U.S. Department of Energy	Subject: Feedback and Continuous Improvement Inspection Criteria and Approach – DOE Headquarters	HS: HSS CRAD 64-22 Rev: 0 Eff. Date: 12/04/2007
Office of Independent Oversight	Director, Office of ES&H Evaluations	
Criteria Review and Approval Document	Date: 3 5 0 Criteria Lead, Feedback and Continuous Improvement Inspection Criteria and Approach – DOE Headquarters Date: 12/5/07	Page 1 of 16

1.0 PURPOSE

Within the Office of Independent Oversight, the Office of Environment, Safety and Health (ES&H) Evaluations' mission is to assess the effectiveness of those environment, safety, and health systems and practices used by field organizations in implementing Integrated Safety Management and to provide clear, concise, and independent evaluations of performance in protecting our workers, the public, and the environment from the hazards associated with Department of Energy (DOE) activities and sites. A key to success is the rigor and comprehensiveness of our process; and as with any process, we continually strive to improve and provide additional value and insight to field operations. Integral to this is our commitment to enhance our program. Therefore, we have revised our Inspection Criteria, Approach, and Lines of Inquiry for internal use and also we are making them available for use by DOE line and contractor assessment personnel in developing and implementing effective DOE oversight and contractor self-assessment and corrective action processes on this WEB page.

2.0 APPLICABILITY

The following Inspection Criteria document is approved for use by the Office of ES&H Evaluations.

3.0 FEEDBACK

Comments and suggestions for improvements on these Inspection Criteria, Approach, and Lines of Inquiry can be directed to the Director of the Office of ES&H Evaluations on (301) 903-5392.

Feedback and Continuous Improvement DOE Headquarters Inspection Criteria, Activities and Lines of Inquiry

DOE Headquarters Line Management Oversight Inspection Criteria - DOE Headquarters line management has established and implemented effective oversight processes that evaluate the adequacy and effectiveness of field element assurance systems and DOE oversight processes. DOE Headquarters assurance system programs and processes are in accordance with the policy and key elements outlined in DOE Policy 226.1, Department of Energy Oversight Policy; DOE Order 226.1A, Implementation of Department of Energy Oversight Policy, Attachment 2; quality assurance requirements (as stated in 10 Code of Federal Regulations (CFR) 830, Subpart A, DOE Order 414.1C, Quality Assurance, or other applicable regulations), and applicable DOE directives¹. DOE Headquarters line management oversight processes have been designed that arc focused on the DOE field elements and also look at contractor activities to evaluate the implementation and effectiveness of field element line management oversight. To promote efficiency, DOE field organizations will perform most onsite operational awareness and assessment activities on behalf of the responsible DOE line management organization. However, DOE Headquarters line management personnel must regularly review the results of DOE field organization oversight and other information to maintain awareness of site conditions and trends and to determine the effectiveness of field line management oversight processes. DOE Headquarters line management must establish appropriate oversight activities to review the adequacy of the scope and implementation of field office self-assessment activities, field office oversight activities, and field office assurance systems.

The inspection criterion reflects DOE O 226.1A, Implementation of DOE Oversight Policy, unless otherwise noted² and is shown below.

- 1. DOE Headquarters line management has established a baseline line management oversight program that ensures that DOE Headquarters and field element line management maintains sufficient knowledge of site and contractor activities to make informed decisions concerning hazards, risks and resource allocation, provide direction to the field element, and evaluate field element performance.
- 2. DOE Headquarters line oversight program includes assessments, performance monitoring and improvement, and assessment of field element assurance systems. Documented program plans have been established that define oversight program activities and annual schedules of planned assessments and focus areas for operational oversight. Deficiencies in programs or performance identified during assessment activities must be communicated to the field element for resolution through a structured issues management process.

¹ For activities and programs at Government-owned and Government-operated facilities and sites that are not under the cognizance of a DOE field organization, DOE Headquarters program offices will establish and implement comparably effective oversight processes consistent with requirements for the contractor assurance system (DOE O 226.1A, Attachment 1, Appendix A) and DOE line management oversight process (DOE O 226.1A, Attachment 2).
² There may be some duplication of requirements between DOE O 226.1A and DOE O 414.1C or other directives.

