. Designated personnel are contacted as soon as possible to ensure availability. Section 3 provides details on evaluation team structure.

4.2.4 Technical and Facility-Specific Document Request List

Team management finalizes the technical and facility-specific document request list and transmits it to the primary DOE site point of contact as soon as possible after the scoping visit. Documents received as a result of requests at the time of scoping are reviewed and additional documents may be required from the site. The document request list may be revised as needed so that the requested documents provide team members with a sufficient understanding of the site's organizational structure, and approach to safety management prior to the team's arrival at the site. These documents are required by team members in planning their evaluation activities.

4.2.5 Evaluation Plan

A final evaluation plan is developed as soon as possible following the scoping visit, although preliminary work often begins before the scoping visit. The goal is to provide the evaluation plan to the site one week in advance of the data collection and analysis portion of the evaluation. The evaluation team management develops the

evaluation plan, which includes the guiding principles and core functions and the initial lines of inquiry reflecting the evaluation objectives and focus areas. The evaluation plan is routed to applicable Oversight office directors for concurrence and approved by the Deputy Assistant Secretary for Oversight. Once approved, the evaluation plan is transmitted to the site. Team members then use the plan to develop more detailed data collection plans containing specific lines of inquiry and data collection techniques. A typical outline for an evaluation plan is shown in Table 4-5. A sample of the evaluation plan is provided in Appendix C-7.

Table 4-5. Typical Evaluation Plan Contents

- Introduction
- Scope
- Background
- Conceptual Basis for Evaluation
- Evaluation Methodology
- Team Composition and Responsibilities
- Communications and Analysis
- Evaluation Schedule
- Report Format and Content
- Appendices
  - Evaluation Criteria and Methodology
  - Management Focus Areas and Lines of Inquiry
  - Example Forms
  - Rating System Description

4.3 Team Planning Activities

Team planning refers to planning efforts that begin once the evaluation team is selected and assembled and the first team planning meeting is held (Section 4.3.1). Team planning activities concentrate on determining appropriate data collection techniques; completing detailed data collection plans that will effectively lay out the framework for data collection and analysis during the evaluation; and focusing and redirecting evaluation activities based on continuing analysis of information. Some of the planning tools that should be considered during team planning activities are outlined in Appendix C-8.

Planning occurs at several different levels within the team, including team management planning, team planning for the management and technical specialists in their focus areas, and individual planning. While planning within the team will concentrate on different activities, it is still imperative that team members coordinate activities with each other to address selected facilities, maintain focus, and promote efficient use of team resources.

4.3.1 Team Planning Meeting

The team planning meeting is the first meeting involving the entire team. It serves to kick off team planning and to orient the team on the process. Planning typically lasts two weeks, and it is important to bring the team together early and get individuals working in a team environment. The purposes of the team planning meeting are

summarized in Table 4-6. During this period, team members review available site documents to better focus their data collection plans. This should enable them to use the limited time available more efficiently while on site.

Table 4-6. Purposes of the Headquarters Team Planning Meeting

- Orient evaluation team members on the evaluation process
- Review the safety management template guiding principles and core functions, and their associated performance criteria
- Provide results of the scoping visit
- Provide the draft evaluation plan
- Review available site documents
- Begin drafting data collection plans containing detailed lines of inquiry and data collection techniques in support of the evaluation plan
- Develop a schedule of site activities for the evaluation visit
- Determine additional documents to be obtained during the evaluation visit

4.3.2 Planning for Management Specialist Activities

Management specialist planning concentrates on selecting data collection activities to evaluate the management systems in relation to the guiding principles and core functions. Planned data collection techniques primarily involve document reviews of site-level policies, programs, procedures, and performance indicators, as well as interviews with site-level and selected senior-level DOE and contractor management. The resulting plan establishes data collection objectives and a schedule. These are aimed at gathering information that accurately represents the management system effectiveness and maturity in relation to the guiding principles and core functions. (See Appendices C-4 to C-10 for samples.) The management specialists also plan the activities for evaluating the selected focus areas.

4.3.3 Planning for Technical Specialist Activities

Technical specialist planning concentrates on measuring the effectiveness of the management programs by evaluating facilities, programs, and technical functional and focus areas (Section 4.1 and Table 4-1). Samples of technical group evaluation plans are provided in Appendix C-9. As discussed in Section 5, observations—walkthroughs, walkdowns, and performance observations—are extremely valuable methods of gathering data. Planned data collection activities involve document reviews of programs, procedures, and performance indicators within the specific technical functional areas, as well as interviews with facility-level DOE and contractor management and workers. Planned data collection activities also concentrate on the result of implementation of the guiding principles and core functions; that is, achievement of site objectives in a safe and secure manner. Consequently, data collection activities include observation of site activities, observation of material conditions, and reviews of previous and current work. The end product is the same as that for the management specialists, namely data collection plans and schedules.

4.3.4 Headquarters Interviews

The data collection process begins at Headquarters during the team planning phase before shifting to the site. During team planning at Headquarters, team members should conduct preliminary interviews with responsible Headquarters

management and staff personnel, retrieve Headquarters documents, and conduct other data collection activities.

4.4 Summary

Planning occurs throughout the evaluation process and results in the products shown in Table 4-7. Efficient and thorough planning activities result in the team having the necessary plans and resources to accomplish an accurate evaluation of line management's implementation of the guiding principles and core functions.

Table 4-7. Products of Planning

- Site notification memoranda
- Identification of focus areas
- Document request lists
- Team roster and structure
- Evaluation plan
- Data collection plans
- Individual schedules for onsite activities (example in Appendix C-10)

Section 5

DATA COLLECTION AND ANALYSIS

Contents

Data collection and analysis are the major evaluation activities to determine the status of ES&H programs and their management. The process of collecting, analyzing, and validating data promotes informed decisions on whether:

- Line management is effectively accomplishing the principles of safety management.
- Management systems and programs provide acceptable control of hazards, vulnerabilities, threats, and risks.

The data and information gathered must be sufficient to support the development of an evaluation report that clearly, concisely, and accurately characterizes management systems at the site. The success of data collection and analysis, however, depends on the thoroughness and quality of the planning activities, which are discussed in Section 4.

As discussed in Section 2, data collection and analysis activities may begin during planning, while the team is still at Headquarters, and continue until the written report is drafted. Therefore, they occur simultaneously with both planning and report writing so that all three processes support each other in an iterative fashion. Previous sections of these protocols have discussed how data collection and analysis may be integrated with planning. Subsequent sections of this guide discuss how data collection and analysis are integrated with report writing, validation, and the rating system. This section of the guide covers the methods for collecting, documenting, and analyzing information, and for protecting sensitive or classified data.

5.1 Focusing on Line Management and the Guiding Principles and Core Functions

The objective of the evaluation process is to fairly and accurately assess the effectiveness of a site's overall implementation of safety management performance in a way that provides value to line management.

The management evaluation process focuses on safety management in the context of the guiding principles, core functions, and associated performance criteria. Team planning results in selecting specific activities for evaluating line management's implementation of the safety management template. With its focus on line management and the guiding principles and core functions, the Office of Oversight strives to provide a balanced assessment of performance, emphasizing strengths as well

as weaknesses. Rather than simply listing non-compliances or specific deficiencies, evaluations address performance, including underlying causes, systemic weaknesses, Opportunities for Improvement, and ISM and ES&H issues. The Oversight program also actively seeks and incorporates the insights and concerns of line management, workers, regulatory bodies, and other interested parties.

5.2 Data Collection and Documentation Methods

Data collection and documentation are crucial activities in the evaluation process. Evaluations rely primarily on several basic methods to collect data: interviews, document reviews, tabletop reviews, observations, walkdowns, and performance testing (a specialized case of observation). Each method has limitations on completeness and reliability; therefore, it is important that specialists understand the value of cross-checking, whenever possible, the validity and integrity of data and information from interviews, documents, or observations with another independent source of information. In addition, as concerns or deficiencies are identified during data collection, team members should make a concerted effort to identify underlying causes that may extend beyond program operations to the responsible management system. Potentially serious and specific safety concerns identified in the course of the evaluation must be communicated to the Team Leader and line management as soon as possible, and before leaving the site for the day. Where appropriate, these concerns should be documented on a Significant Safety Concern form (see Section 3.4.2).

The evaluation team should continuously remain alert for data and information that may be of potential concern to other teams or that involve management issues. Such data or information should be documented and passed to the other team member(s).

Successful data collection depends on a plan and schedule that is flexible in accommodating necessary revisions and changes discovered as data collection progresses, especially while on site. As the evaluation team members learn and understand more about the management and operations of programs, lines of inquiry can and sometimes must be updated to determine root causes or pursue major issues.

5.2.1 Interviews

The interview is an invaluable tool for obtaining data and information. Every interview should be carefully planned and structured to obtain the necessary information. Table 5-1 lists protocols to assist in the conduct of interviews. Interviews are especially effective early in data collection because they provide information quickly and indicate program status. To ensure an open and candid interview and exchange of information, requests from individuals, including managers and supervisors, to attend interviews will not normally be entertained unless requested by the interviewee. Information gathered during interviews should be confirmed by summarizing interview results at the end of the interview and obtaining additional supporting information through other assessment processes, when possible.

While it is common to rely heavily on the responses of site personnel, their information may not be complete or reliable, since interviewees may have biases or insufficient knowledge. The reliance placed on information obtained by interviewing varies, but greater weight should generally be given to information verified by other independent sources or means. It is especially important that the specialist seek additional information when responses seem to be uninformed, biased, or otherwise incomplete.

Table 5-1. Interview Protocols

- Prepare questions and lines of inquiry in advance.
- Assure prompt team attendance at scheduled interviews.
- Do not "lead" interviewees in answers and conclusions.
- Conduct interviews in a neutral and quiet location.
- Interview attendance:
  - Limit team attendance to one or two interviewers.
  - Limit attendance by line personnel to the interviewee *unless* the interviewee requests the attendance of a manager, union representative, or lawyer.
  - Requested attendees should not respond to questions asked of the interviewee but should provide only advice and support to the interviewee.
  - To ensure an open and candid interview and exchange of information, requests from individuals, including managers, to attend interviews will not normally be entertained unless requested by the interviewee.
- Explain the purpose of the interview.
- Pace questions to allow full response and avoid a "third degree" atmosphere, particularly when multiple interviewers are involved.
- Question tactfully, listen sensitively, observe thoughtfully, and evaluate accurately.
- Take good interview notes. Do not rely on memory.
- Summarize the interview at the end to assure that interviewer conclusions and interviewee concerns are appropriately captured.

5.2.2 Document Reviews

Line management usually relies on detailed documentation, such as policies and procedures, as well as documents that provide data on ES&H performance metrics, to ensure that programs are properly implemented and administered. Document reviews can provide the team with information about the consistency of written policies and procedures with DOE requirements (an indication of how the program is intended to operate) and may suggest weaknesses that need further exploration. Where possible, needed documents should be requested to be available early enough to allow team members to use them in planning their onsite activities. Team members should limit the initial document request to only those documents that are not available to them electronically and that are essential to their planning and preparation effort.

The team may request that certain documentation be made available prior to the site scoping visit or at the site for use when data collection begins. Document reviews often continue throughout data collection as team members request additional documents to develop a more complete understanding of programs and how they function. Requests for additional documents are directed to the appropriate point of contact or counterpart (see Section 6).

The documents of most interest are usually policy documents on how programs are designed to function; written program plans and procedural documents; work packages; self-assessments; and other records that may indicate whether programs are implemented as required or designed. Documentary information, like other types of information, has limitations. One shortcoming is that documents are not direct evidence that an

event occurred and do not always demonstrate the effectiveness of implementation. Therefore, what is learned from documents often requires cross-checking using other techniques.

5.2.3 Observations

During an observation, the specialist collects information by examining actual (or working models of) operations, activities, or objects by means of walkthroughs, walkdowns, and performance observations. Physical examination by the technical specialist is often one of the most reliable data collection techniques. Observing operations may be not only desirable, but necessary, for an accurate evaluation in situations where specific, observable operations are critical to effective performance. However, physical examinations also have limitations. The presence of control equipment, monitoring devices, or alarms does not always confirm that they are the proper equipment, that they function properly, or that they will continue to function. Making such determinations requires other data collection techniques, since the team member can report only what is observed at the time of the examination.

Observations allow team members to see how site personnel actually do their jobs and to evaluate how they perform their duties under various conditions. For example, observing personnel monitoring equipment or a sampling event provides valid data on whether site personnel follow established procedures and whether they operate the equipment properly. Before observing someone executing a procedure, the team member should thoroughly review and understand the procedure to establish a baseline for the observation. During observations, team members must not interfere with ongoing activities, manipulate equipment or controls, or access components (such as electrical cabinets), and they must comply with all applicable radiological, security, and safety requirements. Team members will ensure that talking to or asking questions of operators, craft workers, etc., during ongoing activities will not unduly distract the workers or disrupt their activities.

Although observation of personnel performing their duties seems to be an ideal evaluation technique, it has its limitations. For example:

- The presence of an evaluator may influence the behavior of the individual being observed and produce biased data.

- The results of observation may be considered subjective, leading to disagreement between the specialist and site personnel about what was actually observed. Results may therefore be difficult to validate.

Two techniques for increasing the effectiveness of observation are walkdowns and walkthroughs. Walkdowns are used for observing the condition of site equipment and structures. Walkthroughs are used for observing simulated actions or discussing the steps to perform a procedure. Team members use these methods when they are responsible for evaluating the condition of site equipment and structures that are important to program effectiveness. While these techniques may not apply to all topical or technical areas, the walkdown and walkthrough review may reveal areas that the evaluation team should look at in more detail.

Not all observations need to be scheduled evaluation activities. Observing personnel at work is an opportunity for adding to data being collected in other ways or for helping validate data already collected.

5.2.4 Performance Testing

Performance testing of personnel, equipment, or systems is useful for direct

observation of personnel (workers and managers) taking part in activities with safety implications. While some performance tests may be complex, many are not. For example, rather than simply verifying the presence of monitoring equipment and checking calibration records, appropriate tests can be conducted (e.g., by site personnel in the specialist's presence) to verify that the equipment does, in fact, function properly and is correctly calibrated. Other performance testing may include observations of emergency management exercises and drills. All performance tests must be preapproved by appropriate line management and conducted in accordance with all applicable radiological, security, and safety requirements.

The plans for performance tests are normally prepared in advance by the designated team member. Preparations may include developing a test scenario, along with expectations for performance and grading criteria. If applicable and available, standard performance tests, such as written knowledge tests, may be used. Some performance tests are facility- or equipment-specific; that is, they must be developed while on site, usually during the planning and evaluation visit.

Performance tests may be administered one or more times during the evaluation based on the usefulness and validity of information obtained. Observing an operator running a waste processing system, for example, can yield valuable information about the effectiveness of the procedure, the competence of the operator, and the effectiveness of the conduct of operations program. However, a test of one person or activity does not always give a full picture of the associated program or of line management's involvement. For example, a knowledge test administered to one person does not provide a large enough sample to reach a conclusion about a training program's effectiveness; to allow such a conclusion, the team must select an adequate, random sample of subjects and/or activities.

When numerous tests are given, trends and systematic or programmatic weaknesses may be observed. This information, when combined with the results of other data collection activities and analysis, often contributes to understanding the underlying programmatic causes that can be rolled up according to the safety management template, which is discussed in Sections 2, 5.4, and 8.

5.2.5 Data Documentation and Consolidation

Team members should keep accurate and usable records of their collected data and information for reference throughout data collection and analysis. This is especially important when dealing with large sites with multiple contractors, subcontractors, and field offices. Additionally, these internal working documents should be shared with team members and passed along to Team Leaders, as appropriate.

Structured forms, note books, Lotus Notes Database, and other standard devices are useful for data and information documentation. Data collection tools include a daily report form, a Significant Safety Concern form, and a data collection template, which was described in Section 3.4.2. Samples of these forms are included in Appendices C-1 to C-4. Products of data collection are listed in Table 5-2. Internal team documents are retained until the evaluation report is finalized.

Table 5-2 Products of Data Collection

- Interview notes, note books, etc.
- Completed internal daily report forms
- Completed internal data collection forms
- Completed significant safety concern form (available to line management)
- Completed performance tests
- Completed data collection templates
- Validated results

5.3 Analysis

Analysis is an ongoing process during the evaluation and is the key to an effective report. It involves a critical review of all results and leads to logical and supportable conclusions about the performance of line management and effectiveness of programs.

Analysis begins informally through daily team discussions about the observations and results of data collection. To assist this process, a summary safety management template is developed by each technical specialist. The summary safety management template is a listing of the guiding principles and core functions, with supporting objectives for each principle. As data collection activities are completed, the results are incorporated in the template and associated criteria and performance worksheets to help guide the specialist through a preliminary data analysis. An example is shown in Appendix C.

All team members work in concert to emphasize the need to continually "pull the string"—that is, to follow all the "loose ends" to identify underlying causes of flaws or deficiencies in management systems, program design, and/or implementation. Each specialist needs to fully understand the safety management template of guiding principles and core functions, and know the details (who, what, when, where, how, and why) of the subject being evaluated to gain a full understanding of the supporting systems and how they function. Frequent and open communication with other team members is the key to identifying and "rolling up" information and issues to determine their impact on the site.

While data analysis occurs throughout an evaluation, it begins in earnest during the first onsite data collection and analysis visit. Before the team begins to write a report, the members must clearly identify the strengths, weaknesses, and mitigating conditions and must integrate the results and issues with the safety management template and functional areas.

The performance criteria for each guiding principle and core function serve as an analysis tool at any point in the evaluation process, including daily team meetings, the midpoint analysis, and during the final determination of ratings.

The analysis leads to logical and supportable conclusions about the effectiveness of the programs being evaluated, the extent to which the guiding principles and core functions in the safety management template and the functional areas are satisfied, and how well the status of the programs satisfies the intent of DOE policy. Any deficiencies must be addressed for their importance and impact at the site. Deficiencies are analyzed both individually and collectively; they are balanced against strengths and mitigating factors to estimate their overall impact on the performance of line management. Factors to consider in the analysis include:

- Whether the deficiencies are isolated or systemic
- The potential or actual effect of the deficiencies on ES&H performance at the site
- The significance of actual or potential hazards or threats created by the deficiencies

- The importance or significance of the deficiency
- Mitigating factors or conditions that compensate for the deficiencies
- Whether the field office or the contractor line managers already knew of the deficiencies and what actions they took to address them.

Analysis of the data and information within this context is necessary before evaluation performance ratings (Section 7) are recommended or assigned.

5.4 Rollup of Information to the Safety Management Template

Each of the guiding principles and core functions that constitute the basis for establishing an effective safety management program is a crucial element of a process to ensure that DOE-controlled operations are performed in a manner that will protect workers, the public, and the environment. Using these principles and their associated criteria to evaluate safety management program effectiveness requires careful consideration of the nature of the specific activity or facility being reviewed, its relationship with and impact on other activities and facilities, its life-cycle phase, and the risk it presents to adversely affecting ES&H goals.

The guiding principles and core functions are interrelated and mutually supportive elements of the overall safety management system. For example, clear articulation and communication of lines of authority and responsibility must correlate with the establishment and implementation of appropriate requirements. Personnel responsible for executing these requirements must understand the hazards and their roles in controlling the hazards, and they must be competent to perform their assigned duties. In the evaluation of the safety management system, the guiding principles and core functions must be considered both individually and in concert.

In evaluating the effectiveness of each guiding principle and core function, evaluation results are collectively sorted and binned, evaluated, and analyzed. Next, each principle and function is analyzed according to the associated criteria. Each is considered separately and then collectively. The results are then rolled up to a higher-level evaluation of the individual guiding principles and core functions. Finally, the effectiveness of the overall ISM program in meeting the established Departmental objectives is evaluated and rated by rolling up the evaluation of the individual guiding principles and core functions according to the safety management template, described in Sections 2, 5.4, and 8. It should be noted that some results may be applicable to more than one guiding principle and/or core function. Some results may require further sorting to provide the correct emphasis for noted deficiencies. The rollup process is a deliberative process involving all levels of the evaluation team—from the team members who examine individual facilities and topics or technical areas, to the evaluation Team Leaders and Oversight managers, and to the Deputy Assistant Secretary for Oversight.

The rollup evaluations consider:

- Whether risks to ES&H currently exist or will exist in the future if present circumstances remain unchecked
- Whether the risks are unique to a specific criterion, principle, activity, or facility
- The synergistic effects of two or more principles or initiatives that are planned or in progress, and their expected results
- The impact that the level of adherence to a specific principle or criterion has on the effectiveness of the overall safety management program.

In practice, the evaluation process involves a number of iterations to assure that the results are valid and representative of the safety management program.

At all stages of the process, line management representatives are kept informed of preliminary results. Their comments on the factual accuracy and completeness of the data are used to determine the validity of the data and to guide additional data collection efforts, as appropriate.

5.5 Identification of Safety Issues, Opportunities for Improvement, and Noteworthy Practices

The Safety Issues are the Oversight evaluation team's conclusions on conditions warranting increased management attention and action regarding: (1) the effectiveness of ES&H management systems and programs being evaluated; (2) the extent to which the guiding principles and core functions in the safety management template and the functional areas are satisfied; and (3) the status of the programs that satisfy the intent of DOE Policy 450.4. Factors considered in the identification of potential Safety Issues include:

- The potential for increased risk to worker or public health and safety
- The potential for adverse impact to the environment that would exceed regulatory or site specific release limits
- Risks related to an essential safety system
- Operations in non-compliance with site ES&H requirements
- The lack of management systems, controls, or procedures for safe conduct of work
- The lack of management systems, processes, functions, or components relied upon for effective implementation of site's ISMS
- Systemic rather than isolated conditions
- Ineffective corrective actions to address the conditions previously identified.

Safety Issues will express the specific nature of the condition in a clear, concise, and direct manner that will allow line management to translate it into corrective actions. As appropriate, Safety Issues are tied to non-conformance with the relevant ES&H requirements or DOE directives (e.g., specific DOE orders, regulatory requirements, DEAR provisions, or DOE P 450.4). The Oversight Team Leader ensures that the Safety Issues are expressed so they clearly identify ES&H conditions of concern, the relevant requirements, and the specific DOE or contractor organization(s) expected to develop and implement corrective actions. The Safety Issues identified in the oversight report will be formally addressed, resolved, and tracked by line management as outlined in Section 9. The Oversight Safety Issues will be clearly identified and separately listed in the appendix of the team's written report (see Section 8).

