



Number: EA CRAD EA-33-10

Revision: Rev. 0

Effective Date: July 31, 2020

Federal Line Management Oversight of the Emergency Management Program Criteria and Review Approach Document

Authorization and Approval

Anthony D. Parsons
Acting Director, Office of
Emergency Management
Assessments

EA-33

Date: July 31, 2020

Lead, Randy L. Griffin

Emergency Management Specialist

EA-33

Date: July 31, 2020

1.0 PURPOSE

The mission of the U.S. Department of Energy (DOE) Office of Emergency Management Assessments (EA-33) within the Office of Environment, Safety and Health Assessments (EA-30) is to assess the effectiveness emergency management systems and practices used by line and contractor organizations and to provide clear, concise, rigorous, and independent evaluation reports of performance in protecting workers, the public, and the environment from the hazards associated with DOE activities.

In addition to the general independent oversight requirements and responsibilities specified in DOE Orders 226.1B, *Implementation of Department of Energy Oversight Policy, and* 227.1A, *Independent Oversight Program*, this criteria and review approach document (CRAD), in part, fulfills the responsibility assigned to EA in DOE Order 151.1D, *Comprehensive Emergency Management System* to provide independent oversight of the department's emergency management program.

The CRADs are available to DOE line and contractor assessment personnel to aid them in developing effective DOE oversight, contractor self-assessment, and corrective action processes. The current revision of EA's CRADs are available at http://www.energy.gov/ea/criteria-and-review-approach-documents.

2.0 APPLICABILITY

This CRAD is approved for use by the Office of Emergency Management Assessments (EA-33).

3.0 FEEDBACK

Comments and suggestions for improvements on this CRAD can be directed to the Director, Office of Emergency Management Assessments.

4.0 CRITERIA AND REVIEW APPROACH

The objective of this CRAD is to support evaluation of the effectiveness of DOE line management oversight of the emergency management programs at the Headquarters, Program Secretarial Office (PSO), and field element levels. This CRAD encompasses the oversight expectations for line management identified in DOE Order 151.1D, and portions of DOE Order 227.1A and DOE 226.1B. The CRAD focuses on select aspects of oversight of emergency operations, such as operational awareness and readiness assurance programs, for the Office of Emergency Operations, National Nuclear Security Administration (NNSA) and the Program Secretarial Offices. The broader aspects of Federal oversight for the Field Elements are addressed in a separate EA CRAD, and not all criteria and requirements of DOE Order 227.1A and DOE 226.1B are listed in this CRAD.

The following areas of responsibility are designed as stand-alone sections to be used in any combination based on the need of the specific appraisal. They provide the objectives, criteria, activities, and lines of inquiry that will be used to conduct the review.

Section Number
Functional Area

4.1 Office of Emergency Operations, NNSA

4.2 Program Secretarial Offices

4.3 Field Elements

Table 1 - CRAD Functional Areas

4.1 Office of Emergency Operations, NNSA

OBJECTIVE

NA.1 The Associate Administrator, Office of Emergency Operations, NNSA, serves as the Department's Office of Primary Interest for emergency management program activities, excluding Energy Emergencies as specified in Attachment 6. (DOE O 151.1D, Appendix A, Paragraph 6)

CRITERIA

- 1. Maintains operational awareness of the Department's emergency management program to ensure activities are conducted in accordance with this Order. Ensures the program provides a comprehensive and integrated approach to emergency management, including planning, preparedness, response, mitigation, and recovery, and reports the results to the Under Secretaries, Program Secretarial Officers and Field Element Managers for consideration and action as appropriate. (DOE O 151.1D, Appendix A, Paragraph 6.c)
- 2. For Defense Nuclear Facilities, verify program performance measures at each organizational level include specific emergency management oversight objectives, areas of attention, and defined assessment frequencies. (DOE O 151.1D, Appendix A, Paragraph 6.c)
- 3. In coordination with the Under Secretaries and Program Secretarial Officers, provides, through the Administrator, NNSA, an annual status report on Departmental readiness assurance to the Secretary. (DOE O 151.1D, Appendix A, Paragraph 6.d)
- 4. Implements, manages, and coordinates a readiness assurance program to ensure the DOE emergency management program is executed in accordance with directives, regulations, policies, and applicable laws. (DOE O 151.1D, Appendix A, Paragraph 6.g)
- 5. Establish oversight programs and implement the requirements in this Order at Headquarters and Field Elements. (DOE O 226.1B, Paragraph 5.b.(1))
- 6. Ensure that Field Elements perform effective oversight in all relevant areas and place high priority on oversight of high consequence activities, such as high hazard nuclear operations, and assist the Field Elements in implementing and improving documented oversight program plans and schedules through direction and feedback. (DOE O 226.1B, Paragraph 5.b.(2))