Page 3 of 16

- 3. Assist the field elements in implementing and improving documented oversight program plans and schedules through direction and feedback.
- 4. Oversight must include structured and rigorous processes for validating the accuracy of information collected during Headquarters assessments. DOE Headquarters line management requires that findings must be tracked and resolved through structured and formal processes, including provisions for review of corrective action plans.
- 5. DOE Headquarters line management must regularly assess the effectiveness of field element issues management and corrective action processes, lessons learned processes, and other feedback mechanisms (e.g., worker feedback). DOE Headquarters line management must also evaluate field element processes for communicating information, including dissenting opinions up the management chain.
- 6. DOE Headquarters assesses the effectiveness of DOE-wide lessons learned processes to improve all work processes (e.g., safety, and security) and associated management systems.
- 7. DOE Headquarters line management must verify that corrective actions are complete and performed in accordance with requirements before findings identified by DOE Headquarters assessments or reviews are closed, and requires that deficiencies are analyzed both individually and collectively to identify causes and prevent recurrences.
- 8. DOE Headquarters line management has established appropriate criteria for determining the effectiveness of site programs, management systems, and contractor assurance systems, and includes consideration of previous assessment results, effectiveness of corrective actions and self-assessments, and evidence of sustained management support for site programs and management and assurance systems. Review criteria are based on requirements and performance objectives (e.g., laws, regulations, and DOE directives), Headquarters procedures/manuals, and performance objectives.
- 9. DOE Headquarters line management regularly assesses site assurance systems to determine an appropriate level of overlap and redundancy of DOE Headquarters and field element oversight. The effectiveness of the field element and contractor assurance systems, the hazards at the site/activity, and the degree of risk are factors in determining the scope and frequency of DOE Headquarters line management oversight activities.
- 10. DOE Headquarters line management has established and maintained appropriate qualification standards for personnel with oversight responsibilities and a clear, unambiguous line of authority and responsibility for oversight.
- 11. DOE Headquarters line management has established and implemented formal processes for ensuring requirements and performance expectations are established and communicated through formal contractual mechanisms to the contractor. Performance expectations are established through the development and approval of required program documents such as quality assurance program (QAP), integrated system management (ISM), integrated safeguards and security management (ISSM), etc. Headquarters line management periodically reviews established contractor performance measures to ensure performance objectives and criteria are challenging and focused on improving performance in known areas of weakness.
- 12. DOE Headquarters line management has established effective processes for communicating line oversight results and other issues up the DOE line management chain, using a graded

Page 4 of 16

approach based on the hazards and risks. Established processes provide sufficient technical information to allow informed decision-making by Headquarters line managers, and include provisions for communicating and documenting dissenting opinions. Formal structured processes for resolving disputes for Headquarters oversight findings and other significant issues have been implemented and include provisions for independent technical reviews for significant findings.

- 13. DOE Headquarters line management periodically reviews the results of field oversight organization oversight and other information to maintain awareness of site conditions and trends. Headquarters line management oversight program activities include elements for reviewing the adequacy and scope of field element self-assessment activities, field element oversight activities, and field element assurance systems.
- 14. The Central Technical Authority (CTA) periodically monitors, participates, and reviews the results of field oversight organization oversight and other information for high consequence nuclear operations to maintain operational awareness and to ensure the Department's nuclear safety policies and requirements are adequate and properly maintained. Documented oversight program plans and schedules must address the role of the CTAs and their support staff.
- 15. The CTAs maintain awareness of the implementation of nuclear safety requirements and guidance, consistent with the principles of Integrated Safety Management across the organization (including, for example, reviewing documented safety analyses, authorization agreements and readiness reviews as necessary to evaluate the adequacy of safety controls and implementation).
- 16. The CTAs periodically review and assess whether the number of technically capable personnel is adequate to fulfill nuclear safety responsibilities and authorities.
- 17. DOE Headquarters line management (unless formally delegated) reviews and approves contractor assurance system program descriptions updates.
- 18. DOE Headquarters initially approves and, thereafter, annually reviews and approves integrated safety management system description updates, unless approval authority is delegated to the DOE field element.
- 19. DOE Headquarters line management performs periodic reviews of the contractor assurance system program and processes for consistency across the DOE complex and ensures that they reflect industry best practices.
- 20. DOE Headquarters organizations must perform self-assessments of programmatic and line management oversight processes and activities (e.g., security surveys, personnel qualification standards, and training programs) to assess whether requirements and management expectations are met. Continuous improvement mechanisms (e.g., corrective action processes) must be in place to improve the effectiveness and efficiency of oversight programs and site operations.