During the course of an oversight appraisal activity, the Oversight evaluation team may also identify Opportunities for Improvement that provide line management with additional recommendations based on the team's insights. These recommendations are intended to assist line management in identifying options for courses of action, potential solutions to problems observed, or enhancements to existing ES&H programs. A discussion of these Opportunities for Improvement is provided as an appendix to the team's report (see Section 8). Opportunities for Improvement are not required to be addressed within the responding Corrective Action Plan (CAP). However, DOE and contractor line managers should review and evaluate them for future actions. The Opportunities for

Improvement, as well as any other suggested actions in the report, are not intended to limit the judgment and decision-making authority of line management in resolving the identified Safety Issues and implementing the corrective actions.

Noteworthy Practices are innovative approaches or practices identified during the conduct of an Oversight evaluation that have proven to be effective in improving ES&H management systems and performance, and could provide a valuable source of lessons learned for other DOE sites. Generally, these identified practices would be highlighted prominently within the report to ensure sufficient visibility to other site DOE and contractor senior managers.

5.6 Document and Information Security and Sensitivity

Team members often handle classified documents and/or sensitive unclassified information during an evaluation. This information may be provided by Headquarters, screened as part of the inspection process, borrowed from the facility being evaluated, or generated by the team. Some team members may also use classified word-processing equipment during the inspection.

Team members are required to comply fully with all applicable DOE and local security requirements, especially those concerning classified computers, documents, and discussions. The Team Leader provides appropriate site-specific guidance and instructions to the team on these matters.

Documents generated by the team, such as interview notes, significant safety concern forms, data collection forms, and safety management templates, should be treated as sensitive documents and appropriately marked. Sensitive documents should not be shared or distributed outside the team or the Office of Oversight without first obtaining the Team Leader's approval. Documents such as Significant Safety Concern forms are forwarded to the site's management after team management review and approval.

Section 6

VALIDATION
Contents

Validation is the process the Office of Oversight team uses to verify the factual accuracy of information and data collected during site evaluation activities. Without accurate information and data, evaluation results cannot be useful. The objective of validation, then, is to ensure that the data collected by team members are factually correct and can be used to evaluate the effectiveness of the programs and line management functions. In addition, validation ensures that the site points of contact and site management are fully aware of the detailed data collected. These site personnel should acknowledge data accuracy, provide correct information, provide additional pertinent data, or provide information that explains potential weaknesses.

This section provides an overview of the process used to validate data and the draft report. Detailed information on report generation is provided in Section 8.

6.1 Data Validation Strategy

The validation strategy provides site personnel with multiple opportunities to verify the factual accuracy of data and information collected by Oversight team members at various stages of the actual appraisal process. In using any of the validation methods, Oversight team members must be very open about issues in order to provide those being evaluated with a chance to respond. These interactions often are of significant value to the site because they provide a means for the Office of Oversight to share perspective gained from other sites in the complex. Three key elements of the strategy are:

- Site counterparts - Each Oversight team member is assigned one or more site points of contact or counterparts, both DOE and/or contractor, designated by the site as a result of the scoping visit (Section 4.2). These counterparts are knowledgeable of the area or program being evaluated by the Oversight team member. Oversight team members and counterparts interact on a regular basis to ensure communication of findings, both positive and negative. Counterparts provide feedback to Oversight team members on the factual accuracy of information obtained; they recommend additional personnel to interview, as well as documentation to review for additional perspective on an issue. Additionally, Oversight team members informally discuss and review substan-tive issues with their counterparts on material they will draft into reports. This allows for the quick resolution of areas of disagreement and identification of potential inaccuracies as soon as possible. In addition, validation of results in meetings at the end of each day, or the following morning, between Oversight team members and counter-parts provides further confirmation that results are valid and allows less room for misunderstanding.

- On-the-spot validations - Site personnel and Oversight team members shall also summarize key observations and concerns at the conclusion of interviews, walkthroughs, and observations of work performance to ensure a shared understanding of the facts observed by the Oversight team member. An on-the-spot validation immediately after an interview or a performance observation, for example, can help resolve any differences of opinion quickly and promote concurrence on important interview or observation points.

- Continual interaction of Oversight team and site managers - Oversight team managers provide a daily "debrief" to site managers that includes both the positive and negative observations from the previous day's evaluation activities, as well as emerging issues. For example, the Oversight team leader and selected team members usually meet with site senior line managers each morning to brief them on the status of the evaluation, important issues, and critical needs. This helps site management track the progress of evaluation activities and compare information that has been provided to them from the site counterparts. The daily debrief allows site management to identify areas of disagreement quickly and to work with the Oversight team to correct factual accuracy problems. In many cases, site management is informed of issues that need management attention. At the mid- and end-point of the onsite data collection period, these daily meetings are used to provide a preliminary rollup of team results and a description of issues that are being developed by the team. In addition, an informal validation of tentative results is conducted after data collection activities are completed or at the end of an onsite visit. The informal validation may involve working-level counterparts, mid-level and senior site management, and selected Oversight team members. Headquarters line managers may participate in these daily debriefs. Observations, concerns, and safety issues related to headquarters and other organizations not located at the site (e.g., CSO, Operations Office, etc.) will be discussed and validated with the representatives of the affected organization prior to finalization of the evaluation or appraisal report.

Team members also work together to compare the information they have collected during various stages of the appraisal process. This interaction increases the value of evidentiary information with validation by multiple sources. Oversight team members should understand that each type of data and information has its limitations and should be used accordingly, and that the information presented for validation must be as thorough, accurate, and concise as is possible. Finally, it is essential that conflicts in data and information are resolved as soon as possible, between Oversight team members or between team members and site personnel.

6.2 Report Validation Strategy

Reports from the Oversight evaluation are provided to site personnel for review of factual accuracy at key stages in evaluation report generation. This provides the site personnel and management with a number of opportunities to communicate concerns about factual accuracy to the Oversight team. The report validation process is as follows:

- Provide the draft evaluation report to the site.

- Conduct informal pre-validation meetings between team members and counterparts over the content and

conclusions of the draft report. These small group meetings are extremely useful for detailed discussion of the issues, correcting factual accuracy problems, and getting "buy-in" at the working level for the need to address the identified problems.

- Conduct a formal validation with key DOE/contractor counterparts. The formal meeting is conducted approximately 24 hours after the site receives the draft evaluation report. Round-table discussions are held with site management and counterparts on their concerns with the facts or conclusions presented in the report. Headquarters line managers may also attend the formal validation; this is especially important for issues that Headquarters' organi-zations are primarily responsible for addressing. These sessions are also used to further explain issues that have been raised and have been very effective in promoting buy-in with site management. Valid comments from formal validation are incorporated into the final draft report as appropriate, and it is then provided to the site.

- Provide the final draft report to the site and allow five working days for their detailed review. The site is encouraged to provide line management (CSO) specific written comments on any factual inaccuracies or other concerns.

6.3 Keys to Successful Validation

Some key items for successful validation are provided in Table 6-1.

Table 6-1. Keys to Successful Validation

- Candid and frequent communications with line management and points of contact
- Effective communication of issues to functional managers/counterparts
- Adequate development of issues or conclusions, including performance examples to assure validity, understanding, and acceptance by line management
- Communication of emerging issues and supporting examples to assure that all information is provided and the issue is understood and valid
- Opportunities for review at various stages of report generation
- At Headquarters: Share issues with Headquarters line management

Section 7

RATING SYSTEM
Contents

An important part of the Office of Oversight's mission is to inform management and external stakeholders, such as the Secretary of Energy, line management, Congress, and the public, of the status of ES&H programs throughout the complex. As part of the reporting process, the Office of Oversight uses a system of colors to represent ratings, which convey the status of a site's ES&H programs. Evaluation reports include these ratings as a summary of the results including the effectiveness of the current safety management system and progress toward full implementation of ISM. This section of the guide explains the Office's rating system used in the management evaluation reports. Appendix A provides the detailed guiding principles, core functions, and associated criteria that guide the analysis and rating system.

7.1 Overview of the Rating System

The management evaluation rating system uses color panels to visually summarize line management's ES&H performance. Because of the differences in missions, hazards, threats, and facility life cycles among sites, the rating system is *not* intended to provide a relative rating between specific facilities or programs at different sites. The intent is to provide line management with indicators to help them better apply attention and resources, *not* to provide them with an absolute benchmark for measuring their performance against other sites.

The advantage of the color rating system is that it communicates performance information quickly and simply. Subsequent evaluations may produce a different pattern of color ratings to recognize relative improvements or to identify deteriorating performance. The colors are green for effective overall performance, yellow if improvements are needed, and red if significant weaknesses are identified.

7.2 What is Rated

Because the management evaluation is conducted using a framework based on the guiding principles, core functions, and associated criteria, ratings may be assigned to each principle and/or core function. In addition, the integrated safety management, in total, is rated. Figure 7-1 shows a typical rating for a site, with colored panels visually representing the ratings.

The management evaluation team leadership or Office of Oversight management may also direct that the color rating scheme be applied to particular facilities, programs, functional areas, and focus areas, to further focus line management's attention. For example, the team might choose to rate a particular facility because of its importance to the Department. A functional area, such as chemical process safety, might be rated because of its potential impact on the safety and health of workers and the public.

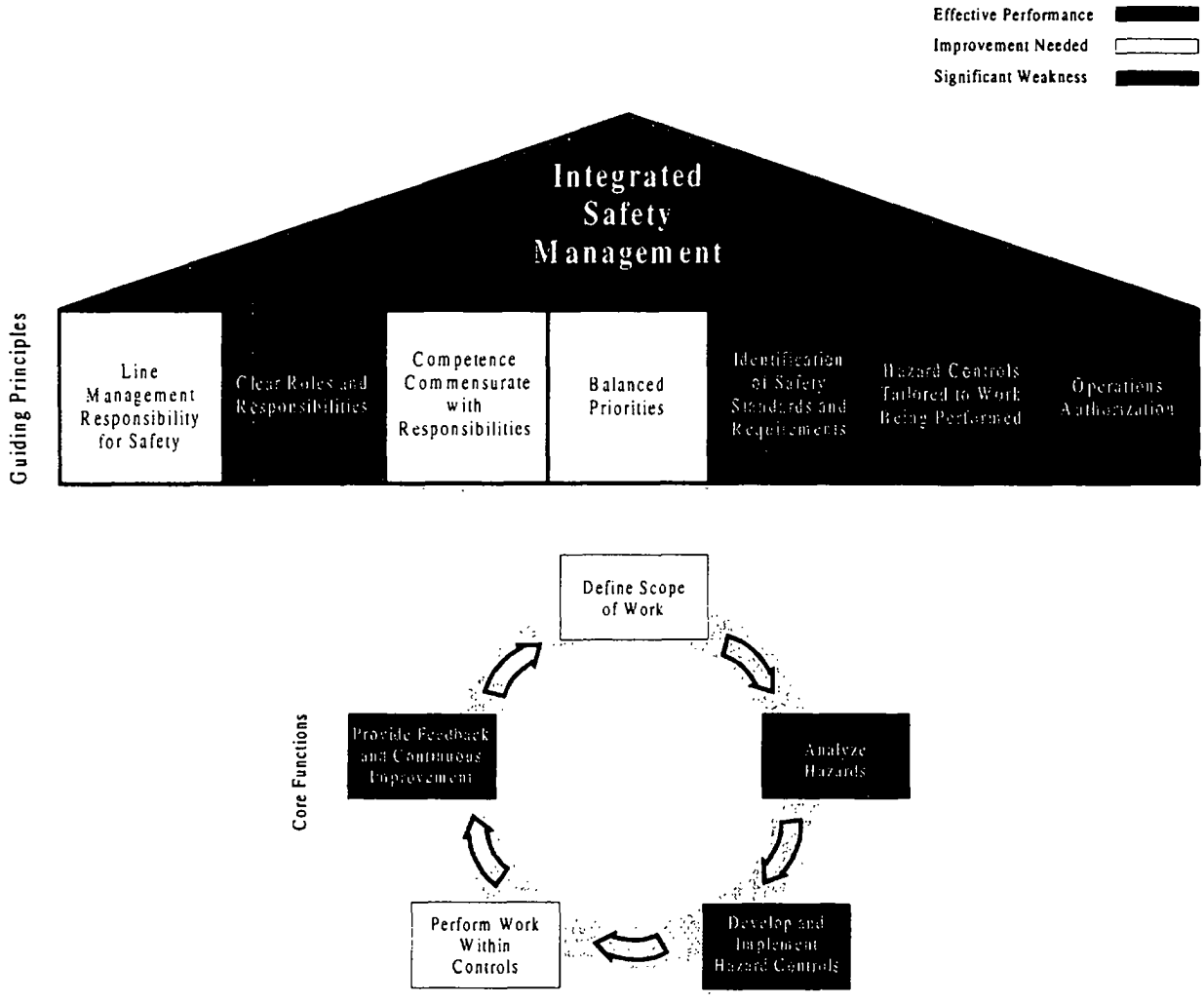

Figure 7-1 Sample Ratings

The Office uses this flexibility in applying the rating system to address the multitude of site and facility missions, hazards, risks, and vulnerabilities, as well to tailor its performance reporting to the size and complexity of the sites and facilities being evaluated.

7.3 Explanation of the Rating Colors

Table 7.1 summarizes the management evaluation color ratings, what each color indicates, and the appropriate line management response. Each rating is explained as follows:

- Green indicates effective overall performance. Specific issues or deficiencies may warrant additional attention and resolution, but they do not significantly degrade overall effectiveness.

- Yellow indicates a need for improvement and significant increased line management attention. A yellow rating provides an early warning that gives line management an opportunity to correct and improve performance.

- Red indicates significant weakness(es) and an immediate need for line

management to focus attention and resources to resolve management system or programmatic weaknesses. A significant weakness would normally be a rollup of a number of deficiencies.

For red or yellow ratings, the Office of Oversight normally increases its level of attention to the site and the site's progress in improving deficiencies. The Office may also elect to conduct a follow-up evaluation.

Table 7-1. Management Evaluation Color Ratings

Color	Programmatic Indications	Response
Green	Effective Performance	Address Only Specific Deficiencies
Yellow	Improvement Needed	Significantly Increased Attention
Red	Significant Weakness(es)	Immediate Attention, Focus, and Action

The Office of Oversight has developed performance criteria to support the evaluation and analysis of each of the seven guiding principles and five core functions of ISM. These criteria are listed on the ISM evaluation template (Appendix A of this protocol). These ISM evaluation criteria are not intended to require a mechanical or checklist-assessment process. Rather, they are intended to increase the level of objectivity in evaluating ISM and the consistency in approach across different oversight appraisals. These criteria support the analysis of performance information and the associated color rating of each core function or guiding principle.

While this approach adds a level of objectivity to the rating process, it is important that the judgment of the team, team leadership, and Oversight management play a key role in determining the final color rating. Factors such as previous performance, trends in performance, significant performance deficiencies in a particular criterion, safety impact of deficiencies, or positive management initiatives are typical elements that must be considered in the management judgment phase.

In addition to adding objectivity to the evaluations, analysis, and performance rating process, these ISM performance criteria and rating statements provide several advantages, including:

- Openly share the EH performance expectations for ISM with line management
  - Facilitate continuous improvement in ISM implementation
  - Promote increased understanding of the application of ISM to specific mission activities and work
  - Support effective self-assessment of ISM implementation
- Prevent excessive focus on exceptionally negative (or positive) performance criteria, assuring consideration of overall performance in a principle or core function
- Provide a more systematic and consistent mechanism or process for analyzing performance evaluation results and translating them into color performance ratings.

These performance criteria are intended to be a living document that can be added to or modified as experience is gained with the implementation of ISM or as warranted by generic performance issues, safety concerns, or changing missions and hazards within the Department. Periodic updates will be provided to line management as warranted.

Section 8

REPORT WRITING
Contents

Writing the management evaluation report is the final activity of the evaluation. The purpose of the report is to represent—accurately, fairly, and objectively—how effectively line management has implemented and operates programs at the site. To meet this purpose, the Oversight evaluation team must review, integrate, and analyze results for the individual and cumulative impact of programs on ES&H performance at the site. The results are reported in terms that reflect how well the site has met the criteria of the seven guiding principles and five core functions.

The written report should clearly convey:

- How successfully the site operation incorporates the safety management guiding principles and core functions.
- The strengths and weaknesses of the management system supporting the ES&H programs.
- The ratings for the safety management guiding principles and core functions, and other selected programs.
- A formal listing of specific Safety Issues identified for corrective actions and follow-up.

In addition to the written evaluation report, other reporting, which may be verbal, includes a briefing to the Deputy Assistant Secretary for Oversight, a closeout briefing to site managers, and a briefing to DOE Headquarters line management and external stakeholders.

8.1 Report Structure

The typical report usually follows a standard format, but may be revised to meet the unique reporting needs of a specific evaluation. Table 8-1 provides an annotated outline of a typical management evaluation report, which includes a table of contents and list of acronyms; an executive summary; an introduction; a discussion of the results of the evaluation—based on the safety management template, with discussion of each of the guiding principles and a summary of the core functions; an overall assessment and ratings for integrated safety management and each of the guiding principles and/or core functions; a discussion of opportunities for improvement; and appendices.

Intended as a management-level overview that summarizes the "big picture" of a site's program effectiveness in performing in accordance with the guiding principles, the report makes frequent use of tables and graphics.

Table 8-1. Sample Management Evaluation Report Annotated Outline

TABLE OF CONTENTS
ACRONYMS
EXECUTIVE SUMMARY
The executive summary concisely describes the scope, results, and conclusions of the management evaluation including an overview of specific Safety Issues for corrective action and follow-up.

1.0 INTRODUCTION
An overview describes the site, including major divisions of the site when applicable, and major site activities, missions, and responsibilities. The key part of this section is the scope or the description of the focus areas of the evaluation, including the more detailed description of organizations evaluated. Included is a description of the conceptual framework for the evaluation and its relationship to DOE Safety Management System Policy (DOE P 450.4), which is built around the seven guiding principles and the five core safety management functions.

2.0 RESULTS
This section describes the site's strengths and weaknesses in meeting the objectives of DOE's safety management system. The foundation for most of the Office of Oversight evaluations is DOE P 450.4.

For its evaluations, the Office of Oversight uses a safety management template. This template describes the Office's approach to evaluating the effectiveness of safety management systems within DOE, and is very strongly tied to the Safety Management System Policy and the FRAM. It is organized around the seven guiding principles and five core functions of integrated safety management.

The development of the template (the guiding principles, core functions, and associated criteria) is described in detail in Section 2 of these protocols. Section 2 also describes how site activities are evaluated based on the guiding principles, core functions, and associated criteria, and how all this information is rolled up into the safety management template.

3.0 OVERALL ASSESSMENT AND RATINGS OF INTEGRATED SAFETY MANAGEMENT
This section discusses the evaluation of management responsibilities and management implementation. It includes a color-coded rating figure showing evaluation results in terms of effective performance, improvement needed, and significant weaknesses.

APPENDICES
Appendix A: A discussion of results of evaluation of the core functions of integrated safety management
Appendix B: A formal listing of the Safety Issues requiring corrective actions and follow-up
Appendix C: Opportunities for Improvement
Appendix D: Details of the evaluation approach and evaluation team composition

It also includes color ratings depicting overall program status for line management's use (refer to Section 7). With this management perspective, the report helps managers determine overall program status, possible alternatives for program enhancement, and where the program stands with respect to the guiding

principles and core functions of integrated safety management.

8.2 Draft Report Preparation

The management evaluation report is the primary published record of the activities and results of an evaluation. In this draft report, issues requiring corrective action are clearly listed in an appendix. The report should reflect a balanced view of ES&H program strengths and weaknesses and, more importantly, line management's performance in these programs. The Oversight team managers are responsible for writing the draft report. The writing process follows a standard sequence, from first draft through a final draft to a final published report.

8.3 Report Reviews and Revisions

The report goes through several reviews before approval as a final report:

- Content review
- Editorial review
- Management review.

Content review focuses on the way information is presented; Is it correct, complete, and well organized? Does it support the conclusions and ratings? Is the report "balanced," with respect to identifying both weaknesses and strengths, when appropriate? The editorial review covers format, grammar, syntax, uniformity, and overall readability. Management reviews focus on conclusions and ratings and are generally conducted by Department line managers (through the validation reviews described in Section 6) and Office of Oversight management (such as the Quality Review Board described below).

During the review, comment, and revision process, the Oversight team members are continuously validating report content to ensure that the presentation of conclusions reflects the evaluation results. In addition, validation reviews for site review and comment are an integral part of report generation. The report validation process is described in more detail in Section 6.

The review and revision process may vary among reports, based on the complexity of the evaluation and the size of the team. However, a written report is typically prepared, reviewed, and revised using a process that involves data analysis against the safety management template (guiding principles and core functions) and report development and revisions based on a series of formal and informal review and validation steps.

Oversight Quality Review Board. Following development and internal quality reviews of the draft evaluation report by the Oversight evaluation team management and technical specialists, a formal Oversight review and critique of the draft report is conducted by the Oversight Quality Review Board (QRB). The QRB is appointed by the Deputy Assistant Secretary for Oversight and is chaired by the Oversight Associate Deputy Assistant Secretary for Operations. Membership includes at least two senior advisors and the Office Director responsible for the appraisal. The QRB membership can be adjusted based on special needs. The QRB provides a corporate-level review of the draft report developed by the evaluation team to ensure that it accurately, fairly, and objectively reflects the results, conclusions, Safety Issues, recommendations, and ratings of the evaluation.

As described in Table 8-2, the review process for the final report includes site management and appropriate Headquarters management. This comprehensive review process ensures that the report contains sufficient detail, is factually accurate, and serves as a tool for improving performance. The review is not intended to allow the reviewers to eliminate conclusions, Safety Issues, or ratings that show the site or office in an unfavorable light. The Office of

Oversight operates independently from the offices and sites being evaluated and must maintain this independence in order to meet its mission and maintain its credibility within the Department and with external stakeholders.

Table 8-2. Outline of the Report Development and Review Process

1. The technical specialists on the Oversight team develop preliminary plans for analyzing their data and developing report material. They "bin" the field data according to the safety management template guiding principles and core functions. They discuss the resulting content and conclusions with their counterparts in informal pre-validation meetings, as described in Section 6. The management specialists develop an outline for their assigned safety management template guiding principle(s) and discuss these results with their counterparts as described in Section 6.

