INDEPENDENT OVERSIGHT PROGRAM
APPRAISAL PROCESS PROTOCOLS

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Office of Enterprise Assessments
U.S. Department of Energy

Preface

The U.S. Department of Energy's (DOE) Office of Enterprise Assessments (EA) is responsible for implementing an Independent Oversight Program for safety and security within the Department in accordance with DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems*, and DOE Orders 227.1A, *Independent Oversight Program*, and 226.1B, *Implementation of Department of Energy Oversight Policy*. Effective oversight, including independent oversight, of DOE federal and contractor operations is an integral element of the Department's responsibility as a self-regulating agency to provide assurance of its safety and security posture to its leadership, its workers, and the public.

DOE Order 227.1A outlines EA's responsibilities for conducting independent evaluations of DOE sites, facilities, organizations, and operations in the subject areas of safety and security. The Order further defines safety and security programs as: (1) programs for the protection of the public, the environment, and worker health and safety; and (2) programs for the protection of security assets, including special nuclear materials and classified and controlled unclassified information in all forms. To implement this responsibility, EA's Independent Oversight Program conducts independent appraisals that are designed to enhance DOE safety and security programs by providing DOE and contractor managers, Congress, and other stakeholders with an independent evaluation of the adequacy of DOE policy and requirements and the effectiveness of DOE and contractor line management performance in safety and security. This responsibility includes assessing the performance of DOE programs and operations in the areas of nuclear and worker safety; emergency management; cyber, information, and physical security; and other critical functions as directed by the Secretary of Energy. Independent Oversight Program activities are selected and tailored to the unique needs of each DOE program and field office, and consider relative risks and past performance in determining specific assessment activities.

EA's safeguards and security and cybersecurity independent oversight activities directly support DOE's mission of national security by determining whether special nuclear materials, classified and sensitive matter, and other critical national assets entrusted to the Department are protected in accordance with laws, regulations, national-level policies and standards, and Departmental directives. EA's independent oversight of safety and emergency response capabilities helps ensure that workers and the public are protected from the hazards associated with the Department's operations and that the potential for adverse events is minimized. Such events have historically caused shutdown of operations and research, and thus impacted DOE's ability to perform its mission. One of the major focus areas of the Independent Oversight Program is ensuring that DOE and DOE contractors have established and implemented effective internal systems for self-identifying deficient conditions and taking appropriate corrective actions. Independent Oversight appraisals are unique in that they assess programs at the site level, as well as the multiple tiers of line management oversight associated with those programs, to provide perspectives on the overall effectiveness of DOE policies, programs, and performance in safety and security. Appraisals are designed to complement, not replace, line management's responsibility to monitor and oversee contractor safety and security programs and performance, manage contracts, and conduct self-assessments. EA's independence in reporting directly to the Office of the Secretary of Energy is intended to provide confidence that DOE's missions are being performed safely and securely.

These appraisal process protocols apply to EA and are part of a continuing effort to enhance the quality, consistency, and contribution of the Independent Oversight Program's activities and products. The protocols describe the general process and principal activities for evaluating both the effectiveness of DOE safety and security policies and the performance of DOE line management in implementing those policies. They also describe the overall philosophy, approach, scope, and methods to be used when conducting Independent Oversight appraisals. The three EA subordinate offices that are principally responsible for

implementing the Independent Oversight Program – the Office of Safeguards and Security Assessments; the Office of Cyber Assessments; and the Office of Environment, Safety and Health Assessments – have developed and implemented office-specific procedures and techniques for accomplishing their respective responsibilities in the areas of safety and security oversight that complement the overall processes described in this document. These documents are available on EA's websites.

These protocols have evolved through experience and have been developed to be flexible and easily adaptable as they are applied to the various policies, sites, facilities, organizations, and activities being evaluated. As part of the continuing effort to improve the Independent Oversight Program, EA anticipates making periodic updates and revisions to these protocols in response to changes in DOE program direction and guidance, insights gained from appraisal activities, and feedback from customers and constituents. Therefore, users of these protocols, as well as other interested parties, are invited to submit comments and recommendations to EA for consideration.

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Acronyms

CRAD   Criteria and Review Approach Document
DNFSB   Defense Nuclear Facilities Safety Board
DOE   U.S. Department of Energy
EA   Office of Enterprise Assessments
ISM   Integrated Safety Management
NNSA   National Nuclear Security Administration
NRC   Nuclear Regulatory Commission
NTC   National Training Center
OFI   Opportunity for Improvement
OSHA   Occupational Safety and Health Administration
QRB   Quality Review Board
SSIMS   Safeguards and Security Information Management System

Definitions

Appraisal: An Independent Oversight activity conducted by the Office of Enterprise Assessments to evaluate the effectiveness of line management performance and risk management or the adequacy of DOE policies and requirements. [DOE Order 227.1A]

Best Practice: A safety or security-related practice, technique, process, or program attribute observed during an appraisal that may merit consideration by other DOE and contractor organizations for implementation because it: (1) has been demonstrated to substantially improve safety or security performance of a DOE operation; (2) represents or contributes to superior performance (beyond compliance); (3) solves a problem or reduces the risk of a condition or practice that affects multiple DOE sites or programs; or (4) provides an innovative approach or method to improve effectiveness or efficiency. [DOE Order 227.1A]

Deficiency: An inadequacy in the implementation of an applicable requirement or performance standard that is found during an appraisal. Deficiencies may serve as the basis for one or more findings. [DOE Order 227.1A]

Directives: Described in DOE Order 251.1, *Departmental Directives Program*.

DOE: U.S. Department of Energy. References to DOE in this protocol, unless specifically indicated otherwise, encompass the National Nuclear Security Administration (NNSA).

Closeout Briefing: A verbal summary of the appraisal results given to DOE/NNSA management and the responsible DOE/NNSA contractor(s). Closeout briefings are normally conducted by the appraisal team leader before departing the facility or site that was subject to the appraisal.

Cognizant Manager: The DOE field or headquarters manager who is directly responsible for program management and direction, and the development and implementation of corrective actions. Cognizant managers may be line managers or managers of support organizations. [DOE Order 227.1A]

Findings: Findings are deficiencies that warrant a high level of attention on the part of management. If left uncorrected, findings could adversely affect the DOE mission, the environment, worker safety or health, the public, or national security. Findings define the specific nature of the deficiency and whether it is localized or indicative of a systemic problem, and identify which organization is responsible for corrective actions. [DOE Order 227.1A]

Imminent Danger: Conditions or practices in the workplace where a danger exists that could reasonably be expected to cause death or serious physical harm either immediately or before the abatement of such danger, through normal procedures, would otherwise be required. [DOE Order 227.1A]

Line Management: The unbroken chain of responsibility that extends from the Secretary of Energy to the Deputy Secretary, to the Secretarial Officers who set program policy and plans and develop assigned programs, to the program and field element managers, and to the contractors and subcontractors who are responsible for execution of these programs. It is distinct from DOE support organizations, such as the Office of Environment, Health, Safety and Security; the Office of Management; and the Office of the Chief Information Officer, which also have support responsibilities and functions important to security and safety. [DOE Order 227.1A]

Major Vulnerability: A vulnerability that, if detected and exploited, could reasonably be expected to result in a successful attack causing serious damage to the national security. [DOE Order 227.1A]

National Security Interests: Activities performed at DOE or DOE contractor, subcontractor, consultant, or other facilities or installations that involve classified matter, special nuclear materials, nuclear weapons, nuclear weapons components and devices, critical infrastructure, government property that is of high value or that would impact DOE program continuity, or other assets that are deemed important.

Opportunities for Improvement (OFIs): OFIs are suggestions offered in Independent Oversight reports that may assist cognizant managers in improving programs and operations. While they may identify potential solutions to findings and deficiencies identified in appraisal reports, they may also address other conditions observed during the appraisal process. OFIs are provided only as recommendations for line management consideration; they do not require formal resolution by management through a corrective action process. [DOE Order 227.1A]

Performance Testing: Activities conducted to evaluate all or selected portions of safety and security systems, networks, or programs as they exist at the time of the test. Performance testing includes, but is not limited to, force-on-force exercises, tabletop exercises, knowledge tests, limited-scope performance tests, limited-notice performance tests, penetration testing, vulnerability scanning, continuous automated scanning, and cybersecurity "red teaming." Performance testing can be conducted as part of a scheduled appraisal activity (i.e., announced), or without prior knowledge of the entity being tested (i.e., unannounced). [DOE Order 227.1A]

Policy: The term "DOE policy" or "policy" when used in lower case in this document is meant to include all documents describing the philosophies, fundamental values, administration, requirements, and expectations for operation of the Department. It includes but is not limited to DOE Policies and other types of directives issued under DOE Order 251.1. [DOE Order 227.1A]

Program Secretarial Officers: Heads of DOE Departmental Elements as listed at https://www.directives.doe.gov/references/doe_departmental_elements.

Recommendations: Recommendations are suggestions for senior line management's consideration for improving program or management effectiveness. Recommendations transcend the specifics associated with findings, deficiencies, or OFIs and are derived from the aggregate consideration of the results of the appraisal. [DOE Order 227.1A]

Safety and Security Programs: Include: (1) programs for the protection of the public, the environment, and worker health and safety; and (2) programs for the protection of security assets to include special nuclear materials and classified and sensitive unclassified information in all forms. Safety and security programs include cybersecurity and emergency management programs. [DOE Order 227.1A]

Trusted Agent: A technically knowledgeable individual who acts as a neutral party to assist in planning and conducting a performance test. A trusted agent must have appropriate operational authority or a compartmented role to provide administrative and logistical support for coordinating and conducting performance test activities. Trusted agents are responsible for maintaining strict confidentiality of performance testing information and remaining impartial in developing and validating performance test parameters and events necessary to evaluate identified objectives.

Validation: The process by which the Independent Oversight Program ensures the factual accuracy of collected data and ensures that identified deficiencies, and their impacts, are effectively communicated to responsible managers and organizations.

Section 1 – Introduction

Vision

The Independent Oversight Program's vision is to stimulate improvements in U.S. Department of Energy (DOE) safety and security programs by providing independent, objective, accurate, timely, and credible information regarding the status and effectiveness of those programs, and by identifying potentially useful and effective program improvements. The Independent Oversight Program is implemented by the DOE Headquarters Office of Enterprise Assessments (EA), which reports to the Office of the Secretary of Energy.   EA managers orchestrate an independent oversight program for the DOE enterprise that systematically analyzes DOE safety and security performance to identify key areas of risks, vulnerabilities, emerging trends, and best practices. Appraisals yield the basic building blocks of information that EA uses to analyze the safety and security of the DOE enterprise.

Mission

The Independent Oversight Program's mission is to provide the Secretary of Energy and senior DOE managers with an independent assessment of the effectiveness of DOE policy and performance in the areas of safety and security, and other critical functions as directed by the Secretary. This effort is designed to support all mission areas of the Department in a manner that promotes innovation and efficiency, while at the same time providing necessary assurances for the health and safety of workers, the public, and the environment, and the protection of national security assets. The Independent Oversight Program is the exclusive focal point for independent evaluation of DOE sites, facilities, organizations, and operations in the subject areas of safeguards and security, cybersecurity, nuclear safety, emergency management, and occupational safety and health. Within that broad scope, the main focus of the program is on the independent oversight of high consequence activities, such as nuclear operations, and the protection of the highest value security assets, such as special nuclear material and classified matter and information. Authority for the program is established by DOE Order 227.1A, *Independent Oversight Program*, as well as other DOE directives (e.g., DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems*; DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*; DOE Order 205.1C, *Department of Energy Cybersecurity Program*; DOE Order 420.1C, *Facility Safety*; and DOE Order 470.4B, *Safeguards and Security Program*), which identify responsibilities for independent oversight in the areas of safety and security.

Organization

The Independent Oversight Program is structured to meet mission requirements. The appraisals that form the basis of the program are conducted by three offices within EA:

- Office of Safeguards and Security Assessments
- Office of Cyber Assessments
- Office of Environment, Safety and Health Assessments

Additionally, the EA Office of Analysis and Evaluation provides analytical support to the Independent Oversight Program; the National Training Center (NTC), managed by EA, uses the information in Independent Oversight appraisal reports, where appropriate, to enhance its safety and security training curricula and convey lessons learned; and EA's Office of Enforcement evaluates Independent Oversight appraisal reports for potential non-compliances with DOE safety and security regulations.

Independence

EA is charged with the independent oversight of safety and security programs throughout the Department. Independence is assured by EA's direct reporting relationship to the Office of the Secretary of Energy, outside any line management reporting chain. The EA offices that conduct Independent Oversight appraisals (identified above) have no direct responsibility for facility operations, protection program management, information systems management, safety program management, or policy formulation.

EA exercises independence in the conduct of all Independent Oversight Program activities. While the selection and scheduling of appraisal activities is independent of line management, EA considers line management's assessment schedules and activities during planning to promote effective and efficient use of the Department's resources. EA also consistently seeks line management input into the scope and schedule of appraisals to promote high value, timely, and efficient appraisals. Appraisals are performance-based assessments of how sites and organizations implement the requirements established in federal and DOE regulations and directives, with an emphasis on whether the program elements being evaluated are effective in achieving the intended level of protection or risk reduction. The Independent Oversight Program also provides feedback on whether DOE directives are effective and adequately establish effective program requirements. To achieve these goals, the Independent Oversight Program uses a standardized and tested process, coupled with the unbiased professional judgment of experienced staff.

Roles and Responsibilities

Responsibilities for conducting the Independent Oversight Program rest with the Office of the EA Director and, along topical lines, with the three subordinate offices that perform Independent Oversight appraisals.

Office of the Director

The EA Director and Deputy Director provide strategic direction (e.g., setting priorities, establishing internal policies, reviewing appraisal plans, administering the office, and developing and maintaining the necessary infrastructure) and quality control (e.g., reviewing and approving reports, ensuring effective validation processes, and establishing Quality Review Boards) for the Independent Oversight Program. This office also facilitates communication, coordination, and feedback with the Secretary, Deputy Secretary, and other senior DOE managers to identify issues and concerns and to support interfaces with DOE program offices and field elements, congressional staff, and other stakeholders. Strategic priorities for all of the EA offices are established in an annual EA Operational Plan developed for each fiscal year.

Specifically, the EA Director:

1. Directs and manages the Department's Independent Oversight Program.

2. Develops, maintains, and ensures adherence to Independent Oversight Program policies, procedures, standards, and guidelines.

3. Ensures that senior EA management oversight is provided for all appraisal planning, conduct, and reporting.

4. Provides DOE managers with independent appraisals of safety and security policies, programs, and implementation. Appraisal results may be provided in various written formats (e.g., assessment reports, memoranda, appraisal summaries, and lessons learned or "rollup" reports).

5. Briefs senior DOE officials, including, when appropriate, the Secretary and Deputy Secretary, Under Secretaries, Secretarial Officers, and DOE policy organizations on the results of appraisal activities.

6. Coordinates with the DOE Inspector General when appraisal activities identify concerns that may have criminal or waste/fraud/abuse implications.

7. Develops and maintains this protocol document for conducting safety and security appraisals to address appraisal priorities and scheduling; appraisal planning; data collection, analysis, and validation methods; development of ratings, findings, deficiencies, best practices, and opportunities for improvement (OFIs); report preparation; and follow-up activities, as appropriate.