Performance Lines of Inquiry

Operational Awareness

- Have all the *Emergency Readiness Assurance Plans* (ERAPs) for the previous calendar year been received? Reviewed? Analyzed?
- Has analysis of the ERAPs been used to report the status of the Department's program annually to the appropriate Under Secretaries and Program Secretarial Offices?
- Does the analysis demonstrate objectiveness and rigor? Include recommendations for actions?
- Did the office receive and review site exercise plans? Was feedback provided to the Field Element?
- Does the office facilitate complex-wide operational awareness by sharing site exercise information dates to share resources and de-conflict dates by maintaining an up-to-date and accurate master exercise plan for the entire complex?
- Has the office visited sites during the past year? Observed or evaluated an exercise, LSPT or evaluated drill?
- Did the office receive exercise after-action reports (AARs)?
- Were the AARs reviewed and was any feedback provided to the Field Element?
- Did the office receive exercise corrective actions and improvement items?
- Were the corrective actions reviewed and was any feedback provided to the Field Element?
- Has the office provided assistance to any Field Elements or contractor organizations during the past year?
- Are plans/procedures for maintaining non-emergency operational awareness executed as prescribed?

• Are plans/procedures in place for maintaining operational awareness during a site emergency? Are the plans thorough, clearly written and understandable? Do they include all individuals and organizations that should be informed during an emergency?

Performance Measures (Defense Nuclear Facilities)

- Has the office received input on the performance measures for each site?
- Do the PSO performance objectives include oversight objectives, areas of attention, and assessment frequencies?
- Do the Field Element performance objectives include oversight objectives, areas of attention, and assessment frequencies?
- Has the office followed up to verify that oversight objectives and assessment objectives have been met?
- Has the office provided feedback to the PSOs and/or Field Elements regarding oversight performance? Expectations?
- Does the office execute a corrective action program to manage and provide internal improvement?
- Does the office facility and promote lessons learned and best practices determined by the sites?

Readiness Assurance

- Are plans/procedures for maintaining oversight of readiness assurance executed as prescribed?
- What steps has the office taken to verify that the Department's readiness assurance program is being executed as directed?
- Has the office participated in any site evaluations (e.g., exercise evaluation or assessment) during the last year? Two or three years?

Programmatic Lines of Inquiry

Operational Awareness

- Is there a plan/process to maintain operational awareness of the Department's emergency management program?
- Are roles and responsibilities clearly established? Executed?
- Is the review and analysis of site ERAPs governed by an internal procedure?
- Is there a procedure or process established to govern the review (and any subsequent actions) of the site's exercise plans, AARs, and corrective actions/improvement items?
- Is the office adequately staffed, budgeted, and organized to provide effective operational awareness of site emergency management programs?

Performance Measures

• Is there a plan/procedure to address oversight of the PSO and Field Element performance measures/oversight objectives?

Readiness Assurance

• Has the office prepared a readiness assurance plan to guide its actions in establishing a departmental wide readiness assurance program?

- Is there a plan/procedure to address oversight of the Department's emergency management readiness assurance activities?
- Is there a plan/procedure to address site ERAP activities?
- Has the office prepared a performance indicators document to guide actions in establishing a internal departmental wide performance indicators program? Or is this part of a larger program?
- Is there a plan/procedure to address oversight of the PSO and Field Element performance indicators/oversight objectives?
- Has the office prepared a corrective actions document to guide actions in establishing an internal departmental wide corrective action program? Or does the office participate in a larger corrective action program?
- Does the office provide policy or guidelines on internal lesson learned programs?

REVIEW APPROACH

Record Review:

- Plan for the departmental readiness assurance program.
- Plans and procedures for conducting operational awareness and readiness assurance activities.
- Plans and procedures for monitoring the performance measures at Defense Nuclear Facilities.
- Documents pertaining to operational awareness activities, performance measure implementation, and readiness assurance.
- Review plans.
- Reports of completed reviews, operational awareness activities, oversight activities, etc.
- Correspondence with Undersecretary Offices, PSOs, and/or Field Element Managers.

Interviews:

- Responsible managers.
- Cognizant staff members.

Observations:

None

4.2 Program Secretarial Offices

OBJECTIVES

PSO.1 Ensure implementation of emergency management policy and requirements and maintain programs and systems consistent with policy and requirements. (DOE O 151.1D, Appendix A, Paragraph 9.a)

CRITERIA

- 1. Ensure that resources for sites, facilities and activities, including transportation activities, are adequate for the effective implementation and maintenance of emergency management programs, emergency response assets and capabilities. (DOE O 151.1D, Appendix A, Paragraph 9.b)
- 2. Ensures the Secretary, the Administrator NNSA, Associate Administrator for Emergency Operations and the field and site managers are kept fully and currently informed about matters that affect their responsibilities. (DOE O 151.1D, Appendix A, Paragraph 9.g)