2. The management specialists and group leaders, under the leadership of the Oversight Team Leader, prepare a first draft evaluation report, which includes information from the management evaluations conducted by the management specialists as well as technical information from the evaluations conducted by the technical specialists. The first draft may go through multiple iterations of internal quality reviews by the team to ensure completeness, validity, defensibility, clarity, etc. The administrative support personnel conduct a rough editorial review of this first draft.

3. The draft report then undergoes a formal review by the Oversight Management Quality Review Board (QRB) to review the accuracy and consistency of the report. The QRB focuses on report content to ensure conclusions, Safety Issues, and ratings are substantiated.

4. The draft report is revised based on QRB comments, and an editorial review by administrative support personnel is usually conducted. Senior Oversight managers review this revised draft report. After management comments have been incorporated and after Office of Oversight approval, the report is released for site review.

5. The revised draft report is reviewed through round-table discussions with site management and counterparts after a 24-hour review period. Site comments are considered, and further explanations of issues are provided. Comments from this validation review are resolved, and an editorial review is conducted by the Oversight team.

6. This revised draft is reviewed by the Office of Oversight. After revision and approval by the Office of Oversight, the draft report is released to site management for a week-long period for formal review, validation and written comment.

7. All comments are considered and incorporated, where appropriate, or resolved, and the final report is issued.

8.4 Issuing the Final Report

Once the written report is reviewed and comments incorporated and/or resolved, the report is issued as a final document and distributed to the site, Headquarters elements, and other constituents (e.g., Defense Nuclear Facilities Safety Board, Congressional staff, stakeholders) as directed by the Deputy Assistant Secretary for Oversight. Transmittal of the report and associated issues to line management begins

the formal process for line management development of corrective actions, described in Section 9. In addition, the Office of Oversight will conduct formal presentations and/or briefings to the applicable cognizant secretarial office, DOE field office, contractor management, and/or other constituents, such as Congress and external stakeholders (such as citizen advisory boards or regulating agencies). Most unclassified Office of Oversight reports are also available through the Office of Oversight homepage on: **http://tis.eh.doe.gov/oversight/.**

Section 9

IMPLEMENTATION OF CORRECTIVE ACTIONS
Contents

Effective implementation of corrective actions to address and resolve issues identified by the Office of Oversight is the final, and a key, element of the Department's overall ISM system.

9.1 Corrective Actions in the Feedback and Improvement Process

The feedback and improvement process is one of the five core safety functions within ISM, as shown in Figure 9-1. This core safety function is accomplished through the following general steps:

- Identify Issues. Feedback information is collected from a variety of sources, including management self-assessments, line management oversight, independent oversight, and external oversight. Office of Oversight assessments, appraisals, analyses, evaluations, reviews, and other feedback mechanisms provide clear, factually accurate information, safety issues, and Opportunities for Improvement.

- Evaluate Issues. Cognizant line managers evaluate identified Oversight safety issues and determine appropriate corrective actions, if any, including plans, schedules, and relative priorities compared to other ongoing safety improvements. Dispositions include cause identification, actions to address the immediate issue, actions to prevent recurrence, and lessons learned for broader application.

- Resolve Issues. Cognizant line managers implement corrective actions to resolve safety issues as determined by their dispositions. Implementation status is tracked and reported to ensure timely and adequate issue resolution.

- Close Issues. Cognizant line managers complete corrective actions and validate completion. Issues are closed upon confirmation that the original feedback issue was effectively resolved by the actions taken.

These steps are illustrated in Figure 9-2.

9.2 DOE's Safety Issue Resolution Requirements

In response to the DNFSB Recommendation 98-1, the Department developed on March 10, 1999, the Implementation Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight. The Implementation Plan clearly describes the Department's requirements and responsibilities to ensure that corrective actions for identified Oversight safety issues are developed, implemented, and carefully tracked through completion and closeout, including the establishment of:

- A disciplined and systematic process to be applied by line management to develop and implement corrective action plans in response to safety issues identified by the Office of Oversight and other ES&H offices

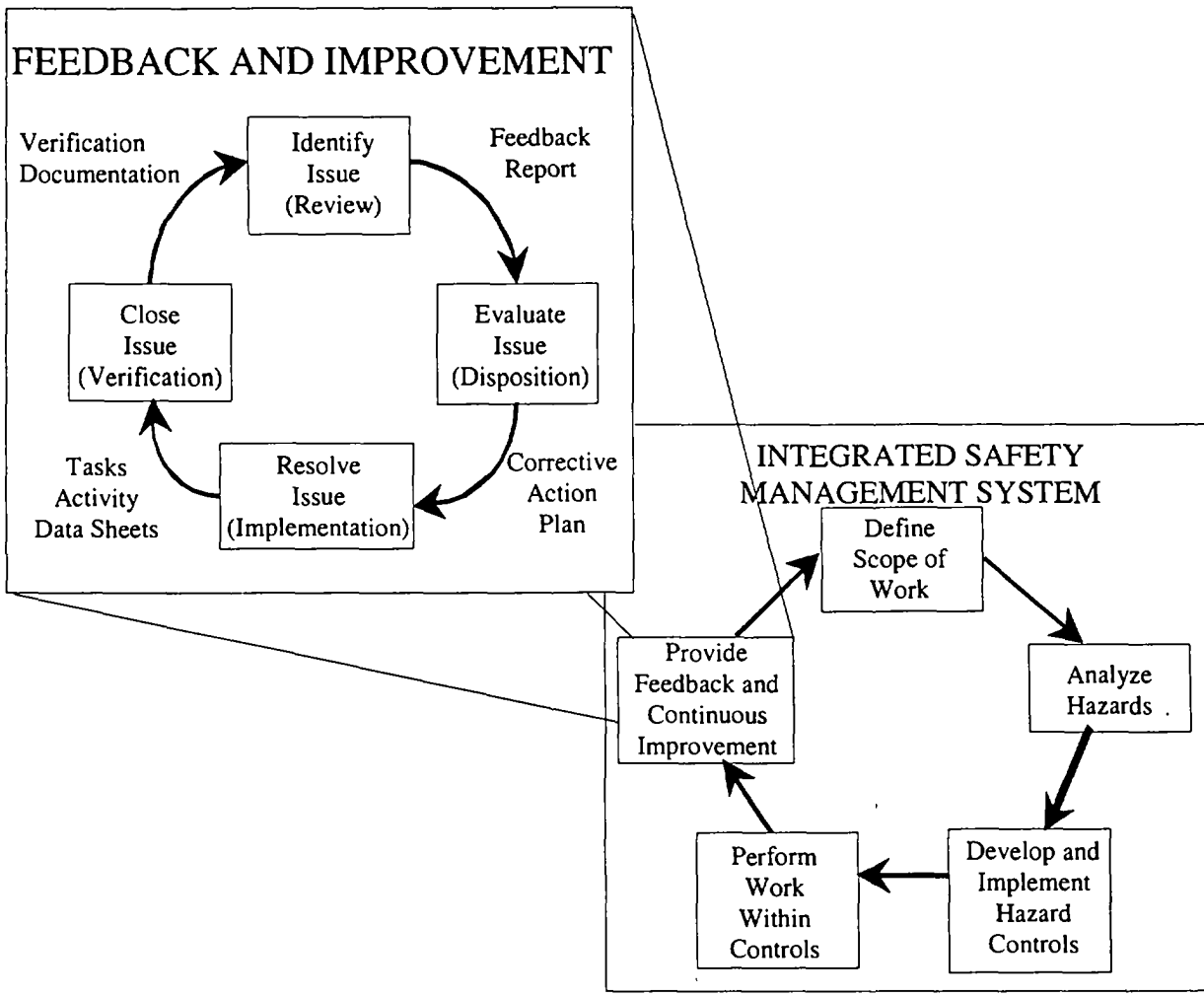

Figure 9-1. Generalized Process for Feedback and Improvement (from DOE Implementation Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight, dated March 10, 1999)

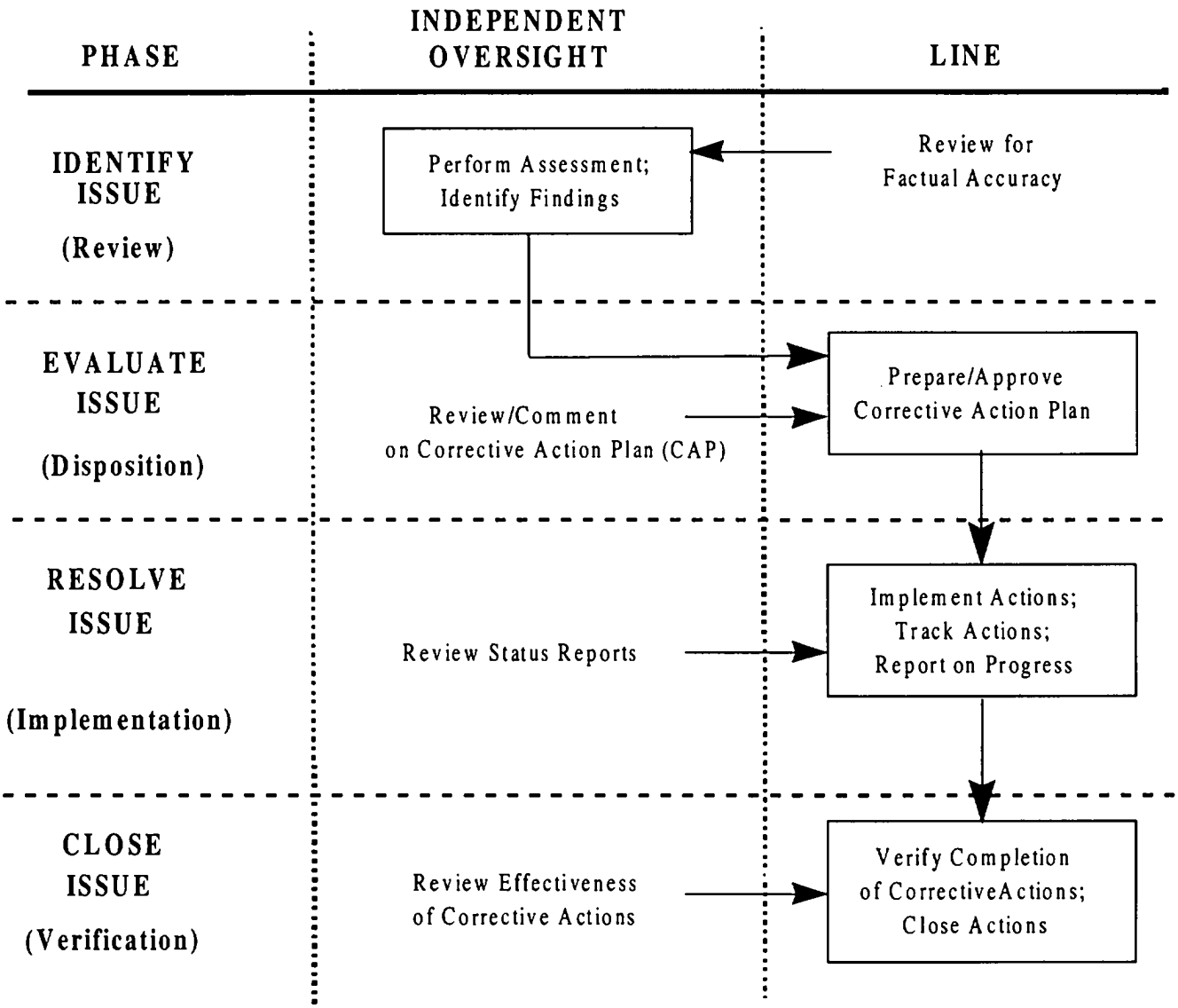

Figure 9-2. DOE Organizational Structure for Managing Independent Oversight Issues and Associated CAPs (from DOE Implementation Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight, dated March 10, 1999)

- A clear and comprehensive process for resolving safety issues at the lowest possible organizational level, but allows for the systematic evaluation of such issues, up to the Office of the Secretary of Energy, if necessary

- An effective system for tracking identified safety issues and reporting progress of the associated corrective actions.

The desired outcome of these requirements and responsibilities is the efficient integration and functioning of corrective action programs responding to identified safety issues across all Departmental organizations.

9.3 Corrective Actions

Line management is responsible for safety and for effectively resolving safety issues identified by the Office of Oversight while integrating and prioritizing the resolution of these issues with other safety management activities.

In short, then, the Office of Oversight is responsible for identifying safety issues through internal independent oversight, and line management is responsible for developing, approving, implementing, completing, and verifying closure of corrective actions. The Office of Oversight is also responsible for reviewing proposed corrective actions for adequacy and timeliness.

9.3.1 Developing the Corrective Action Plan

One of the most critical outcomes of an independent oversight evaluation is a report that clearly describes each identified safety issue. The Office of Oversight protocols described in this guide are intended to ensure that this goal is met, and to support the line management efforts to fully understand the identified safety issues in order to develop appropriate corrective actions. Once the Office of Oversight approves its evaluation or appraisal report, in accordance with the protocols defined in previous sections of this guide, copies are provided to the cognizant line manager (CLM) and the cognizant secretarial office (CSO).

That CSO and cognizant line manager are responsible for developing the corrective action plan (CAP). When independent oversight evaluations identify issues that apply to multiple organizations, a lead CSO is appointed. Also, a cognizant line manager is appointed for each organization. The CAP preparation, format, review, and approval will be consistent with DOE guidance and relevant DOE Directives.

Providing the evaluation report establishes "Day 0" for CAP approval and comment time frames. Also, upon issuing the formal evaluation report, the Office of Oversight enters identified issues into the DOE Corrective Action Tracking System (CATS) maintained by the Integrated Corrective Action Management team. Entering identified issues into CATS ensures historical integrity of the identified issue and ultimately links the issue to the line organization's CAP. After development and approval of the CAP, the DOE line organization is responsible for entering all required corrective action information into the CATS.

In addition to the issues explicitly stated in an Oversight Report, which require a corrective action plan, Oversight reports may also identify other less significant weaknesses and deficiencies. While these lower-level weaknesses and deficiencies are not subject to the DOE corrective action plan process, they should be captured and addressed through the site's internal process for feedback and improvement.

9.3.2 Issuing the CAP

The cognizant line manager, in consultation with the applicable CSO, prepares the CAP. Within 60 days of the issuance of the assessment report, the applicable CSO (or designee) must approve the CAP, and forward a copy to the Office of Oversight. The CAP generally provides the following information for each relevant safety issue:

- Actions to be taken;
- Actions to determine root causes (and generic applicability) and to prevent recurrence of the issue;
- Responsible individual and/or organization;
- Date of actions initiation;
- Date of expected completion of actions (and key milestones), if applicable;
- How actions will be tracked to closure together with the mechanism for verification of closure and assurance that such actions are appropriate to prevent recurrence; and
- Priority considerations.

Other weaknesses, deficiencies, and opportunities for improvement identified in the report should be evaluated and addressed by the cognizant line manager, but need not be included in the CAP.

The Office of Oversight reviews the CAP within 30 days of its approval by the CSO. The purpose of the Oversight review is to obtain an independent determination on whether the timely and effective implementation of the CAPs provides a reasonable approach for addressing the identified safety issues. The Oversight Team Leader for the evaluation generally coordinates the review, with involvement from other team members and other elements of the Office of Oversight. The Office of Oversight completes its review and provides any relevant comments (and the basis for the comments) to the applicable CSO and cognizant line manager. The CLM and CSO will resolve any comments from Oversight within 30 days of receipt. If necessary, the CAP will be revised, reapproved, and redistributed. If differences between the Office of Oversight and one or more line organizations cannot be resolved by informal discussions, then it is elevated for satisfactory resolution via the systematic process established by the Department's March 10, 1999, Implementation Plan.

9.3.3 Implementing the CAP

The cognizant line manager is responsible for implementing the CAP, and completing the associated corrective actions and for routinely reporting the status of the CAP in the CATS. The tracking and closure of identified safety issues will be performed by line management in accordance with relevant DOE guidance and directives.

9.3.4 Closing Out the CAP

The cognizant line manager coordinates with the field organization, and the Headquarters line organization, including the CSO to ensure that all completed corrective actions have been verified as closed by persons with sufficient independence from those who performed the work described in the CAP. That is, closure is verified by line organizations and support staff independent of the staff responsible for development, implementation, and completion of the corrective actions.

9.3.5 Following Up CAP Status

The Office of Oversight monitors the implementation status of corrective actions and assesses the progress and adequacy of implementation of issues and root causes through follow-up reviews. Follow-up reviews may look at specific issues or root causes, or may be broad reviews of progress in implementing ISM systems or improving safety management and performance. The

Office of Oversight also monitors CAP progress through CATS and periodic line management briefings at Headquarters or the site.

During follow-up or subsequent evaluation activities, if the Office of Oversight determines that line management's actions to address and "close" an issue did not completely resolve or correct that issue, the previously "closed" issue will not be reopened; however, Oversight will report its concern as a new issue. In those instances, the new issue will be included in the Oversight Report and subject to corrective action and tracking (under CATS).

APPENDIX A

SAFETY MANAGEMENT TEMPLATE

Office of Oversight Criteria for Conducting Evaluations Using the U.S. Department of Energy's Guiding Principles and Core Functions for Integrated Safety Management (DOE P 450.4)

SAFETY MANAGEMENT TEMPLATE

July 1999

U.S. Department of Energy
Office of Environment, Safety and Health
Office of Oversight (EH-2)

INTRODUCTION

The Department of Energy (DOE) Office of Environment, Safety and Health's Office of Oversight is charged with conducting independent oversight of the effectiveness of DOE's performance in protecting the public, workers, and the environment. The Office of Oversight performs that role through a variety of activities, including comprehensive evaluations of environment, safety and health (ES&H) management systems; special reviews and studies; focused surveillances; accident investigations; and cross-cutting analyses of performance information. The foundation for most Oversight appraisals and analyses is DOE's Safety Management System Policy (DOE P 450.4), the Functions, Responsibilities, and Authorities Manual (FRAM, DOE M 411.1), existing contracts, and the following provisions of the Department of Energy Acquisition Regulation (DEAR 48 CFR 970):

- 48 CFR 970.5204-2, which requires integration of environment, safety and health into work planning and execution, as well as annual updates of the Safety Management System including safety objectives, measures, and commitments;
- 48 CFR 970.5204-78, which deals with laws, regulations, and DOE directives, and also permits the use and application of DOE-approved tailoring processes;
- 48 CFR 970.1001, which encourages performance-based contracting (to the maximum extent practicable); and
- 48 CFR 970.5204-86, which deals with conditional payment of fee, profit, or incentive.

Other regulations and DOE directives concerning work processes and quality improvement, such as the Quality Assurance Requirements (10 CFR 830.120) and Occupational Radiation Protection (10 CFR 835) are considered by the evaluation team.

The Safety Management System Policy establishes an objective that:

"The Department and Contractors must systematically integrate safety[1] into management and work practices at all levels so that missions are accomplished while protecting the public, the workers, and the environment. This is to be accomplished through effective integration of safety management into all facets of work planning and execution. In other words, the overall management of safety functions and activities becomes an integral part of mission accomplishment."

The policy and corresponding DEAR provision are built around seven guiding principles: Line Management Responsibility for Safety; Clear Roles and Responsibilities; Competence Commensurate With Responsibility; Balanced Priorities; Identification of Safety Standards and Requirements; Hazard Controls Tailored to Work Being Performed; and Operations Authorization.

The policy, the FRAM, and the DEAR also describe five core safety management functions, see Figure A-1, that provide the necessary structure for any work[2] activity that could affect the public, workers, and the environment.

[1] "Safety" throughout is used to refer to environment, safety and health.
[2] "Work" includes all operations, research, experiments, projects, maintenance, modifications, decontamination and decommissioning, environmental restoration and waste management.

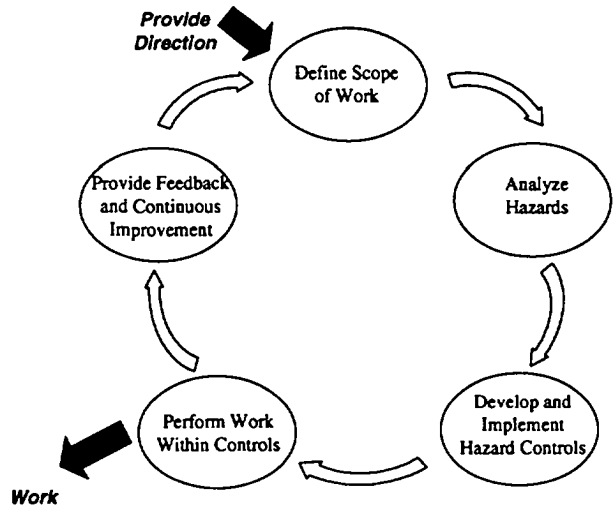

Figure A-1. Five Core Safety Management Functions

The Safety Management Template on the following pages describes the Office of Oversight's approach to evaluating the effectiveness of safety management systems within DOE. It is very strongly tied to the Safety Management System Policy, the FRAM, and the DEAR and is organized around the seven guiding principles and five core functions of integrated safety management. The principles and functions are presented in an integrated list, similar to that presented in the Integrated Safety Management System (ISMS) Verification Team Leader's Handbook. The Oversight Safety Management Template and the DOE ISMS Handbook are consistent in the use of the guiding principles and core functions, but serve different purposes. The Handbook is used by line management to assess the adequacy of the ISMS documentation and to determine if the system has been established. The Oversight Safety Management Template is used by the Office of Oversight to assess the efficacy of the ISMS verification process and to continually evaluate the effectiveness of ISM at all stages of system implementation, both pending and subsequent to verification determinations by line management.