8. Ensures that subsequent appraisal activities review the effectiveness of corrective actions using a tailored approach based on significance and complexity.

9. Works with cognizant DOE line managers to resolve disagreements on appraisal schedules, results, findings, or ratings, and works with cognizant policy organizations to ensure proper application and characterization of DOE policies and directives in appraisal reports.

10. Cooperates with the Defense Nuclear Facilities Safety Board (DNFSB), including providing ready access to appraisal results, and responds to DNFSB inquiries and recommendations, as applicable.

11. Ensures that lessons learned from Independent Oversight activities are integrated into NTC safety and security training courses.

12. Informs Program Secretarial Officers when Independent Oversight findings have not been resolved effectively or in a timely manner.

Subordinate Oversight Offices

The following responsibilities are common to the Offices of Safeguards and Security Assessments; Cyber Assessments; and Environment, Safety and Health Assessments in the performance of Independent Oversight Program activities associated with their respective subject areas:

- Developing and maintaining detailed plans, guides, procedures, and protocols as necessary to assist in accomplishing office-specific missions and responsibilities

- Coordinating the scheduling, notification, and planning of appraisals with appropriate headquarters and field element managers

- Conducting independent appraisals of DOE sites, facilities, organizations, and operations in subject-specific programs, including conducting appraisals at the request of the Secretary of Energy and program office and field element managers

- Advising appropriate managers promptly of major vulnerabilities or imminent dangers identified during appraisal activities

- Developing, publishing, and disseminating final reports of the results of independent appraisals to effect appropriate line management cognizance of issues, effective sharing of lessons learned, and stakeholder awareness of oversight activities

- Evaluating DOE policies related to subject-specific programs

- Coordinating with the applicable DOE policy organization to ensure accurate interpretation of requirements and convey any inadequacies associated with DOE policies and requirements

- Coordinating with the NTC to incorporate pertinent information gleaned from appraisal activities, such as innovative practices and lessons learned, into training curricula

- Performing ongoing analyses to identify trends and emerging issues in assigned safety and security subject areas

- Reviewing and commenting on the adequacy of corrective action plans developed in response to appraisal reports when requested by the cognizant DOE manager or directed by the EA Director

- Performing follow-up assessments as appropriate to evaluate progress and effectiveness in implementing corrective actions for previously identified issues, especially issues of significance, such as findings

- Performing complex-wide, cross-cutting studies of subject-specific program issues of interest

- Identifying recommendations and OFIs for subject-specific program performance

- Maintaining broad situational awareness of field operations and conditions, missions, challenges, and management capabilities

- Maintaining an enterprise-wide analysis of key areas of risk, vulnerabilities, emerging trends, and best practices for assigned mission areas

- Reviewing other governmental and commercial subject-specific programs to provide benchmarks for DOE performance

- Providing resources, as necessary, to participate in special assessments.

In addition to the common responsibilities identified above, specific Independent Oversight responsibilities for the three EA offices that conduct appraisals are outlined below.

Office of Safeguards and Security Assessments

The Office of Safeguards and Security Assessments performs independent evaluations of the effectiveness of safeguards and security (including information security) policies and programs throughout the Department. The office maintains two sub-offices: the Office of Safeguards Assessments and the Office of Security Assessments. The office makes extensive use of sophisticated performance testing, both announced and limited-notice, that employs a broad range of threats and scenarios as a means to maximize realism in evaluating the readiness of site safeguards and security systems to protect DOE assets. The emphasis in appraisals is on the protection of such high value security assets as Category I quantities of special nuclear material, classified matter, special access programs, and sensitive compartmented information facilities, and preventing sabotage of chemical and radiological items. The office also performs follow-up assessments to ensure that corrective actions are effective and that complex-wide issues and systemic weaknesses in safeguards and security and information security are appropriately addressed. Safeguards and security appraisals evaluate the following functional areas:

- Protection program management
- Personnel security
- Physical security systems
- Nuclear material control and accountability
- Classified matter protection and control
- Protective force.

The office's activities focus primarily on:

- Performing periodic appraisals of safeguards and security programs, including the conduct of performance testing at DOE sites possessing significant amounts of special nuclear material, classified material and information, or other national security interests

- Maintaining a Composite Adversary Team to perform force-on-force performance exercises

- Maintaining an Engagement Simulation System program to support safe, but realistic, execution of force-on-force exercises

- Implementing a limited-notice performance testing program designed to maximize realism in evaluating safeguards and security response capabilities

- Evaluating the implementation of insider threat programs mandated by federal and DOE requirements

Office of Cyber Assessments

The Office of Cyber Assessments performs independent evaluations of the effectiveness of classified and unclassified cybersecurity policies and programs throughout the Department. The office maintains two sub-offices: the Office of Cyber Assessment Strategy and the Office of Cyber Assessment Operations. Appraisal activities are intended to provide assurance that classified and controlled unclassified information are protected from theft, sabotage, diversion, loss, or unauthorized disclosure, and that DOE-managed critical infrastructure and computer networks are protected from unauthorized access or manipulation, including from actions of a possible malicious insider. The office also analyzes cybersecurity trends and studies complex-wide cyber-related issues in order to provide feedback on essential information assurance practices to DOE Headquarters and sites.

The office's activities focus primarily on:

- Performing periodic appraisals of classified and unclassified cybersecurity programs

- Maintaining and deploying capabilities for performing remote network probing through penetration testing, and for simulating realistic adversarial attacks on DOE computer networks to identify vulnerabilities

- Conducting annual evaluations of cybersecurity for DOE national security systems and DOE intelligence systems, and providing input for the annual evaluation of DOE unclassified information security programs and the annual evaluation of U.S. Intelligence Community elements as required by the Federal Information Security Modernization Act

- Conducting "red team" computer security evaluations (i.e., unannounced penetration testing) of

specific DOE programs

- Assessing the vulnerability of networks to insider threats

- Evaluating the vulnerability of national critical infrastructure and site-specific essential systems (e.g., computer-based security systems) to inadvertent or malicious cyber manipulation

- Evaluating the effectiveness of cybersecurity controls that provide risk mitigation to site-specific programs as well as the overall DOE enterprise

Office of Environment, Safety and Health Assessments

The Office of Environment, Safety and Health Assessments evaluates nuclear safety and worker safety and health programs, integrated safety management (ISM) performance, and emergency response capabilities to determine their effectiveness and to provide feedback to line management for needed improvements. The office maintains four sub-offices: the Office of Nuclear Safety and Environmental Assessments, the Office of Worker Safety and Health Assessments, the Office of Emergency Management Assessments, and the Office of Nuclear Engineering and Safety Basis Assessments. Appraisal activities are intended to ensure adequate protection of the public, workers, and the environment, particularly at DOE sites with nuclear facilities or conducting nuclear or radiological activities. For sites with nuclear facilities or activities, the office has implemented a Site Lead program. A Site Lead is an EA staff member who has been assigned to monitor activities and maintain operational awareness of nuclear facilities and operations at a site, and to use this information to plan and coordinate Independent Oversight appraisal activities.

The office's activities focus primarily on:

- Evaluating the status of nuclear safety at DOE nuclear facilities, including the functionality of vital safety systems and other nuclear safety programs and functions

- Conducting assessments of design and construction of new or significantly modified nuclear facilities

- Conducting targeted, multi-site safety assessments of selected focus areas that are of interest due to known performance deficiencies, high risks, or recent changes in requirements

- Evaluating emergency response capabilities at DOE sites with nuclear activities and significant quantities of hazardous materials

- Conducting assessments of site work planning and control processes to evaluate the effectiveness of hazard identification and control mechanisms

- Conducting assessments of safety programs at sites or within organizations where performance may present significant risk (e.g., less than expected safety performance and/or serious or recurring incidents or violations of requirements)

- Evaluating line management feedback and improvement processes.

Interface with Other Organizations

The Independent Oversight Program places significant emphasis on working with policy organizations, headquarters program offices, and field organizations to ensure that identified deficiencies are accurately

characterized and adequately addressed. This approach has met with considerable success because of the combined effort of DOE field and Headquarters organizations and the support of senior DOE management. EA also routinely interfaces with other DOE organizations, such as the Office of Inspector General, and organizations external to DOE, such as the Congress, Department of Homeland Security, Office of Management and Budget, Office of the Director of National Intelligence, and DNFSB.

Section 2 – Independent Oversight Appraisals

Introduction

The Independent Oversight Program's appraisal process provides a disciplined and consistent approach to monitoring, evaluating, and reporting the status of the implementation of safety and security programs within DOE. The process has been developed and refined over time and tested through repeated use during many different types of assessments. This section describes the essential elements of that process, all of which are closely tied to established Independent Oversight Program goals and philosophy.

These appraisal process protocols provide an overview of the general process that applies to all independent oversight appraisal activities. The subordinate oversight offices maintain more detailed program plans, guides, procedures, and protocols as necessary to assist in accomplishing their specific missions and responsibilities.   Most   of   these   are   available   through   EA's   assessments   web   page   at http://energy.gov/ea/services/assessments.

Program Scope

EA conducts independent oversight activities for the entire Department, including the National Nuclear Security Administration (NNSA). The focus of most Independent Oversight appraisal activities is on high hazard activities, such as nuclear operations, and the protection of high-value security assets. However, EA is authorized to conduct Independent Oversight activities regarding all aspects of Departmental safety and security programs except:

- The Naval Nuclear Propulsion program

- Aviation safety (oversight is performed by the Office of Aviation Management, within the Office of Management)

- Nuclear explosives safety (oversight is performed by the NNSA)

- Water impoundment structures and dams (oversight of structural integrity is performed by the Federal Energy Regulatory Commission via a memorandum of agreement with DOE).

The Independent Oversight Program generally conducts only limited oversight of activities that are licensed by the Nuclear Regulatory Commission (NRC) or subject to regulation by the Occupational Safety and Health Administration (OSHA). The scheduling of any Independent Oversight appraisals pertaining to these activities will first consider the inspection and assessment activities of the NRC or OSHA in order to eliminate or minimize duplication of effort. However, the Independent Oversight Program retains the authority to conduct oversight of these activities when necessary to ensure that DOE safety and security interests are being managed effectively.

Appraisal Types

All Independent Oversight Program activities are designed to satisfy mission requirements. The oversight function is *independent* from DOE's line program offices (line management) in that the EA oversight offices have no responsibility for operations, projects, programmatic activities, or policy development. EA

managers also ensure that no appraisal team members have a conflict of interest with the organizations or subject areas that they are tasked to evaluate.

The Independent Oversight Program conducts a number of activities, collectively referred to as appraisals, related to evaluating DOE policy and DOE and contractor line management performance in the areas under its purview. Appraisals can generally be grouped into three general types of activities: (1) assessments, (2) operational awareness activities, and (3) unannounced or limited-notice performance tests.

EA publishes a validated report describing the results of each appraisal activity. These reports may contain recommendations or OFIs for line management to consider as possible program enhancements. Depending upon the results of the appraisal, reports may also identify findings, which require corrective action by line management; and deficiencies, which line management is expected to handle in accordance with the issues management processes it has established in accordance with DOE Orders 226.1, *Implementation of Department of Energy Oversight Policy*, and 414.1, *Quality Assurance*. For larger appraisals, such as multi-topic assessments, EA also provides the cognizant program office Assistant Secretary or Program Director an opportunity to convey written comments on the conclusions and recommendations of the final draft report. If provided, this management reaction is reflected in an appendix to the final assessment report. Some reports may also include ratings, as described in Section 5 of this document.

EA also routinely publishes "rollup" or lessons learned reports that summarize the results of a series of appraisals covering similar topical areas or activities. The intent of these reports is to characterize broad, systemic or cross-cutting issues faced by the Department and offer recommendations to address those challenges based on the perspectives gained by Independent Oversight personnel in evaluating multiple programs and organizations in the DOE complex. In order to affect continuous performance improvement, EA may also elect to publish an annual report for the Secretary that identifies the highest priority issues that warrant senior management's attention.

Assessments

EA conducts a range of assessments that vary widely in scope, approach and frequency to best suit the objective of the assessment and the office conducting it. Assessments range from system-level appraisals that are broad in their program coverage and technical span to in-depth evaluations of a particular program, topic, or activity. For example, many of the assessments conducted by the Office of Safeguards and Security Assessments are program-level assessments (termed multi-topic assessments) that cover a full suite of safeguards and security topics at a selected site and are conducted at regular intervals. On the other hand, most assessments conducted by the Office of Environment, Safety and Health Assessments are focused on a particular safety system, process, or activity at a site or project, and are scheduled based on ongoing analyses of site conditions and operations. Assessments can also be Independent Oversight activities that are conducted in conjunction with a DOE line management or contractor assessment activity (termed a concurrent assessment) or an assessment sponsored by another DOE Headquarters staff office (e.g., Office of the Chief Information Officer, Office of Classification). Where applicable, assessments will include performance testing and observations of work activities to the greatest extent possible. Performance testing may consist of large-scale force-on-force testing, limited-notice and limited-scope performance tests, evaluation of site emergency response exercises, cybersecurity red teaming, or remote scanning or penetration testing of cybersecurity capabilities.

Other types of assessments are:

(A) Follow-up Assessments

EA conducts follow-up assessments to determine the status and progress of corrective actions and other actions taken in response to findings previously identified by Independent Oversight appraisals or DOE line management oversight activities. Follow-up assessments are aimed at evaluating the effectiveness and sustainability of corrective actions.

(B) Targeted Assessments

EA conducts targeted assessments to evaluate a selected topic or program area at multiple DOE sites or facilities. Targeted assessments might address the effectiveness of certain program elements as implemented across DOE by evaluating similar activities, operations or conditions at multiple locations, or they might analyze the implementation of a specific policy item throughout the complex.

(C) Special Assessments

EA conducts special assessments at the request of the Secretary or other senior DOE managers, often on a "rapid response" basis, to provide specific needed information about DOE safety and security programs and policies, or other critical DOE functions. A special assessment may be a single undertaking or a series of appraisals conducted across the complex, often in response to a particular event. Special assessments directed or requested by the Secretary or other senior DOE officials may address areas outside of safeguards and security, cybersecurity, nuclear safety, emergency management, or ISM programs. Alternatively, the EA Director may propose that an Independent Oversight Program special assessment be conducted if other EA activities suggest a need to do so.

Operational Awareness Activities

EA conducts operational awareness activities to obtain current information about operations, activities, and initiatives at a site or within a program, or to follow-up on site issues. These activities typically involve touring facilities, conducting informal interviews, and attending meetings. Operational awareness activities serve a vital role in ensuring that Independent Oversight Program managers have up-to-date and accurate information upon which to base decisions about appraisal priorities, schedules, and scopes. Information gathered from operational awareness activities is usually documented in a "field note" that is maintained in EA internal files. However, if an operational awareness activity reveals information of a substantive nature that warrants being communicated more formally, EA may elect to document the results of the activity in a memorandum to the cognizant manager.