- 3. The Field Element Manager or appropriate Federal Manager must prepare and submit a consolidated ERAP covering the sites/facilities/activities under its supervision to the Program Secretarial Officer and Associate Administrator, Office of Emergency Operations by November 30 each year. (DOE O 151.1D, Attachment 3, Paragraph 14.c.(2))
- 4. Establish oversight programs and implement the requirements in this Order at Headquarters and Field Elements. (DOE O 226.1B, Paragraph 5.b.(1))
- 5. Ensure that Field Elements perform effective oversight in all relevant areas and place high priority on oversight of high consequence activities, such as high hazard nuclear operations, and assist the Field Elements in implementing and improving documented oversight program plans and schedules through direction and feedback. (DOE O 226.1B, Paragraph 5.b.(2))

Performance Lines of Inquiry (LOIs)

Operational Awareness

- Have all the ERAPs for the previous calendar year been received? Reviewed? Analyzed?
- Does the analysis demonstrate objectiveness and rigor? Include recommendations for actions?
- Did the PSO receive and review site exercise plans? Were the plans reviewed? Feedback provided to the Field Element?
- Has the PSO visited sites during the past year? Observed or evaluated an exercise, LSPT or evaluated drill?
- Did the PSO receive and review exercise after-action reports (AARs)?
- If so, were the AARs reviewed and was any feedback provided to the Field Element?
- Did the PSO receive and review exercise corrective actions and improvement items?
- If so, were the corrective actions reviewed and was any feedback provided to the Field Element?
- Has the PSO provided assistance to any Field Elements or contractor organizations during the past year?
- Are plans/procedures for maintaining operational awareness and oversight of readiness assurance executed as prescribed?
- Is there a round-the-clock single point of contract to receive notifications from the Headquarters Watch Office?

Performance Measures (Defense Nuclear Facilities)

- Has the PSO established performance measures for oversight of the Field Elements and sites under its responsibility?
- Do the PSO performance objectives include oversight objectives, areas of attention, and assessment frequencies?
- Has the PSO received input on the performance measures for each site?
- Has the PSO verified that the Field Element performance objectives include oversight objectives, areas of attention, and assessment frequencies?
- Has the PSO followed up to verify that oversight objectives and assessment objectives have been met?
- Has the PSO provided feedback to the PSOs and/or Field Elements regarding oversight performance? Expectations?

Readiness Assurance

• Are plans/procedures for maintaining operational awareness and oversight of readiness assurance executed as prescribed?

- What steps, if any, has the office taken to verify that the Department's readiness assurance program is being executed as directed?
- Has the office participated in any evaluations (e.g., exercise evaluation or assessment) during the last year? Two or three years?
- Has the PSO promoted any lessons learned from the sites?

Programmatic Lines of Inquiry (LOIs)

Operational Awareness

- Does the PSO have plans/procedures for maintaining operational awareness?
- Is there a process/procedure for receiving and reviewing ERAPs?
- Is there a process/procedure for receiving and reviewing site exercise plans?
- Is there a process/procedure for determining whether and when to conduct site visits?
- Is there a process/procedure to receive and review exercise after-action reports (AARs)? Provide feedback to the Field Element?
- Is there a process/procedure for the PSO to be notified of findings and deficiencies resulting from external reviews? Field Element reviews?
- If so, is there a process/procedure to review and if necessary provide feedback regarding the corrective actions? Provide feedback provided to the Field Element?
- Is there a process/procedure governing PSO provided assistance to any Field Elements or contractor organizations?
- Is there a process/procedure which designates a round-the-clock single point of contract to receive notifications from the Headquarters Watch Office?
- Does the procedure provide clear guidance to the single point of contact on who and how to make internal notifications?

Performance Measures (Defense Nuclear Facilities)

- Does the PSO provide expectations to the Field Elements regarding oversight performance expectations?
- Does the PSO have a method to establish performance measures for oversight of the Field Elements and sites under its responsibility?
 - Establishing performance objectives, including oversight objectives, areas of attention, and assessment frequencies?
 - Receiving input on the performance measures for each site?
 - Verifying that the Field Element performance objectives include oversight objectives, areas of attention, and assessment frequencies?

Readiness Assurance

- Does the PSO have plans/procedures for maintaining oversight of readiness assurance executed as prescribed?
- How does the office verify that the Department's readiness assurance program is being executed as directed?
 - Periodic Field element and site evaluations?
 - Are criteria established to determine the effectiveness of the Field Element oversight?
 - Use specific standards and criteria issued by the Director, Office of Emergency Operations for program and exercise evaluations?

- Does the PSO have a process/procedure to ensure that timely and appropriate actions are taken by the PSO, Field Element, and/or site contractor to address findings and deficiencies identified in Independent Oversight appraisal reports? (DOE Order 227.1)
- Does the PSO have internal guidance or a document processing lessons learned?