In some instances where there is great overlap between a principle and core function, the Safety Management Template combines the principle and corresponding function for simplicity, since the evaluation approach would be similar for both. However, the results of an Oversight evaluation may be presented around the list of seven guiding principles, or the list of five core functions, or both principles and functions in separate discussions. Each principle or function in the template is supported by criteria that further describe the attributes of an effective safety management system. The guiding principles and core functions that the safety management template is organized around are:

- Line Management Responsibility for Safety (GP-1)
- Clear Roles and Responsibilities (GP-2)
- Competence Commensurate with Responsibilities (GP-3)
- Balanced Priorities; Define the Scope of Work (GP-4, CF-1)
- Identification of Safety Standards and Requirements; Analyze the Hazards (GP-5, CF-2)
- Hazard Controls Tailored to Work Being Performed; Develop and Implement Hazard Controls (GP-6, CF-3)
- Operations Authorization; Perform Work Within Controls (GP-7, CF-4)
- Provide Feedback and Continuous Improvement (CF-5)

The Safety Management Template is used by Oversight to develop specific evaluation plans and as a reference guide for use during Oversight activities. It is not intended as a checklist. Some criteria and attributes described may not be relevant in all cases, and a site's integrated safety management system may satisfy the guiding principle or core function without satisfying all of the listed attributes. The Safety Management Template is intended as a diagnostic tool to assist Oversight teams, and line management, in identifying barriers to effective implementation of the guiding principles and core functions of integrated safety management.

Safety Management Template

Line Management Responsibility for Safety

Guiding Principle #1: *"Line Management Is Directly Responsible for the Protection of the Public, Workers, and the Environment."*

Criterion 1: Policy and Expectations

Safety policies and goals are documented, and initiatives are in progress to improve ES&H programs and to implement or improve, as appropriate, integrated safety management.

- Line management has developed a consistent and responsive Integrated Safety Management System description, and has compared the system description to existing safety processes and to identify, prioritize and implement needed enhancements.
- Line management has established, and communicated to every level of the organization, a set of ES&H policies and performance expectations consistent with ISM.
- Safety management policies and ES&H planning processes adequately reflect the input of stakeholders.
- Line management has established, and communicated through contracts and other mechanisms, expectations for integrated safety management and ES&H performance for DOE, contractor and subcontractor organizations.
- Senior line management provides overall expectations for integrating safety into all operations and facilities. Expectations are set through strategic plans, mission statements and budget processes.
- Line management has established and clearly communicated performance objectives for measuring ES&H effectiveness of organizations, projects, activities, and work performed during day-to-day line operations. Line management has linked performance objectives to decision-making processes (strategic and operational planning, budgeting and execution).

Criterion 2: Leadership

Line Management demonstrates a commitment to protect the public, workers, and the environment. Line Management proactively demonstrates a leadership position in guiding line organizations, contractors, subcontractors, and workers toward integrated safety management.

- Line management promotes the understanding, acceptance, timely implementation, and continuous maintenance of integrated safety management through leadership and a demonstrated commitment to the improvement of safety performance.
- Line management demonstrates ownership of ES&H responsibility and performance vis-à-vis the support role provided by safety organizations.
- Line management is effective in establishing a safety culture that permeates the entire organization and assures that safety is an integral part of every activity.
- Line management fosters a cooperative and professional relationship between DOE, contractors, safety support organizations, subcontractors, workers, and unions, so that ES&H is an integrated and collaborative effort.
- Managers and supervisors at all levels accept, actively promote and set an appropriate example for the timely implementation of ISM and the integration of safety into all site activities.
- DOE and contractor management provide an effective level of leadership to assure understanding and implementation of applicable elements of ISM by subcontractors and privatized or lessee workers.
- Line management has ensured that the elements of ISM, including the principles and core functions, have been fully institutionalized into programs, processes, procedures, training, and other management controls.
- DOE and contractor senior management have provided effective direction for integrating safety into all facilities, activities, and work through an appropriate flowdown of ES&H policies into implementing processes, documents, and mechanisms.
- Line management has developed adequate implementation and integration mechanisms for integrated safety management that provide for horizontal and vertical integration of safety throughout all organizational functions at all organizational levels.

Criterion 3: Worker Empowerment

Line managers recognize that active participation by workers is essential to maintain and improve protection of the public, workers, and the environment.

- Workers, including applicable labor unions, are effectively empowered and involved in safety, including participation in the development of safety policies and procedures, safety committees, prioritization of safety issues and the implementation of ISM.
- Workers are empowered by line management to raise issues involving safety directly applicable to their work and take appropriate action in response to hazards encountered during work activities or emergencies, including the authority to refuse unsafe work assignments and stop work.
- Workers' ownership of workplace safety, confidence in safe work practices, and job satisfaction are evident.
- Line management has established an employee concerns program to provide a mechanism for employees to raise ES&H concerns; concerns are adequately solicited, tracked, prioritized and responded to.
- Incentive programs are in place to promote a safety-conscious culture and worker participation in safety management.

Safety Management Template

Clear Roles and Responsibilities

Guiding Principle #2: *"Clear Lines of Authority and Responsibility for Ensuring Safety Shall Be Established and Maintained at All Organizational Levels Within the Department and Its Contractors."*

Criterion 1: Clear Lines of Authority and Responsibilities

Line management defines, documents and maintains clearly delineated roles and responsibilities for ES&H that provide a foundation for effectively integrating safety into sitewide operations. Pursuant to DOE M 411.1, functions, responsibilities and authorities are defined, communicated, understood and implemented for: Providing Direction; Defining Scope of Work; Analyzing Hazards; Developing and Implementing Controls; Performing Work; and Collecting Feedback and Pursuing Improvement.

- Roles, responsibilities, and authorities for ES&H (including ISM implementation, ISM system maintenance, and the control of all work activities and the associated hazards) are clearly defined, documented and understood by organizations and individuals at every level in the organization.
- Line management has implemented a process to ensure that ES&H and ISM responsibilities flow down from senior management to each person performing work (employees, subcontractors, temporary employees, visiting researchers, vendor representatives, lessees, etc.).
- All levels of line management understand their specific responsibilities with respect to safety, and have implemented a process that requires and provides for the delegation and documentation of organizational structure and interfaces, delegation of authority, accountability, and responsibility throughout the line organization.
- Line management has clearly defined functional relationships and responsibilities among line, support and oversight/assessment organizations.
- Line management has established clear roles, responsibilities, authorities, delegations and interface between DOE Headquarters and field organizations, including coordination of line management direction from multiple program offices at a single site.
- Organizational roles, responsibilities, authorities, and interfaces related to ES&H and ISM are clearly defined and implemented between DOE and contractor organizations. DOE line management has an organization and processes in place to support the approval and implementation of the contractor safety management system, and for continuing interface with the contractor on safety management.
- Line management has established effective responsibilities for, and lines of internal and external communications on, ES&H issues and performance, including liaison with external stakeholder organizations.

Criterion 2: Defined Responsibilities and Accountability

Line managers are responsible and accountable for ensuring that DOE facility operations and work practices are performed in a manner that adequately protects the public, workers, and the environment.

- Line managers have clear mechanisms throughout the line organizations for resolving disputes among line managers when discrepancies are believed to exist between work goals, performance objectives, management needs, and ES&H requirements.
- Line managers have established mechanisms for periodically reviewing the effectiveness of the line management structure and revising it as appropriate.

Criterion 3: Accountability for Performance

Line managers are accountable for safety performance through performance objectives and appraisal systems. Performance is explicitly tracked and measured, and inadequate performance should have visible and meaningful consequences. Line managers execute actions to attain and continuously improve the safety of their operations.

- DOE and contractor managers, supervisors and workers are held accountable for ES&H performance through a combination of target setting, positive reinforcement, and negative consequences for poor safety performance.
- DOE and contractor managers and supervisors are held accountable for the timely and effective implementation and effectiveness of ISM.
- Contractors and subcontractors are held accountable for ES&H performance through appropriate contractual and appraisal mechanisms (RFPs, contracts, and annual contractor performance reviews). Appropriate performance expectations are established, reliably measured, verified and used by line management to influence safety performance.
- Line management uses the results of performance metrics and feedback programs, processes, and mechanisms essential to continuous improvement as tools to hold organizations and individuals accountable for ES&H performance.

Safety Management Template

Competence Commensurate with Responsibilities

Guiding Principle #3: *"Personnel Shall Possess the Experience, Knowledge, Skills, and Abilities That Are Necessary To Discharge Their Responsibilities."*

Criterion 1: Staffing and Qualifications

In accordance with DOE M 411.1, line managers and staff demonstrate a high degree of technical competence and a good understanding of programs and facilities.

- Line management has determined and documented the appropriate levels of staffing, education, experience, and training for each function, including the consideration of responsibilities, activities, hazards, risks, and schedules.
- Line management has identified critical skills and developed and implemented short-term and long-term strategies for recruiting and retaining competent personnel.
- Line management has implemented the level of control necessary to maintain adequate levels of management and staff resources and technical expertise.
- Effective processes are in place to assure that DOE personnel and contractors are adequately trained and qualified on job tasks, hazards, risks, and Departmental and contractor policies and requirements.
- Effective management processes and controls are in place to assure that subcontractors, privatized workers, lessees and visitors are adequately trained and qualified on job tasks, site and job hazards, risk, and applicable DOE and contractor policies and requirements.

Criterion 2: Technical Competence

Workers and managers are technically competent to perform jobs and are appropriately educated and knowledgeable of hazards, vulnerabilities, and risks.

- Line management demonstrates their support to personnel in attaining and maintaining their technical qualifications commensurate with discharging their responsibilities.
- Line managers and supervisors, workers, and ES&H support staff demonstrate a high degree of technical competence and understanding of programs and facilities within their assigned areas of responsibility.
- Management systems are in place to assure that managers, supervisors and workers are knowledgeable of ES&H requirements and hazards associated with their responsibilities and work, including both training and retraining.
- Line managers and supervisors, workers and ES&H support staff demonstrate understanding and competency in ISM within every level of the DOE and contractor organizations.
- Mechanisms are in place to assure that only qualified and competent personnel are assigned to specific work activities, commensurate with the associated hazards.
- Mechanisms are in place to assure understanding, awareness, and competence in response to significant changes in procedures, hazards, systems design, facility mission, of life cycle status.
- Mechanisms are in place to assure that subcontractors performing work on behalf of the Department are competent to perform work in accordance with Department safety policies and requirements.

Criterion 3: Training Programs

In accordance with DOE M 411.1, DOE O 360.1 and DOE O 5480.20A, line managers establish and implement processes to ensure that ES&H training programs effectively measure and improve performance and identify training needs. Training plans are based upon future needs, including anticipates changes in mission, budget and staffing.

- Line management has established a performance-based training program with clear objectives linked to program needs.
- Line management has established and implemented a systematic process utilizing training needs analysis and job/task analysis to identify training requirements and responsibilities.
- ISM, including the principles and core functions, has been effectively incorporated into all applicable training programs and materials for site personnel.
- Line management is supportive of attaining and maintaining technical and ES&H qualifications through manager and staff attendance at relevant training and retraining.
- Effective management systems are in place to assure that training programs, materials, and training simulators are maintained current and relevant to program needs.
- Trainers and instructors are adequately experienced, competent, and qualified, and these attributes are effectively maintained.
- Line management has established and implemented an effective process for monitoring and assuring the continuing quality of training programs.
- Managers and supervisors are provided with timely and adequate management or supervisory skills training commensurate with their ES&H responsibilities.

Safety Management Template

Define the Scope of Work; Balanced Priorities

Guiding Principle #4: *"Resources Shall be Effectively Allocated To Address Safety, Programmatic, and Operational Considerations. Protecting the Public, the Workers, and the Environment Shall Be a Priority Whenever Activities Are Planned and Performed."*

Core Function #1: *"Missions are Translated Into Work, Expectations are Set, Tasks Identified and Prioritized, and Resources are Allocated."*

Criterion 1: Translate Mission into Work; Set Expectations

Line management ensures that DOE and its contractors have and use defined mechanisms to define the scope, schedule and cost of work and to identify and communicate associated risks and hazards.

- DOE and contractor managers have demonstrated a commitment to assuring that ISM and ES&H receive sufficient priority and resources.
- Line management has assured the effective integration of ES&H into all applicable business processes.
- Line management has actively involved workers, regulators, and stakeholders to ensure an appropriate balance between mission objectives and protection of the public, workers, and the environment.
- Line management has formal processes for the development of scope, schedule, and cost to achieve DOE missions and expectations safely. A well-defined work planning and control process is in place, which embraces the core functions of integrated safety management.
- Line management's hierarchy of work planning processes provides increasing detailed description of the work at successively lower tiers such that broad mission objectives are eventually translated into discrete tasks.
- The level of detail and formality in a scope of work is commensurate with the importance of the work, its complexity, and the potential risks and hazards.

Criterion 2: Provide for Integration

ES&H functions and activities are integrated into program, activity, and work planning at all levels of the line organization.

- Line management has instituted a safety management system that provides for integration of safety management processes, procedures, and/or programs into site, facility, and work.
- Line management has established a process to assure that the identification and minimization of hazards associated with the work constitute an integrated and collaborative activity involving all appropriate organizational units.
- Line management has assured that the principles and core functions of ISM are applied appropriately and that safety is an integral and inseparable part of every activity.
- Effective management systems are in place to link safety issues, deficiencies and commitments to business systems for planning, prioritizing and budgeting.
- Effective management systems, processes, and controls are in place to assure that the implementation of ISM and integration of ES&H into all work activities and control of associated hazards is a coordinated and collaborative effort.

Criterion 3: Project Prioritization and Resource Management Systems

Line managers at appropriate levels within the organization understand and synthesize program goals and risks in order to effectively deploy resources to adequately address both. Line managers approve and monitor ES&H plans and budgets to promote consistency with program requirements.

- Line management has established an effective, consistent, and risk-based process for appropriately prioritizing ES&H needs and funding associated with all facilities, projects and activities, including identified safety issues, deficiencies and commitments.
- Line management assures appropriate priority to ES&H considerations in operational decisions (e.g. scheduling of maintenance, timely operability determinations, response to identified deficiencies, etc.)
- Prioritization processes are effective in balancing and reasonably limiting the negative impact of resource reductions and unanticipated events on ES&H funding.
- ISM and ES&H are adequately considered, prioritized, and incorporated into major projects and associated contracts, schedules, and milestones.
- Management has effectively involved workers, regulators, and stakeholders in the prioritization and allocation of resources and maintaining an appropriate balance and integration between mission and safety.
- Line management has established effective processes for resolving disputes relating to balance between mission priorities and safety.
- There are sufficient DOE and contractor management controls and processes in place to assure adequate priority and maintenance of the ES&H infrastructure.

Safety Management Template

- DOE Headquarters line management are involved in, cognizant of, and supportive of established site priorities, ES&H, and ISM.
- Line management has established a reasonable balance of priorities between safety responsibilities and environmental protection, including monitoring, regulatory compliance, waste management, and environmental restoration.
- Adequate priorities are assigned for historically underfunded elements essential to ES&H, including upgrading safety systems, site infrastructure, disposition of excess facilities, training personnel, equipment maintenance and testing, emergency management programs and procedure development and implementation.

Safety Management Template

Identification of Safety Standards and Requirements: Analyze the Hazards

Guiding Principle #5: *"Before Work Is Performed, the Associated Hazards Shall Be Evaluated and an Agreed Upon Set of Safety Standards Shall Be Established That, if Properly Implemented, Will Provide Adequate Assurance That the Public, the Workers, and the Environment Are Protected from Adverse Consequences."*

Core Function #2: *"Hazards associated with the work are identified, analyzed and categorized."*

Criterion 1: Hazards Analysis and Work Planning

Prior to the initiation of work, line management identifies, analyzes, and categorizes the hazards associated with the work activity so that the appropriate administrative and engineering controls can be put in place to prevent or mitigate those hazards.

- Line management has continually analyzed and inventoried the hazards, vulnerabilities, and risks associated with facilities as they cycle through the phases of design, construction, operation and maintenance, decommissioning and decontamination, and environmental restoration.
- A disciplined, documented, methodical, and collaborative management approach has been established and implemented for all aspects of hazard analysis at all levels and for all activities.
- Hazard analyses and the extent of management review are tailored to the complexity of the work activity and the significance of the risk.
- Line management has established effective management controls and processes to assure the involvement of the appropriate ES&H support professionals, quality assurance, and workers in the hazards analysis processes.
- Line management ensures the analysis of accident scenarios for all categories of identified hazards.
- Effective DOE and contractor management controls and processes are in place to assure that the hazards surveys and hazards assessments essential to emergency management, planning, and response are established and maintained.

Criterion 2: Identification of Standards and Requirements

Line management has identified, communicated, executed, and monitored all applicable DOE requirements, and Federal, state, and local regulations.

- Line management has implemented processes for managing requirements, including the translation of standards and requirements into policies, programs, and procedures, and the development of processes to tailor requirements to specific work activities.
- Line management has established requirements commensurate with the hazards, vulnerabilities, and risks.
- Requirements are based on site-specific hazards, vulnerabilities, and risk analyses and, when implemented, are sufficient to ensure protection of the public, workers, and the environment.
- DOE line management has effective processes to identify, analyze, institutionalize and implement new requirements, including communication of requirements to the contractor.
- Line management has established a DOE-approved process (SRID, WSS, etc.) to: (1) evaluate work and its associated hazards; and (2) identify an appropriately tailored set of standards, requirements, practices, and controls commensurate with the work activity and its associated hazards.
- Site-specific implementation plans and associated procedures have been approved at an appropriate level and detail the standards that will be used to comply with applicable requirements.
- DEAR provisions relating to ISM and ES&H performance have been incorporated into contracts, subcontracts, and other binding agreements.
- Standards and requirements address all relevant ES&H functional areas and disciplines.
- Sitewide or institutional requirements are used as the basis for developing facility or program specific requirements, which are in turn used as a basis for developing requirements for specific work activities such that sitewide requirements flow down effectively into facility and work activity requirements.
- Line management's vertical and horizontal communication systems are effective in assuring that managers and staff remain cognizant of all standards and requirements applicable to their responsibilities, work activities, and associated hazards.
- Line management assures that all applicable requirements are transmitted to subcontractors, including incorporation, as appropriate, into subcontracts.
- Line management systems and controls are in place to assure that when significant changes occur in missions, hazards, or facility life cycle or physical condition, there is a reanalysis of the appropriate requirements.
- DOE Headquarters (CSO's, EH, NN, etc.) has been supportive of the timely development and transmittal of quality DOE requirements, standards, and implementing guidance.

Safety Management Template

Hazard Controls Tailored to Work Being Performed; Develop and Implement Hazard Controls

Guiding Principle #6: *"Administrative and Engineering Controls To Prevent and Mitigate Hazards Shall Be Tailored to the Work Performed and Associated Hazards."*

Core Function #3: *"Applicable Standards and Requirements are Identified and Agreed Upon, Controls to Prevent/Mitigate Hazards are Identified, the Safety Envelope Established, and Controls are Implemented."*

Criterion 1: Identify Controls to Prevent/Mitigate Hazards

Line management has established processes for identifying and tailoring controls for hazards associated with all facilities, operations and activities.

- Hazard controls developed at site level are used as basis for developing and tailoring facility controls, which are used as basis for developing and tailoring activity controls.
- Line management applies a preferred hierarchy in identification of controls: engineering, administrative, personnel protective equipment (PPE); both passive and active controls are appropriately applied.
- Line management has established processes for identifying and tailoring controls for hazards associated with all facilities, operations and activities.

Criterion 2: Establish Safety Controls

Hazard controls are established based on the understanding of the hazards, vulnerabilities, and risks in the work environment (e.g., nuclear, radiological, chemical, industrial, physical, and natural phenomena).

- Line management has a process to establish and document an agreed upon (and where appropriate, contractually binding) set of controls.
- Line management has established hazard controls that address the hazards for all the stages of work to be performed (e.g., normal operations, experiments, surveillance, maintenance, facility modification, decontamination and decommissioning).
- Line management has established hazard controls that are adequately protective and tailored to the type and magnitude of the work and hazards and related factors that impact the work environment; controls provide for compliance with all requirements.
- Line management has incorporated processes ensuring that DOE contractors and subcontractors test, implement, manage, maintain, and revise controls and that personnel are qualified and knowledgeable of their responsibilities as they relate to work controls and work performance.
- Processes are in place to assure the availability of safety systems and equipment necessary to respond to and mitigate the impact of emergencies and accidents due to hazards, vulnerabilities, and risks present in the work environment.
- Management controls and processes are effective in establishing and maintaining a safety envelope for the protection of the public, workers, and the environment in both nuclear and non-nuclear facilities and under all facility life cycle stages, activities, and normal and emergency conditions.
- Management controls and processes are effective in assuring that hazard control documentation is maintained current and accurate to reflect facility status, design, hazards, and activities.
- Line management ensures that procedures that implement requirements, regulations, and standards are established and maintained in a manner that assures technical accuracy, usability, and quality and that are current.
- Line management has implemented an effective collaborative process for the establishment of work and hazard controls and that assures participation by personnel who understand the hazards involved as well as the work activity and associated systems and equipment.

Criterion 3: Implement Controls

Line management has established methods to implement controls at every level and which ensure that controls remain in effect as long as hazards are present.

- Effective line management systems and controls are in place to assure that established safety envelopes and hazard controls are maintained current and effective.
- Processes are in place to maintain the configuration of hazard controls within the approved safety boundaries/envelope.
- Significant changes in design, life cycle, operations, or conditions are properly analyzed for their impact on operational and safety requirements.
- Effective management systems and sitewide processes are in place to assure the provision and maintenance of high quality, technically accurate, and useable procedures to control work and related hazards.

Safety Management Template

Operations Authorization; Perform Work Within Controls

Guiding Principle #7: *"The Conditions and Requirements to be Satisfied for Operations Initiated and Conducted Shall Be Clearly Established and Agreed-Upon."*

Core Function #4: *"Readiness is Confirmed and Work is Performed Safely."*

Criterion 1: Confirm Readiness

Line management has established and implemented processes to confirm that a facility or work process/activity, as well as the work force, are in an adequate state of readiness prior to authorizing the performance of work.

- The formality and rigor used to confirm readiness is based on hazards and complexity of the work; where necessary the process includes independent assessment as specified in DOE Order 425.1A.
- Line management has clearly defined responsibilities and authorities for confirming readiness, including the appropriate level of review for the startup or operation of nuclear and non-nuclear facilities and work activities, commensurate with the hazards and complexity of the work.
- Line management ensures and verifies the proper design, construction, installation, testing and operability of necessary facility or process systems, equipment and components required for safe operations.
- Line management confirms that all necessary safety support functions and interfaces have been established.
- Line management confirms the adequacy of procedures for maintenance, testing and operations required for safe operation, and adequacy of work authorization processes to be used.
- Line management ensures that controls are adequate to prevent accidents, uncontrolled releases or unacceptable exposures.
- Line management confirms that the capabilities are in place to effectively respond to emergencies and accidents prior to authorization of operations.
- Line management ensures that personnel are qualified and trained to perform the work in accordance with the established controls.
- Line management has established processes to ensure closure of findings from pre-performance reviews.
- Line management ensures that facilities or operating processes such as experiments or waste processing are not restarted following an unscheduled trip or shutdown until the causes are identified, analyzed and appropriate management authorizations obtained.
- Line management has established and implemented policies, procedures, and guidance for restart readiness confirmation after "stop work" has been initiated.