Unannounced or Limited-Notice Performance Tests

In addition to announced performance testing, the Independent Oversight Program routinely conducts unannounced and limited-notice performance tests. These tests are intended to maximize realism by limiting participants' foreknowledge of the test's timing and content; such tests also allow EA to test a broad set of conditions with only limited staff resources. Unannounced performance tests, such as automated scanning and network penetration testing, are typically employed to remotely evaluate cybersecurity measures, consistent with common industry practices. Limited-notice performance tests are more often used to evaluate such safeguards and security topics as protective force response practices, operability of physical security systems, and accuracy of inventories. Unannounced and limited-notice performance tests are usually conducted as discrete activities but may also be conducted before or in conjunction with a broader assessment. As with all performance tests, safety and security are of paramount

importance in planning and conducting unannounced and limited-notice appraisal activities, and require close and careful coordination with designated trusted agents. Safeguards and security limited-notice performance test results are documented in a memorandum to the cognizant manager rather than an assessment report.

Appraisal Goals

The goals of the Independent Oversight Program's appraisals are to:

- Determine whether the implementation of safeguards and security, cybersecurity, nuclear safety, ISM, and emergency management programs meets the requirements established by DOE policy and whether those programs are effective in providing worker, public, environmental and asset protection and mitigating risks.

- Determine whether DOE policies and policy guidance in the areas of safety and security are effective.

- Assess the impact of identified deficiencies, taking into account mitigating factors, compensatory measures, and current or planned corrective actions.

- Determine the status of actions relative to previously identified deficiencies.

- Present potential enhancements for consideration in strengthening implementation of safety and security programs or addressing identified deficiencies.

- Identify safety- and security-related best practices that merit consideration for implementation by DOE and contractor organizations.

Appraisal Philosophy

To accomplish its mission and achieve its goals, the Independent Oversight Program employs a set of carefully developed and experience-based principles.

1. **Planning is the foundation of all appraisals and appraisal selection and prioritization.** Careful and deliberate strategic planning must ensure that appraisal activities are directed toward the areas of greatest vulnerability to Departmental operations and the safety and security of workers, the public, the environment and DOE national assets. Detailed and coordinated planning must then precede each specific appraisal and continue through to its conclusion. Planning is discussed in more detail in Section 3, and a sample appraisal plan is provided in Appendix C.

2. **Coordination with DOE Headquarters and field elements is essential.** The ultimate objective of the Independent Oversight Program is to improve DOE's performance, which can best be achieved through coordination and openness at all levels. EA managers are expected to engage cognizant senior DOE managers when developing appraisal schedules and early in the planning for specific appraisals to discuss and obtain feedback on priorities, scope, and objectives for all proposed oversight activities.

3. **Appraisals must be based on established standards.** National standards established by Congress, DOE, and other executive agencies are the basic requirements with which DOE programs must comply. DOE policy is promulgated through DOE directives and regulations. Other national standards are embodied in applicable public laws, regulations, executive orders, and other

directives.   Program-specific standards are requirements established by Program Secretarial Officers for sites and programs under their cognizance. Local standards are those imposed by DOE field elements, facility contractors, or subordinate contractors responsible for administering programs within their areas of operation. Program-specific and local standards usually pertain to site-specific implementation of national requirements, and may impose more stringent requirements. These types of standards are promulgated through DOE program office and field element implementing instructions, contractor procedures, site safeguards and security plans, cybersecurity program plans, ISM plans and procedures, and emergency plans. Independent Oversight Program appraisals use appropriate program-specific and local standards to evaluate programs, especially if they differ from or cover areas not addressed by national requirements.

4. **Appraisals must be fair, reasonable, and factual.** The Independent Oversight Program strives to be fair, reasonable, and factual in conducting appraisals and interpreting how DOE policies and standards are applied to specific programs. All data used in the evaluation process are validated at multiple levels to ensure correctness.

5. **Performance is the most accurate indicator of a program's effectiveness.** Whenever possible, the Independent Oversight Program uses existing performance indicators, observes work being performed, and conducts performance tests to assess the adequacy of a program or program element. Through the review of performance data, work observations, and performance test results, the Independent Oversight Program determines the effectiveness of a safety or security program in implementing the intent and objectives of DOE policy.

6. **The review of policies must be performed from a holistic and practical perspective.** In determining the adequacy of DOE policies, the Independent Oversight Program considers such things as whether the policy sufficiently defines expectations, the expectations are clearly articulated, and the requirements are able to be implemented in real-world conditions. Independent Oversight Program personnel maintain a strong dialogue with applicable policy organizations to ensure an in-depth understanding of the intent of policy as part of evaluating its effectiveness.

7. **Appraisals must provide meaningful, accurate, and current information.** The reports developed as a result of appraisals must clearly present the results of the appraisal, identifying and analyzing the impacts of strengths and weaknesses. Additionally, when possible and appropriate, recommendations and OFIs are identified for consideration.

8. **The cooperation of field elements is essential in conducting thorough, efficient, and fair appraisals.** Local representatives provide detailed site and system knowledge for planning; arrange administrative and logistical support; expedite data collection activities; and designate local points of contact who participate during scoping, planning, data collection, validation, and closeout of appraisal activities.   Relationships between Independent Oversight Program and local representatives should be cordial, open, and professional in order to facilitate the efficient execution of appraisal activities.

9. **The qualifications and objectivity of Independent Oversight Program appraisers are of paramount importance.**   It is essential that appraisal team members be knowledgeable of applicable standards, technically competent in their assigned areas, cognizant of the Independent Oversight Program's philosophies and goals, free from any conflicts of interest with organizations subject to appraisal, and able to successfully perform all necessary functions related to their appraisal responsibilities. Independent Oversight Program federal staff training and qualification programs are intended to maintain and continually improve mission performance. These programs are implemented consistent with DOE Order 426.1B, *Department of Energy Federal Technical*

Capabilities.

Appraisal Phases

All appraisals can be characterized by four major activities or phases.

1. **Planning (including scoping).** The planning phase includes the activities necessary to prepare for all aspects of an appraisal, both on and off site. These activities include coordination within the Independent Oversight Program and with cognizant DOE and contractor entities, including senior managers, as applicable; research of facilities and topical areas to be reviewed; development and issuance of assessment plans (see example in Appendix C); document requests from the site and other DOE organizations; logistical arrangements; information technology resource needs; security and training considerations; and similar considerations. When necessary, EA may conduct onsite scoping or operational awareness activities to identify which operations or facilities will be the subject of an assessment. Major appraisals include an interview with the cognizant program office Assistant Secretary and/or Program Director to discuss and garner feedback on the proposed scope and objectives of the appraisal. Similar discussions are conducted at lower levels of management for appraisals with more limited scopes.

2. **Conduct (including informal validation).** The conduct phase is the portion of the appraisal principally devoted to collecting and validating data obtained through interviews, review of documents and operating data, observations of operations and work activities, and performance testing, such as tabletop and force-on-force exercises. Although EA typically collects most data at the site, some activities may be accomplished via document reviews or performance tests at remote locations. EA continuously validates the collected data by cross-referencing sources, meeting with site points of contact and other means. At the end of onsite data collection activities for most appraisals, EA convenes an exit meeting with site management to convey preliminary observations and describe the process for subsequent factual accuracy review of the forthcoming draft appraisal report. For these appraisals, the appraisal team leader is expected to provide a written summary of preliminary results to the field element manager and laboratory director (if applicable) at the time of the exit meeting (see example in Appendix E). If the draft appraisal report has been prepared before leaving the site at the conclusion of the data collection phase, the exit meeting is a more formal briefing that summarizes the information conveyed in the draft report.

3. **Reporting (including formal validation).** While EA conducts informal validation as data is being collected, the report preparation and formal validation phase involves data integration and analysis, deficiency and finding identification, rating determination (if applicable), and draft report preparation. For most appraisals, report writing occurs at headquarters and then the draft report is transmitted to site management for review and validation. For multi-topic safeguards and security assessments, however, this phase is conducted at the site being evaluated, and a draft report is left with site management and provided to the applicable program office for final factual accuracy review after the exit meeting.

4. **Closeout.** The closeout phase includes disposition and resolution of comments on the draft appraisal report, internal quality review, and final report issuance. For larger appraisals, this phase may also include solicitation of senior DOE management's reaction to the final draft report. Once the final report is issued, this phase can include headquarters briefings, external briefings (e.g., Congressional committees), and reviews of proposed corrective actions.

Although these phases are identified by the primary activities they encompass, actual component activities may overlap significantly. For example, data may be collected during the planning phase, and planning

(particularly for performance testing) can extend into the data collection phase. Similarly, analysis begins during data collection and continues throughout the process. Subsequent sections of this document describe the activities and expectations associated with these major appraisal phases.

Security and Safety Standards of Conduct

Appraisal team personnel often handle classified and controlled unclassified documents and information while conducting appraisals. This information and documentation may be provided by the facility or organization being visited, or may be generated or provided by appraisal team members. Additionally, team members may use classified word processing, scanning, copying, and destruction equipment in performing such duties as recording data and writing reports. Team members are frequently required to access security-sensitive work areas where they must not bring in certain electronic equipment and other prohibited items.

While working at DOE Headquarters and field sites, team members are expected to comply with all security-related postings and placards such as those that indicate the boundaries of security areas and identify prohibited articles. Team members are required to comply fully with all applicable DOE and local security policies and requirements, such as restrictions on the introduction and use of prohibited and controlled articles (e.g., personal electronic devices, cameras, thumb drives, and controlled substances) in designated security areas. Additionally, team members are expected to comply with all information security and cybersecurity policies on the use of classified and unclassified computers and the control and handling of documents and media containing classified or controlled unclassified information.

Team members may also encounter industrial hazards and/or require access to radiological or other posted areas while performing appraisal activities. In addition to fulfilling any training or badging requirements needed to gain general access to a particular site, team members must comply with all site-specific requirements for training, personal protective equipment, and escorting for access to facilities or areas they will visit. Whenever possible, the team should make arrangements with site points of contact to obtain required training in advance of the appraisal. Team members should also ascertain before an appraisal whether they will need to supply their own protective equipment (e.g., safety shoes) and take action to obtain such equipment.

Professional Conduct and Relationships with Site and Headquarters Personnel

As stated in the appraisal philosophy section above, the cooperation and assistance of representatives of organizations subject to an appraisal, whether at headquarters or in the field, are crucial in conducting a successful appraisal. Independent Oversight Program appraisals evaluate line management at the DOE Headquarters, DOE field element, and facility contractor levels. Appraisal team personnel are required to maintain the highest standards of conduct when dealing with representatives of line management organizations, including supervisors, managers, workers, and other personnel encountered during appraisal activities. Professional conduct and other guidelines regarding relationships with personnel subject to oversight appraisals are explained in more detail in Appendix A.

Field Augmentation Program

The Independent Oversight Program has implemented a field augmentation program that permit subject matter experts from DOE field elements and site contractors to participate as members of Independent Oversight appraisal teams. This program has been part of the Independent Oversight Program's process for many years. The positive aspects of the field augmentation program for the Department and the Independent Oversight Program are that it:

- Provides augmentees (and through them, their managers and sites/organizations) with insight into the Independent Oversight Program's performance-based evaluation approach that can be taken back to their sites and used to improve local survey and self-assessment programs

- Enhances working relationships between Independent Oversight Program staff and site personnel

- Facilitates increased inter-site exchange of approaches, practices, and procedures when augmentees view site operations subject to appraisal and/or discuss home site operations with those being appraised

- Allows the Independent Oversight Program to take advantage of the considerable subject matter expertise and experience that resides in the field

- Broadens the Independent Oversight Program's perspective (i.e., adds field perspective) in identifying and analyzing potential issues

The following general program concepts are followed to ensure the integrity of the field augmentation program:

- Augmentees must be volunteers who are recommended by their field element manager, or by their contractor management through the cognizant field element manager, and are approved for participation by EA management.

- Augmentees are restricted from participating in assessments of their own sites or organizations; contractor augmentees are further restricted from participating in assessments of other sites operated by their employers.

- Augmentees are fully integrated into assessment teams and fully participate as members of the topic team to which they are assigned.

- Augmentees must be familiar with EA's Independent Oversight Program and approach to conducting appraisals.

Observers

Interested DOE Headquarters organizations (such as the Office of the Chief Information Officer, the NNSA Office of Emergency Operations, and program offices)—which may or may not be in the line management chain—sometimes send representatives to observe Independent Oversight Program appraisal activities. Because appraisals are conducted openly, appropriate participation by such organizations is welcomed. Such representatives are encouraged to participate as observers—on a non-interfering basis—in such activities as tours, interviews, meetings, and other data collection activities; however, they are not members of the appraisal team.

EA will accommodate observers of its appraisal activities provided that the presence of the observers does not adversely impact the site or EA's ability to accomplish the appraisal objectives. In particular, EA will encourage senior managers from the headquarters line organization to observe appraisals to promote awareness of EA's evaluation methods, analytical practices, and validation processes.

Section 3 – Appraisal Process Planning

Introduction

Independent Oversight Program planning is a continuous process, involving a myriad of activities and essentially all staff members. Thorough planning at the strategic, program, and individual appraisal level is the foundation of the Independent Oversight Program.

This section outlines the Independent Oversight Program's general planning processes and the responsibilities for developing appraisal schedules and conducting individual appraisal activities. Additional details regarding program-specific planning processes are contained within the subordinate offices' program documentation. Independent Oversight's general approach to site prioritization and appraisal scheduling is outlined in Appendix B.

Goals

The goal of the Independent Oversight Program is to ensure that its appraisal activities focus on Departmental facilities and programs that have high-value assets, conduct high-risk operations, and/or pose conditions that have the potential to cause the Department and/or United States irreparable harm, while also maintaining assurance of the overall effectiveness of security and safety programs across the entire Department. The goals of the planning process are to facilitate EA's ability to identify and execute a suite of appraisal activities that collectively address the most significant safety and security vulnerabilities faced by the Department, and to provide recommended actions to the Secretary and other senior managers for use in allocating resources and targeting remedial actions. The goal when planning appraisal activities is to anticipate every action necessary to meet mission requirements and conduct the highest quality appraisal possible with the available resources.

Strategic and Program Planning

Strategic planning is the responsibility of the EA Director and Deputy Director, with input from the Office of the Secretary and the directors of the subordinate EA oversight offices. Strategic planning involves taking a long view of evolving threats and conditions, and adjusting the organization's resources, processes, capabilities, and schedules to meet the strategic needs of the office and the Department. For example, the increasing number and sophistication of cybersecurity attacks against DOE computer networks and the evolving capabilities of transnational terrorist groups to threaten facilities housing special nuclear, radiological, chemical, and biological materials, have required the Independent Oversight Program to continually enhance its capabilities and employ new assessment techniques to evaluate DOE protection strategies in these areas. Similarly, DOE initiatives to modify or build new nuclear facilities to replace aging infrastructure and support large-scale cleanup operations have required a renewed focus on assessing the design and construction of major nuclear facility projects.

To accomplish strategic planning, EA routinely convenes meetings of its managers and appropriate EA subject matter experts to share, analyze, and confer on all of the safety and security performance and compliance information that is collected from a myriad of information sources. These sources include EA appraisal, enforcement, operational awareness, and analysis activities; Departmental corporate reporting databases; other DOE offices and Departmental issues management forums (e.g., Office of Inspector General, DOE Cyber Council and Information Management Governance Board, DOE Insider Threat Program Working Group, DOE Safety Culture Improvement Panel); and external entities (e.g., DNFSB,

Government Accountability Office). These strategic planning meetings may focus on a specific DOE site or organization, or a particular topical area of interest. The intent of these meetings is to evaluate all available information in the aggregate to facilitate decisions regarding appraisal priorities and focus areas. The outcomes from these meetings contribute to the formulation of EA's annual Operational Plan and, where applicable, annual assessment schedules.