REVIEW APPROACH

Record Review:

- PSO emergency management lessons learned entered/reviewed during the past three calendar years
- PSO emergency management lessons learned procedure
- PSO emergency management program assessment plans and CRADs for the past three calendar years
- PSO emergency management program assessment procedures
- PSO emergency management program assessment reports for the past three calendar years
- PSO emergency management program assessment schedules for the past three calendar years
- PSO issues management procedures

Interviews:

- PSO emergency management program lead
- PSO issues management lead
- PSO lessons learned lead

Observations:

• None

4.3 Field Elements

OBJECTIVES

FEM.1 Implement emergency management policy and requirements and maintain programs and systems consistent with policy and requirements. (DOE O 151.1D, Appendix A, Paragraph 10.a)

CRITERIA

- 1. Review and approve site, facility, and activity emergency management plans, including updates. (DOE O 151.1D, Appendix A, Paragraph 10.b)
- 2. Review and approve site, facility, and activity All-Hazards Surveys. (DOE O 151.1D, Appendix A, Paragraph 10.c)
- 3. Review and approve site, facility, and activity Emergency Planning Hazards Assessments (EPHAs). (DOE O 151.1D, Appendix A, Paragraph 10.d)
- 4. Review and approve site, facility, and activity-level consolidated and integrated Emergency Planning Zones. (DOE O 151.1D, Appendix A, Paragraph 10.e)
- 5. Ensure appropriate performance measures of the effectiveness of contractor site, facility, and activity emergency management programs are incorporated into contractual arrangements. (DOE O 151.1D, Appendix A, Paragraph 10.f)
- 6. Establish and communicate performance expectations to contractors through formal contract mechanisms. Such expectations must be established on an annual basis, or as otherwise required or determined appropriate by the Field Element. (DOE O 226.1B, Paragraph 4.c)

- 7. Assess the Field Element emergency management program annually and document the results of the self-assessment in the Field Element portion of the Emergency Readiness Assurance Plan (ERAP). (DOE O 151.1D, Appendix A, Paragraph 10.f.(1))
- 8. Assess the site, facility, and activity emergency management program(s). (DOE O 151.1D, Appendix A, Paragraph 10.f.(2))
- 9. Review site, facility, and activity self-assessment reports. (DOE O 151.1D, Appendix A, Paragraph 10.f.(3))
- 10. Review and approve the annual site, facility, and activity exercise plan. (DOE O 151.1D, Appendix A, Paragraph 10.f.(4))
- 11. Review and approve site, facility, and activity Corrective Action Plans for external findings identified during evaluations, assessments, drills, exercises, and actual emergencies. (DOE O 151.1D, Appendix A, Paragraph 10.f.(5))
- 12. Based on site, facility, and activity performance, periodically review Corrective Action Programs for internal findings to ensure programmatic effectiveness. (DOE O 151.1D, Appendix A, Paragraph 10.f.(5))
- 13. Review and approve the annual site, facility, and activity ERAPs; prepare the Field Element annual ERAP; and submit the ERAP by November 30 each year to the Associate Administrator, Office of Emergency Operations, for inclusion into the annual report on the status of the Emergency Management System and the DOE Enterprise Threat and Hazard Risk Profile. (DOE O 151.1D, Appendix A, Paragraph 10.f.(6))
- 14. Coordinate with the Program Secretarial Officer(s) to ensure resources are available to implement this Order for cognizant sites, facilities, and activities. (DOE O 151.1D, Appendix A, Paragraph 10.g)
- 15. Ensure development and implementation of appropriate emergency management procedures. (DOE O 151.1D, Appendix A, Paragraph 10.h)
- 16. Ensure emergency public information planning is integrated with the development and maintenance of emergency management plans. (DOE O 151.1D, Appendix A, Paragraph 10.i)
- 17. Ensure effective communication systems and protocols are coordinated and maintained with the Headquarters Emergency Operations Center regarding emergencies involving and/or affecting sites, facilities, and activities or materials under DOE jurisdiction or requiring DOE assistance. (DOE O 151.1D, Appendix A, Paragraph 10.j)
- 18. Implement corrective actions and lessons learned from actual emergency responses and based on findings from evaluations, assessments, and appraisals. (DOE O 151.1D, Appendix A, Paragraph 10.p)
- 19. Ensures that the responsible Program Secretarial Officer, and the Associate Administrator for Emergency Operations are kept informed about matters that affect their responsibilities. (DOE O 151.1D, Appendix A, Paragraph 10.u)
- 20. Defense Nuclear Facilities must perform the following. (1) Conduct causal analysis to determine corrective actions for findings identified as a result of noncompliance for life safety. (2) Develop formal corrective action plans for identified findings. The corrective action plan must be approved by the Field Element Manager. The Field Element Manager must ensure effective corrective actions are tracked, identified, and implemented. (DOE O 151.1D, Attachment 4, Paragraph 15.j)
- 21. Establish oversight programs and implement the requirements in this Order. (DOE O 226.1B, Paragraph 5.e.(1))