Criterion 2: Operations Authorization

Line management has assumed the responsibility for ensuring that all operations are authorized at a level commensurate with the hazards and has established work authorization processes for both facility- and activity-level operations. All work activities, including maintenance modifications, are subject to authorization based on appropriate review of the preparation and readiness to perform work.

- Line management has established and agreed upon conditions and requirements that must be satisfied for operations to be initiated. For all work activities, DOE has either directly authorized (where appropriate) or delegated work authorization authority, within clearly defined limits, to the contractor.
- Line management ensures that all work activities (including operations, maintenance, surveillance testing, experiments, decontamination and decommissioning, environmental restoration and waste management activities) are properly authorized at a level appropriate to the hazards, risks, and complexity associated with the work prior to commencement of work activities.
- Line management has a process to confirm that the scope and authorization documentation is adequately defined and directly corresponds to the scope and complexity of the operation(s) being authorized. The authorization documentation clearly delineates the terms and conditions for authorizing site, facility, or activity operations, including those associated with research and development.
- The authorization requirements reference a change control process for assessing, approving, and changing authorization documentation.
- Systems and controls are in place to assure that managers responsible for facilities are cognizant of all significant operations or work activities within their facilities. Operations, research, or work conducted on site by other organizations or individuals is properly authorized at the right level in accordance with the hazards, risks, and complexity of the activity.

Criterion 3: Perform Work Safely

Line managers are responsible for implementing programs in compliance with defined requirements. Line managers ensure that DOE personnel, contractors, and subcontractors execute defined requirements in such a manner that employees, the public, and the environment are protected from adverse consequences.

Safety Management Template

- Line management ensures that all facility/process operations and all work activities are conducted within the established safety envelope and hazard controls.
- Pre-job briefings and walkdowns are used to ensure clear understanding of the work scope, hazards and controls by all personnel involved in the work.
- Line managers and supervisors have incorporated processes (e.g., work practices, operating procedures) for ensuring that safety requirements are integrated into work performance.
- Line management implements programs to ensure continuing readiness for work such as conduct of operations, surveillance, maintenance, management review, etc.
- Work is performed consistent with requirements and controls (including procedures) and personnel are held accountable for performing work within controls (see GP-2).
- Line management has established processes for withdrawal of operations authorization and/or cessation of work (including shutdown of facilities or processes) deemed to be unsafe.
- Line management has established effective processes for nuclear and non-nuclear facilities to ensure that changes in facility status, activities, hazards, or conditions that have the potential to negatively impact the safety envelope and safety margin are effectively identified, communicated, analyzed and resolved. Temporary or permanent modifications to facilities, systems, or equipment or abnormal system alignments do not result in operations outside the authorized operating limits or safety envelope.
- Line management has established a safety culture that encourages the use and adherence to approved procedures to control the hazards associated with work activities.

Safety Management Template

Provide Feedback and Continuous Improvement

Core Function #5: *"Feedback Information on the Adequacy of Controls is Gathered, Opportunities for Improving the Definition and Planning of Work are Identified and Implemented, Line and Independent Oversight is Conducted, and, If Necessary Regulatory Enforcement Actions Occur"*

Criterion 1: Assessment and Measurement of Performance for Continuous Improvement

Line management has established formalized mechanisms and processes (at the institutional, facility/project, and activity levels) for collecting both qualitative and quantitative information on ES&H performance as the basis for informed management decisions to improve safety performance through assessments, performance measures, and other feedback mechanisms.

- Line management has demonstrated commitment to achieving continuous improvement in ES&H performance.
- Line management is responsible for planning and conducting assessments, coordinating other assessment activities, and leading assessments of ES&H contract performance, in accordance with 10 CFR 830.120 and in some cases DOE O 414.1.
- DOE line management has established effective, performance based processes for monitoring and assessing contractor ISM and ES&H performance, providing feedback, and holding the contractor accountable for correction of deficiencies and effective performance.
- The vehicles for collecting information includes formalized feedback mechanisms from workers, line management, and independent oversight organizations.
- Assessment program elements include self-assessment processes and management assessments, assessment of work processes and performance, performance-based observation of work activities, and evaluation of cross-cutting ES&H issues and programs.
- Both managers and workers participate through teaming approaches in self-assessment activities.
- Results of assessments and other performance information are communicated upward in the line management chain to enable senior management to make informed determinations as to the effectiveness of the safety management system and safety performance, and communicated downward to set expectations for performance.
- Line management has developed and executed an "improvement opportunity" or "lessons learned" protocol that solicits worker and manager suggestions for improving ES&H performance.
- Line managers have implemented processes to develop, execute, and track performance measures that includes (but is not limited to) the safety measures associated with work performance.
- Approved performance measures provide information that indicates how safely work is being performed and is clearly linked to the performance objectives and expectations established by line management and stakeholders.
- DOE and contractor line management have established effective, performance based processes for monitoring and assessing subcontractor implementation of ISM and ES&H performance, providing feedback, and holding subcontractors accountable for correction of deficiencies and effective performance.
- Line management cooperates with and is responsive to DOE and external oversight and enforcement activities, as part of its commitment to continuing ES&H improvement.

Criterion 2: Follow-up and Correction of Safety Management System Deficiencies

Line management has established a formalized process to capture and track ES&H-related deficiencies and associated corrective actions. Line management has executed mechanisms, such as independent verification and performance-based evaluations, to ensure that corrective actions are timely, complete, and effective.

- Corrective actions are implemented by line management, including improvements to management systems and processes, in response to identified deficiencies, adverse trends in performance measures, occurrence reports, generic issues, recurring events, or other safety indicators.
- Line management has instituted a policy of assigning responsibility for improvements, corrective actions, and commitments to a specific individual within the organization.
- Line management analyzes deficiencies to determine root cause, generic applicability and measures necessary to prevent recurrence.
- Line management has established a system for risk-based prioritization and tracking to closure for all identified deficiencies.
- Closure of deficiencies and corrective actions is based on objective, technically sound and verified evidence.
- Line management receives periodic information on the status of identified deficiencies and corrective actions and holds organizations and individuals accountable for timely completion of actions.

Criterion 3: Lessons Learned

Line management has established a method to capture ES&H-related deficiencies, to identify causes and generic applicability, and to disseminate lessons learned within and across organizations.

Safety Management Template

- Line management has established processes to solicit pre- and post-work feedback from workers, managers and ES&H professionals on the effectiveness of work definition, hazards analyses, controls and implementation.
- Processes are in place to assure that events and accidents are promptly and thoroughly reported and investigated, including the identification and resolution of root cause and management and programmatic weaknesses and distribution of lessons learned.
- Processes are in place to disseminate lessons learned to targeted audiences and to ensure that lessons learned are understood and applied.
- Processes are in place to assure that lessons learned from internal or external events or accidents are communicated and incorporated into the training curriculum at all levels of the organization, as applicable.

APPENDIX B

ENVIRONMENT, SAFETY, AND HEALTH SUPPORT DISCIPLINES

APPENDIX B

ENVIRONMENT, SAFETY, AND HEALTH SUPPORT DISCIPLINES

Listed below is a representative sample of the ES&H support disciplines mentioned in Section 2.1, Figure 2-2, and Table 4-1.

Facility Safety

- Conduct of Operations
- Essential Systems Functions
- Engineering
- Decon. and Decomm.
- Emergency Management
- Maintenance
- Quality Assurance

Nuclear Safety

- Criticality Safety
- Nuclear Materials Handling and Storage

Environmental/ Public Protection

- Waste Management
- Surface Water Protection
- Environmental Restoration
- Environmental Radiation Protection
- Air Quality Protection
- Ecological and Cultural Resources
- National Environmental Protection Act
- Pollution Prevention/ Waste Minimization
- Drinking Water
- Packaging and Transportation
- Groundwater

Worker Safety

- Industrial Hygiene
- Industrial Safety
- Radiation Protection
- Chemical Safety
- Fire Protection
- Firearms Safety
- Mine Safety
- Construction Safety
- Occupational Medicine
- Aviation Safety
- Explosives Safety

APPENDIX C
SAMPLES AND EXAMPLES

Appendix C-1
Daily Overview Report
(Sample)

DATE: April 8, 2000

TO: Glenn Podonsky
Deputy Assistant Secretary
Office of Oversight

SUBJECT: Daily Overview Report for Activities for April 8, 2000 – Butte Ridge (BR) Site ES&H Safety Management Evaluation

1. Key Activities Completed:

- Follow-up activities are ongoing

2. Evolving Lines of Inquiry:

New information in *Italics*

GP1: Line Management Responsibility for Safety

- All organizations within the scope of the review demonstrated that line managers were responsible for safety.
- DOE/BR – Strategic plan, Activity Agreements, many initiatives underway
- Frontier Aerospace (FA) – Safety and Health improvement program, safety culture improvements are high priority
- Laboratories – common Hazard Analysis, laser safety, monthly joint ES&H meeting
- Efforts to drive changes needed to support timely implementation of ISMS need additional leadership focus.

GP2: Clear Roles, Responsibilities, and Accountability

- The roles and responsibilities of DOE/BR are not adequately defined to assure effective control and oversight of activities.
- The roles and responsibilities of DOE/BR Program Managers in the work authorization process are not well defined. Specifically, the process to analyze hazards is not well defined or rigorous.
- *The DOE/BR FRAM requires SARs to be approved by the Manager, BR. The Assistant Manager for Environmental Management, not the BR Manager, approved the Waste Management Facilities SAR.*
- *FA roles and responsibilities are adequately defined*

GP3: Competence Commensurate with Responsibility

- Staffing is generally adequate for safe accomplishment of the site mission
- Personnel are generally technically competent
- Some personnel do not understand or accept ISMS

GP4: Balanced Priorities

- BR Work Breakdown Structure systems incorporate safety and health into FY planning and budgeting
- FA systems for breaking down the scope of work into discrete elements are in place
- Mechanisms for project prioritization and resource management systems are not developed or fully implemented

GP5: Requirements Management

- Work Smart Standards (WSSs) for FA have been established following DOE M 450.3-1, "Closure Process for Necessary and Sufficient Sets of Standards," and provide an adequate requirements baseline for FA activities.
- The BR Directives Management function provides the system for processing both internal and external directives.
- There are weaknesses in the FA procurement function related to subcontracts.

GP6: Hazard Controls

- Hazards are required to be thoroughly identified and categorized at the corporate and project level using a consistent approach for all work by FA.
- While Hazard Analyses identify necessary controls, a weak culture of procedure use and compliance for activities not directly related to experiment execution is significantly hampering the effective implementation of those controls.
- Controls identified for program tests and experiments are clearly delineated and implemented in test and experiment procedures.

GP7: Operations Authorization

- Activity Agreements are the current mechanism for DOE Operations Authorization at higher hazard facilities at BR.

- Authorizations to conduct Experimental Activities are clear and take into account necessary safety reviews.

- *Activities conducted by different divisions at the BR Site may not always be sufficiently coordinated to ensure workers are not subjected to undue risks as a result of other activities in the area.*

- ***Other Observations***

- *There are two examples of significant safety events that should have been entered into the site's Deficiency Tracking System (DTS) as a deficiency. Not having a deficiency in the DTS prevents the formal corrective action process to occur. Critiques were conducted on these events which describe the event in enough detail to warrant a deficiency.*
- *Near Miss at Tunnel 5 on November 21, 1999*
- *DDS Complex Security Door Interlock Bypass Incident September 25, 1999*

3. Special Debriefs (Stakeholders):

- None

4. Key Activities Scheduled Next 24 Hours:

- None

5. Problems:

- None

6. Comments:

- None

Bob Lemon: _____
Phone: 234/485-0546
Site: Butte Ridge Operations Office
Hotel: Janus Suites, 234/634-0303

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Appendix C-2
Daily Report
(Sample)

Working Draft
Program Sensitive
Form 12

Safety Management Evaluation
Sample Site - Evaluation Period 05/08/00 - 05/23/00
Daily Report

Name: Safety Assessor **Date: 05/10/00**
Area of Responsibility: SSOC: Five Core Functions (AB Implementation/COO)

Today's Activities:

08:00AM - 04:00PM Review institutional requirements for Operations Orders, TSR Action Plans, and technical procedures.

Observations/Supporting Evidence

GP-5, Standards and Requirements

The site COOP manual provides directions for developing and implementing Standing Orders. The COOP manual states that the section on Standing, Operations, and Shift Orders "satisfies the requirement in DOE Order 5480.19 for providing timely information and instructions to operators." This section of the COOPs manual conflicts with the intent of the DOE Order and associated DOE standard (DOE-STD-1034-93) in some cases. The DOE Order addresses a means for operations management to communicate short-term information and administrative instructions to operations personnel. The DOE Order also states that "Information and policies intended as permanent should be incorporated into appropriate administrative procedures." Contrary to the intent of this statement, the site COOPs manual allows permanent standing orders, and a permanent order associated with sitewide alarm system computer is currently active. The DOE Order further states that "the operator orders program should not be used to change operating procedures, because the changes noted in the operator orders might be missed by a procedure user." Contrary to the intent of the order, two standing orders were used in lieu of non-intent changes to the site lockout-tagout procedure to clarify lockout/tagout requirements. An off-normal occurrence occurred as a result of working on energized equipment because the workers and the shift manager used the guidance in the site procedure and missed the clarification in one of the standing orders. At the facility level an operations order in lieu of an administrative procedure to provide clarification of the site lockout/tagout procedure.

CF-3, Develop and Implement Hazard Controls

The following should be folded into the core function bullet on Operations Orders:

> The site COOP manual concludes that technical Operations Orders are equivalent to procedures, based on them receiving the same reviews and approvals as procedures. Operations orders do not follow the requirements for procedures delineated in the Site Documents Requirements such as requirements for purpose, scope, limitations and precautions, prerequisites, etc. Therefore, although the review and approval process is the same; operations orders are not equivalent to procedures. This erroneous conclusion

in the site COOP manual has led to the use of operations orders in the facilities in cases where procedures or procedure changes would have been more appropriate.

The following should be a new core function bullet:

The TSR required action plans addressing repair of inoperable safety equipment are inadequate. The LCO action statements (for certain safety class equipment) and TSR Administrative Control require action plans and schedules submitted to DOE if inoperable equipment is not repaired in the specified time interval. Several pieces of safety equipment fall under these requirements. The required action plans to DOE are in table format, provide minimal information on the course of repair, and do not establish critical path milestones as described in the LCO bases. The Field Office has expressed dissatisfaction in the quality of the action plans, however they have not provided clarification or guidelines to SSOC of DOE's expectations.

Difficulties Encountered: None

Key Activities Tomorrow:

09:00AM - 10:00AM Facility Representative, J. Q Public,
03:00PM - 05:00PM Expanded Team Meeting

Appendix C-3
Significant Safety Concern Form

Significant Safety Concern

Organization/Facility/Site	Responsible Individual:
Example	Team Member
Title:	No:
Sample Safety Concern	Example-001

1. Observed Condition
Description of observed conditions that led to this concern.

2. Background Information (Basis Requirements/Standards/Documents Reviewed/ Persons Contacted as needed)
Amplifying Information.

3. Approval	
Originator:	Date:
Team Leader/Deputy:	Date:

Organization/Facility/Site Example	Responsible Individual: Team Member
Title: Sample Safety Concern	No: Example-001

4. Line Management Response (DOE/Contractor)
Detailed response from DOE Line Management and/or Contractor management addressing corrective actions (immediate and long term).

5. Oversight Follow-up Response
Oversight response to corrective action plan, corrective actions, etc.

Originator:	Date:
Team Leader:	Date:

Appendix C-4
ES&H Data Collection Template

ES&H Data Collection Template

I. Guiding Principles and Criteria

Principle 1 – Line Management Responsibility for Safety (GP1)

"Line Management Is Directly Responsible for the Protection of the Public, Workers, and the Environment."

- Policy and Expectations
- Leadership
- Worker Empowerment

Principle 2 – Clear Roles and Responsibilities (GP2)

"Clear Lines of Authority and Responsibility for Ensuring Safety Shall Be Established and Maintained at all Organizational Levels Within the Department and Its Contractors."

- Clear Lines of Authority and Responsibility
- Defined Responsibility and Accountability
- Accountability Performance

Principle 3 – Competence Commensurate with Responsibility (GP3)

"Personnel Shall Possess the Experience, Knowledge, Skills, and Abilities That Are Necessary to Discharge Their Responsibilities."

- Staffing and Qualifications
- Technical Competence
- Training Programs

Principle 4 – Balanced Priorities (GP4)

"Resources Shall Be Effectively Allocated to Address Safety, Programmatic, and Operational Considerations. Protecting the Public, the Workers, and the Environment Shall Be a Priority Whenever Activities Are Planned and Performed."

- Translate Mission Into Work; Set Safety Expectations
- Provide for Integration of ES&H
- Project Prioritization and Resources Management Systems

Principle 5 – Identification of Safety Standards and Requirements (GP5)

"Before Work Is Performed, the Associated Hazards Shall Be Evaluated and an Agreed-Upon Set of Safety Standards Shall Be Established That, if Properly Implemented, Will Provide Adequate Assurance That the Public, the Workers, and the Environment Are Protected From Adverse Consequences."

- Hazard Analysis and Work Planning
- Identification of Standards and Requirements

Principle 6 – Hazard Controls Tailored to Work Being Performed (GP6)

"Administrative and Engineering Controls To Prevent and Mitigate Hazards Shall Be Tailored to the Work Being Performed and Associated Hazards."

- Identify and Communicate Controls to Prevent/Mitigate Hazards
- Establish Safety Controls
- Implement and Maintenance of Controls

Principle 7 – Operations Authorization (GP7)

"The Conditions or Requirements To Be Ratified for Operations To Be Initiated and Completed (Confirm Readiness) Shall Be Clearly Established and Agreed Upon."

- Confirm Readiness
- Operations Authorization
- Perform Work with Safety and Within Controls

II. Core Functions and Criteria

Function 1 – Define the Scope of Work (CF1)

- Translate Missions into Work
- Set Expectations
- Identify and Prioritize Tasks
- Allocate Resources

Function 2 – Analyze the Hazards (CF2)

- Identify, Analyze, and Categorize Hazards

Function 3 – Develop and Implement Hazard Controls (CF3)

- Identify Applicable Standards and Requirements; Obtain Agreement
- Identify Controls to Prevent (Accidents) or Mitigate Hazard (Consequences)
- Establish Safety Envelope
- Implement Controls

Function 4 – Perform Work Within Controls (CF4)

- Confirm Readiness
- Performed Work Safely

Function 5 – Provide Feedback and Continuous Improvement (CF5)

- Gather Feedback Information on the Adequacy of Controls
- Identify and Implement Opportunities for Improving Work
- Conduct Line And Independent Oversight
- Enforce Regulatory Actions If Necessary

Appendix C-5
Oversight Analysis Support for Evaluations

OVERSIGHT ACTIVITIES IN SUPPORT OF SAFETY MANAGEMENT EVALUATIONS

I. COLLECT DATA:

Search Qualitative Data Sources:

- Conduct search of EH-2 Data for site performance data and extract performance related comments. Sources reviewed include:
  - EH-Resident Surveillances and Weekly Summaries
  - Oversight Appraisal Activities (i.e., Special Studies, previous safety management evaluations/follow-ups, special reviews)
  - Accident Investigation Reports
  - Site Assessments
  - Site Profiles (focusing on action status)
- Conduct search of relevant site Homepages (DOE and Contractor)
  - Collect data on site activities, stakeholder actions/involvement/agreements
  - Collect relevant site data to include budget information, organizational structure, listings of key management systems, directives, manuals, etc
  - Capture data on any factors that affect site safety performance such as management/contractor changes, contractual changes, performance measures, new missions, facility closures, etc
- Acquire, review, and extract performance data from site performance documents (i.e., functional area self-assessments, DOE/Contractor management assessments, annual lab assessments, corrective action plans, annual site environmental management plan.
- Conduct search of other DOE documents for performance data. Sources include:
  - Inspector General Office reports
  - Enhance Working Plan (EWP) Reports
  - Enforcement Actions/Non-compliance reports
  - Lessons Learned
  - Integrated Safety Management (ISM) Homepage
- Conduct search of Non-DOE reports such as DNFSB reports, and recommendations/replies to recommendations, EPA Evaluations, State investigations, and GAO Reports

Search Quantitative Data Sources

- Conduct Occurrence Reporting and Process System (ORPS) queries for 1990s or since last site queries. Queries address all major fields of data to include:
  - Root , Direct , and Contributing Causes—by Category and dominant Subcategories
  - Facility Functions, Activities, and targeted facilities
  - Nature of Occurrence—by Category and dominant subcategories
  - By Topical Area

- Conduct Computerized Accident/Incident Reporting System (CAIRS) queries for 1991-present or since last site queries. Queries include all major safety indices (Lost Workday Cases (LWC), Total Recordable Cases (TRC), Lost Work Days (LWD) and Cost Index). Queries are tied to:

  - Operation Codes present at site—Government, Production, Services, Lump Sum Construction, Cost Construction, etc
  - Occupations—Query for list of incidents tied to a specific occupation or topical area (i.e., electrician, construction, technicians)
  - Recent Events—Listing of LWC reports or LWD reports over last 12-18 months
  - Query and acquire major event report (e.g., major lost workday cases)

- Conduct query of Radiation Exposure Monitoring System (REMS) database for 1990s or since last site query. Queries acquire results associated with:

  - Total Personnel being monitored at site by year
  - Average dosage of those recording some dosage
  - Occupation and category of personnel receiving dosage

II. COLLATE, ORGANIZE, AND ANALYZE DATA

- Trend ORPS query results—develop relevant charts/graphs
- Trend CAIRS query results-- develop relevant charts/graphs
- Trend REMS query results-- develop relevant charts/graphs
- Review and Collate qualitative extracts by topic/guiding principle/core function
- Analyze trends developed from quantitative databases
- Analyze qualitative extracts

III. DEVELOP ANALYSIS:

- Develop safety performance themes/areas of noteworthy performance/improvement and areas of concern/emerging adverse trends from both the qualitative and quantitative results
- Analyze data to determine the effectiveness of ISM implementation within each of the guiding principles and core functions
- Analyze data to determine safety performance and safety performance trends within each of the topical areas
- Compare trends against other sites and DOE trends
- Resolve any conflicts among data sources

- Prepare analysis summary and Briefing Presentation

- **IV. PRESENTATION OF ANALYSIS RESULTS**

- Prepare Data Binders: Data organized within binders; each binder focuses on a specific type of safety performance data or site information. The baseline binders include:
  - A site information binder, providing key site data such as key personnel, organizational structure, budget, programs, mission statement, site plans, site documents that describe key site systems and processes, recent activities, stakeholder interest items, historical information, strategic and ES&H plans, and major implementing directives

  - Analysis Summary: provides the results of the analysis of all quantitative and qualitative data sources. Includes key charts/graphs developed from all data sources
  - ORPS Binder: Contains ORPS Queries (source data), ORPS lists of specific topical or facility results and most recent of significant event reports
  - CAIRS binder: Contains copies of the CAIRS queries, key lists, and the more significant and or most current individual incident reports
  - REMS and Noncompliance Tracking System (NTS) Binder: Provides REMS queries and copies of relevant NTS reports
  - Facility Reports: Contains those queries that are relevant to a specific targeted facility. Provides and compares the facility trends within the ORPS, CAIRS, and REMS trends within ORPS and CAIRS.
  - User-Defined Reports Binder: Provides copies of those topical areas pre-identified by the team as an area of evaluation. Usually covers 8-12 topical areas
  - Facility Binder: Provided when the team has pre-identified the exact facilities to be evaluated. A complete analysis of the facility is provided and compared against the site analysis results and DOE averages

- Prepare Team Briefing Package: Briefing Package designed to summarize significant analysis results and to present the sites safety performance by guiding principle and core function and by topical interest area. Briefing package provided to each member of the team as a summary of significant analysis results.