EA recognizes that its Independent Oversight Program is one of many elements of the Department's overall approach to providing assurance of the effectiveness of its safety and security programs. Other major elements include the line management contract performance mechanisms mandated by federal and Departmental acquisition regulations, field element and program office assessment programs, field element oversight of contractor assurance systems, self-assessment programs, and the regulatory enforcement program (also implemented by EA). Thus, the Independent Oversight Program works closely with headquarters and field elements when scheduling and planning appraisal activities to maximize the efficient and effective use of resources and minimize unnecessary duplication of effort, while also ensuring that appropriate federal oversight depth and coverage is devoted to those assets and operations that demand it based on risk and complexity. While the Independent Oversight Program endeavors to accommodate DOE line management input on appraisal priorities and schedules, EA must ensure that its activities collect, analyze, and validate sufficient information for EA to effectively fulfill its independent function as mandated by the Secretary.

Appraisal Planning

Thorough planning is the foundation of all appraisals. Appraisal planning comprises management and team activities and responsibilities, and requires gathering and analyzing large amounts of information from many sources, decision-making based on that analysis, and appraisal preparation based on those decisions. The quality of planning significantly affects all other appraisal phases. Because only limited time and resources are available for planning, these efforts must be focused and efficient.

While the directors of the subordinate oversight offices establish detailed planning requirements and procedures to meet their specific needs, those activities fall within the scope of the general process outlined in this section. The overall planning process described in these protocols applies to all appraisals, regardless of the nature of the appraisal—assessment, operational awareness activity, or performance testing—or the size of the team involved. Planning requirements may vary in magnitude for different activities, but the essential elements of planning do not.

Management Planning

Management planning responsibilities are continuous throughout an appraisal's cycle. Most of the early planning requirements are the responsibility of management, not the appraisal team. Once an appraisal has been approved and tentatively scheduled, the director of the responsible office or the designated team leader (depending on the anticipated scope of the appraisal) initiates planning activities, which usually include:

- For major appraisals, meeting with the cognizant headquarters program office managers to discuss the general scope and objectives of the appraisal

- Contacting the managers of affected field sites and laboratories to begin ongoing coordination

- Conducting an initial review of available information to determine the tentative scope and focus of the appraisal, including formulating a candidate list of facilities, projects, activities, and/or networks for evaluation

- Developing and coordinating a site visit schedule with the site(s)/organizations(s) to be visited

- Identifying documents and other information needed for more detailed planning, and issuing a data call tailored to the appraisal objectives

- Identifying and acquiring the personnel resources to accomplish both the technical and administrative support aspects of the appraisal, including determining whether field augmentees (see Section 2) will be included on the appraisal team

- Identifying and satisfying logistical needs, such as onsite workspace, hotel accommodations, computer and other equipment support, access authorizations and training

- Directing and overseeing team planning activities at team planning meeting(s) or site planning visit(s).

The results of management planning activities, with appropriate input from appraisal team planning activities, are used to develop a formal appraisal plan, which defines the scope and approach for the conduct of the appraisal. A sample Independent Oversight appraisal plan is shown in Appendix C.

Team Planning

Detailed planning for data collection activities—the essence of all Independent Oversight Program appraisals—typically begins once the team has been established, and continues through initial visits to and communications with the site or organization being assessed. For some appraisal activities, planning meetings for the appraisal team may be convened at headquarters, if necessary based on the judgment of the team leader. During the course of planning, the team will normally be expected to:

- Become familiar with the results of previous appraisal activities.

- Review the objectives and proposed parameters of the appraisal, and any management guidance and expectations.

- Review and analyze available documentation.

- As needed, tour key facilities at the site.

- As needed, conduct preliminary interviews with DOE and contractor field element, program, and facility managers.

- Meet with stakeholders, as appropriate.

- Contact and conduct appropriate information exchanges with designated counterparts from headquarters and field organizations.

- Provide input to the appraisal plan and recommend any modifications to activity scope and focus resulting from planning activities.

- Determine appropriate data collection methods; review and/or establish planned lines of inquiry or criteria and review approach documents; and develop any additional data collection or appraisal-related documents necessary (e.g., performance test plans, safety plans).

- Develop a schedule of data collection and related activities.

- Identify additional information and support requirements and communicate them to the team leader.

- Brief or otherwise inform the team leader of planned activities.

Much of the detailed planning for an appraisal is accomplished before the appraisal team arrives on site, but it should be recognized that planning is an ongoing effort and may continue well into the conduct phase of the activity. Both team leaders and team members are expected to remain flexible and ready to modify plans in response to unexpected circumstances that may arise during any phase of an appraisal.

Section 4 – Conducting Appraisals

Introduction

The conduct phase of an appraisal normally encompasses that period when most of the needed data is collected. This phase may consist of a concentrated effort during a relatively short period of time or it may occur over an extended period, as in some targeted or special assessments. For most appraisals, the conduct phase takes place almost exclusively on site; however, for a few types of activities, such as cybersecurity scans and penetration tests, team members may be located remotely from the subject site. The conduct phase is tailored to the unique needs and objectives of each specific appraisal. This stage is crucial to the success of an appraisal because during this stage, team members collect most of the information that will form the basis of their analyses and conclusions (and ratings and recommendations, when appropriate).

This section addresses the goal of appraisal conduct, data collection methods, data validation procedures, and important related topics.

Goal

The goal when conducting an appraisal is to accomplish all planned data collection activities in a fair, impartial, and professional manner and to validate the technical accuracy of the data collected.

Data Collection

Since data is critical to a successful appraisal, the appraisal team must collect sufficient amounts of accurate, pertinent data by using appropriate data collection methods. Five basic methods of data collection are available to team members: document reviews, interviews, observations, knowledge tests, and performance tests. Since each of these methods has inherent advantages and limitations, the team must carefully select the specific methods and use them in combination with others to ensure that all necessary data is collected and cross-checked.

Data collection activities generally follow the plans and schedules developed during the formal planning process. While team members focus on accomplishing the planned activities, data collection activities sometimes require adjustment to accommodate changing conditions. For example, early data collection results may necessitate reduced or expanded activities in planned areas of emphasis or investigation of areas not originally identified for review. If circumstances or conditions necessitate deviating substantively from the planned scope of the appraisal, the appraisal team leader will notify line management as soon as practicable and work with line management to accommodate the revised scope. The appraisal team will not ignore issues or potential issues that become apparent during the course of data collection simply because they were not identified during formal planning.

Document Reviews

Document reviews are a basic method used in virtually every appraisal. Every DOE program or activity that is reviewed normally has associated policy guidance, procedures, records, and other information in documentary form. Even in preparing to employ other data collection methods, such as work observations and performance tests, document reviews are usually essential. Document reviews are not limited to paper documents; information in computer databases, computer system directories, and automated logs of computer activity are included in this category. When requesting documents to review, team members are

expected to exercise judgment to tailor their requests based on the appraisal scope and review topics, and share collected documents to eliminate any duplicate requests.

Interviews

Interviews can provide useful data that is not readily available from other data collection methods. Interviews are most effective in determining perceptions and individual understanding of policies, procedures, duties, and management expectations. While both formal and informal interview techniques may be employed, deliberate preparation is necessary before any interview. Interview techniques are discussed in Appendix D.

An Independent Oversight Program federal staff member should normally be present whenever a federal manager is being interviewed; an Independent Oversight team leader or office director should be present when a senior federal or contractor manager, such as a field element manager or laboratory director, is interviewed.

Observations

Observations allow team members to see how personnel actually do their jobs and to evaluate their performance under normal conditions. Such observations provide valuable data about whether personnel understand and follow established procedures, operate equipment properly, etc. However, under some conditions, the observer's very presence may skew the performance being observed; consequently, observations are made judiciously. Observations can also be useful in determining how systems and equipment are designed, installed, operated, and maintained.

Knowledge Tests

Job knowledge may be best assessed through various techniques including interviews, observations, and performance tests. However, formal knowledge tests—particularly written tests—are an efficient and time-saving way to determine whether a large number of people possess a specific body of knowledge. Knowledge tests may be written or oral, or a combination of the two, and appropriate sampling techniques are used in selecting personnel to take the tests. Team members develop knowledge tests in conjunction with site trusted agent subject matter experts to ensure that the tests are fair and factually accurate, and access to test materials is strictly limited and controlled to preclude participants' knowledge of the contents in advance. Team members understand that knowledge tests indicate only whether personnel are knowledgeable in certain areas, not whether they can apply that knowledge or perform related duties.

Performance Tests

Performance testing is one of the most valuable data collection methods available, and is preferred over knowledge testing. In contrast with knowledge testing, performance testing is designed to determine whether personnel have the skills and abilities to perform their duties, whether procedures work, and whether systems and equipment are functional and appropriate. Virtually any skill, duty, procedure, system, or item of equipment can be performance tested. Performance tests vary in complexity from simple, limited-scope testing (e.g., tabletop or specific skill testing) to more complicated facility- or site-level exercises.

Some tests can be conducted under completely normal conditions, where the subject is unaware of the testing (e.g., cybersecurity penetration testing). Other tests must be conducted under artificial conditions, although maximum realism is always a primary consideration (e.g., force-on-force exercises and limited-notice security performance tests). While most performance tests must, by their very nature, be conducted

on site, some tests, such as cybersecurity scans and penetration tests, may be conducted from remote locations.

Before any performance test is conducted during an appraisal, all test activities are appropriately coordinated with site trusted agent representatives or other responsible individuals or organizations. To promote safety and realism in performance testing, Independent Oversight Program office directors are required to establish formal protocols for planning and conducting performance tests. These are detailed in organizational process guides or office-specific protocol documents.

Independent Oversight personnel are not limited to the five basic data collection methods specified above. Different or hybrid methods may be used, and team members are encouraged to employ the best techniques available for a specific task. For example, a survey or questionnaire, appropriate for some types of appraisals, may share characteristics with the document review, interview, and knowledge test methods.

Validation

Validation is the process used by Independent Oversight Program appraisal teams to verify the accuracy of the information gathered during data collection activities. It is a critical element in the conduct of all appraisals. While validation occurs throughout the conduct phase of an appraisal, a more formal validation of the appraisal results occurs when the draft appraisal report is provided for review as described in Section 5. Validation is a continuous process to ensure that:

- All collected data is factually correct and can legitimately be used to evaluate the effectiveness of the program, project, or activity.

- Points of contact and site federal and contractor management are aware of the data that has been collected. They must acknowledge its accuracy, correct any misinformation, request that further data be collected if necessary, and provide mitigating information. Representatives of the affected DOE and contractor organizations, and any affected policy office, should participate in validation as appropriate to provide feedback on the factual accuracy of information related to their organization.

All Independent Oversight appraisals include a process for ongoing validation activities. Depending on the scope and length of an appraisal, this process may include validating information with the point of contact as it is collected or as soon thereafter as practical; during daily validation meetings with points of contact; at management briefings conducted daily (or at another specified frequency) throughout the conduct phase; during summary validation meetings at the end of data collection; and during reviews of draft reports or appraisal summaries.

Communication/Integration

Communication among team members, between the team and the site or organization being evaluated, and between the team and headquarters is an essential element of all appraisal activities to ensure the integration of collected data and keep site management and relevant headquarters organizations informed of the appraisal's progress and any identified deficiencies. Methods may include face-to-face discussions, daily team meetings, daily site management debriefs, daily reports, and mid-point "rollups."

As various team members collect data throughout the appraisal, it is important that they share all appropriate information with other team members in a timely manner. Information collected by one team member may directly impact a line of inquiry conducted by another. When teams are large—and particularly when

several sub-teams are involved and each focuses on a different area or discipline—the team must make a conscious and deliberate effort to integrate information. Specific methods for achieving integration vary from formal to informal, are influenced by the team size and type of activity involved, and may include team meetings, shared data collection notes, and daily reports to managers. Specific integration methods are left to the discretion of the responsible appraisal team leader.

Equally important is communication between the appraisal team leader and site management regarding the progress of appraisal activities and potential issues identified by team members. Communication at this level typically takes place through informal daily management debriefs, although the nature of the appraisal and the presence of external stakeholders may require more formal methods. Daily debriefs provide the opportunity for the appraisal team leader to present the team's observations to site management and give site managers an opportunity to provide additional information.

The team may use an "Issue Form" to inform site management of significant issues (such as an imminent danger or a major vulnerability) or to convey an emerging issue that may be more clearly or more effectively communicated in writing before the team's report is developed and validated. A template for an Issue Form and procedures for its use are provided in Appendix E.

Appraisal team leaders are also responsible for keeping their office director informed of appraisal activities. The office director, in turn, conveys pertinent appraisal information to senior EA management. For larger appraisals, verbal and/or written reports are typically provided to EA management on a daily basis. Communication with headquarters organizations (e.g., program office, policy office) is also conducted as appropriate to validate or clarify team observations, especially if potential deficiencies in policies or program implementation are identified.

At the conclusion of onsite data collection activities, the appraisal team leader typically conducts an exit meeting with site management. In some cases, site management receives the draft appraisal report for formal validation at the end of the exit meeting. In other cases, the team provides a less formal listing of preliminary results (see example Preliminary Results Form in Appendix E), and drafts a report or other record of the appraisal after returning to headquarters. In either case, the exit meeting conveys the team's preliminary perspectives, and in some cases preliminary conclusions, and the expectations for completing the appraisal process.

Response to Major Vulnerabilities or Imminent Danger

EA is required by DOE Order 227.1A, *Independent Oversight Program*, to notify the cognizant DOE manager verbally as soon as possible and in writing within 24 hours when appraisal activities indicate either of the following conditions:

1. Conditions or practices in the workplace where a danger exists that could reasonably be expected to cause death or serious physical harm either immediately (imminent danger) or before the abatement of such danger could otherwise be accomplished through normal work control processes.

2. A major safeguards and security or cybersecurity vulnerability (e.g., unacceptable risk of special nuclear material theft or diversion, radiological or industrial sabotage, espionage, or significant compromise of classified information).

This notification is typically initiated by the appraisal team leader and is communicated as soon as possible directly to the DOE site manager. The Issue Form in Appendix E can be used to provide the written notification. DOE Order 227.1A also describes the required response from line management to such notification.

Section 5 – Appraisal Reporting and Formal Validation

Introduction

The report preparation and formal validation phase of an appraisal generally takes place after data collection is complete (although, at times, these activities may identify additional data needs). Data must be organized, assimilated, and analyzed in order to form conclusions and report the results. This section discusses the goals and integration needs of this phase and the various tasks to be accomplished, including analysis of results; determination of deficiencies and findings; assignment of ratings (if appropriate); consideration of OFIs, recommendations, and best practices; identification of policy inadequacies; and report preparation.

Goals

The primary goals of this phase are to thoroughly analyze all available data, draw valid conclusions from that analysis and, based on the analysis and conclusions, prepare a report that accurately reflects the status of the program, program element, facility, or activity being examined and provides managers the information they need to develop and implement necessary corrections.

Integration

The information integration discussed in the previous section continues to be important during the report preparation phase. During data analysis, team members must consider all pertinent information, regardless of who collected it, in the effort to reach valid conclusions. Team members must share not only the raw data, but also the conclusions and other results of analysis, as appropriate.