- 22. Establish and implement line management oversight programs and processes at the Field Element level to meet the requirements of this Order and hold personnel accountable for implementing these programs and processes. (DOE O 226.1B, Paragraph 5.e.(3))
- 23. Establish performance expectations and communicate same to contractors through formal contract mechanisms. (DOE O 226.1B, Paragraph 5.e.(5))
- 24. Use the results of DOE line and independent oversight and contractor assurance systems to make informed decisions about corrective actions and the acceptability of risks and to improve the effectiveness and efficiency of programs and site operations. (DOE O 226.1B, Paragraph 5.e.(6))
- 25. For sites required to meet DOE O 414.1D Quality Assurance, do corrective action programs identify the causes of problems, and include prevention of recurrence as a part of corrective action planning. (DOE O 414.1D, Attachment 2, 3.c)

Performance Lines of Inquiry

Review and approval activities

- Has the Field Element reviewed and approved the site, facility, and activity emergency management plans (including updates no less than every three years)?
- Has the Field Element reviewed and approved the site, facility, and activity All-Hazards Surveys (at least every three years)?
- Did the Field Element conduct any spot checks or walkthroughs to verify the accuracy of the All-Hazards Survey?
- Has the Field Element reviewed and approved the site, facility, and activity Emergency Planning Hazards Assessments (EPHAs)?
- Did the Field Element perform any independent calculations to verify the accuracy of the EPHAs? Were any criteria or lines of inquiry established for the reviews of the All-Hazards Survey or EPHA?
- Has the Field Element reviewed and approved the site, facility, and activity-level consolidated and integrated Emergency Planning Zone?
- Has the Field Element reviewed and approved the exercise plan for the annual evaluated site-level exercise?
- Has the Field Element ensured that the annual exercise schedule implements the five-year exercise plan? Includes challenging exercises that appropriately test the site and facility emergency response organizations? Rotates the exercises among the site facilities?
- Has the Field Element reviewed the annual exercise schedule? Typically this is the five-year exercise plan.
- Has the Field Element reviewed and approved the corrective action plans for findings from Federally-directed or external assessments?
- Has the Field Element reviewed the after action reports for annual exercises?
- Has the Field Element reviewed the after action reports for any operational emergencies at the site?
- Did the Field Element document the results of the review(s)? Internal assessment form? Assessment report? Formal transmittal?
- Does evidence demonstrate that the reviews were thorough (e.g., conducted using a checklist or provided comments to the contractor for correction) and timely?
- Has the Field Element verified that the site, facility and/or activity emergency plans have been revised and adequately meet the requirements of DOE O 151.1D?
- Has the Field Element reviewed and approved the annual ERAP submittal?
- Was any analysis of the ERAP conducted or were conclusions regarding the status of the site's program developed?

- Did the Field Element direct the contractor to take any actions based on the ERAP?
- Did the Field Element adjust the contractor performance indicators based on the content of the ERAP?
- For Defense Nuclear Facilities:
 - o Has the Field Element reviewed and approved the corrective action plans for findings identified as a result of noncompliance affecting life safety
 - o Did the Field Element check that corrective actions were developed using an appropriate level of causal analysis?
 - o Did the Field Element verify that corrective actions adequately address the cause or causes of the finding?
 - o Did the Field Element confirm that corrective actions include verification and/or validation of the effectiveness of the corrective actions, as appropriate?
 - o Did the Field Element ensure compensatory measures were performed prior to causal analysis and corrective actions were identified and implemented?

Performance measures

- Do contractual arrangements with the site/facility contractors provide for measuring the effectiveness of the emergency management programs?
- Are there site/facility contractor performance objectives and criteria and appropriate incentives identified and specified in contract documents?
- Has the Field Element established and tracked performance measures (indicators) for site/facility contractor sites/facilities?
- Do performance measures reflect the performance expectations of senior managers? Or are they only the ones required by NA-40 in the annual ERAP?
- Are these performance expectations established on an annual basis (or on a frequency determined appropriate by the Field Element)?
- Are the performance measures:
 - o Specific?
 - o Measurable?
 - o Achievable?
 - o Relevant?
 - o Time-bound?
- Do the performance measures effectively track key functional areas?
- Are management reviews of the progress in meeting performance measures conducted periodically? Documented in reports/notes/formal correspondence?
- Is progress in meeting performance targets formally monitored and reported?
- Are these indicators effective in determining performance?
- Are the performance measures tracked?
- Are performance measures analyzed and trends developed?
- Have actions been taken to correct areas were performance measures are not being met?

Field Element Self-Assessment

- Has the Field Element developed a self-assessment schedule for its own program?
- Has a thorough and complete self-assessment of the Field Element emergency management program been conducted at least annually?
- Has a written report been completed on the self-assessment?
- Did the self-assessments follow the documented process/procedure used to conduct the self-assessment?
- Were the criteria and lines of inquiry used in conducting this self-assessment appropriate?