DOE Headquarters Operating Experience/Lessons Learned Program Inspection Criteria — The primary objective of DOE O 210.2, *DOE Corporate Operating Experience Program*, is to institute a DOE-wide program for the management of operating experience to prevent adverse

operating incidents and to expand the sharing of good work practices among DOE sites. The following criteria are applicable to the review of headquarters organizations (given the applicability as stated in the order).

- 1. The National Nuclear Security Administration (NNSA) Administrator, Central Technical Authority (CTA) for the NNSA, Under Secretary for Energy, Science and Environment (ESE), Central Technical Authority for ESE, and Under Secretary for Science.
 - a. Periodically discuss DOE- or program-wide and site-specific performance and trends related to operational events and performance indicators with their Program Secretarial Officers (PSOs), NNSA Deputy Administrators, and heads of field elements.
 - b. The designated CTAs through the respective Chief of Nuclear Safety/Chief of Defense Nuclear Safety will give particular attention to performance and trends that impact nuclear safety and track resolution of such trends.
- 2. NNSA Deputy Administrators, Cognizant Secretarial Officers, PSOs.
 - a. Ensure that program office processes include incorporation of lessons learned into training, maintenance and work planning, work processes, operations, directives and standards development, and design and construction.
 - b. Designate operating experience program coordinators to execute responsibilities of the Order.
 - c. Review quarterly analyses of reportable and non-reportable events submitted by contractors and program field elements in accordance with Section 5.8 of DOE M 231.1-2, *Occurrence Reporting and Processing of Operations Information*, dated 8-19-03 to identify operating experience trends and lessons learned.
 - d. Provide management and technical/subject matter experts to participate in the development of Special Operations Reports (SORs), Environment, Safety and Health Alerts (SAs), or Environment, Safety and Health Bulletins (SBs) for issues applicable DOE-wide and require monitored implementation.
 - e. Review, submit comments, and provide concurrence on SORs applicable to PSO/NNSA Deputy Administrator programs back to the DOE Corporate Operating Experience Program lead office before submission to the Deputy Secretary for approval.
 - f. Verify implementation for all levels of operating experience reports through line management oversight.
 - g. As a part of self-assessments conducted to evaluate organizational performance in Integrated Safety Management (ISM), includes an assessment of the effectiveness of the organization's operating experience program.
 - h. Ensure that lessons learned are developed and disseminated following completion of major program missions (e.g., contractor closeout of a major cleanup site, major decontamination and decommissioning projects, construction).
 - i. Provide consolidated, formal response to corporate operating experience documents on whether the expectations of the SOR or SA have been met or will be met by the required date.

DOE Headquarters Differing Professional Opinions Program and Employee Concerns Programs Inspection Criteria – DOE M 442.1-1, *Differing Professional Opinions Manual*, establishes a DOE Differing Professional Opinion (DPO) process to encourage and facilitate dialogue and resolution on DPOs from employees for technical issues involving environment, safety, and health (ES&H). This process supplements DOE P 442.1, *Differing Professional Opinions*, dated November 16, 2006. The following criteria are applicable to the review of Headquarters organizations (given the applicability as stated in the order). An effective employee concerns program been established and implemented in accordance with DOE O 442.1A, *DOE Employee Concerns Program*, that encourages the reporting of employee concerns and provides thorough investigations and effective corrective actions and recurrence controls.

- 1. Differing Professional Opinions Program:
 - a. For nuclear safety issues—Central Technical Authorities (CTAs).
 - i. Within 10 working days of acceptance of the DPO, assign a Secretarial Officer; a Deputy Administrator (for NNSA facilities and activities); the Chief of Defense Nuclear Safety (CDNS); the Chief of Nuclear Safety (CNS); a field office manager (FOM), or other appropriate senior manager to be responsible for the Final Decision on a DPO. Where practicable, the individual assigned responsibility for the Final Decision should be at a level above or independent from the manager who made the contested decision.
 - ii. Approve any extensions of the review period for DPOs beyond the initial 30 calendar day extension.
 - iii. Make decisions on any appeals to DPO Final Decisions.
 - iv. Stop or curtail work as necessary to ensure that a facility or activity is in a safe condition until DPO issues have been resolved. Provide annual notice to all employees of the availability of the process and encourage its use where appropriate.
 - b. For issues other than nuclear safety—Under Secretaries (Deputy Secretary where there is no Under Secretary).
 - i. Within 10 working days of acceptance of the DPO, assign a Secretarial Officer, Deputy Administrator (for NNSA facilities and activities), CDNS, CDS, FOM, or other senior manager to be responsible for the Final Decision on a DPO. Where practicable, the individual assigned responsibility for the Final Decision should be at a level above or independent from the manager who made the contested decision.
 - ii. Approve any extensions of the review period for DPOs beyond the initial 30 calendar day extension.
 - iii. Make decisions on any appeals to DPO Final Decisions.
 - iv. Stop or curtail work as necessary to ensure that a facility or activity is in a safe condition until DPO issues have been resolved.