- Briefing Presentation: Highlights the most significant points within the briefing package and allows for exchange and clarification among the analysis presenters and the team membership.

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Appendix C-6
Scoping Visit Briefing Package
(Sample)

FOCUSED SAFETY MANAGEMENT EVALUATION AT SITE A

Office of Oversight

Office of Oversight Role

Organization Responsible for Independent Evaluation of Department's Safety Performance

Conducts:

- Integrated Safety Management Evaluations
- Special Studies and Reviews
- Follow-up Reviews
- Accident Investigations
- Trending and Analysis

Oversight Process

Continuous Oversight

- Site Profiles
- Oversight Integration Teams

Focus on Safety Management Template

- Comprehensive
- Understandable
- Flexible

Communicate Expectations to PSOs and to the Field

Smaller Teams with More Focused Reviews

Experience with Integrated Safety Management Evaluations

- Numbers and Types of Reviews
- Team Members

Foundation for Oversight Activities: DOE P 450.4 Integrated Safety Management System Components

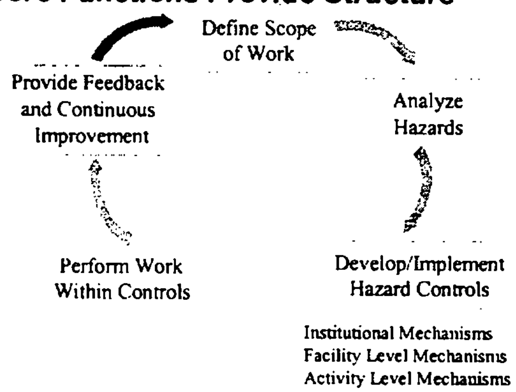
Objectives:	Systematically integrate safety into work practices at all levels	Complex-wide
Principles:	Fundamental policies that guide the development of safety directives to performance of work	
Functions	Structure to perform work with rigor commensurate with the hazards	
Mechanisms:	Systems defining how functions are performed	Site-wide
Responsibilities:	Defined and documented responsibilities and approval process commensurate with hazards	
Implementation:	Actual planning, performance, and assessment of work	

Guiding Principles For Integrated Safety Management

- Line Management Responsibility for Safety
- Clear Roles and Responsibilities
- Balanced Priorities
- Competence Commensurate with Responsibilities
- Identification of Safety Standards and Requirements
- Hazard Controls Tailored to Work Being Performed
- Operations Authorization

Site A Safety Management Evaluation

Core Functions Provide Structure



Site A Safety Management Evaluation

Scoping Visit Objective

- **Brief on process and schedules**
- **Set scope of evaluations**
- **Gather information for planning**
- **Administrative needs**

Site A Safety Management Evaluation

EH Approach to Oversight

- ☑ Involves Line Management, Unions, Workers, and Stakeholders
- ☑ Focus on Management Systems and Work Processes
- ☑ Continuous Validation with Line Management Key to Success
- ☑ Line Management Feedback Solicited After Each Evaluation

Site A Safety Management Evaluation

Safety Management System Template

- ☑ Based On DOE Safety System Policy P450.4 And DOE FRAM M411.1
- ☑ Template Retains Seven Guiding Principles
- ☑ Each Principle Supported by Performance Criteria
- ☑ Evaluation Report/Results Structured Around Safety Management System Template

Site A Safety Management Evaluation

Safety Management System Template

- Policy, Leadership, and Worker Empowerment
- Clear Roles, Responsibilities, and Accountability
- Competence Commensurate with Responsibility
- Balanced Priorities

} Management Responsibilities

- Identification of Standards and Requirements
- Hazards Analysis, Work Planning, Hazard Controls, and Operations Authorization

} Management Implementation

Site A *Focused Safety Management Evaluation Team*

Team Leader: Patrick Wiley

Safety Management Systems

Robert Anderson*
Frank Foster
Larry Nichols

Judy Nichols*
Bob West

Technical Team:

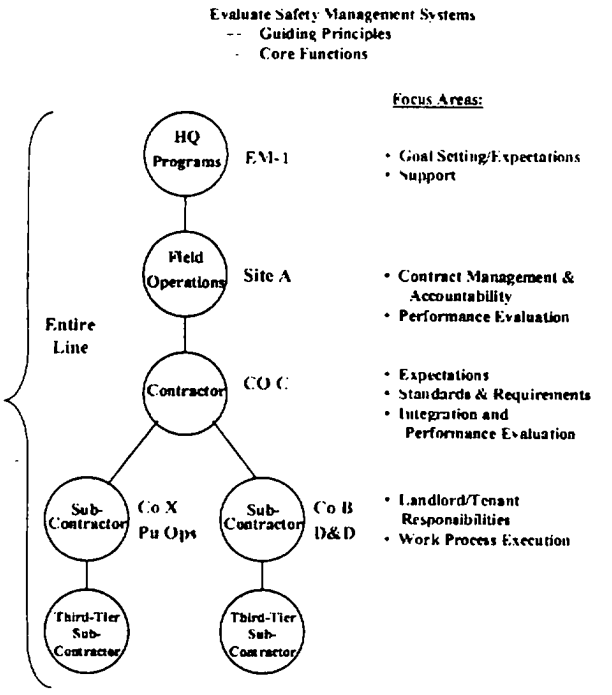
[illegible]*
[illegible]

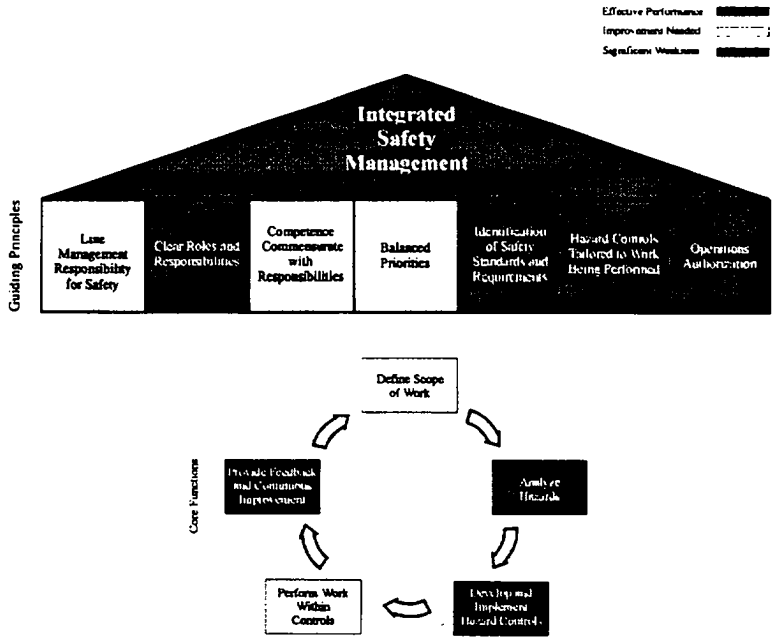
Dates
Scoping [illegible]
Evaluation March 22 – April 2, 1999

Admin
[illegible]

* Group Leaders

Evaluation Approach





Site A Safety Management Evaluation

Keys to Validation Success

1. Candid and frequent communications with line management
2. Daily management debriefs (a.m.)
3. Effective communication of concerns to functional managers/counterparts in line management
4. Quality Review Board
5. Site validation
6. Factual review of report (5 days)

Site A Safety Management Evaluation

Schedule

Scoping Visit	February 23-25
Planning	March 8-19
Onsite Evaluation	March 22 to April 2
Report Preparation	April 5-16
Quality Review Board	April 19
Site Validation & Closeout	April 21-23
Factual Review	April 26 - May 3
Report Issued	May

Appendix C-7
Safety Management Evaluation Plan
(Sample)

[redacted]

Site A

Integrated Safety Management Evaluation Plan

March 1999

U.S. Department of Energy
Office of Environment, Safety and Health
Office of Oversight

[redacted]

Office of Oversight

Responsible
DOE Line Programs: Assistant Secretary for Environmental Programs

Onsite Evaluation Dates: March 22 – April 2, 1999

Approved by:

_____ _____
Patrick Wiley, Team Leader Date

_____ _____
Michael A. Wall, Director Date
Office of ES&H Evaluations

EH Integrated Safety Management Evaluation
Site A Evaluation Plan

TABLE OF CONTENTS

EH Integrated Safety Management Evaluation
Site A Evaluation Plan

1.0 INTRODUCTION

An EH Integrated Safety Management Evaluation of Site A will be conducted by the Office of Oversight during the period of March through April 1999. The purpose of this evaluation is to determine the adequacy of integrated safety management systems in place and efforts to complete implementation of an integrated safety management system. This evaluation plan outlines the conceptual basis, the methodology, and the data collection activities, evaluation team responsibilities and composition, schedule, and report format.

2.0 CONCEPTUAL BASIS FOR EVALUATION

The basis for the evaluation is a conceptual framework or template that characterizes the principles and programs that are essential elements of a sound safety management program. This conceptual framework is centered on the objectives, principles, and functions for integrated safety management systems (ISMS) described in DOE Policy (DOE P 450.4). The DOE policy describes functions that the Department deems necessary to fulfill its mandate under its enabling legislation to provide "reasonable assurance that the safety and health risk of operating personnel and the public be minimized." Seven guiding principles are identified in the policy: line management responsibility for safety; clear roles and responsibilities; balanced priorities; competence commensurate with responsibilities; identification of safety standards and requirements; hazard controls tailored to work being performed; and operations authorization. The policy also describes five core functions, which provide a structured approach to perform work with rigor commensurate with hazards.

3.0 EVALUATION SCOPE AND METHODOLOGY

The evaluation will focus on the safety management systems and their execution. Where gaps or deficiencies in these systems have been self-identified and actions are underway, the focus will be on the adequacy of these actions towards successful implementation of ISMS. The methodology will ensure that the team evaluates the effectiveness of the Site A safety management program by applying the guiding principles, core functions, and their associated criteria. The entire line organization — i.e., Office of Environmental Management (EM), Site A Field Office, contractor, and selected subcontractors will be the focus of this evaluation as depicted in Figure 1. In order to understand site operations and how safety management is actually implemented, the application of the guiding principles and core functions to selected projects and facilities at Site A will be evaluated. These will include selected activities and associated prime-subcontractor functions associated with operation of Buildings 223, 333, and 435. Primary evaluation focus and key assessment areas for each of the buildings include:

1. Building 223, Company A – Landlord

   - Evaluation to focus on facility- and activity-level hazard analysis and work control for facility safety envelope and nuclear operations activities.

   - Key assessment areas to include: authorization basis implementation; conduct of nuclear operations program; maintenance of facility safety envelope and vital safety systems; operations authorization processes; and special nuclear materials processing, stabilization, and packaging activities.

2. Building 333, Company B – Landlord

   - Evaluation to focus on project- and activity-level hazard analysis and work control for decommissioning and demolition activities.

   - Key assessment areas to include: implementation of the integrated work planning and control manual for project- and activity-level D&D activities; hazardous, chemical, transuranic (TRU), radioactive waste treatment and management.

3. Building 435, Company B – Landlord

   - Application of Building 435 D&D lessons-learned for Building 333 decommissioning.

The evaluation will be conducted according to formal protocols and procedures, described in the EH-2 Appraisal Process Protocol. This document provides the general framework for the work processes used by the Office of Oversight for conducting evaluations and reviews. This Integrated Safety Management Evaluation Plan outlines the scope and conduct for the evaluation. Team members will develop individual evaluation plans (i.e., lines-of–inquiry, evaluation strategies) and schedules of on-site activities that supplement this overall evaluation plan, and are tailored to the site mission, operations, and evaluation scope. The evaluation team will collect data through interviews, document reviews, walkdowns, observation of activities, and performance testing. Interviews will be conducted with Headquarters, Rocky Flats Field Office, contractor managers, technical staff, hourly workers, union representatives, and selected subcontractors. Appendix X contains an overview of the evaluation activities and lines of inquiry that will be conducted to gather information for each criterion.

4.0 TEAM COMPOSITION AND RESPONSIBILITIES

To reflect the emphasis being placed on the effectiveness of safety management systems, the team includes a core group of five safety management specialists whose role is to evaluate the overall application of the guiding principles and the five core functions of safety management at the institutional level. The team also includes a group of technical specialists who have overall responsibility for evaluation of the five core functions of safety management at the facility-, project-, and activity-levels. The technical specialists will provide data gathering and analysis support to the management specialists with a primary focus on evaluation of selected work processes and their execution. Based on their technical background, each of the technical specialists will be assigned to one of two subgroups established to evaluate implementation of the five core functions at the facilities selected for review. The team composition and areas of responsibilities is shown below.

Team Members	Responsibility Area
Patrick Wiley, Team Leader	
Barbara Ann Wilson, Administrative Assistant	
Jean Smith, Administrative Assistant	

Management Specialists:

Robert Anderson, Group Leader:	Clear Roles and Responsibilities
Frank Foster:	Line Management Responsibility for Safety Balanced Priorities
Larry Nichols:	Competence Commensurate with Responsibilities
Judy Echols, Group Leader:	Identification of Standards and Requirements Institutional-Level Performance Feedback and Continuous Improvement
Bob West:	Institutional-Level Hazards Controls Operations Authorization

Technical Specialists:

Building 223, Company X – Landlord:	Integrated Work Control Program Manual Implementation Facility- and Activity-Level Five Core Function Implementation

Terry Stafford/Roy Clark, Sub-Group Leader
Don Sutton
Donna Bell
Ray Smith

Building 333/435, Company B – Landlord	Integrated Work Control Program Manual Implementation Project- and Activity-Level Five Core Function Implementation

Daniel Peers, Sub-Group Leader
Kathy Ivey
Tom Holland
Vince Bailey
Bob Lambert

5.0 COMMUNICATIONS AND ANALYSIS

During the 2 weeks of onsite evaluation, the evaluation team will review and discuss observations from the day's activities and analyze key observations and areas requiring follow-up during the conduct of daily evening meetings. Team management will provide a daily morning debrief to senior management at the site on emerging issues. A summary outline of emerging environment, safety and health management issues and key activities will be provided to the Deputy Assistant Secretary for Oversight on a daily basis. The entire team will also meet periodically to discuss and analyze issues, including meeting at the midpoint of the 2-week data collection period to collectively reprioritize the second week's activities based on information collected during the first week.

All team members will prepare daily report forms. These forms will be used as an internal team communication and analysis tool. The daily report forms will be used to enter data into "templates" which are an accumulation of strengths and weaknesses for each specific safety management criterion or technical discipline. This "template" is used for recording results, findings, and analysis. The template will be evaluated and analyzed on a daily basis by the specialists and team leadership. This analysis will

form the basis for the integration of information, the identification of management issues, the ratings for performance under each guiding principle/core function and its criteria, and writing the evaluation report. The analysis of daily report forms (see Appendix XX) and templates will also provide the basis for redirecting the team during the evaluation.

Based on observations and/or issues generated, the team will analyze the effectiveness of each criteria and associated attributes for each of the guiding principles and five core functions. Results and conclusions will be documented in a safety management evaluation report and ratings assigned. Color-ratings coded annunciation windows will be used to depict ratings are described in Appendix XXX. The results of these efforts will be provided in a draft report to DOE management for factual validation.

6.0 EVALUATION SCHEDULE

Scoping Visit	February 23 - 25, 1999
Germantown Planning	March 8 - 19, 1999
Onsite Evaluation Visit	March 22 - April 2, 1999
Analysis and Report Development	April 5 - 16, 1999
Quality Review Board	April 19, 1999
Report Validation and Closeout	April 21 - 23, 1999
Draft Report Site Comments due	May 3, 1999
Final Report Issued	June 1999

7.0 REPORT FORMAT AND VALIDATION

The evaluation report will be organized to provide perspectives on the seven guiding principles and five core functions of the safety management system at Site A. A draft of the evaluation report will be prepared during the two weeks following the onsite evaluation period using the processes described in the Appraisal Process Protocol. The draft report will be reviewed by a quality review board, and revised appropriately. A validation meeting with site representatives will be conducted to discuss the factual accuracy of the report. An additional period will be provided for the line management organization to provide written comments. After receiving factual comments in the validation process, the report will be finalized.

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APPENDIX X
EVALUATION CRITERIA AND ACTIVITIES

EVALUATION CRITERIA AND ACTIVITIES

The following tables provide an overview of the types of activities that will be conducted to collect information that will be used to evaluate the guiding principles and core functions.

Line Management Responsibility for Safety	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Policy and Expectations: Line management displays a commitment to protect the public, workers, and the environment. Safety policies and goals are documented, and initiatives are under way to improve ES&H programs and implement integrated safety management.	Review site ISM program documents. Review contract clause related to ISM. Interview senior level and mid-level DOE Operations Office, contractor and subcontractor managers, including Facility and Project Managers. Review schedule for implementations. Review HQ programs ES&H policy and goals.
Leadership: Line management has proactively established a leadership position in guiding line organizations, contractors, subcontractors and workers towards integrated safety management.	Review DOE Operations Office, contractor and subcontractor management plan(s) to determine how ES&H policy and goals are reflected in tasks. Verify that processes develop appropriate goals. Interview senior, mid-level, and Project Managers in DOE Operations Office, contractor and subcontractor managers to determine their understanding of ES&H policy and policy management procedures, how they confirm that ES&H policy and goals are effectively communicated to workers, and how workers are involved in ES&H policy development.
Worker Empowerment: Line managers recognize that active participation by workers is essential to maintain and improve protection of the public, workers, and the environment.	Review DOE Operations Office, contractor and subcontractor ES&H manuals to determine if they reflect ES&H policy. Interview contractor and subcontractor safety committee participants to determine their role in establishing and revising ES&H policy. Interview DOE Operations Office and contractor managers to ascertain citizens' role in or impact on ES&H policy formulation and implementation. Interview DOE Operations Office, contractor and subcontractor project and facility managers to determine their understanding and implementation of quality assurance policy.

Line Management Responsibility for Safety (Continued)	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
	Review DOE HQ and DOE Operations Office programs and policies to determine interrelationships, and effectiveness of communication between DOE Headquarters and the field. Review the DOE Operations Office and contractor ES&H Safety Plan to determine how it incorporates Quality Assurance (QA) policy and goals. Review contractor and subcontractor contracts to ascertain whether adequate ES&H performance is imbedded in these agreements, as well as associated penalties for inadequate performance. Review the personnel performance appraisal process and interview DOE Operations Office, contractor and subcontractor workers and managers work to ascertain which ES&H criteria are used and how they are measured. Interview DOE Operations Office, contractor and subcontractor line managers to determine if performance appraisals at the mid-levels and project/facility levels incorporate quantitative indicators to consistently measure QA performance, including accountability to close self-assessment actions. Interview DOE Operations Office, contractor and subcontractor managers to determine how workers are involved in improving safety performance. Interview union members and leadership to determine their involvement in ES&H decisions. Review DOE and contractor Employee Concerns Programs to determine timeliness and satisfactory resolution of employee concerns, whether all elements of DOE requirements are being addresses and sufficient resources are allocated to investigate and resolve concerns.

Clear Roles and Responsibilities	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Clear Lines of Authority and Responsibilities: Line management defines, documents and maintains clearly delineated roles and responsibilities for ES&H that provide a foundation for effectively integrating safety into site-wide operations. Pursuant to DOE M411.1, functions, responsibilities and authorities are defined, communicated, understood and implemented for: providing direction; defining scope of work; analyzing hazards; developing and implementing controls; performing work; and collecting feedback and pursing improvement.	Ascertain how DOE HQ, and DOE Operations Office are complying with the DOE Policy 450.1 *Functions, Responsibilities, and Authorities Manual* (FRAM) by reviewing similar specific sitewide documents, compliance/ implementation plans, and conducting interviews with senior and mid-level managers. Review organizational mission and function statements, and facility management agreements, to determine how ES&H responsibilities are addressed. Identify and review documents describing facility management systems and operational procedures relating to line program and ES&H support organizational roles.
Defined Responsibilities and Accountability: Line managers are responsible and accountable for ensuring that DOE facility operations and work practices are performed in a manner that adequately protects the public, workers, and the environment.	Determine if roles and responsibilities are documented and reflect current activities by reviewing position descriptions. Review mechanisms or special incentives to determine whether and how ES&H performance by organizations and individuals are encouraged, recognized, and rewarded.
Accountability for Performance: Line managers are accountable for safety performance through performance objectives and appraisal systems. Performance is explicitly tracked and measured, and inadequate performance should have visible and meaningful consequences. Line managers execute actions to attain and continuously improve the safety of their operations.	Query workers as to how they know their responsibilities, where they are documented, and what methods of communication are used to convey this information. Determine what mechanisms exist for communicating and adjudicating disputes, and the roles of DOE HQ program, DOE Operations Office, contractors and subcontractors in this process. Interview DOE HQ, DOE Operations Office, contractor and subcontractor managers and workers to determine what methods of communication are used to convey important ES&H information within and between the organizations. Interview selected facility representatives to understand their individual and organizational functions and responsibilities.