- Does the documentation provide evidence that the self-assessment was based on accepted standards of performance? Objective and thorough?
- Who conducted the self-assessment?
- What organizations were the assessors from?
- Did the assessors meet the requirements for assessors (e.g., independence, subject matter experience, assessment experience, and training)?
- Do the self- assessments include observations of emergency response?
- Do the self-assessments address the performance measures and goals established for the program?
- Did the self-assessment address important program elements, such as response elements and oversight responsibilities?
- Were the strengths and weaknesses of each program element adequately addressed in the assessment report?
- Are findings and/or deficiencies adequately identified in the written report?
- Have corrective actions been identified and implemented for deficiencies and findings? Weaknesses?
- Have actions to improve the program been implemented based on identified lessons learned?
- Was the report reviewed and/or approved by the appropriate line managers?
- Do evaluations, improvements (lessons learned) and ERAPs contribute to the effectiveness of readiness assurance program?
- Have the results of the Field Office self-assessment been documented and recorded (summarized) in the Field Office portion of the ERAP?
- Are any weaknesses, deficiencies, findings, or lessons learned discussed in the self-assessment of ERAP?

Emergency management program oversight and assessment

- Has the Field Element executed its emergency management program oversight plan as described in the Field Element plans and procedures?
 - o Has the Field Element developed a coherent, logical assessment schedule?
 - O Have assessments been completed as scheduled? Have deferrals substantially altered the oversight performance? Are deferred assessments reviewed and approved by appropriate Field Element managers?
 - O Did the planning process take into account hazards and risks in determining the assessment schedule?
 - Was there appropriate emphasis on performance-based assessments (i.e., observation and assessment of training, drills, exercises, etc.)?
 - Were performance measures used as a factor in establishing the assessment plans and schedule?
 - o How often are the site/facility emergency management program elements assessed?
 - Do the completed assessments adequately address the site and facility (especially high hazard facilities) programs?
 - o Did assessors follow the procedure for the specifics on how assessments are to be conducted?
 - Were written plans utilized when required for assessments? When appropriate?
 - Were criteria and lines of inquiry used for the assessments?
 - Were objectives, criteria, and lines of inquiry appropriate?
 - Were the results of the assessments documented (as specified in procedures)? Oversight system entries? Formal reports?
 - O Did the Field Element analyze the information gleamed from these assessments? For performance evaluation? Development of oversight future plans?
 - o Were response elements evaluated as part of the assessment?
 - o Do the assessments include good practices and/or recommendations?

- Were Field Element staff who completed the assessments adequately trained? Technically qualified? Assessment training?
- Were identified deficiencies and findings entered into a corrective action (and/or issues management) system?
 - Were the issues communicated to the contractor in a timely manner?
 - Was the contractor required to respond to and correct deficiencies and findings identified in the report?
- Did the Field Element review the contractor self-assessment program as it relates to emergency management to ensure compliance with DOE directives and policy? Did the Field Element:
 - o Review the contractor's self-assessments?
 - Use a set of criteria established for the review the contractor's self-assessments?
 - o Document the results of the reviews? Oversight system entries? Formal reports?
 - o Follow up using the information gleamed from these reviews?
- Did the Field Element oversight verify that the contractor self-assessments are thorough and effective? For example, did the Field Element oversight process verify that the contractor:
 - o Assessed all elements of the emergency management program every year?
 - o Met the schedule for conducting assessments?
 - Used appropriately objectives/criteria/LOIs in conducting the self-assessment appropriate?
 - O Used qualified site/facility contractor personnel to conduct the assessments (i.e., emergency management, fire, rad, safety)?
 - o Included a response activity (tabletop, drill, exercise) when appropriate?
- Did the Field Element effectively utilize reviews of the contractor self-assessments to provide oversight of the site program (e.g., used the contractor's self-assessment results to identify areas requiring increased Federal oversight or assessment)?
- Did the Field Element issue reports on the observations of the Field Element assessment of the site/facility contractor?

Corrective actions

- Does the Field Element correct any deficiencies and weaknesses found in the Field Element emergency management program?
- Does the Field Element identify the causes of problems and corrective actions to prevent recurrence?
 - Has a causal analysis been completed for the findings of actual emergency responses, exercise evaluations, and assessments (appraisals)?
 - O Based on the causal analysis, have corrective actions been formulated for findings from actual emergency responses, exercise evaluations, and assessments (appraisals)?
 - Have findings from program and exercise evaluations by organizations external to the site/facility/ Field Element been acknowledged and include a corresponding corrective action plan?
 - o Do corrective actions include:
 - Measures to correct the deficiency?
 - Identification of root cause (see above)?
 - Determination of the existence of similar deficiencies or underlying causes?
 - Actions to preclude recurrence of like or similar deficiencies?
 - Assignment of corrective action responsibility?
 - Completion dates for each corrective action?
 - O Do corrective actions use the results of DOE line and independent oversight and contractor assurance systems to make informed decisions about corrective actions?
- Has a corrective action plan been formulated that adequately addresses the deficiencies and weaknesses?
- Are corrective actions placed into a tracking system to ensure closure?