Page 7 of 16

- v. Provide annual notice to all employees of the availability of the process and encourage its use where appropriate.
- c. Under Secretary of Energy for Nuclear Security/NNSA Administrator (in addition to the responsibilities listed for the Under Secretaries) assigns a DPO manager (DPOM) for NNSA.
- d. Secretarial Officer, Deputy Administrator, CDNS, CNS, FOM or other Senior Manager Assigned Responsibility for Final Decision on a DPO (hereinafter referred to as the assigned Final Decision Manager).
 - i. Within 10 working days of being assigned a DPO, appoints an ad hoc panel of independent experts to review the DPO issue and provide recommendations and assigns the chair for the panel.
 - ii. Provides technical assistance and/or support to the ad hoc panels, when needed.
 - iii. Reviews reports from ad hoc panels.
 - iv. Makes and documents the Final Decision within 10 working days of receiving an ad hoc panel report, including the appropriate actions to take on assigned DPOs, including the bases for the Final Decision. Sends copies of the Final Decision to submitter, the submitter's management, the appropriate DPOM (or both DPOMs), ad hoc panel members, and any individuals or organizations tasked with followup actions or implementation.
 - v. Approves extensions to review periods for up to 30 calendar days and requests additional extensions from the CTA or Under Secretary (Deputy Secretary where there is no Under Secretary) when needed.
 - vi. Maintains records on DPOs until decisions have been documented then sends records to the appropriate DPOM (or both DPOMs) for record keeping and followup.
 - vii. Meets with employees who are not satisfied with DPO decisions within 10 working days of the request to meet, and attempts to resolve issues before the Final Decision is appealed.
 - viii. Where authorized, stops or curtails work as necessary to ensure that facilities and/or activities are in a safe condition until DPO issues have been resolved; where not authorized, informs the appropriate management level that work may need to be stopped or curtailed.
 - ix. Notifies contracting officers of contracts affected by the requirements of this directive that the CRD will be included in the affected contracts.
- e. If at Headquarters, Differing Professional Opinion Managers, Ad Hoc Panel Chairpersons, Ad Hoc Panels, Employees/Submitters, and all DOE Managers execute responsibilities as detailed in the manual.
- f. Headquarters organizations have developed, approved, and issued a process description or procedure that details how manual required roles, responsibilities, and authorities are implemented.

2. Employee Concerns Program (ECP):

- a. The Headquarters organization has established and implemented a documented program plan to implement program requirements, or has made arrangements (e.g., memorandum of agreement) with another appropriate ECP to handle the organization's concerns.
- b. Order required organizational ECP training has been conducted for Headquarters staff.
- c. An appropriate 24-hour ECP hotline has been established and has been advertised (i.e., posters, website, etc.).

DOE Headquarters Line Management Oversight Review Approach: Review appropriate oversight directives, policies, program descriptions, procedures, instructions, and guidance. Review assessment activity planning documents and schedules. Interview DOE managers and staff to determine how assessments are planned and performed and how they are used to improve performance. Review documentation related to deficiencies (e.g., procedures, completed assessments, causal analyses and corrective action plans, verification/validation records, and effectiveness determinations). Review trend analysis and performance indicator reports and evaluate the analyses, conclusions, and any related corrective actions. Review training and qualification records and interview personnel to determine the adequacy in establishing and enhancing competence of oversight personnel.