Analysis of Results

While analysis is an ongoing process during all phases of an appraisal, it culminates during the report preparation phase. Analysis involves a critical review of all data collection results, particularly any identified program deficiencies, strengths, and weaknesses, and leads to logical, supportable conclusions regarding how well the program functions or the program element has been implemented.

If no deficiencies are identified, analysis is a relatively simple matter. However, if performance deficiencies are identified, the analysis must consider these observations individually and collectively, and then balance them against identified strengths or mitigating factors to determine the overall impact on the program's effectiveness. Factors considered during analysis include:

- Whether an observed deficiency is isolated or systemic

- Whether program managers and other line managers knew of the deficiency and, if so, what actions were or are being taken

- The importance or significance of the deficiency in comparison to the applicable standard or requirement

- Mitigating factors, such as the effectiveness of other programs or program elements that may compensate for the deficiency

- The deficiency's actual or potential effect on mission performance or accomplishment

- The magnitude and significance of the actual or potential vulnerability to DOE interests resulting from the deficiency.

The analysis must result in—and support—conclusions regarding how successfully the program or program element meets requirements.

Deficiencies and Findings

One outcome of appraisal analysis may be the identification of deficiencies and findings. A deficiency is an inadequacy in the implementation of an applicable requirement or failure to meet a performance standard that is identified during an Independent Oversight appraisal. Findings indicate more significant deficiencies, or safety or security issues that warrant focused attention on the part of management (see Definitions, page vi). Team members are responsible for determining which appraisal results are designated as findings or deficiencies and for reporting them with a focus on improving performance and linkage to applicable requirements. Any program element or system that does not comply with DOE policy or that does not meet DOE performance standards may be identified as a finding. However, teams are expected to exercise judgment in determining findings; minor and non-systemic deficiencies must be appropriately identified so that they can be corrected, but they are normally not designated as findings.

The appraisal report presents findings and deficiencies in a manner that identifies both the specific problem and the appropriate DOE (or other) reference. If multiple potential findings each address specific aspects of a single standard, the findings may be "rolled up" and reported as a single finding *if* the single finding statement can clearly and completely convey the problems observed and facilitate their correction. Findings are always worded to express the specific nature of the deficiency, clearly indicate whether the deficiency is localized or indicative of a systemic problem, and clearly identify which organization (DOE Headquarters, field element, facility contractor, etc.) is responsible for corrective actions. Typically, assignment of a finding includes a discussion of the impact of the condition described, including any mitigating factors and compensatory measures.

Ratings

For some assessment activities, the conclusions reached through analysis of the results may lead to the assignment of ratings. The appraisal team is responsible for recommending ratings; however, final approval of ratings rests with the EA Director, with input from the cognizant EA office director. Although findings often identify conditions that adversely impact a program's rating, findings do not necessarily impact the rating. Ratings used by EA are:

- Effective Performance (Green): Assigned when the system being evaluated provides reasonable assurance that the identified protection or program needs are met (overall performance is effective). The element being appraised is normally rated Effective Performance if all applicable standards are met and are effectively implemented. An element is also normally rated Effective Performance if, for all standards that are not met, other systems or compensatory measures exist that provide equivalent protection; or the impact of failing to fully meet an applicable standard is minimal and does not significantly degrade the protection provided. Line managers are expected to effectively address any specific deficiencies identified.

- Needs Improvement (Yellow): Assigned when the system being evaluated only partially meets identified protection or program needs or is not sufficiently mature and robust to provide assurance

that the protection or program needs are fully met. The element being appraised is normally rated Needs Improvement if one or more of the applicable standards are not met and are only partially compensated for by other systems, and the resulting deficiencies degrade the effectiveness of the system under evaluation. Line managers are expected to provide sufficient attention to ensure that identified areas of weakness are effectively addressed through corrective actions and/or ongoing initiatives.

- Significant Weakness (Red): Assigned when the system being evaluated does not provide adequate assurance that the identified program needs are met. The element being appraised is normally rated Significant Weakness if one or more of the applicable standards are not met, there are no compensating factors to adequately reduce the impact on system effectiveness, and the resulting deficiencies seriously degrade the effectiveness of the system under evaluation. Line managers are expected to apply immediate attention, focus, and resources to the deficient program areas.

Opportunities for Improvement, Recommendations, and Best Practices

Independent Oversight Program appraisal team members have a broad range of knowledge in their individual areas of expertise and also have the advantage of observing methods of program implementation across the DOE complex. When deficiencies, issues, or inefficiencies in program implementation are identified during an appraisal, it can be beneficial for team members to provide insight on approaches that line management could adopt to improve program performance, often by reference to successful approaches observed at other DOE sites. Specific OFIs are identified for inclusion in appraisal reports but are provided only in the context of recommendations for line management consideration, not as directed action. OFIs that correlate to findings normally offer suggested approaches that line management may consider in their corrective action plans. Additionally, OFIs are routinely provided when a performance deficiency does not rise to the level of a finding, or for other conditions noted during the appraisal.

In some cases, appraisal reports may include recommendations. Recommendations are typically broader in scope than OFIs, with an aim to improving management systems rather than particular deficiencies. Reports that include recommendations may also include OFIs that provide suggested steps or actions for addressing the issues embodied in a recommendation.

Some appraisal reports, particularly rollup reports that cover a series of related appraisals, may also identify best practices. Best practices are implementing methods, techniques, and processes, or program attributes that have been observed during Independent Oversight appraisals and that EA believes may merit consideration by other DOE and contractor organizations to enhance performance or operate more efficiently or effectively. Best practices are typically beneficial methods or processes that other DOE sites and facilities can readily adapt for use, or innovative approaches for addressing a condition that poses a challenge for multiple sites or organizations. A template for documenting best practices observed during appraisals is provided in Appendix E.

Policy Inadequacies

Appraisals sometimes uncover deficiencies or issues that stem from policy inadequacies (e.g., lack of policy, unclear policy, contradictory policies, inappropriate policy, or inappropriate implementation guidance). In such cases, the cognizant EA office director or appraisal team leader first engages the headquarters element responsible for the policy or subject area to ensure that the team has a correct understanding of the applicable policy or its effect on the observed condition. In some cases, this communication may necessitate a request for a written interpretation of the policy or requirement and its proper application; either EA or the organization subject to the appraisal may initiate such a request. If the observed policy weakness is not a matter of interpretation, EA communicates the issue to the appropriate

headquarters element, typically via a memorandum that identifies the subject, provides necessary background information, states the problem, discusses its implications, and, if appropriate, recommends a course of action.

Report Preparation

The report is the formal product of any appraisal. Reports are the only published records of specific appraisals, and are intended for dissemination to the appropriate managers at DOE Headquarters and field elements (including, when appropriate, facility contractors). Appraisal reports vary in format, and the appraisal team leader selects the most appropriate format for the specific purpose and with consideration of the scope and nature of the appraisal activity. Most reports include an executive or appraisal summary targeted at senior management. Appendix F provides guidance for preparing an executive summary.

Draft Report

During the later stages of an appraisal, the appraisal team develops a draft report that includes all the necessary elements of the final report. EA then submits the draft report to the responsible field element manager and headquarters program office representative, as appropriate, for factual accuracy review based on an agreed-upon schedule. In some cases, the draft report is provided for formal review and comment at the conclusion of the onsite exit meeting. Line management organizations and other responsible DOE organizations may provide draft reports to personnel within their organizations for review. Where multiple organizational layers are involved in reviewing a draft report (e.g., secretarial officer and field element manager), the organizations are expected to provide a consolidated set of comments on the factual accuracy of the draft appraisal report in accordance with the appraisal schedule.

Section 6 – Appraisal Closure

Introduction

This section addresses responsibilities and tasks for finalizing the appraisal report (including offering senior line management the opportunity to provide a management reaction), developing an appraisal summary, communicating policy inadequacies, reviewing corrective actions, conducting requested or required briefings, effecting headquarters coordination, and gathering information for internal process improvement. All of the responsibilities and tasks addressed in this section apply to assessments; some may be applied to other types of appraisals when appropriate.

Goals

The primary goals of the closure phase are to prepare and disseminate an accurate account of the appraisal results through a final report, conduct appropriate briefings on the appraisal results, provide public information as to a report's existence or availability, and conduct policy issue discussions as necessary with the senior managers of appropriate headquarters organizations.

Final Report

The appraisal team must review all factual accuracy comments that EA receives during the formal review and validation phase and make appropriate changes in the draft report. In some cases, resolution of the comments requires additional dialogue with site personnel. EA office directors review the proposed responses to factual accuracy comments to ensure that the team is objectively responding to the feedback. After considering all factual accuracy comments, the appraisal team prepares a final draft report. For major appraisals, EA gives the cognizant headquarters Assistant Secretary or Program Director the opportunity to review the final draft appraisal report and provide a Management Reaction memorandum conveying comments on the conclusions and recommendations of the report.

The final draft report is reviewed by an EA Quality Review Board (QRB). The QRB is chaired by the EA Deputy Director and typically includes other EA managers who have not been involved in the appraisal that is the subject of the report. The QRB is responsible for providing an independent review of the report's contents, conclusions, and presentation to ensure clarity, accuracy, appropriate tone and messaging, and consistency in EA's reports. The appraisal team leader must make the QRB aware of any significant comment resolution issues remaining and the contents of any Management Reaction memorandum received by EA. The final draft report may be altered or revised based on the QRB's comments and recommendations. If the appraisal team leader, cognizant EA office director, and QRB reach an impasse on an item in the final draft report, the issue is submitted to the EA Director for resolution. Otherwise, the appraisal team prepares the final report and submits it to the EA Director and Deputy Director for approval before issuance.

In some cases, an appraisal team member may not agree with the report's contents. If the disagreement cannot be resolved between the team member and team leader, the team member is encouraged to document the issue and submit it to the cognizant EA office director for review. If the office director cannot resolve the disagreement, the issue must be submitted to successively higher levels of EA management for evaluation and discussion.

The approach to distribution of the final report depends on the nature and scope of the appraisal activity.

Assessment reports for larger appraisals are typically distributed to the cognizant Under Secretary, Assistant Secretary or Deputy Administrator/Associate Administrator, and field element manager, and may be transmitted to the Secretary and/or Deputy Secretary. Reports for smaller appraisals are typically transmitted to the field element manager, with a copy to others in the cognizant line management chain or those with a vested interest in the appraisal results. Targeted and special assessment reports covering activities at multiple sites are generally more widely distributed. Appraisal reports that contain only publicly releasable information (i.e., no classified or controlled unclassified information) are posted on an EA website. For reports that contain information that cannot be publicly released, only the report title is provided on an EA website. Appraisal reports pertaining to safeguards and security topics are appended to the Safeguards and Security Information Management System (SSIMS) database. Any requests received by EA for access to reports that are not readily available are typically forwarded to the organization subject to the appraisal for a determination on whether the report may be released to the requestor.

Appraisal Summary

For most appraisals, EA develops a short summary (typically one to two pages) to communicate the overall results of the appraisal to senior DOE managers. To facilitate communication of the appraisal results, Independent Oversight strives to develop summaries that contain only unclassified or controlled unclassified information. In some cases, the executive summary of the appraisal report constitutes the appraisal summary. An example of an appraisal summary in provided in Appendix E.

Communication of Policy Inadequacies

Upon returning to headquarters from an appraisal, the appraisal team leader completes, if necessary, a memorandum documenting any inadequacies that were identified in DOE policies or directives during the appraisal, and provides it to the office director for transmittal to the manager(s) of the appropriate headquarters organization(s). Such a memorandum can also be prepared based upon an analysis of a series of appraisals in the same subject area. EA responds, as needed, to requests for discussion or additional information pertinent to the issue(s) raised.

Corrective Actions

The responsible DOE line managers are required to ensure that corrective actions are developed and implemented to address findings identified in appraisal reports. DOE line management and contractors must manage the corrective actions and track them to completion using site- or program-specific issues management processes and systems as set forth in DOE Order 226.1, *Implementation of Department of Energy Oversight Policy*. For findings in Independent Oversight reports pertaining to safeguards and security (excluding cybersecurity), the line management organization subject to the appraisal must ensure that the findings and corrective actions are entered into SSIMS as required by DOE Order 227.1A, *Independent Oversight Program*.

If requested by the responsible DOE manager, the appraisal team reviews corrective action plans pertaining to the appraisal and provides comments to the manager for consideration. In rare cases, the EA Director may require the entity subject to an appraisal to submit corrective action plans to the cognizant EA oversight office for review and comment. This might occur if, for example, repeated prior attempts to resolve an issue through corrective actions have been unsuccessful.

Thereafter, the Independent Oversight Program conducts selected appraisals to evaluate the timeliness and adequacy of corrective actions, verify and validate the effectiveness of corrective actions, and confirm the

closure of findings. The timing and extent of these appraisal activities are based on the significance and complexity of the finding and the extent and complexity of the actions necessary to address it.

Briefings

The closure process for appraisals can include briefings to appropriate managers on the process, results, and conclusions of the activity. Briefings fall into several categories:

- In some cases, EA may conduct a site briefing when the draft or final report is complete. If EA leaves a draft report with site management after onsite data collection activities, this briefing is the exit meeting described in Sections 2 and 4.

- EA may conduct briefings for key headquarters managers immediately before or after the final report is issued.

- EA may conduct briefings for the Secretary's Chief of Staff team to keep them abreast of pending EA reports.

- When appropriate, EA conducts external briefings for key stakeholders, such as congressional staff and the DNFSB, after issuance of the final report and completion of all internal DOE briefings. The cognizant DOE management for the activities or organizations subject to the appraisal is invited to attend these briefings to address the appraisal results and the corrective actions planned or completed in response to the appraisal.

The need for appraisal briefings depends on the nature of the activities that were conducted and the results. The structure, level of detail, and specific content of briefings are tailored to the needs of the audience and the information that needs to be communicated. All appraisal briefings are coordinated with the affected cognizant DOE management.

Headquarters Coordination

As appropriate, EA coordinates with Offices of the Secretary, Public Affairs, and Congressional and Intergovernmental Affairs; the applicable Under Secretary; and affected DOE line management organizations to develop an approach for providing results of appraisals with significant congressional or media interest to external stakeholders. Individual appraisal team members are instructed to not respond to media or other external inquiries directly.

Process Improvement

The Independent Oversight Program consistently strives to improve its internal processes as part of a continuing effort to improve its products and the value it provides to DOE. During the closure phase of each major appraisal, EA office directors and team leaders are expected to solicit information from team members that can be used for process improvement. The format for such solicitations (questionnaire, roundtable discussion, after-action report) is determined by the responsible manager, and may vary depending on the type of appraisal being reviewed and the perceived need for improvement.

EA office directors are also expected to maintain an ongoing dialogue with their field and program office counterparts and be receptive to line management views on potential improvements in EA's appraisal processes. Periodic meetings with senior leaders from the program offices are also used to solicit feedback on EA's appraisal processes.

Section 7 – Records Management

Introduction

Final appraisal reports provide the formal record of the results of Independent Oversight Program activities. However, much of the detailed information regarding the conduct of appraisal activities, the results of data collection efforts, and the deliberations and analyses of team members is not specifically included in the final reports. While the Independent Oversight Program's goal is to include sufficient detail in each report to fully justify its conclusions and enable the report to stand on its own, there is a need to retain some documentation that provides additional information about various aspects of an appraisal activity. Consequently, it is the Independent Oversight Program's policy to archive certain types of information associated with appraisal activities to enable an accurate response to potential queries for additional detail.