- Have the corrective actions from actual emergency responses, exercise evaluations, and/or assessments been implemented?
 - Have corrective action plans been developed within 45 working days of receipt of final evaluation report?
 - Have corrective actions been planned/scheduled?
 - Have the corrective actions been completed on schedule?
 - o Have corrective actions been effectively implemented?
 - Have corrective actions been completed as soon as possible?
 - Have corrective actions been completed before the next annual self-assessment?
- Are corrective actions involving revision of procedures or training of personnel completed before the next exercise?
 - O Did any of the corrective actions associated with site, facility, and/or Field Element events (e.g., fire and release) entail the revision of procedures and/or training of personnel?
 - Have corrective actions involving revision of procedures been completed before the next exercise (so they can be validated)?
 - O Has corrective actions involving training of personnel been completed before the next exercise (so the actions can be validated)?
 - Were these actions (revision of procedures/training of personnel) completed before the next exercise?
- For Defense Nuclear Facilities, have corrective actions for life safety issues been verified and validated? (DOE O 151.1D, paragraph 15.J)
 - Do the corrective action plans indicate the verification and validation process for each corrective action?
 - Has the site/facility site verified that the corrective action indicated in the corrective action plan been completed for actual events, exercise evaluations and program assessments?
 - O Has the Field Element verified that site/facility has completed the corrective action? (pick several findings and track corrective action for verification)
 - o Is there documentation that site/facility/the Field Element has verified that corrective actions have been completed?
 - o Is there a validation process at site/facility/the Field Element?
 - Have corrective actions that are verified also been validated for their effectiveness in resolving the original finding?
 - What processes have been utilized for validation (training exams, drills, tabletops, exercises)?
 - Are verification and validation actions in the tracking system?
 - Who has performed verification of corrective actions?
 - Who has performed validation of corrective actions?
 - Are the individuals who have verified the corrective actions independent of the individuals who have performed these actions?
 - Are the individuals who have validated the corrective actions independent of the individuals who have performed these actions and verified the actions?
 - Have findings from program and exercise evaluations by external organizations been validated by the evaluating organizations?
 - What are the qualifications of the individuals who verified/validated?
 - o Is the Quality Assurance Department of site/facility/the Field Element used to either verify or validate?
- Were compensatory measures put in place until causal analysis and corrective actions were performed?
- Was the corrective action effective in preventing recurrence?

ERAP

- Did the Field Element review the site/facility contractor ERAP?
 - o Was the site/facility (contractor) ERAP been reviewed in a timely manner?
 - Was feedback on actions needed to address needed emergency program improvements provided by the Field Element?
 - o Did the Field Element have any comments/revisions to the site/facility contractor ERAP?
 - Are the comments documented?
 - o Did the site/facility contractor address the Field Element comments?
- Did the Field Element submit an ERAP summarizing its programs and its facility and activity submissions, to the Program Secretarial Officer and the Director, Office of Emergency Operations by November 30?
 - Has the Field Element Emergency Management Program Manager included Field Office information in the ERAP?
 - O Does the ERAP provide an accurate depiction of the status of the Field Element's emergency management program?
 - o Does the report identify what the goals were for the fiscal year that just ended?
 - o Does the report indicate to what degree these goals were accomplished?
- Did the Field Element submit the consolidated ERAP to the Director, Office of Emergency Operations and the Program Office by November 30th?
 - Does the ERAP consolidate information from both the site/facility contractor and the Field Element?
 - O Does the ERAP identify what the goals were for the fiscal year just ended and the degree to which those goals were accomplished?
 - o Does the report identify the goals for next fiscal year (which starts on October 1)?
 - O Does the report highlight program status, including significant changes in emergency management programs (i.e., planning basis, organization, facility mission, exemptions)?
 - O Does the ERAP document evaluation of results and the status of associated corrective actions, including site/facility self-assessments and performance measures?
 - o Does the ERAP include a summary of the Threat and Hazard identification Risk (THIRA)?
 - Ones the ERAP contain a sufficient level of accurate information and analysis to provide management at all levels with adequate tools for gauging emergency management program readiness?

Lessons Learned

- Has the Field Element participated in the DOE/NNSA Corporate Lessons Learned program by submitting entries?
- Have lessons learned from actual emergency responses, exercise evaluations, and/or assessments been implemented?
- Are lessons learned from training, drills, actual responses and site-wide lessons learned program incorporated and tracked in the readiness assurance program? [DOE O 226.1A, Att.2, 2.c.(2), (DOE G 151.1-3, D.3.4, P5.8)]

Programmatic Lines of Inquiry

Review and approval activities

• Does the Field Element have procedures or guidance regarding the conduct and documentation of its review and approval of site/facility document, such as the emergency management plans (including updates no less than every three years), All-Hazards Surveys (at least every three years), Emergency