Review appropriate Operating Experience/Lessons Learned (LL) program description documents and products; interview personnel (managers, LL Coordinator, etc.) to determine adequacy of implementation and continuous improvement of the Headquarters LL program. Review Differing Professional Opinion implementing processes or procedures. Interview personnel processing Differing Professional Opinions, and verify their clear understanding of assigned roles and responsibilities. Collect and review an appropriate sample of Differing Professional Opinions (if any have been processed since the last Independent Oversight inspection) from assigned Differing Professional Opinion Managers. Review ECP documented program plans and procedures, and/or validate that Headquarter personnel's concerns are being handled by an appropriate ECP. Review ECP training and posting.

DOE Headquarters Oversight Program Lines of Inquiry - Are the DOE Headquarters and field element line management oversight programs, plans, processes and schedules compliant with DOE O 226.1A, coordinated, documented, risk informed and historically aware, while ensuring significant deficiencies are identified, documented, communicated, evaluated, tracked and appropriately resolved?

1. Are the roles, responsibilities, and authorities for quality assurance documented in Headquarters QAPs in accordance with DOE Order 414.1C, *Quality Assurance*? Are responsibilities for implementing Headquarters line oversight and self-assessment plans formally assigned and documented?

Page 9 of 16

- 2. Does Headquarters assist the field elements in implementing and improving documented oversight program plans and schedules through direction and feedback?
- 3. Has DOE Headquarters line management established and communicated appropriate criteria for delegation and coordination of performance assurance program functions to DOE field elements and for determining the effectiveness of DOE Headquarters, DOE field elements and contractor programs, management systems, and assurance systems?
 - a. Do the delegation and coordination criteria include requirements that ensure the Headquarters and field element performance assurance programs, when taken together, comprehensively encompass the requirements of DOE O 226.1A. Attachment 2, and provide sufficient overlap to facilitate Headquarters assessment of DOE field element performance assurance programs and activities?
 - b. Do the criteria include consideration of previous assessment results, effectiveness of corrective actions and self-assessments, and evidence of sustained management support for site programs (e.g., performance goals in accordance with DOE P 450.7), management and assurance systems?
 - c. Is the criteria based on requirements and performance objectives relevant to the site and site mission (e.g., laws, regulations, national standards, DOE directives, DOE-approved plans and program documents, site-specific procedures/manuals, and criteria review and approach documents), Headquarters procedures/manuals, and other performance objectives, including those required for: Authorization Basis; Quality Assurance; Integrated Safety Management (including the environmental management system); Integrated Safeguards and Security Management; Cyber Security; Emergency Management; Self-assessments; and Contractually mandated requirements, including performance indicators, measures, objectives, and criteria?
- 4. Do DOE Headquarters line management oversight programs establish effective processes for performance assessment and monitoring of the scope and implementation of delegated functions addressed by DOE field element line management performance assurance programs and activities to:
 - a. Ensure contractor compliance with requirements;
 - b. Ensure the adequacy of contractor assurance systems;
 - c. Ensure contractor performance in accordance with the provisions of their contracts;
 - d. Ensure deficiencies are brought to the attention of contractor management and addressed in a timely manner;
 - e. Ensure compliance with requirements applicable to DOE line management; and
 - f. Ensure the establishment and implementation of oversight processes for monitoring and ensuring continuous improvement in their internal operations and required activities, such as reviewing and approving safety analysis reports and security plans, performing emergency management functions, adjudicating security clearances, implementing computer security programs at DOE office buildings, operating classified and sensitive information identification and protection programs, and operating employee concerns programs and other such functions?