Records Retention Requirements

The Independent Oversight Program follows the DOE Administrative Records Schedules found at http://energy.gov/cio/administrative-records-schedules that are maintained by DOE's Office of the Chief Information Officer. Records associated with each appraisal activity are assembled and archived for a period of 10 years from the date of the final report of the activity. At a minimum, the archives contain the following types of information, in either electronic or hard copy form:

- Appraisal Plan*
- Correspondence pertinent to the appraisal, as determined by each EA office director
- Performance test documentation, if applicable
- Issue Forms, if utilized*
- Site's written response to any Issue Form utilized*
- Site and program office factual accuracy comments*
- EA briefing materials*
- Appraisal summaries*
- Management responses to the appraisal*
- Final report and report transmittal memorandum*

Note: * If these items are not classified, they are posted in the EA Share master document library

Additional information may be retained as necessary to fully document an appraisal activity. The directors of the EA offices that perform appraisals identify, in their individual office appraisal process documents, the types of records that are to be collected and archived, including the minimum set of records listed above.

Appendix A – Professional Conduct

Independent Oversight Program personnel occupy sensitive and highly visible positions and must maintain the highest standards of personal and professional conduct. While conducting appraisals, Office of Enterprise Assessments (EA) team members are considered official representatives of the Office of the Secretary of Energy. Their behavior must always be beyond reproach. This includes being tactful, courteous, and properly attired.

While on site, team members must follow all local rules, entry and exit procedures, safety and security regulations, parking requirements, and other employee and visitor guidelines. Team members are responsible for familiarizing themselves with all local policies. If they encounter a problem or if local requirements alter essential appraisal activities, the team member should inform the team leader as soon as possible.

Team members are responsible for promoting good relations with site personnel. Appraisal team members come into contact with individuals at almost all organizational levels during appraisal activities. Team members must be well received and looked upon as professionals. Appraisal teams work especially closely with points of contact, trusted agents, and other federal and contractor personnel who have been assigned specific appraisal support responsibilities. During initial meetings, team members should ensure that these individuals fully understand what is expected. Team members should be open, candid, and straightforward. A close working relationship is necessary and desired, but must be kept on a professional level. Team members need to be sensitive to the pressures and stress experienced by the people undergoing the appraisal. Their stress may be amplified when problems are identified. Establishing good relations at the outset can significantly relieve these stressful situations. In addition, professional image and support can quickly erode if team members openly criticize the site or its personnel, or make unfavorable comparisons with other sites. If criticism of the site is warranted, it should be included in the proper section of the appraisal report.

Improper conduct of any kind will not be tolerated. It is important that all team members understand that EA fully supports the prevention of sexual harassment and all other forms of harassment. All Independent Oversight Program managers and team members should be alert to conditions, regardless of how innocent they appear, that could produce an incident of harassment. Immediate action must be taken to correct problems, respond to requests for assistance, and prevent future occurrences.

Team members may socialize and relax at appropriate times and locations while on appraisals. However, team members must be particularly circumspect when socializing with personnel from the facility or site being evaluated to minimize the chance of social contacts being perceived as compromising the objectivity of the appraisal. Team members must also refrain from discussing the appraisal while in public areas where they may be overheard.

Contractors serving on appraisal teams must be extremely careful to avoid any conflict of interest, potential conflict of interest, or appearance of a conflict of interest. Discussing future work possibilities at the site, mentioning individual or corporate capabilities as they apply to current site problems, and any other similar activity is unacceptable. If any potential conflict of interest is encountered, it must be reported to the responsible office director immediately.

The information provided here is not intended to be an exhaustive discourse on personal and professional conduct or ethical standards. The intent is to provide a condensed treatment of these subjects as they pertain

to the Independent Oversight Program. 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.

A Standard of Professional Conduct for Independent Oversight Program Personnel

- As an official representative of the Office of the Secretary 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.

- Establish good relationships with site personnel; avoid adversarial relationships.

- Maintain a professional relationship and frequent, candid dialogue with points of contact and trusted agents.

- Avoid criticizing the site or site personnel.

- Be sensitive to the pressures and stress experienced by the people being evaluated.

- Avoid actions that could be interpreted as sexual harassment.

- Be discreet when socializing.

- Avoid any conflict of interest or appearance of conflict of interest.

Appendix B – Appraisal Selection, Prioritization, and Scheduling

Purpose

This appendix describes the Independent Oversight Program's approach to establishing oversight and appraisal priorities, and the frequency of assessments for the activities and assets that are subject to periodic Independent Oversight evaluations. It reflects the program's focus on Departmental facilities and programs that have high-value assets, conduct high risk operations, and/or pose conditions that have the potential to cause workers, the Department and/or United States irreparable harm. The Office of Enterprise Assessments (EA) oversight offices are expected to identify key areas of risk, vulnerabilities, emerging trends, and best practices in order to have an enterprise view of performance in their assigned mission areas. While complemented with broad situational awareness and analysis of performance metrics and line management data, the conduct of appraisals is the most basic data collection tool that enables EA to provide timely, independent information to line managers and the Secretary and Deputy Secretary of Energy on the safety and security of the enterprise. EA oversight managers determine the types and subjects of appraisals most suitable for monitoring and analyzing performance in their respective areas, consistent with senior DOE management direction.

Overview of Selection, Prioritization and Scheduling Process

The Independent Oversight Program employs a formal process for prioritizing its appraisal activities for each of the three oversight areas: safeguards and security, cybersecurity, and safety/emergency management. For safeguards and security and cybersecurity oversight, most major appraisals are conducted at field sites at routine intervals, the frequency of which primarily depends on the type and quantity of the physical and information assets maintained at the site. For these areas, EA has established priority designations that provide a guideline for determining how often a site will be subject to periodic Independent Oversight appraisal activities. Smaller scope appraisals and technical or limited-notice performance testing are conducted more frequently than the intervals identified below. For nuclear safety, worker safety and emergency management oversight, appraisal priorities are determined using a more dynamic analytical process that continually evaluates site performance based on recent significant events, important new activities, proposed significant changes to infrastructure, and the status of the site or activity operating contract. In all areas, however there are a number of factors (e.g., a facility's recent assessment results; changes in management approaches, contractual arrangements, or protection strategies or technologies; new safety- or security-related initiatives; recent site, Departmental, or national events; and available resources) that affect how often a given site is subject to appraisal in a particular area.

Priority Designation Process

Each site subject to independent oversight is associated with a priority designation for safeguards and security and cybersecurity based on the criteria described below. These criteria are applied using available empirical data and the professional judgment of Independent Oversight Program staff. EA conducts a review of a site's priority designation when significant changes occur in the site's physical plant, mission, or operations.

Criteria for Determining Safeguards and Security Priority Designations

Priority I: Sites with high-value assets or with high risk; includes all sites with Category I special nuclear material in accessible and transportable form. These sites are typically assessed every 30 months.

Priority II: Sites with medium-value assets or with medium risk; includes Category II or III special nuclear material in accessible and transportable form. These sites are typically assessed every 36 to 48 months.

Priority III: Sites with primarily non-national defense missions and no Category I or II quantities of special nuclear material. These sites are typically assessed only in response to significant or recurring security incidents, or as part of targeted assessments of specific security functions (e.g., performance of armed protective forces).

Other factors to be considered in determining the priority designation:

- Amount of special nuclear material present on site

- Amount and sensitivity of classified matter on site (e.g., intelligence, special access)

- Amount and sensitivity of controlled unclassified information on site

- Other assets that require protection

- Identified risks/risk levels associated with the protection system

- Compensating or mitigating factors

- Management and program stability (e.g., contract changes, reductions in force, changes in program implementation approaches, newly deployed technologies).

Criteria for Determining Cybersecurity Priority Designations

Priority I: Major weapons production sites, weapons laboratories, and scientific laboratories with large classified computer networks containing high-value information assets, and/or information systems requiring a high degree of assurance of data integrity or availability. These sites are typically assessed every 30 months.

Priority II: Sites with classified computing assets and substantial unclassified computer networks containing controlled unclassified information, presence of critical infrastructure assets, and/or information systems requiring a high or moderate degree of assurance of data integrity or availability. These sites are typically assessed every 36 to 48 months.

Priority III: Sites with only unclassified computer networks and a limited amount of controlled unclassified information, with most systems only requiring a low degree of assurance of data integrity or availability. These sites are typically assessed on a sampling basis, in response to significant or recurring cybersecurity incidents, or upon request.

Other factors to be considered in determining the priority designation:

- The threat environment impacting classified and unclassified information systems

- Number and sensitivity of classified information system resources (e.g., Restricted or Formerly Restricted Data, weapons design information), and accessibility of the information systems (i.e., standalone or interconnected)

- Sensitivity of controlled unclassified information (e.g., personally identifiable information, Unclassified Controlled Nuclear Information, Official Use Only information) and accessibility of the information (i.e., standalone, interconnected, or internet connected)

- Presence of critical infrastructure systems, such as those that control large-scale electrical power distribution, or systems that are critical to safe and secure nuclear and hazardous facility operations

- Effectiveness of management, operational, and technical controls to mitigate cybersecurity risks

- Compensating or mitigating factors

- Management and program stability (e.g., contract changes, changes in program implementation approaches, network reconfigurations, susceptibility to new threats, newly deployed technologies).

Criteria for Determining Nuclear Safety, Worker Safety and Health, and Emergency Management Priorities

The Office of Environment, Safety and Health Assessments has designated a staff member as a site lead for all sites with hazard category 1, 2, and 3 nuclear facilities. The site lead is responsible for maintaining operational awareness of their assigned site(s), including the status of contracts, nuclear facility safety bases, nuclear facility projects, major modifications or changes to nuclear facilities, schedules of line oversight activities and assessments, significant issues, and corrective actions for prior findings. Information from operational awareness activities, coupled with site condition and operational performance information in the worker safety and health and emergency management areas, is assembled for each site and routinely updated and analyzed to determine assessment priorities. EA focuses its nuclear safety oversight on hazard category 2 and above nuclear facilities and includes sampling of essential processes pertaining to implementing safety controls, such as design of safety systems, conduct of operations, conduct of surveillances, maintenance, engineering, and quality assurance. Nuclear safety oversight also includes assessments of the safety bases for select high hazard nuclear facilities, particularly those with major nuclear facility design and construction projects. Oversight of these projects typically includes evaluating the integration of safety with design, quality assurance, construction quality, startup readiness, and startup programs for transition to operations. The priority for emergency management assessments is on sites requiring an Operational Emergency hazardous material program, and assessments are focused on evaluating site response capabilities during large-scale emergency exercises. Worker safety and health assessments are prioritized based on site safety performance and include evaluating programs for controlling hazards that present unusual risks, such as those associated with biological and nanoscale materials, beryllium, and explosives. Priorities are further refined and assessments tailored based on the assessment results for each site.

Schedule Development Process

Annually, approximately three months before the start of a fiscal year, the subordinate oversight offices:

1. Identify periodic and other assessment requirements (e.g., follow-up activities, targeted assessment topics, or special assessments) in their areas of interest for the upcoming calendar year. The objective of this phase is to outline major appraisal activities that require significant advanced planning, recognizing that many appraisal activities are also scheduled and planned with shorter lead times based on changing conditions, the stage of a particular activity or operation, and ongoing observations of performance.

2. Coordinate with other EA offices to ensure that appraisal schedules do not overlap or conflict with one another.

3. Coordinate with the cognizant line managers to ensure that Independent Oversight activities are integrated into line management assessment schedules. This typically includes meeting with points of contact in the headquarters program offices to ascertain overall program office priorities, plans, and schedules for line oversight activities in the coming year, and then coordinating with site managers and staff to identify optimal time frames.

4. Coordinate with headquarters offices, field managers, and key points of contact to identify and address scheduling conflicts.

5. Submit the proposed activities and a general schedule to the EA Director and Deputy Director for approval.

Upon approval and coordination of activity dates, normally by November 1 of each year, EA provides the schedule for the following calendar year to the affected headquarters and field elements. EA will also provide the schedule to other organizations within DOE (e.g., Office of Inspector General) for areas of significant common interest (e.g., cybersecurity).

Appendix C – Sample Appraisal Plan

This appendix provides an example of the types of information that may be included in an Office of Enterprise Assessments (EA) appraisal plan. Plans will vary in the level of detail and sequence of information based upon the specific type of appraisal to be conducted and the office or offices conducting it.

DEPARTMENT OF ENERGY
OFFICE OF ENTERPRISE ASSESSMENTS
PLAN
FOR THE [APPRAISAL TYPE] OF [TOPIC]
AT THE [SITE]

[Months and Year of Onsite Assessment Activities]

Approved by:

_____   _____
Appraisal Team Leader   Date

_____   _____
EA Oversight Office Director   Date

DEPARTMENT OF ENERGY
OFFICE OF ENTERPRISE ASSESSMENTS
PLAN
FOR THE [APPRAISAL TYPE] OF [TOPIC]
AT THE [SITE]

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DEPARTMENT OF ENERGY
OFFICE OF ENTERPRISE ASSESSMENTS
PLAN
FOR THE [APPRAISAL TYPE] OF [TOPIC]
AT THE [SITE]

</div>

I.   INTRODUCTION

The [applicable EA Office], within the Department of Energy's (DOE) Office of Enterprise Assessments (EA) will conduct an [appraisal type] of [appraisal area] at the [Site], [onsite activity dates]. The objective of this assessment is to evaluate the effectiveness of the [contractor/laboratory] and [field office] programs in managing and maintaining [appraisal area] performance. This assessment will evaluate [specific program, assessment area(s), and/or facilities].

This [appraisal type] will be conducted in accordance with DOE Order 227.1A, *Independent Oversight Program*; other DOE directives; EA protocols and guides; and this plan. While this plan outlines projected assessment activities, changes to specific activities and assessment focus areas may be made in response to emerging issues, requests from senior DOE managers, scheduled work activities at the site, or conditions observed during data collection efforts. If it is deemed necessary to deviate substantially from this plan, the changes will be coordinated with the [field element].

II.   SCOPE/METHODOLOGY

This [appraisal type] will evaluate selected elements of the [appraisal area] program using a variety of data collection methods. To achieve the objectives of the appraisal, the following topical areas will be evaluated:

[Listing of subtopics/program elements subject to review]

Performance effectiveness will be evaluated against applicable national standards, DOE directives, program and field office procedures, and locally approved [site] program plans and operating procedures.

III.   SCHEDULE

The appraisal process is divided into several stages, including offsite and onsite planning, data collection and analysis, report writing, data validation and factual accuracy review, and closeout activities. Offsite planning for this appraisal will include brief discussions with site personnel to understand the current organization and operations, a request for and review of relevant site procedures and other documents, scheduling of onsite activities, preparation of performance test plans and agreements, and designation of and coordination with trusted agents. The onsite portion of the appraisal will be conducted [dates]. During this period, activities such as interviews, facility walkdowns, limited-scope performance tests, and document reviews will be conducted. Following completion of the onsite activities, a draft report will be prepared and made available to line management for factual accuracy review. The overall schedule is provided below.

Scoping Visit	[Dates]
Planning Visit	[Dates]

Onsite Data Collection	[Dates]
Report Preparation	[Dates]
Report Factual Accuracy Review	[Dates]
Draft Report Comments Due	[Dates]

IV. TEAM RESPONSIBILITIES AND ASSIGNMENTS

[Name/Title] will be the senior DOE official managing the appraisal activities and the primary point of contact with site management. He/she will be assisted by a staff of technical specialists and administrative support personnel. The team leader and staff will ensure that the appraisal is conducted fairly and in accordance with this plan.