Define the Scope of Work; Balanced Priorities	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Translate Mission into Work; Set Expectations: Line management ensures that DOE and its contractors have and use defined mechanisms to define the scope, schedule and cost of work and to identify and communicate associated risks and hazards. **Provide for Integration:** ES&H functions and activities are integrated into program, activity, and work planning at all levels of the line organization. **Project Prioritization and Resource Management Systems:** Line managers at appropriate levels within the organization understand and synthesize program goals and risks in order to effectively deploy resources to adequately address both. Line managers approve and monitor ES&H plans and budgets to promote consistency with program requirements.	Interview senior level and Project level managers in DOE HQ, DOE Operations Office, and contractor and subcontractor personnel responsible for budgeting to determine how ES&H policy and goals are reflected in funding decisions. Review DOE Operations Office and contractor site strategic and/or institutional plan(s) for consistency and flow down of ES&H funding priorities from Headquarters to the field. Review procedures for incorporating ES&H performance in the ES&H Safety Plan and interview the personnel responsible for preparing these tasks. Review the procedures for preparing risk data sheets, and interview the personnel for preparing such documents to evaluate the risk management prioritization system. Interview senior budgeting personnel from DOE HQ and DOE Operations Office programs to understand how the risk management system is communicated from DOE Headquarters to the field, and how the field implements it. Review contractor ES&H Safety Plan to determine interfaces in planning assumptions, establishing goals and objectives, and establishing sitewide and facility objectives and implementation activities. Review the utility of DOE Operations Office, contractor and subcontractor management information systems in addressing ES&H safety and health risks. Evaluate integration of ES&H planning into facility-level and activity-level work planning.

Competence Commensurate with Responsibilities	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Staffing and Qualifications: In accordance with DOE M 411.1, line managers and staff demonstrates a high degree of technical competence and a good understanding of programs and facilities. **Technical Competence:** Workers and managers are technically competent to perform jobs and are appropriately educated and knowledgeable of the hazards, vulnerabilities, and risks. **Training Programs:** In accordance with DOE M 411.1, line managers establish and implement processes to ensure that ES&H training programs effectively measure and improve performance and identify training needs.	Interview DOE and contractor managers and review strategic plans to determine whether they have a strategic process to determine staffing needs and whether these requirements are integrated into staffing decisions within divisions, projects, and operations. Interview DOE and contractor managers to determine whether the process for addressing short and long-term ES&H staffing needs is effective. Interview DOE, contractor, and subcontractor personnel, review staffing plans and actual staffing levels, to determine whether appropriate levels of qualified staff are available to support safe operations. Review recruiting policies and implementation strategies and interview DOE and contractor managers and human resource staff to determine their effectiveness in attracting and retaining personnel with needed managerial, technical, and operational expertise and experience. Interview DOE and contractor managers, matrix managers and project and program managers, to determine effectiveness of processes for identifying ES&H resources to support line programs. Interview managers and human resources personnel to determine how core competencies are recognized and maintained in relation to changing site mission, work site hazard, and non-routine occurrences.

Competence Commensurate with Responsibilities (Continued)	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
	Interview DOE and contractor managers and training personnel and review documents to determine: • How performance improvement needs are identified and training programs are developed to meet site competence requirements. • Whether career/skill development processes are available to workers and managers to promote a technically competent workforce. • Whether key indicators of worker and operating performance are used to revise training programs to ensure workers are meeting established safety and performance goals. • How lessons learned are reviewed and incorporated as appropriate into training programs. • Whether technical training is periodically reviewed and evaluated for content, delivery, cost effectiveness, and adherence to learning objectives. • How job-specific requirements (and/or hazards) are addressed or incorporated into training activities, or revised when changes in job tasks occur. Review training programs and implementation to determine and verify the implementation of training requirements as implemented at DOE Operations Office. Review documents, observe operations and interview project, building and/or facility managers, and other ES&H-related positions to determine whether personnel demonstrate the requisite skills and abilities to safely perform their assigned duties and to respond to workplace hazards, and determine whether training and qualification programs provide the required understanding of work site hazards.

Identification of Standards and Requirements; Analyze the Hazards	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Hazards Analysis and Work Planning: Prior to the initiation of work, line management identifies, analyzes, and categorizes the hazards associated with the work activity so that the appropriate administrative and engineering controls can be put in place to prevent or mitigate those hazards. **Identification of Standards and Requirements:** Line management has identified, communicated, executed, and monitored all applicable DOE requirements, and Federal, state, and local regulations.	Interview DOE HQ and DOE Operations Office managers and selected staff to determine requirements related roles and responsibilities related to ES&H programs. Interview contractor and subcontractor managers and selected staff to determine key organizations and programs related to the requirement management process(es) at the site. Review process for transmittal of requirements from DOE HQ to DOE Operations Office. Review processes(s) for transmittal of requirements from DOE Operations Office to the contractor and subcontractors. Interview DOE line managers to determine that programs are in place to ensure effective transmittal of requirements to the contractor. (This also includes revised and new requirements.) Interview DOE managers and selected staff to determine key organizations and programs related to the requirements management process. Review the site and facility/activity specific processes for Requirements Management System(s) (RMS) for the site; interview key personnel to determine whether the processes are understood at operational levels and if the processes result in effective implementation of requirements. (RMS may include Standards Requirements Identification Documents (S/RIDs), Work Smart set of standards or laboratory set of standards.) Interview key DOE Operations Office, contractor, and subcontractor managers and review contract documents to determine whether applicable requirements are incorporated into existing contracts and subcontracts. Interview contractor managers and technical specialists to determine if and how they recognize and understand what requirements apply to their facilities and programs.

Hazard Controls Tailored to Work Being Performed; Develop and Implement Hazard Controls	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Identify Controls to Prevent/Mitigate Hazards: Line management has established processes for identifying and tailoring controls for hazards associated with all facilities, operations and activities. **Establish Safety Controls:** Hazard controls are established based on the understanding of the hazards, vulnerabilities, and risks in the work environment (e.g., nuclear, chemical, industrial, physical, and natural phenomena). **Implement Controls:** Line management has established methods to implement controls at every level and which ensure that controls remain in effect as long as hazards are present.	Review the process for review and approval of safety analysis documentation (including review of hazard evaluation processes for Preliminary Hazard Analysis (PHAs), Preliminary Hazard Review (PHRs), Basis for Interim Operation (BIOs), Safety Analysis Reports (SARs), Hazards Analysis Special Permit (HASP), Justification for Continued Operation (JCOs), Basis for Operation (BFO)) Review selected activities (work packages) to determine if hazards analysis, exposure assessment, medical monitoring and worker involvement is built into early work planning, and that appropriate administrative and engineering controls have been established. Determine the status of Implementation Plans and evaluate review and approval process for sample of select DOE Orders. Review status of safety/authorization basis documents for facilities under review (status of Safety Analysis Reports (SAR) and Operation Safety Requirement / Technical Safety Requirement (OSR/TSR) updates, BIO development, JCOs, BFO, and HASP). Interview DOE and contractor management and selected staff with safety and health documentation related responsibilities. Review DOE HQ and DOE Operations Office on directives for safety and health documentation. Review the Unreviewed Safety Question (USQ) process including reports and assessments of adequacy and effectiveness. Walk down facilities and procedures to verify implementation of authorization basis commitments. Review policies and documents and interview managers to determine whether policy creates the environment for workers to freely express ideas regarding health and safety issues without retribution. Review procedures and interview managers and workers to determine whether an effective process for incorporating worker input exists and is included during work planning.

Hazards Controls (Continued)	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
	Interview DOE and contractor managers and workers and review procedures and incident reports to determine whether a stop work/restart authorization process exists and circumstances associated with its application are clearly defined and understood. Review ES&H-related committee charters, composition, meeting minutes, and action items and interview committee members and officers to determine if ES&H issues are being identified and addressed in work planning and control activities.

Operations Authorization; Perform Work Within Controls	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Confirm Readiness: Line management has established and implemented processes to confirm that a facility or work process/activity, as well as the work force, are in an adequate state of readiness prior to authorizing the performance of work. **Operations Authorization:** Line management has assumed the responsibility for ensuring that all operations are reviewed and authorized at a level commensurate with the hazards and has established work authorization processes for both facility- and activity-level operations. All work activities, including maintenance modifications, are subject to authorization based on appropriate review of the preparation and readiness to perform work. **Perform Work Safely:** Line managers are responsible for implementing programs in compliance with defined requirements. Line managers ensure that DOE personnel, contractors, and subcontractors execute defined requirements in such a manner that employees, the public, and the environment are protected from adverse consequences.	Interview DOE HQ, DOE Operations Office, contractor, and subcontractor managers and staff regarding the mechanisms used to ensure that conditions and requirements have been appropriately identified, reviewed, and achieved prior to starting or resuming operations of work activities -- at all levels and varying degrees of complexities. Review standards and requirements, and sample documentation including maintenance and operations, design reviews, experiment and work plan reviews, and authorization approvals. Conduct field inspection and observe work evaluations. For the selected facility-, project-, and activity-level activities for review, determine if formal site conduct of operations and work planning and control process/program are effective. Work observations will focus on: • Are work activities scheduled on the plan of the day/week and are these meetings effective in addressing scheduling conflicts/safety systems or facility availability issues? • Are activities authorized by the shift manager? • Is proper authorization obtained prior to performing the work? • Are all precautions and prerequisites met including facility/system configurations, hazard controls, and other conditions? • Are all training and pre-job briefings completed? • Are all necessary support staff (Radiological Control Techniques (RCTs), Industrial Hygiene (IH), etc.) interfaces and coordination defined and effective? • Are Technical Work Documents (TWDs) and permits adhered to including working within defined work scopes, work instructions, and hazard controls? • Are workers knowledgeable of activity/project level instructions and are they adequately trained/experienced so the work can be performed as described in the TWDs? • Are activities/projects stopped by workers/supervision when work cannot be performed as described in TWDs or when safety concerns are encountered? • When work documents are changed are defined processes for revisions/approvals followed?

Operations Authorization; Perform Work Within Controls (Continued)	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
	• Are special permits (Radiological Work Permits (RWPs), hot work, confined space work) effectively followed to control hazards? • Is there periodic and adequate supervision of work activities? • Are postings, barriers, criticality limits, sampling requirements, stop work limits, and proper Personal Protection Equipment (PPE) use complied with?

Performance Feedback and Continuous Improvement	
Evaluation Criteria	Evaluation Activities and Lines of Inquiry
Assessment and Measurement of Performance for Continuous Improvement: Line management has established formalized mechanisms and processes for collecting both qualitative and quantitative information on ES&H performance as the basis for informed management decisions to improve safety performance though assessments, performance measures, and other feedback mechanisms.	Interview DOE Operations Office, contractor and subcontractor managers and staff personnel to determine how self-assessment and independent assessment is accomplished and how it is utilized to improve ES&H performance. Interview DOE, contractor and subcontractor Project Managers regarding oversight of the projects/contract performance evaluation to contract requirements. Evaluate adequacy of contract performance measures.
Follow-up and Correction of Safety Management System Deficiencies: Line management has established formalized process to capture and track ES&H-related deficiencies and associated corrective actions. Line management has executed mechanisms, such as independent verification and performance-based evaluation, to ensure that corrective actions are timely, complete, and effective.	Interview managers and Facility Representatives and review program documents for evaluation of the DOE Operations Office Facility Representative Program. Review standards and requirements, schedules, and completed assessments for adequacy regarding scope, frequency, thoroughness, documentation, corrective action (including extent of condition and root cause determinations), and issue closure.
Lessons-Learned: Line management has established a method to capture ES&H-related deficiencies, to identify causes and generic applicability, and to disseminate lessons learned within and across organizations	Interview managers and staff regarding the use of other assessment and feedback tools such as performance indicators, lessons learned, occurrence reporting, contract term evaluations, BIO/SAR and design reviews, ES&H-related committees, and work plan debriefings. Review standards and requirements, schedules, and samples of documentation of these other assessment and feedback tools for adequacy and implementation. Interview managers regarding the assessment and feedback mechanisms they have access to and employ, and the level of knowledge of ES&H issues and corrective action status for activities in their area of responsibility. Review corrective actions process and determine the extent to which deficiencies are identified, corrected, effectively tracked and trended, and communicated and incorporated into training curriculum and lessons-learned program.

APPENDIX XX
DAILY REPORT FORM

SAFETY MANAGEMENT EVALUATION
Site A

DAILY REPORT

Name:	Date:
Area of Responsibility:	
Today's Activities:	
Observations/Supporting Evidence	
Difficulties Encountered:	
Key Activities Tomorrow:	

APPENDIX XXX
RATING COLOR CODES

RATING COLOR CODES

This rating system utilizes colored panels to provide a visual summary of performance within safety management systems, programs, or functions. The colors include green for acceptable or normal performance, yellow where improvement and additional attention is needed, and red where significant weaknesses are identified and management attention and action is warranted. This color rating system is intended to provide line management with a tool for determining where resources might be applied toward improving safety management. It is not intended to provide a relative rating between specific facilities or programs at different sites because of the many differences in missions, hazards, and facility life cycles, and the fact that these EH evaluations use a sampling technique to evaluate management systems and programs.

The advantage of this rating system is the ability to communicate performance information quickly and simply. The rating colors can also be changed during subsequent evaluations to recognize relative improvements or to identify deteriorating performance.

Color	Programmatic Indication	Management response
Red	significant weakness	immediate attention, focus, and action
Yellow	improvement needed	significantly increased attention
Green	effective performance	address only specific deficiencies

Explanation

Red: Indicates senior management needs to immediately focus attention and resources necessary to resolve management system or programmatic weaknesses identified. A significant weakness would normally be a rollup of a number of issues identified within a management system or program. A red annunciator window would, in most cases, warrant a line organization corrective action plan with assigned responsibilities and management follow-up to ensure effective resolution and improvement.

Yellow: Indicates a need for improvement in and a significant increase in attention to a management system or program. This annunciator window color is anticipatory and provides an opportunity for line management to correct and improve performance before it results in a significant weakness and a red annunciator window.

Green: Indicates effective overall performance in a management system or program. There may be specific issues or deficiencies that require attention and resolution but that does not degrade the overall effectiveness of the system or program.

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Appendix C-8
Planning Tools

Key Documents for Review
Key Observations/Walkdowns
Evaluation Planning—Key Interviews
Activity Planning

Key Documents for Review

Document Identification	Need in Germantown	Received Y/N

Key Observations/Walkdowns

Facility	Position	Date/Time Arranged

Evaluation Planning
Key Interviews

Name	Position	Date/Time Arranged

Activity Planning

	Team Member: _____Facility Team: _____ Functional Area: _____
OBJECTIVE	**ACTIVITY**
Principle #1: Line managers are responsible and accountable for safety—policy and expectations. • DOE - Clear safety policy, goals, and ISM expectations. • Contractor - Clear set of policies and expectations for ISM. • ISM directives reflect DOE requirements. • Senior management provides effective direction for ISM throughout the site. • Elements of ISM are institutionalized into all site programs and activities. • Deficiencies in ISM program are identified and resolved on a timely basis.	

Appendix C-9
Technical Group Evaluation Plan
(Sample)

EVALUATION PLAN

Site A ISME
Technical Group
Work Activity Sets

Group A:

Prime Contractor Evaluation Scope:	Company X
Facility Evaluation Scope:	Building 223
Team Composition:	Terry Stafford, Leader Roy Clark Don Sutton Donna Bell Ray Smith
Work Activity Sets:	
Work Activity Observations	Facility AB/TSR surveillance activities (2 or 3) Residue Stabilization Operations (Wet Combustibles/Sand Slag and Crucible) Major Project Work (PuSPS Installation/Fire and Security Alarm Repair) 1or 2 Minor Maintenance Activities (IWCP Definition) 1or 2 Medium and High Hazard Maintenance Activities (IWCP Definition)
Key Document Reviews	IWCP Manual, COOP Manual, B-223 BIO, Operational Procedures/Work Packages for Above Activities, Recent B-223 ORPS Reports, Training Records,
Key Interviews	Facility Management, Operators, Supervisors, Work Planners, Planning Team Members, Maintenance Craft, Maintenance Foreman, DOE Fac Reps,

Group B:

Prime Contractor Evaluation Scope:	Company B
Facility Evaluation Scope:	Building 333
Team Composition:	Daniel Peers, Leader Kathy Ivey Tom Holland Vince Bailey Bob Lambert
Work Activity Sets:	
Work Activity Observations	Building 333 Demolition Building 333/Annex A Ventilation Duct Removal Building 333 Room 133 Glovebox Removal (High Am content) Building 333 Asbestos Abatement Activities Building 333 Utility Strip-out
Key Document Reviews	IWCP Manual, B-333 D&D Project Plan, B-333 BIO, Operational Procedures/Work Packages for Above Activities, Recent B-333 ORPS Reports, Training Records,
Key Interviews	Facility Management, D&D Operators, Supervisors, Work Planners, Planning Team Members, Maintenance Craft, Maintenance Foreman, DOE Fac Reps,

EVALUATION PLAN

Site A ISME
Technical Group A
Company X, Bldg. 223

Define the Scope of Work	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the performance of the following: -Work Identification, Coordination, and Authorization: • Activity/Project Identification • Activity/Project Prioritization • Activity/Project Authorization (for planning and performance) • Activity/Project Planning (activity scope and boundaries established) • Activity/Project Scheduling - Establishing Required Resources - Qualifying Individuals	**Observe 2 or 3 TSR surveillance activities and review the new B-223 BIO/facility surveillance procedures.** • Do surveillance procedures and administrative programs adequately define the scope of work as outlined in BIO TSR requirements? **Review facility level maintenance planning procedures and scheduling activities.** • Has the facility established an appropriate level of preventive maintenance as evidenced by facility availability rates and safety significance /nature of equipment failures? • Is the backlog of PMs or CMs excessive? • Has the facility implemented a system for prioritizing maintenance activities? **Review selected work activities and corresponding technical work document (TWD).** • Is the work scope clearly defined in TWDs? • Is the actual work performed consistent with the work scope definition? • Are work packages complete with adequate procedures, instructions and drawings? • Has the work activity been properly categorized (IWCP level) based on complexity/initial screens and is the level of work scope definition and planning consistent with its categorization? **Observe facility level activities.** • Are activities scheduled on the plan of the day/week and are POD/POW meetings effective in addressing scheduling conflicts/safety system or facility availability issues? • Are activities authorized by the shift manager? • Have the activities received USQ screens or are authorized under the existing ABDL? • Are pre-job briefings effective in communicating work scope, prerequisites, and permit requirements (LO/TO, RWP, etc.) to all workers?

Analyze the Hazards	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the performance of the following: - Individual Activity Hazards Analysis - Project Level Hazards Analysis - Facility Level Hazards Analysis	**Interview workers and perform follow-up record reviews.** • Have adequate resources been identified for the performance of work? • Are there enough qualified operators and support staff such as Rad Techs, Crit Eng, IH/IS, and QA? **Have workers, planners, project managers, and supervisors received training on the site's ISM/IWCP processes?** **Review the new B-223 BIO and associated JCOs.** • Have all hazards associated with individual activities/projects been identified and analyzed? • Has DOE appropriately reviewed and approved all revisions and changes with adequate technical justification? Is the USQ process appropriately utilized? **Review selected work activities and corresponding TWD's.** • Have all hazards associated with individual activities/projects been identified and analyzed? • Are workers knowledgeable of activity/project level hazards? • Are hazards adequately communicated to all workers by way of TWDs, permits, and pre-job briefs? • Are current/controlled documents, drawings, surveys (Rad/IH), and other data used in hazard analyses? • Are final hazard assessments (JHAs, AHAs, etc.) included in work packages and are they adequately completed. • When work scope and TWD tasks are changed are the Hazard Assessments reviewed for impacts? **Perform Facility level walkthroughs** • Are facility level hazards adequately identified and addressed in facility AB documents? **Interview Work Planners, Planning Teams, Responsible Managers, and Project Managers** • Are workers and appropriate safety professionals (RP, CE, IH, IS) included on planning teams and are they involved with activity and project level hazards analysis? • Are job sites walked down by planning teams to identify task-related hazards, co-located hazards, or environmental hazards?

Analyze the Hazards	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
	Review IWCP Manual • Are standardized hazard assessment processes developed and are they graded in their approach based on work complexity, performance frequency, and initial hazards screens? • Are the hazard assessment techniques adequate for maintaining planning efficiency while ensuring consistent hazard identification? • Are hazard analysis checklists comprehensive? Are JHAs, USQ screens, and safety evaluations integrated into hazard analysis processes?

Control the Hazards

EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the development of the following: - Individual Activity Hazard Controls - Project Level Hazard Controls - Facility Level Hazard Controls	**Review the new B-223 BIO, TSRs, and associated surveillance procedures, and Observe 2 or 3 TSR surveillance activities.** • Are hazard controls identified, developed and clearly incorporated into the TSRs? • Are the surveillance requirements comprehensive enough to adequately ensure operability of the associated equipment? • Are the surveillance requirements achievable with existing equipment and instrumentation? **Review selected work activities and corresponding TWD's** • Are hazard controls associated with individual activities/projects identified, developed and clearly incorporated into individual TWDs? • Are the controls easily understood and effective in mitigating all of the associated hazards? • Are workers knowledgeable of activity/project level hazard controls? • Are hazard controls adequately communicated to all workers by way of TWDs, permits, and pre-job briefs? • Are special permits (RWPs, hot work, confined space) effectively employed to control hazards? • When work scope and TWD tasks are changed are the hazard controls reviewed for impacts? **Perform Facility level walkthroughs.** • Are facility level chemical, industrial, and radiological hazards effectively controlled by way of barriers, postings, PPE requirements, permits, storage cabinets, etc.? • Are facility operations conducted consistent with AB designated controls (TSR/Admin controls). **Interview Work Planners, Planning Teams, Responsible Managers, and Project Managers.** • Are hazard controls being developed using teaming versus series approaches? • Are workers and appropriate safety professionals (RP, CE, IH, IS) included on planning teams and are they involved with activity and project level hazard control development? • Are hazard control sets for higher risk activities/projects evaluated for reliability and are hazard control failure consequences determined/considered?