Page 10 of 16

- 5. Do DOE Headquarters line management oversight programs and processes for performance assessment and monitoring of the scope and implementation of the contractor's programs and activities require:
 - a. The overall scope, content, and frequency of assessments included in the coordinated DOE Headquarters and field element line management oversight program are based on the assessed effectiveness of DOE line management and contractor assurance systems, the hazards at the site/activity, and the degree of risk involved;
 - b. A minimum DOE line management baseline oversight program is established and implemented (which includes planned, coordinated, and scheduled assessments by DOE Headquarters and/or field elements) that focuses resources on selected assessments, operational awareness activities, performance measure monitoring and improvement, and assessment of assurance systems to enable DOE line management to understand the hazards and risks of activities:
 - c. Regular assessment of site assurance systems are conducted to determine the appropriate level of overlap and redundancy of DOE Headquarters and field element line management oversight;
 - d. Assessment activities are coordinated with site assurance system activities to promote efficient use of resources while maintaining an adequate baseline oversight program that includes sufficient standalone assessments of contractor management and assurance systems and site programs;
 - e. The results of external organization reviews and the effectiveness of assurance systems are considered in determining DOE line management oversight priorities and the scope and frequency of oversight activities, while still implementing the defined minimum baseline oversight process;
 - f. Oversight activity frequency and/or depth are increased based on performance deficiencies or events, or decreased to reflect sustained effective site performance;
 - g. More frequent assessments are required on areas needing improvement in site programs, management systems, or assurance systems (e.g., insufficient rigor or comprehensiveness in existing systems);
 - h. Appropriate "for cause" reviews, reviews pursuant to other requirements in this Order, discretionary assessments, or for support to field elements during assessments are conducted, where necessary;
 - i. Additional oversight rigor is required for high consequence activities that include Headquarters awareness and assessment activities, such as instituting a CTA for core nuclear safety functions;
 - j. A balance is maintained between reviews of documentation (e.g., plans, procedures, and records) and adequacy of implementation through performance tests and observation of actual work activities at the facilities; and
 - k. A similar balance is maintained between evaluations of systems (such as the DOE integrated safety management system and integrated safeguards and security management system), programs (e.g., radiation protection), facilities, and implementation of individual elements of those systems (e.g., specific work activities)?

Page 11 of 16

- 6. Do the DOE Headquarters line management oversight programs require the CTA to:
 - a. Maintain awareness of the content of applicable DOE line oversight programs, plans, and processes, and contractor assurance systems by monitoring, evaluation and trend analyses, and by participation in oversight activities;
 - b. Maintain awareness of the state of implementation of these line management programs, plans, and processes, and contractor assurance systems by monitoring associated assessment reports;
 - c. Conduct and participate in various DOE Headquarters line oversight review activities as defined in the associated Headquarters oversight programs;
 - d. Communicate identified issues and trends to line management;
 - e. Provide advice concerning technical solutions or options;
 - f. Be able to follow up to ensure proper closure or implementation;
 - g. Have documented oversight program plans and schedules that address the role of the CTAs and their support staff;
 - h. Maintain awareness of the implementation of nuclear safety requirements and guidance, consistent with the principles of Integrated Safety Management across the organization (including, for example, reviewing documented safety analyses, authorization agreements and readiness reviews as necessary to evaluate the adequacy of safety controls and implementation); and
 - i. Periodically review and assess whether the number of technically capable personnel is adequate to fulfill nuclear safety responsibilities and authorities?
- 7. Do DOE Headquarters line management oversight programs require monitoring and self-assessment of Headquarters line management programs and activities, including requirements for:
 - a. A structured, documented self-assessment program to confirm compliance with DOE requirements for environment, safety, and health; safeguards and security; cyber security; and emergency management.
 - b. Establishment and implementation of oversight processes for monitoring and ensuring continuous improvement in internal operations and required activities, such as reviewing and approving safety analysis reports and security plans, performing emergency management functions, adjudicating security clearances, implementing computer security programs at DOE office buildings, operating classified and sensitive information identification and protection programs, and operating employee concerns programs and other such functions?
 - c. Performance of self-assessments of programmatic and line management oversight processes and activities (e.g., security surveys, personnel qualification standards, and training programs) to assess whether requirements and management expectations are met
 - d. Adjusting the frequency of assessments to be commensurate with the hazards and risks related to the activity being assessed. Continuous improvement mechanisms (e.g.,

- corrective action processes) must be in place to improve the effectiveness and efficiency of oversight programs and site operations.
- 8. Do DOE Headquarters line management oversight programs and processes require results of oversight activities to be appropriately validated, documented, communicated, classified, evaluated, tracked and resolved?
 - a. Are structured and rigorous processes required for validating the accuracy of information collected during assessments?
 - b. Are deficiencies in programs or performance identified during assessment activities required to be communicated to appropriate managers for resolution through a structured issues management process?
 - c. Are dissenting opinions required to be documented and appropriately communicated with assessment results?
 - d. Are processes for resolution of disputes about oversight findings and other significant issues established, including where necessary, approved processes for interpretation of requirements?
 - e. Are effective processes established for independent technical reviews of significant issues?
 - f. Are effective processes established for communicating line management oversight results and other issues up and down the DOE line management chain (e.g., ES&H communications in accordance with DOE P 450.7), using a graded approached based on the hazards and risk (e.g., ES&H communications in accordance with DOE P 450.7)?
 - g. Are findings required to be tracked and resolved through structured and formal processes, including provisions for review of corrective action plans?
 - h. Is DOE line management required to verify that corrective actions are complete and performed in accordance with requirements before findings identified by DOE assessments or reviews are closed?
 - i. Are deficiencies required to be analyzed both individually and collectively to identify causes and prevent recurrences?
- 9. Are DOE Headquarters line management oversight programs and the annual schedule of planned assessments and focus areas documented and approved?
- 10. Do DOE Headquarters line management oversight programs define the process for modifications of the annual oversight activity schedule and for DOE line management approval in response to changing circumstances?
- 11. If DOE Headquarters and field element line management oversight processes are implemented as written, would DOE Headquarters and field element line management maintain sufficient knowledge of site and contractor activities to make informed decisions about hazards, risks and resource allocation, provide direction to contractors, and evaluate contractor performance?