The team will be divided into several subject/topical areas as follows:

[List team composition, assignments, and contact information or provide in an appendix]

V. APPRAISAL PROCESS

The appraisal will be performed in accordance with [applicable office protocol/process guide]. Appraisal team members will adhere to all site-specific safety, security, training and access requirements.

Data Collection

The appraisal will be conducted using the [lines of inquiry/criteria and review approach document (CRAD)] in [appendix/CRAD title(s)]. Methodologies for collecting data as part of this assessment will include document reviews, facility tours, interviews, work observations, and tabletop performance tests. Any issue with facilitating a document or data request, facility tour, interview, activity observation, or performance test should be brought to the attention of the appraisal team lead and EA and DOE site office management (if needed) for resolution. If an imminent danger, major security vulnerability, or condition that presents an unacceptable immediate risk to workers, the public, the environment, or national assets is identified during the appraisal, the team lead will notify DOE site management verbally as soon as possible and in writing within 24 hours. The team lead will conduct an informal daily briefing for DOE and contractor management during data collection to discuss preliminary observations from the appraisal and the status of appraisal activities.

Appraisal Closeout

The appraisal team lead will provide information on preliminary observations from the appraisal to [field element] and [contractor/laboratory] managers at the conclusion of the onsite data collection activities.

The appraisal process will culminate in the issuance of a report that documents the scope and results of the appraisal. The report will identify the overall effectiveness of the [field element] and/or [contractor/laboratory] organization in managing the assessed topical areas. The report may identify "findings," which are deficiencies that warrant a high level of attention on the part of management and that, if left uncorrected, could adversely affect the DOE mission, the environment, worker safety

or health, the public or national security. Any findings will be clearly identified in the appraisal report. Findings must be addressed through corrective actions and managed in accordance with the issues management process that the [organization/site] has implemented in accordance with DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*. The appraisal report may identify other deficiencies that do not rise to the level of a finding. These deficiencies are expected to be evaluated by line management for correction and entry into applicable issues management systems. The appraisal report may also identify "opportunities for improvement," which are suggestions offered by the appraisal team that may assist in identifying options and potential solutions to various issues identified during the conduct of the appraisal. Some appraisal reports also identify "best practices" that could help other DOE organizations improve performance or solve challenging problems.

Line management will be provided a draft report for factual accuracy review and comment prior to issuance of the final report. In accordance with DOE Order 227.1A, the line management validation process also includes the option for the cognizant Program Secretarial Office to submit a written management response to the conclusions and any recommendations in the draft report, which will be included in the final report as an appendix.

APPENDIXES

Note: The appendixes to appraisal plans vary depending upon the type of appraisal to be conducted and the office conducting it. In some cases, an appendix is used to provide more detail on items in the appraisal plan, such as the appraisal schedule or team composition. An appendix may also be used to transmit the request for documents to support the conduct of the appraisal, or to identify specific items for follow-up that are included in the scope of the appraisal. For safeguards and security appraisals, the appraisal lines of inquiry are typically provided in an appendix. For safety-related appraisals, the lines of inquiry are contained in Criteria and Review Approach Documents (CRAD) that are available on an EA website.

Appendix D – Interview Techniques

The interview is an invaluable instrument for obtaining data and information. Although there are several different interview types, Independent Oversight appraisal team members are primarily interested in the data determination interview, which is used to gather data and information from the interviewee. Each interview will differ to accommodate the type of interview, the parties involved, and the complexity of the topics discussed. However, to be successful, every interview should involve a two-way discussion and be *properly planned*.

Frequently, the goals of the two parties involved in an interview may be dissimilar or even opposite. One purpose of the interview would then be to find common ground for discussion. At times, the personalities of the individuals involved may also be quite different, which can create challenges. To alleviate, if not eliminate, these types of issues, the appraisal team member needs to plan the interview, designate and communicate the objectives to be achieved, and be sensitive to the other person's needs and feelings. During the interview, the team member also needs to listen with intelligence and understanding and use interviewing tools effectively.

Planning the Interview

Interviews are more successful when the interviewer takes time to establish objectives and review general methods and techniques. Appraisal team members are expected to devote time and effort to the following areas.

Purpose

Appraisal team members should refrain from discussing too wide a variety of topics or cover topics that are not applicable to the appraisal. Those actions detract from efficient use of time and may unnecessarily generate confusion or misunderstanding. Team members must be flexible during an interview, but they must also plan ahead. The team member should consider establishing objectives with the interviewee to facilitate securing pertinent facts, reaching decisions, or selecting a specific course of action to obtain additional information.

Research

Interview time is typically limited, so the interviewer must use the time with the interviewee efficiently to accomplish the interview objectives. Appraisal team members are expected to do their "homework" by reviewing relevant documents ahead of time and having important reference sources on hand during the interview in order to maximize the time spent discussing and understanding the key objectives of the interview.

Key Questions

The benefit from any interview will be maximized if interviewees are willing and able to express themselves freely. In many cases, team members may achieve these conditions by asking the right kinds of questions. Queries such as "How would you reorganize the operation?" or "What action do you recommend for solving the problem?" may motivate the interviewee to respond openly and freely.

Sensitivity

Appraisal team members should recognize the interviewee's perceptions, expectations, and personality. Everyone reacts to interviews differently. Some will respond openly and freely with one approach; others may respond better to another. A moment or two spent at the outset of the interview attempting to determine the individual's personality, perceptions, and needs is often time very well invested.

There are other actions that team members may take to prepare for the interview. The point is that proper planning almost always results in a fruitful interview.

The Interview in Action

Appraisal team members typically adapt the interview to the persons involved. However, in every instance, it is important to use the following tools of interviewing to maximize effectiveness:

1. **Establish a comfortable climate.** When people are treated courteously, honestly, and respectfully, they usually respond positively. If the exchange is to be open, honest, and free, the climate must help to attain those goals.

2. **Articulate the purpose of the interview.** It is helpful to both parties if a common understanding is reached as to the purpose of the interview and the subjects or issues to be discussed.

3. **Obtain the interviewee's input.** Because of the nature of appraisals, both the appraisal team member and the interviewee may tend to allow the interviewer to dominate the discussion. This is not desirable. The interviewee should participate freely and thoroughly. Without this participation, appraisal team members will find it difficult to gather the data necessary to accurately evaluate the area being evaluated.

4. **Question, listen, observe, evaluate.** These points are the keys to a successful interview. Questions should be carefully worded and should usually be designed to elicit a response from the interviewee beyond "yes" or "no." Since the purpose is to gather facts and information, the appraisal team member should refrain from arguing, correcting, explaining, or preaching. It is a time to listen—listen attentively, understandingly, skillfully, and sensitively. While listening, the team member should also observe the nonverbal communication of the interviewee. With tactful questioning, sensitive listening, and thoughtful observation, the team member should be positioned to accurately evaluate the information that the interviewee conveys.

5. **Terminate effectively.** Interviews should not be terminated abruptly so as to avoid diminishing whatever cooperative climate was developed between the appraisal team member and interviewee. An effective conclusion to the interview is important. A recap of the key points noted by the team member is an effective way to end the discussion and gives the interviewee an opportunity to provide any needed clarification or suggest additional sources of relevant information.

The interview can be among the most important of all the appraisal team's data collection tools. It provides an excellent method for determining facts and confirming or refuting information gathered.

Interviews require time, but this is usually time well spent. A good exchange will often give the appraisal team valuable information and put the interviewee at ease regarding the objectives of the appraisal and

interview. Interviewees have the opportunity to express themselves and the satisfaction of having someone listen. This is particularly true if interviewees are proud of their achievements and areas of responsibility.

Table D-1 summarizes the protocols for conducting effective interviews.

Table D-1. Interview Protocols

- Prepare questions and lines of inquiry in advance.
- Schedule interviews well in advance and arrive for interviews promptly.
- Provide an overview of the topic to be discussed to ensure the proper attendees.
- Explain the purpose of the interview.
- State the classification level of the discussion.
- Do not "lead" interviewees in answers and conclusions.
- Conduct interviews in the interviewees' work location whenever possible to promote easy access to applicable documents and minimize disruption in the employee's work day.
- Limit team attendance to one or two interviewers unless a group interview is being conducted. The number of interviewers should not overwhelm the interviewees. Limit attendance by line personnel to the individual or individuals being interviewed, unless the interviewee requests the attendance of a manager or union representative. In most cases, to ensure an open and candid interviews and exchange of information, requests from individuals, including managers, to attend interviews are not normally entertained unless specifically requested by the interviewee and such attendance has been coordinated in advance with the appraisal team leader.
- Ask other attendees not to respond to questions asked of the interviewee but to provide only advice and support to the interviewee.
- Pace questions to allow a full response, and avoid creating a threatening or anxious atmosphere, particularly when multiple interviewers are involved.
- Question tactfully, listen sensitively, observe thoughtfully, and evaluate accurately.
- Provide the interviewee an opportunity to ask questions about the interview or the appraisal process.
- 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.

Appendix E – Issue Form, Sample Preliminary Results Form, Sample Appraisal Summary, and Best Practice Observation Form

E.1 Issue Form Use and Template

In accordance with DOE Order 227.1A, *Independent Oversight Program*, the Office of Enterprise Assessments (EA) is required to notify the cognizant DOE manager verbally as soon as possible and in writing within 24 hours when appraisal activities indicate either of the following conditions:

- An imminent danger or condition that presents an unacceptable immediate risk to workers, public health, or the environment, or

- A major vulnerability (e.g., unacceptable risk of special nuclear material theft or diversion, radiological or industrial sabotage, espionage, or significant compromise of classified information).

The appraisal team can use the issue form shown on the next page to document and communicate such conditions during assessments. However, preparation of the issue form must not delay verbal notifications to line management.

At the team leader's discretion, the issue form can also be used to document emerging significant issues identified during an appraisal. The team leader should consider using an issue form to:

- Document and communicate particularly complex issues to the site being evaluated.

- Document weaknesses that are expected to prompt site personnel to take time-critical mitigative and/or compensatory actions.

- Solicit a written response from line management on a time-critical issue associated with an appraisal activity to aid the team's understanding of the site's perspective.

- Help improve communications among the appraisal team, DOE line management, and contractors regarding, for example, a particularly contentious issue.

OFFICE OF ENTERPRISE ASSESSMENTS
INDEPENDENT OVERSIGHT PROGRAM
ISSUE FORM

The purpose of this issue form is to convey to cognizant managers potentially significant information from an ongoing Independent Oversight Program appraisal activity and solicit feedback. EA requests additional information pertaining to this issue (including mitigation actions, if appropriate), along with management's comments on factual accuracy. The information conveyed by this issue form is preliminary data that is not meant to communicate the entire picture of performance for a program or at a site. Consequently, this form should be provided only to those who have a need to know the information, and used only in the context of ensuring effective communications among cognizant DOE management, the site, and the Office of Enterprise Assessments.

SITE: _____

SUBJECT: _____

Notification of an imminent danger or major vulnerability in accordance with section 4.e. of DOE Order 227.1A, *Independent Oversight Program*?   Yes _____   No _____

1. Issue:

2. Impact:

3. Requirement/Standard:

Originating Team Member _____ Date _____

Approval:

Team Leader / Office Director _____ Date _____

E.2 Sample Preliminary Results Form

For appraisals where a draft report is not provided at the end of onsite data collection, the appraisal team leader provides the field element manager with a summary of preliminary results from the appraisal. The summary typically communicates positive attributes or program strengths, and potential deficiencies or weaknesses found during an appraisal. The summary may also include the appraisal team's preliminary thoughts regarding potential "findings" and "opportunities for improvement." An example is shown below.

<div align="center">

OFFICE OF ENTERPRISE ASSESSMENTS
PRELIMINARY RESULTS FOR THE [APPRAISAL TYPE]
OF [APPRAISAL AREA/TOPIC] AT [SITE]

</div>

The following information provides a summary of the preliminary results of the Office of Enterprise Assessments appraisal. This information is subject to change as more analysis is conducted and the appraisal report is drafted.

Scope of Assessment

- Activity-level work planning and control

  o Manufacturing Division
  o Hydrostatic Testing Facility
  o Waste Transfer Facility

- Contractor Feedback and Improvement

- DOE Field Element Oversight

Results – Activity-Level Work Planning and Control

Positive Observations

- Pre-job briefings were observed to be very thorough. Workers routinely demonstrated a questioning attitude and healthy concern for safety.

- Subject matter experts are consulted frequently during the work planning process and have been instrumental in ensuring the proper selection, use, and application of engineered controls.

- Use of the waste transfer mockup facility has resulted in additional engineering controls to minimize worker radiation exposure.

- The new hazardous waste tracking system has significantly improved the accuracy of the chemical inventory and reduced the amount of chemicals needing to be procured each year.

Potential Weaknesses and Deficiencies

- The work control process is not well documented, leading to wide variances in the degree of hazard analysis and types of hazard controls being applied to similar kinds of work conducted in different facilities on site.

- Many workers are confused about what constitutes an approved work control document, particularly when numerous pen and ink changes have been made to a document or a "stop work" is called and then the work restarted using the same work control documents.

- Some work packages do not contain all of the required permits and Safety Data Sheets in an organized and readily accessible fashion for ease of reference by workers at the work location.

Potential Findings

The site-level work control procedure does not contain sufficient detail and explanatory information to ensure that work planning requirements are applied consistently among organizations and that workers have sufficient information to ensure work is performed in accordance with the applicable work control documents.

Opportunities for Improvement

- Consider using a cross-organizational team to update the site-level work control procedure to benefit from the variety of practices being used to plan and analyze work.

- Consider adding an index and using a standardized sequence of documents within a work package to improve usability for workers.

- Consider updating worker training to better address the requirements for restarting work following either a safety pause or stop work condition.

Results – Contractor Feedback and Improvement

Positive Observations

- A well-indexed and searchable web-based database of lessons learned and work package feedback is maintained that is promoting work planning and operating procedure improvements.

- The contractor has initiated a cross-organizational peer review program to evaluate its work planning and control programs across the site.

- Assessments conducted by site-designated subject matter experts are providing high quality feedback on both compliance and performance and the assessment results are well characterized to identify the impacts on programs and operations.

- Managers and supervisors are frequently present in the field and at job sites and were observed to have positive and productive relationships with the work force.

Potential Weaknesses and Deficiencies

- Requirements and expectations for prioritizing, selecting, planning and staffing topic-specific and organizational self-assessments are not well developed and documented.

- The high degree of turnover in the employee concerns program and lack of consistent follow-up to address reported safety issues is undermining the program's effectiveness.

Potential Findings

>   None

Opportunities for Improvement

- Consider expanding the strategy developed at the Hydrostatic Testing Facility to identify and prioritize required and desired assessments for the year.

- Consider including a representative from the facility being assessed on the subject matter expert assessments to enhance communications and ownership of the identified issues and resulting corrective actions.

- Consider developing a database and scheduling system to ensure that timely actions are taken on employee concerns when target deadlines for an expected action are approaching or have passed.

Results – DOE Field Element Oversight

Positive Observations

- The field office assessment schedule is well designed to provide the requisite information to support the end-of-year evaluation of safety-related elements in the contractor performance evaluation and management plan.