Control the Hazards	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
	Review IWCP Manual • Are standardized hazard control sets developed and used and are they graded in their approach based on work complexity, performance frequency, and initial hazards screens? • Are hazard control sets comprehensive? **Are independent safety reviews required for higher-level hazard control sets?**

Perform Work Within Controls	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
A formal site Conduct of Operations Program has been developed and effectively implemented for the following: - Operational and Maintenance Activities - Project Level Activities - Facility Level Activities	**Conduct field inspection and reviews of work evolutions and TSR surveillance activities.** • Is proper authorization obtained prior to performing the work? • Are all precautions and prerequisites met including facility/system configurations, hazard controls, and other conditions? • Are all training and pre-job briefings completed? • Are all necessary support staff (RCTs, IH, CE, QA, etc.) interfaces and coordination defined and effective? • Are TWDs adhered to including working within defined work scopes, work instructions, and hazard controls? • Are workers knowledgeable of activity/project level instructions and are they adequately trained/experienced so the work can be performed as described in the TWDs? • Are activities/projects stopped by workers/supervision when work cannot be performed as described in TWDs or when safety concerns are encountered? • When work documents are changed are defined processes for revision/approvals followed? • Are permits (RWPs, hot work, confined space work) effectively followed to control hazards? • Is there periodic and adequate supervision of work activities? • Are postings, barriers, criticality limits, sampling requirements, stop work limits, and proper PPE use complied with?

Feedback and Continuous Improvement	
EVALUATION CRITERIA	EVALUATION ACTIVITY AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the following: -Individual, Facility and Project Specific Feedback and Lessons Learned -Self Assessment Corrective Action -Occurrence Reporting	**Review selected work activities and corresponding TWD's.** • Are effective self-assessments of work control processes conducted including defining work, hazard analysis, hazard controls and work within controls? • Do work activities and TWD's for repeat work properly reflect integration of self-assessment/lessons learned information? **Conduct field inspection and reviews of work evolutions.** • Are post work critiques effectively utilized to identify lessons learned and improvements in areas such as hazards analysis, hazard controls, work definition, resource allocation or work within controls? • Are problems encountered in conducting work with procedures, permits, work packages, work planning effectively fed back into processes for continued improvement? **Interview Work Planners, Planning Teams, Responsible Managers, and Project Managers.** • Are events, accidents and near misses effectively investigated, root causes identified corrective actions implemented and lessons learned disseminated? • Are critiques for events and accidents effective and timely and are employees written statements obtained? • Are management and supervisory walkthroughs and observations of work planning and control used effectively to accomplish continuous improvement? • Is training related to ISM, or work and hazards control critiqued by participants and used to accomplish improvement to training?

EVALUATION PLAN

Site A ISME
Technical Group B
Company B, Bldg. 333

Define the Scope of Work	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the performance of the following: -Work Identification, Coordination, and Authorization: • Activity/Project Identification • Activity/Project Prioritization • Activity/Project Authorization (for planning and performance) • Activity/Project Planning (activity scope and boundaries established) Activity/Project Scheduling - Establishing Required Resources - Qualifying Individuals	**Review D&D Project Execution Plan for 333 cluster and available Project Level Documents for C435** • Has the building's D&D project been translated into discrete work packages with clear start/stop boundaries? • Has the sequencing of D&D activities been effective in mitigating risks and ensuring safety system availability when needed? • Is the selection of work method processes and activities consistent with anticipated hazards? **Review 333 work packages and corresponding technical support documents** • Is the work scope clearly defined? • Are work packages complete with adequate procedures, instructions and drawings? • Has the work activity been properly categorized (IWCP level) based on complexity/initial screens and is the level of work scope definition and planning consistent with its categorization? • Are the appropriate personnel involved in defining the work (i.e. tech specialists, facility manager, etc)? **Observe facility level activities in 333.** • Are activities scheduled on the plan of the day/week and are POD/POW meetings effective in addressing scheduling conflicts/safety system or facility availability issues? • Are activities authorized by the shift manager? • Have the activities received USQ screens? • Are pre-job briefings effective in communicating work scope, prerequisites, and permit requirements (LO/TO, RWP, etc.) to all workers? **Interview workers and first line supervisors and perform follow-up records reviews.** • Have adequate personnel and equipment resources been identified for the performance of work? • Are there enough qualified operators and support staff such as Rad Techs, Waste Handlers, Crit Eng, IH/IS, and QA? • Have workers, planners, project managers, and supervisors received training on the site's ISM/IWCP processes?

Analyze the Hazards	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the performance of the following: - Individual Activity Hazards Analysis - Project Level Hazards Analysis - Facility Level Hazards Analysis	**Review 333 work packages and observe 333 work activities.** • Have all hazards associated with individual activities/projects been identified and analyzed? Are they sufficiently detailed to identify controls? • Are hazards adequately communicated to all workers by way of work packages, permits, and pre-job briefs? • Are current/controlled documents, drawings, surveys (Rad/IH), and other data used in hazard analyses? • Are final hazard assessments (JHAs, AHAs, etc.) included in work packages and are they adequately completed. • When work scope and work packages tasks are changed are the Hazard Assessments reviewed for impacts? • Do institutional level ES&H procedures address the hazard analysis process at the work level, and are such procedures being implemented? **Perform Facility level walkthroughs** • Are facility level hazards adequately identified and consistent with facility AB and other hazard analysis documents? • Are D&D work activities adequately bounded by existing AB documents? **Interview Work Planners, Planning Teams, Responsible Managers, and Project Managers** • Are hazard analyses being conducted using teaming versus series approaches? • Are workers knowledgeable of activity/project level hazards? • Are workers and appropriate safety professionals (RP, CE, IH, IS, Env.Prot.) included on planning teams and are they involved with activity and project level hazards analysis? • Are thresholds identified for involvement of ES&H in the hazard analysis process? • Are job sites walked down by planning teams to identify task related hazards, co-located hazards, or environmental hazards? **Review IWCP Manual** • Are standardized hazard assessment processes developed and are they graded in their approach based on work complexity, performance frequency, and initial hazards screens? • Are the hazard assessment techniques adequate for maintaining planning efficiency while ensuring consistent hazard identification? • Are hazard analysis checklists comprehensive? • Are independent safety reviews required for higher level hazard assessments? • Are JHAs, USQ screens, and safety evaluations integrated into hazard analysis processes?

Control the Hazards

EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for the development of the following: - Individual Activity Hazard Controls - Project Level Hazard Controls - Facility Level Hazard Controls	**Review 333 work packages and observe 333 work activities.** • Are hazard controls associated with individual activities/projects identified, developed and clearly incorporated into individual work packages? • Are the controls easily understood, commensurate with the risk and effective in mitigating all of the associated hazards? • Are hazard controls adequately communicated to all workers by way of work packages, permits, and pre-job briefs? • Are workers/supervisors work stop authorities clearly defined for unexpected hazards or safety concerns? • Are special permits (RWPs, hot work) effectively employed to control hazards? • When work scope and TWD tasks are changed are the hazard controls reviewed for impacts? **Perform Facility level walkthroughs.** • Are facility level chemical, industrial, and radiological hazards effectively controlled by way of barriers, postings, labeling, PPE requirements, permits, storage cabinets, etc.? • Is appropriate hazard identification documentation (i.e. MSDS, RWPs) readily available in the workplace. • Are facility operations conducted consistent with AB designated controls (TSR/Admin controls). **Interview Work Planners, Planning Teams, Responsible Managers, and Project Managers.** • Are hazard controls being developed using teaming versus series approaches? • Are workers knowledgeable of activity/project level hazard controls and documentation? • Are workers and appropriate safety professionals included on planning teams and are they involved with activity and project level hazard control development? • Are training mockups and other methods used to develop, assess the effectiveness, and improve the implementation of identified controls? • Are hazard control sets for higher risk activities/projects evaluated for reliability and are hazard control failure consequences determined/considered? **Review IWCP Manual** • Are standardized hazard controls developed and used and are they graded in their approach based on work complexity, performance frequency, and initial hazards screens? • Are the hazard controls comprehensive and adequate for maintaining planning efficiency while ensuring hazard mitigation? • Are corresponding worker training requirements incorporated into controls and hazard assessments? • Are independent safety reviews required for higher level hazard controls?

Perform Work Within Controls	
EVALUATION CRITERIA	EVALUATION ACTIVITIES AND LINES OF INQUIRY
A formal site conduct of operations Program has been developed and effectively implemented for the following: - Operational and Maintenance Activities - Project Level Activities - Facility Level Activities Work is performed and managed in a controlled manner in accordance with all requirements and safety management performance expectations.	**Conduct field inspection and reviews of work evolutions.** • Is proper authorization obtained prior to performing the work? • Is the actual work performed consistent with the work scope definition? • Are all precautions and prerequisites met including facility/system configurations, hazard controls, and other conditions? • Are all training and pre-job briefings completed? • Are all necessary support staff (RCTs, IH, QA, Waste, etc.) interfaces and coordination defined and effective? • Are work packages, procedures and permits adhered to including working within defined work scopes, work instructions, and hazard controls? • Are workers knowledgeable of activity/project level instructions and are they adequately trained/experienced so the work can be performed as described in the work packages? • Are activities/projects stopped by workers/supervision when work cannot be performed as described in work packages or when safety concerns are encountered? • Are ongoing hazards assessments (additional rad surveys, airborne monitoring, etc.) conducted to ensure work hazards are not changing and work controls remain effective. • When work documents are changed are defined processes for revision/approvals followed? • Are special permits (RWPs, hot work, confined space work) effectively followed to control hazards? • Is there periodic and adequate supervision of work activities? • Are postings, barriers, limits, sampling and monitoring requirements, stop work limits, and proper PPE use complied with? • Are hazard controls effective? • Have any new or previously unrecognized work hazards developed during the performance of work activities?

Feedback and Continuous Improvement	
EVALUATION CRITERIA	EVALUATION ACTIVITY AND LINES OF INQUIRY
Management (facility or project level) systems are developed and effectively implemented for identification and dissemination of the following: -Individual, Facility and Project Specific Feedback and Lessons Learned information -Self Assessment Corrective Action -Occurrence Reporting	**Review work packages and occurrence/lessons learned documentation from prior events** • Are effective self assessments of work control processes conducted including defining work, hazards analysis, hazard controls and work within controls? • Do 333 work packages properly reflect integration of self assessment/lessons learned information from prior work of a similar nature and in planning efforts for 333? • Have lessons learned external to the site (but applicable to the work) been incorporated into the work planning processes? **Conduct field inspection and reviews of work evolutions.** • Are post work critiques effectively utilized to identify lessons learned and improvements in areas such as hazards analysis, hazard controls, work definition, resource allocation or work within controls? • Are problems encountered in conducting work with procedures, permits, work packages, work planning effectively fed back into processes for continued improvement? **Interview Work Planners, Planning Teams, Responsible Managers, Project Managers and Facility Representatives.** • Are events, accidents and near misses effectively tracked, investigated, root causes identified corrective actions implemented and lessons learned disseminated? • Are critiques for events and accidents effective and timely and are employees written statements obtained? • Are management and supervisory walkthroughs and observations of work planning and control used effectively to accomplish continuous improvement? • Is the DOE Facility Representative Program effectively utilized in fostering feedback and continuous improvement? • Is training related to ISM, or work and hazards control critiqued by participants and used to accomplish improvement to training?

Appendix C-10
Individual Schedule of Onsite Activities

Sample Schedule of Onsite Activities

Person: **Janet Williams** **Revised:** 04/26/00 07:23 PM
Topical Team: GP-5: Standards and Requirements; Institutional Core Function 5 (Feedback)

Date/ Time	Mon. 04/22/00	Tues. 04/23/00	Wed. 04/24/00	Thurs. 04/25/00	Fri. 04/26/00	Sat. 04/27/00
Before 7:00 AM						
7:00 AM		07:00AM - 08:00AM - Weekly BR Safety Meeting		07:00AM - 08:00AM – Tom MacDonnel, BF Lessons Learned, Bldg. T254A		
8:00 AM		08:00AM - 09:00AM – Bill Houchin, SSOC Assessment Program, Bldg. 33, Rm. 135B	08:00AM - 09:00AM – Andy Sunborg, Linda Beall, Plant Action Tracking System, Bldg T112G, Rm 144			
9:00 AM			09:30AM - 10:30AM – Paul Vincent, SSOC Performance Assurance, Bldg 256, Rm 112	09:00AM - 10:00AM – Nancy Copeland, DOE BFO, Bldg 334, Rm223		
10:00 AM		10:00AM - 11:00AM – Sharon Bryan, BRFO Performance Assessment				
11:00 AM			11:00AM - 12:00PM – Butch Stanton, Carol Hummel, BRS Performance Assurance, Bldg 200, Rm 194		11:00AM - 12:30PM – Donna Lane, BFO AM for Field and Performance Assessment	

12:00 PM			12:30PM - 01:30PM – Frank Francis, BF Independent Oversight Group, Bldg 334, Rm 146			
1:00 PM	01:00PM - 02:00PM – Rita Wilson and Tom Anderson, BRS Assessment Program			01:00PM - 02:30PM – Jim Jacobs, BF IS/IH Program Division Head Bldg 333, Rm 274		
2:00 PM						
3:00 PM		03:00PM – 04:00PM – Manny Mota, Steve Nance, Bonnie Smith, BR Requirements Management System, Bldg 3345, Rm 254				
4:00 PM						
5:00 PM						
6:00 PM						
After 6:00 PM						

APPENDIX D
CODE OF CONDUCT

APPENDIX D

CODE OF CONDUCT

Personnel conducting evaluations for the Office of Oversight occupy sensitive and highly visible positions and must maintain the highest standards of personal and professional conduct. This is especially important during the onsite visits, since everything one does is under scrutiny. While on travel status, both Federal employees and contracted team members are considered official representatives of Department of Energy Headquarters. Their behavior must always be beyond reproach. This includes being tactful, courteous, and properly attired. Their conduct should always enhance the professional stature of the team, their office, and the Office of the Deputy Assistant Secretary for Oversight.

While on site, team members must follow all local rules, entry and exit procedures, safety regulations, parking requirements, and other employee and visitor guidelines. Each team member is responsible for familiarizing himself or herself with all local policies and procedures. When in doubt, staff should ask their team leader, point of contact, or team management. If they encounter problems or if local requirements alter essential evaluation activities, the team member should inform the Team Leader as soon as possible.

Team members will come into contact with a variety of individuals during onsite evaluation activities, including supervisors, managers, and other site personnel who may not be directly impacted by the evaluation. All team personnel must be well received and looked upon as professionals. Also, it is essential that site personnel provide the support and assistance team members need in order to do their jobs. Professional image and support can quickly erode when anyone associated with the evaluation team openly criticizes the site or its personnel or makes unfavorable comparisons with other sites. The team should avoid being influenced by habitual critics. Most organizations have one or more individuals who continually complain and contend that all is wrong, that their supervisors are unfair, and that if only they could get out of the organization their happiness would be complete. If criticism of the site is warranted based on validated factual data, it should be included in the report. Finally, open criticism of DOE, the team, the process, and the Office of Oversight is not appropriate.

Avoid adversarial relationships. No matter how difficult an individual may be, each team member is personally responsible for promoting good relations with each and every person contacted. Team members should not allow themselves to view the visit as "just another evaluation" and forget that personnel being contacted may consider the evaluation as a career-threatening event. Be sensitive to the pressures and stress experienced by the people being evaluated. This is amplified further when significant problems are identified. At these times, the team can be the object of intense scrutiny and may be questioned or criticized by personnel from the affected organization. Establishing good relations and keeping a cool head will significantly relieve these stressful situations.

Do not be excessively aggressive or, on the other hand, unduly condescending or informal. Avoid displaying a superior attitude or portraying yourself as an expert or an authority figure. Conversely, be sufficiently prepared so that you are not asking simple questions. Refrain from telling jokes or humorous stories. Usually, individuals undergoing an evaluation are not amused, especially when they are trying to

perform their duties under the additional tensions that accompany an evaluation. Also, excessive chatter by team members about themselves and their experiences can be annoying, although site personnel will usually appear interested out of deference. This kind of incessant one-sided dialogue is thoughtless and can be stressful for individuals having to continuously feign interest. Additionally, it detracts from evaluation activities and wastes time that could otherwise be better spent collecting data. Although establishing a good rapport with site personnel includes a limited amount of "small talk," most conversation should center around the activities at hand.

Improper conduct of any kind cannot be tolerated. Abrasive or vulgar language, obscene body language, or flippant remarks should always be avoided. Frivolous remarks or insensitive criticism, even in jest, can be misinterpreted or poorly received. It is important that all team members understand that the Office of Oversight fully supports the prevention of sexual harassment. Team managers and team members should be alert to conditions, regardless of how innocent they appear, that could produce an incident of sexual harassment. Immediate action must be taken to correct problems, respond to requests for assistance, and prevent future occurrences. It is imperative that all team members understand their right to a harassment-free work environment and their responsibility for eliminating conduct that could lead to sexual harassment.

According to guidelines issued by the Equal Employment Opportunity Commission, sexual harassment is a form of sex discrimination under Title VII of the Civil Rights Act of 1964. It is a punishable offense. These guidelines address unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when made a term or condition of employment, when used as the basis for employment decisions, or when they create an offensive working environment. The type of prohibited conduct includes physical (touching, patting, and bumping), verbal (propositions, sexual jokes, comments about a person's body, or obscene language that is gender-specific or sexual in nature), and other types of improper conduct (display of pictures that are offensive in sexual content, sexual gestures, leering, or any behavior with sexual overtones). One of the most important factors in determining what constitutes "unwelcome behavior" and "sexual conduct" is that it depends more on effect than intent; effect can only be determined by the recipient. So, whether the perpetrator intentionally or unintentionally sexually harasses another person is not the only issue. How that behavior is received is central in determining that the occurrence took place.

Team members may socialize and relax at appropriate times and locations while on evaluations. However, these activities should be in good taste and not leave the impression that the team is partying all night or that the trip a boondoggle. Personnel from the facility or operations office often stay at the same hotel as the team and observe after-hours activities. Team members must be particularly prudent when socializing with personnel or friends from the site to minimize the chance of these occurrences compromising the objectivity of the evaluation. Questions regarding inappropriate social contacts may be directed to the Team Leader. Excessive drinking of alcohol is especially discouraged, and any improper conduct exhibited by a team member who is obviously intoxicated will not be tolerated.

All team members must be extremely careful to avoid any conflict of interest, potential conflict of interest, or appearance of conflict of interest. Discussing future work possibilities at the site, mentioning individual or corporate capabilities and experience, and conducting any marketing activity or any other similar activity is unacceptable. Such actions cast doubt on that person's objectivity and the independent oversight mission and can result in removal from the team. Should any potential conflict of interest be encountered, it must be reported to the evaluation Team Leader immediately.

Team members should not discuss future job possibilities or leave a resume with anyone from the inspected facility. This is not only unprofessional, but it creates the impression that one is taking advantage of his or her official position for personal gain.

When initially contacted to participate on a team during a particular evaluation, potential team members must not assume that a particular topic will, in fact, be selected. In the past, there have been conversations between team members and operations office or site personnel about areas to be evaluated prior to finalizing the planning or notifying the operations office point of contact. Oversight personnel should not pass the word that the office is considering a specific topic at a specific location. All initial planning is to be kept internal to the Office of Oversight and not discussed with any field element representative. The Office of Oversight will formally notify the field element at the proper time.

Team members will work especially closely with points of contact, trusted agents, and operations office, facility, and site contractor personnel who have been assigned responsibilities to work with the team. During initial meetings, the team should ensure that each of these individuals fully understands what is expected. In dealing with points of contact and trusted agents, team members should be open, candid, and straightforward. A close working relationship is necessary and desired, but it should be kept on a professional level.

Points of contact are expected to assist in the general planning of evaluation activities, arrange for local resources in support of onsite activities, assist in expediting data collection, and validate data with the team. They are not necessarily informed of all details of performance tests or other data collection activities in advance of the activity, and they do not determine evaluation activities.

Trusted agents are expected to assist in planning and conducting performance tests and observations and are fully aware of appropriate aspects of the tests. Points of contact may also be trusted agents if time permits them to accomplish both functions.

The information provided in this section is not intended to be an exhaustive discourse on personal and professional conduct or on ethical standards. The intent here is to provide a condensed treatment of these subjects as they pertain to management evaluations, highlighting some of the most common problems and issues encountered during previous evaluations concerning conduct, personal behavior, and relationships with site personnel. On the whole, professional conduct stems from good judgment, consideration for others, civility, and a genuine concern for the prestige of the organization one represents. Most professionals treat others the way they themselves wish to be treated, and they conduct themselves and dress in a way that portrays the best possible image of their capacities. It follows, therefore, that a highly visible organization responsible for independent oversight of S&S and ES&H programs designed to protect some of the most critical elements in existence would expect the highest standards of conduct from those who represent it.

A Checklist for Professional Conduct

- As an official representative of Headquarters, Department of Energy, your behavior should always be beyond reproach.
- Be tactful, courteous, and properly attired.
- While on site, comply with all local rules and regulations.
- Avoid criticizing the site or site personnel.
- Avoid adversarial relationships.
- Be sensitive to the pressures and stress experienced by the people being evaluated.
- Establish good relationships with site personnel.
- Do not be excessively aggressive or unduly condescending or informal.
- Avoid displaying a superior attitude or portraying yourself as an authority figure or expert.
- Refrain from telling jokes or humorous stories to persons being evaluated.
- Avoid excessive chatter about yourself and your experiences.
- Avoid vulgar language, obscene body language, or flippant remarks.
- Avoid actions that can be interpreted as sexual harassment.
- Be discreet when socializing.
- Avoid the excessive use of alcohol.
- Contractors must be careful to avoid any conflict of interest or appearance of conflict of interest.
- Do not discuss job possibilities or leave a resume with personnel from the facility.
- Keep all initial planning internal to the office.
- Develop a good, professional relationship with points of contact.