DOE Headquarters Training and Qualification Lines of Inquiry – Are DOE Headquarters staff adequately trained and qualified to perform assigned oversight activities (in accordance with DOE O 226.1A, DOE M 360.1-1B, and DOE M 426.1-1A)?

- 1. Has DOE line management defined the requirements for experience, knowledge, skills and abilities for personnel implementing the assurance system elements?
- 2. Has DOE line management established, maintained, and implemented appropriate qualification standards for personnel with oversight responsibilities?
- 3. Has DOE line management provided and ensured completion of appropriate training for personnel implementing headquarters assurance system elements?

DOE Headquarters Implementation of Program Responsibilities Lines of Inquiry – Does DOE Headquarters line management maintain sufficient knowledge of DOE field element line management, site and contractor programs and activities to make informed decisions about hazards, risks and resource allocation, to evaluate DOE field element line management and contractor performance, and to provide direction?

- 1. Were the following assessments required by DOE O 226.1A performed; what were the results; how were the insights used; and how effective were the corrective actions?
 - a. Do DOE Headquarters line management personnel regularly review the results of DOE field organization and contractor oversight activities to maintain awareness of site conditions and trends and to determine the effectiveness of field line management oversight processes?
 - b. Does DOE Headquarters line management periodically review established performance measures to ensure performance objectives and criteria are challenging and focused on improving performance in known areas of weakness?
 - c. Does DOE Headquarters line management (unless formally delegated) annually review and approve contractor assurance system program descriptions updates?
 - d. Does DOE Headquarters initially approve and, thereafter, annually review and approve integrated safety management system description updates, unless approval authority is delegated to the DOE field element?
 - e. Do Headquarters managers monitor field element performance and assess whether performance expectations are met; that field elements are assessing site activities adequately; self-identifying deficiencies; and, taking timely and effective corrective actions?
 - f. Does DOE Headquarters line management regularly assess the effectiveness of field element issues management and corrective action processes, lessons learned processes, and other feedback mechanisms (e.g., worker feedback)?
 - g. Does DOE Headquarters line management evaluate field element processes for communicating information, including dissenting opinions up the management chain?

- h. Does DOE Headquarters line management regularly assess field element assurance systems to determine the appropriate level of overlap and redundancy of DOE Headquarters and field element oversight?
- i. Are the effectiveness of the field element assurance system; the hazards at the site/activity; and the degree of risk factors in determining the scope and frequency of the combined DOE Headquarters and field element line management oversight program assessment activities?
- j. Are program and performance deficiencies brought to the attention of appropriate management and addressed in a timely manner?
- k. Do DOE organizations perform self-assessments of programmatic and line management oversight processes and activities (e.g., security surveys, personnel qualification standards, and training programs) to assess whether requirements and management expectations are met, and to identify opportunities for improvement?
- 1. Are continuous improvement mechanisms (e.g., corrective action processes) in place to improve the effectiveness and efficiency of oversight programs and site operations?
- m. Does DOE Headquarters line management perform periodic reviews of the field element assurance system programs and processes for consistency across the DOE complex and ensure that they reflect industry best practices?
- n. Does the DOE Headquarters regularly assess the effectiveness of DOE-wide lessons learned processes to improve all work processes (e.g., safety, and security) and associated management systems?
- o. Does the Central Technical Authority periodically monitor, participate in, and review the results of field oversight organization oversight and other information for high consequence nuclear operations to maintain operational awareness and to ensure the Department's nuclear safety policies and requirements are adequate and properly maintained?
- 2. Are managers, supervisors, and workers held accountable for assigned performance assurance responsibilities?
- 3. Are oversight program responsibilities appropriately implemented?
- 4. Is the coordinated DOE Headquarters and field element line management oversight program risk informed and historically aware while ensuring significant deficiencies are identified, documented, communicated, evaluated, tracked and appropriately resolved?
- 5. Is the coordinated DOE Headquarters and field element line management oversight program effective in ensuring that site operations are performed safely, securely, and in compliance with applicable requirements?