- The field office re-evaluated its Facility Representative and cognizant system engineer coverage and has been successful in acquiring additional resources for these programs.

- The field office conducts thorough, high quality closure package reviews for contractor corrective actions that require these reviews.

Potential Weaknesses and Deficiencies

- The field office has limited expertise in certain areas (e.g., industrial hygiene, emergency management) and the designated reach-back resources are often not available to provide timely resolution of issues when needed.

Potential Findings

>   None

Opportunities for Improvement

>   The field element should consider working with the program office and service center to establish a prioritization system for reach-back assistance requests.

E.3 Sample Appraisal Summary

For most appraisals, a short summary is prepared to facilitate communication of the key results to senior field and headquarters leadership. EA strives to make the summary unclassified or, at most, controlled unclassified information, for ease of distribution to senior leaders. For some appraisals, the executive summary of the appraisal report (see Appendix F) serves as the appraisal summary; whereas for other appraisals, the summary described in this section is included at the front of the appraisal report.

<div align="center">

Office of Enterprise Assessments
[Appraisal Type] of [Appraisal Area/Topic]
at the [Site]

[Onsite Appraisal Activity Month and Year]

Summary
</div>

Scope

This appraisal evaluated the work planning and control (WP&C) program at the [site/facility], which is managed and operated by [contractor]. The appraisal focused on evaluating operations in the Advanced Manufacturing Division and at the High-Level Waste Transfer Facility. It included an evaluation of the [contractor] contractor assurance system and [field element] oversight processes pertaining to work control.

Significant Results for Key Areas of Interest

Overall, the contractor has developed and implemented an effective WP&C process reflecting the core functions of Integrated Safety Management for its manufacturing and waste handling operations. A few deficiencies in work package execution and documentation were identified.

Work Planning and Control Program

The contractor has a mature WP&C program and facility-specific WP&C processes that generally result in the safe performance of work. However, weaknesses in managing a limited pool of subject matter expert resources has resulted in unnecessary work delays that could lead to more significant WP&C issues if not addressed.

Work Planning and Control Implementation

The workforce is experienced and qualified, and operating procedures and maintenance work packages are well written and detailed. Overall, the institutional WP&C program is adequately implemented, but a few deficiencies were identified in conducting pre-job briefings, verifying equipment calibration status, and securing approved copies of work permits for inclusion in work packages.

Contractor Assurance System

The contractor has developed and implemented a comprehensive and highly effective program of corporate, management, and self-assessments that is coupled with extensive metrics and trending processes in contributing to the improvement of WP&C processes. Issues from assessments are categorized using a standard set of risk-based criteria as a means for prioritizing corrective actions.

Field Element Oversight Process

The field office has established a detailed strategy and effective procedures for oversight of the contractor's WP&C program, but is hampered by a lack of readily available subject matter expertise to fully implement the desired strategy in a couple of key areas.

Best Practices and Findings

The following best practice was identified as part of this assessment:

- The Advanced Manufacturing Division has developed an innovative equipment cleaning process that has eliminated the use of numerous toxic chemicals and reduced the amount of equipment maintenance that is required.

The following finding was identified as part of this assessment:

- The contractor has closed issues without justification before completing corrective actions, which has led to a recurrence of conditions that could endanger workers.

E.4 Best Practice Observation Form

Given the broad span of its Independent Oversight Program, EA is well positioned to identify best practices that can be shared across the enterprise to recognize DOE successes and assist sites and organizations in addressing their most challenging issues. Best practices documented by EA are intended to describe methods, processes, or program attributes observed during appraisals that may merit consideration by other DOE and contractor organizations for implementation because they: (1) substantially improve safety or security performance of a DOE operation; (2) represent or contribute to superior performance (beyond compliance); (3) solve a problem or reduce the risk of a condition or practice that affects multiple DOE sites or programs; or (4) provide an innovative approach or method to improve effectiveness or efficiency. Best practices identified during appraisals are reflected in the appraisal reports. The type of information contained on the following form should be retained by the EA office that identified the best practice for ease of reference and dissemination.

OFFICE OF ENTERPRISE ASSESSMENTS

BEST PRACTICE OBSERVATION

Title:

Topical Area:

Site/Facility:

Description of Best Practice:

Why is this considered a best practice?

Benefits of this practice:

Reference Documents:

Site Point of Contact for Further Information:

Appendix F – Reporting Formats and Objectives

To meet its oversight obligations, the Independent Oversight Program conducts numerous activities of varying scope and intensity. These include multi-topic assessments, single topic assessments, multi-site targeted assessments, limited-notice performance tests, network technical tests, and operational awareness activities. The Independent Oversight Program also conducts such activities as special assessments and follow-up assessments. These activities share some common elements, but each type of activity is also different in significant ways. It is appropriate that the reports issuing from these various activities be tailored to best represent and communicate the essential facts relating to the activity. They should all be written in clearly understandable terminology for the audience, contain executive summaries suitable for senior leaders, and limit the amount of descriptive text not necessary to support key results.

Appraisal reports represent the primary product of the Independent Oversight Program. If appraisal teams do not do a good job of reporting, the considerable effort and resources devoted to planning, data collection, and analysis will not achieve the ultimate objective of providing information that can be used to make improvements. Independent Oversight appraisal reports provide information about what was done, what was found, the significance of what was found, areas that are in need of corrective actions and management attention, and suggestions on methods for improving performance. This information is intended to benefit the managers, supervisors, and staff who administer and operate the various programs.

Most of the documents that the Independent Oversight Program produces are of three types:

- Long reports, often including numerous appendices and containing considerable detail, such as multi-topic assessment reports
- Shorter reports, often 5 to 25 pages, usually associated with single topic assessments
- Memoranda conveying the results of limited-notice performance tests, operational awareness activities, or other smaller scope appraisal activities.

For longer reports that address multiple program areas or organizations, or contain considerable technical detail, an executive summary or similarly formatted front section of the report is utilized. The summary incorporates the essence of the significant details provided in the body of the report or its appendices, an overall analysis of program status and needs, and conclusions regarding the adequacy of the program(s) evaluated. It must include sufficient information for senior managers, in particular, to understand the significance of any issues or weaknesses identified and the potential impacts, both short- and long-term, of not addressing those issues. If appropriate, a statement of intent to follow up should also be provided. The executive summary for multi-topic assessment reports and shorter reports, such as those for cybersecurity or nuclear safety assessments, typically should not exceed 1½ pages.

For some shorter reports documenting more narrowly-scoped activities, the results may be provided in the body of the report without an executive summary or front section. In any case, the body of the report typically includes the following sections:

- Introduction – describing who conducted the appraisal activity and when, the type of activity that was conducted and the reason for it, and the programs, facilities, subjects, topical areas, and/or organizations evaluated
- Background or Methodology – providing context for the activity, such as the status of relevant site operations and results of previous evaluations, and describing how the activity was conducted
- Results – observations, discussion, and characterization of the areas evaluated
- Conclusions – an overall assessment of the areas evaluated and the impact of any weaknesses identified

- Best Practices (if applicable) – methods or practices for other organizations to consider adopting to improve operations
- Findings (if applicable) – deficiencies that warrant a high level of attention from management
- Deficiencies (if applicable) – inadequacies in the implementation of an applicable requirement or standard
- Opportunities for Improvement (OFIs) or Recommendations (if applicable) – items for management consideration in improving performance
- Items for Follow-up (if applicable) – weaknesses or areas that will be re-evaluated during a subsequent assessment.

Guidance for preparing an executive summary is provided in appendix F.1, and an executive summary template and sample can be found in appendix F.2. Other reporting formats are described in appendix F.3. The Office of Enterprise Assessments (EA) Editorial Style Guide is also a useful reference for report writing and development.

F.1 General Guidance for Preparing Executive Summaries

The purpose of the executive summary is to convey the results of the appraisal to the Department's most senior managers. It should reflect a balanced review without overemphasizing positives or negatives and clearly, but briefly, indicate program status and the impacts of weaknesses. If appropriate, it should identify any need for action based on the appraisal results. This guidance applies to most assessment reports. However, some appraisal activities will have a non-standard scope and/or purpose and may require a different approach in the executive summary. (See the template and sample in appendix F.2.)

The executive summary should be 1½ pages maximum, and one space should be manually added after each paragraph. Moreover, the executive summary should not include subheadings of any kind unless it is necessary to differentiate between multiple, distinct organizational entities. The use of acronyms should also be minimized. If a term is used only once or twice, spell it out and do not use an acronym (though there may be leeway for terms that are extremely long or may be confusing).

INTRODUCTORY INFORMATION

Within the executive summary, introductory information typically includes:

- Who conducted the appraisal activity, the type of activity that was conducted, and where and when it was conducted
- If relevant, the scope of the activity and responsible Federal, site, and contractor management
- Any other information that may be necessary, such as the reason for the activity or limited background information.

This information should be provided as succinctly as possible, and may range in length from one paragraph to several paragraphs.

RESULTS

The results section of an executive summary is organized logically based on the scope of the appraisal and is intended to highlight the most significant outcomes of the evaluation, both positive and negative. Positive aspects may include best practices or continuing good performance in a program area, appropriate management attention devoted to a particular issue or area, and successful actions taken to correct past

deficiencies. Provide enough information to enable the reader to understand what has been accomplished, and why the things that are being done are positive or the benefits that have been realized. Discussions of weaknesses should focus on those that warrant management attention or corrective action. Provide enough detail for the reader to understand the nature and gravity of the weakness and why it is important that it be corrected. The results section should also refer to any mitigating circumstances, or any compensatory measures or immediate corrective actions that have been implemented. The overall goal of this section is to provide sufficient information without duplicating the detail contained in the body of the report.

The information in each subsection (strengths and weaknesses, respectively) may require as little as a single paragraph, or up to several paragraphs. The objective is to be as brief as possible, but include enough context to get the necessary points across. Use of bullets is encouraged. If there are many items, it may be necessary to consolidate items that have similar content, importance, etc. For each negative bullet, provide a very brief impact statement – one sentence or less. (See the EA Editorial Style Guide for more information about bulleted lists.)

<div align="center">

SUMMARY

</div>

The summary section of an executive summary should briefly state the overall program status. It may indicate whether the program is showing an improving or declining trend, and should include a high-level statement about why the identified weaknesses are important, individually or as a group. If appropriate, also include a statement of intent to follow up.

F.2 Executive Summary Template and Sample

The template below provides guidance for preparing an executive summary.

<div align="center">

INDEPENDENT ASSESSMENT OF
<SUBJECT> AT <SITE NAME>

Executive Summary

</div>

The U.S. Department of Energy Office of Enterprise Assessments (EA) conducted an independent assessment of <subject> at <site name and acronym> from <Month> to <Month> <Year>. <More body text, including, if relevant: assessment scope, responsible Federal, site, and contractor management. Left align. Manually add one space after each paragraph.>

EA identified the following strengths, including <number> best practices: <Omit reference to best practices if there are none, but do identify several positive items.>
<Samples of bulleted lists are shown. Use the short bullets formatting only if all items in the list are only one line. Add Best Practice in parentheses as shown below, whenever appropriate.>
- <Sample short bullets formatting. Delete if not needed.> <(Best Practice)>
- <Sample short bullets formatting. Delete if not needed.>
- <Sample short bullets formatting. Delete if not needed.>

EA also identified several <insert an appropriate term, such as weaknesses or areas of concern>, as summarized below: <If there are many items, consider consolidating items that have similar content, importance, etc. Bullets should be as concise as possible.>

<Use the longer bullets formatting if one or more items in the list are more than one line. Spacing between bullets is 6 points, with 0 points after the final bullet. For each negative bullet, provide a very brief impact statement – one sentence or less.>

- <This is sample text for the longer bullets. This is sample text for the longer bullets. This is sample text for the longer bullets. This is sample text for the longer bullets.>

- <This is sample text for the longer bullets. This is sample text for the longer bullets. This is sample text for the longer bullets. This is sample text for the longer bullets.>

- <This is sample text for the longer bullets. This is sample text for the longer bullets. This is sample text for the longer bullets. This is sample text for the longer bullets.>

In summary, <statement of overall status>. Until the concerns identified in this report are addressed or effective mitigations are put in place, <high-level statement about why these weaknesses are important, individually or as a group>. <If appropriate, include statement of intent to follow up. For example: EA will follow up to…>

A sample executive summary is shown below.

INDEPENDENT ASSESSMENT OF SAFEGUARDS AND SECURITY
AT THE ABC LABORATORY

Executive Summary

The U.S. Department of Energy (DOE) Office of Enterprise Assessments conducted an independent safeguards and security (S&S) assessment at the ABC Laboratory (ABCL) from September through November 2020. ABCL performs research in support of DOE national missions and possesses classified matter and nuclear material in various configurations and quantities. This assessment evaluated the efficacy and performance of DOE and contractor line management in implementing requirements, as well as the effectiveness of S&S programs in protecting Category I-IV special nuclear material, classified matter, Controlled Unclassified Information, personnel, and government property.

The assessment team identified the following strengths, including two best practices:
- The management and operating contractor, Management and Operating People, Inc. (MOPI), uses a commercial off-the-shelf system to prevent reconstruction of destroyed security keys. (Best Practice)

- MOPI has developed a dashboard to summarize individuals' fitness for duty, allowing a protective force shift leader to quickly ensure the readiness of security police officers. (Best Practice)

- MOPI ensures that only cleared personnel perform preventive and corrective maintenance on security systems and components.

Despite these strengths, several weaknesses were identified, including seven findings, as summarized below:
- The MOPI site security plan does not contain all required information and the security plan for one prime contractor, Prime Contractor, Inc. (PCI), does not reflect current operations, thereby limiting the effectiveness of security plan implementation.

- MOPI has not ensured that ABCL has all required postings and signage to warn people that the property is subject to DOE jurisdiction.

- MOPI does not conduct and appropriately document the tactical training exercises necessary to ensure that the protective force can respond to incidents effectively.

- PCI does not operate in accordance with DOE requirements for material control and accountability plans and related security documentation, thereby limiting the protection afforded to nuclear material.

- PCI has not implemented a technical security program and does not ensure proper marking of classified matter, thereby limiting the protection afforded to classified information.

In summary, ABCL S&S programs are generally effective in protecting classified matter and nuclear material. However, until the concerns identified in this report are addressed or effective mitigations are put in place, some important ABCL S&S plans and operations will remain out of compliance with DOE requirements, and the lack of protective force tactical training exercises and the absence of a technical security program could put ABCL operations at risk. The Office of Enterprise Assessments will follow up on progress in remediating these weaknesses during future assessments at ABCL.

F.3 Other Reporting Formats

In some cases, the results of an appraisal activity are conveyed to the cognizant line management in a memorandum rather than a report. This format is used for limited-notice performance testing activities and some operational awareness activities. Although shorter than most appraisal reports, appraisal memoranda still contain sufficient detail to describe how and why the appraisal was conducted and the results, including any findings, deficiencies, best practices, and OFIs that were identified. The outcome of most operational awareness activities is recorded in a "Field Note." Field notes for operational awareness activities are provided to the Department's line management for factual accuracy review but are maintained internal to EA after being finalized. If, however, an operational awareness activity results in the identification of a finding, deficiency, or OFI, or other significant information that warrants more formal communication to line management, an assessment report or memorandum may be issued.