DOE Headquarters Oversight Results and Corrective Action Process Lines of Inquiry – Are the results of DOE Headquarters line management oversight activities appropriately validated, documented, communicated, classified, evaluated, tracked and resolved?

- 1. Are structured and rigorous processes used for validating the accuracy of information collected during assessments?
- 2. Are deficiencies in programs or performance identified during assessment activities communicated to appropriate management for resolution through a structured issues management process?
- 3. Does DOE Headquarters line management have effective processes for communicating line oversight results and other issues up and down the management chain?
- 4. Do the DOE Headquarters line management oversight processes provide sufficient technical basis to allow senior DOE Headquarters managers to make informed decisions?
- 5. Are findings tracked and resolved through structured and formal processes, including provisions for review of corrective action plans?
- 6. Does DOE Headquarters line management verify that corrective actions are complete and performed in accordance with requirements before findings identified by DOE Headquarters assessments or reviews are closed?
- 7. Are deficiencies analyzed both individually and collectively to identify causes and prevent recurrences?

DOE Headquarters Operating Experience/Lessons Learned Program Lines of Inquiry – Has Headquarters implemented a Operating Experience/Lesson Learned process in accordance with DOE O 210.2, *DOE Corporate Operating Experience Program?*

- 1. Do senior headquarters managers periodically meet to discuss operational events and performance indicators?
- 2. Do the CTAs, through associated staff, monitor operational performance and trends that impact nuclear safety and track resolution of such trends?
- 3. Are headquarters LL roles and responsibilities fully described in a formal program description document?
- 4. Has a LL Coordinator been designated for the organization?
- 5. Are quarterly analysis of reportable and non-reportable Occurrence Reporting and Processing System data being reviewed, analyzed, and results reported to senior management?
- 6. Are adequate technical resources being provided to develop, review, comment and/or concur on lessons learned (SORs, SAs, SBs, etc.).
- 7. Do line management oversight assessments contain specific criteria for inclusion of lessons learned in site office procedures, training, and other processes as appropriate?
- 8. Does the Headquarters self-assessment of integrated safety management evaluate effectiveness of the organizations operating experience program?
- 9. Are lessons routinely developed and promulgated following completion of major program missions?
- 10. Does the organization review and provide formal response on the completion of actions or expectations described in corporate operating experience documents (SORs, and SAs)?

DOE Headquarters Differing Professional Opinion Program (DPO) Lines of Inquiry – Has Headquarters implemented a DPO in accordance with DOE M 442.1-1, *Differing Professional Opinions Manual*?

- 1. Has the Headquarters organization being inspected developed, approved, and issued a process description or procedure that details how manual required roles, responsibilities, and authorities are implemented?
- 2. For the DPOs selected:
 - a. Were appropriate senior managers selected and appointed as the individual responsible for the final decision of a DPO (at least one level higher than Submitter)?
 - b. Were required timelines observed (i.e., 10 day, 30 day, etc.)?
 - c. Was work stopped or curtailed as necessary to ensure that a facility or activity was in a safe condition until the DPO issue was resolved?
 - d. Does the organization provide annual notice to all employees of the availability of the process?
 - e. Were DPOs closed out in an appropriate fashion (e.g., proper documentation shared with Submitter, meeting with Submitter if applicable)?

DOE Headquarters Employee Concerns Program (**ECP**) **Lines of Inquiry** - Has an effective employee concerns program been established and implemented that encourages the reporting of Headquarters employee concerns and provides thorough investigations and effective corrective actions and recurrence controls (in accordance with DOE O 226.1A and DOE O 442.1A)?

- 1. Has the organization established and implemented documented program plans to implement program requirements, or have arrangements been made (e.g., memorandum of agreement) with another appropriate ECP to handle the organizations concerns?
- 2. Has order required organizational ECP training been conducted?
- 3. Has an appropriate 24-hour ECP hotline been established and been advertised (i.e., posters, website, etc.)?