- Planning Hazards Assessments (EPHAs), Emergency Planning Zone (EPZ), site-level exercise plans, annual exercise AARs, and ERAP?
- Does the Field Element have a procedure/process for review and approval of the corrective action plans for findings from Federally-directed or external assessments?
- Does the Field Element have a procedure/process for review and approval of the corrective action plans for findings identified as a result of noncompliance affecting life safety (Defense Nuclear Facilities)?
- Does the Field Element have a procedure/process for review of the annual exercise schedule? Five-year exercise schedule?
- Did the Field Element require documentation of the results of the review(s)? Internal assessment form? Assessment report? Formal transmittal?
- Does the Field Element oversight procedure/process require the use of criteria or lines of inquiry for the reviews?
- Does a Field Element procedure/process require any analysis of the ERAP regarding the status of the site's program?
- Does the Field Element have a process for establishing and adjusting the contractor performance measures based on the content of the ERAP? Oversight activities? Established performance measures?

Performance measures

- Do contractual arrangements with the site/facility contractors provide for measuring the effectiveness of the emergency management programs?
- Has the Field Element established and tracked performance measures (indicators) for site/facility contractor sites/facilities?
- Does the Field Element have a procedure/process for establishing and managing performance measures?
 - o Do performance measures reflect the performance expectations of senior managers?
 - Are these performance expectations established on an annual basis (or on a frequency determined appropriate by the Field Element)?
 - o Are the performance measures:
 - Specific?
 - Measurable?
 - Achievable?
 - Relevant?
 - Time-bound?
 - o Do the performance measures effectively track key functional areas?
 - Are (management) reviews of the progress in meeting performance measures conducted periodically? Documented in reports/notes/formal correspondence?
 - o Is progress in meeting performance targets formally monitored and reported?
 - o Are the performance measures tracked?
 - o Are performance measures analyzed and trends developed?

Field Element Self-Assessment

- Does a policy or procedure require a thorough and complete self-assessment of the Field Element emergency management program every year?
- Does a documented process/procedure provide the steps necessary to plan and conduct the self-assessment?
- Are criteria and lines of inquiry required to be used in conducting this self-assessment?

- Are the requirement for those who conduct the self-assessment specified (e.g., independence from the organization or activity, subject matter expert experience, assessment experience, and training)?
- Does this self- assessment process require performance-based observation, such as observations of emergency response, or allow only programmatic reviews (of documentation)?
- Does the self-assessment process address the performance measures and goals established for the program?
- Are the strengths and weaknesses of each program element to be addressed in the assessment?
- Is there a procedure or process to identify findings and/or deficiencies and include them in the written report?
- Is there a process to ensure that corrective actions been identified and implemented for deficiencies and findings? Weaknesses?
- Is written documentation (such as a report) required by procedure or process?
- Is an appropriate level of review and/or approval required?
- Has the Field Element developed a self-assessment schedule for its own program?
- Where is the assessment schedule found (e.g., in the annual ERAP)?
- Does a procedure or process have the results of the Field Office self-assessment documented and recorded in the Field Office portion of the ERAP?
- Are the results of the Federal self-assessment required to be summarized in the annual ERAP?
- Are any weaknesses, deficiencies, findings, or lessons learned to be discussed in the self-assessment of ERAP?

Emergency management program oversight and assessment

- Has the Field Element established a procedure or process for oversight of the Contractor Assurance System? Does that procedure include oversight of the emergency management program?
- Has the Field Element established a procedure or process for oversight of the emergency management program?
- Does the Field Element (portion of the) emergency management program plan describe the Federal oversight program for emergency management?
- Do the Field Element plans and procedures establish a program that could effectively oversee the contractor's program?
- Are the specific requirements for oversight of the emergency management program included (a separate procedure or process)?
 - o Is the oversight program adequately established in a procedure or process?
 - Does a procedure or process govern the assessment of the contractor's program?
 - o Does the procedure or process require development of an assessment schedule?
 - o Is the assessment done in one assessment or are separate elements done each year?
 - O Does the planning process take into account hazards and risks in determining the assessment schedule?
 - O Does the procedure include an appropriate emphasis on performance-based assessments (i.e., observation and assessment of training, drills, exercises, etc.)?
 - o Do the Field Element procedures use performance measures (and their achievement) as a factor in establishing the assessment plans and schedule?
 - o Are roles and responsibilities for scheduling and conducting assessments clearly established?
 - o How often are the site/facility emergency management program elements assessed?
 - O Does the site schedule adequately address the site and facility (especially high hazard facilities) programs?
 - o Is there a procedure for the specifics on how assessments are to be conducted?
 - Are written plans required for assessments?
 - o Is there a set of criteria and lines of inquiry established for the assessments?

- o Are objectives, criteria, and lines of inquiry appropriate?
- o Are the results of the assessments documented? Oversight system entries? Formal reports?
- o What does the Field Element do with the information gleamed from these assessments?
- Are response elements evaluated as part of the assessment?
- o Do the assessments include good practices and/or recommendations?
- Are Field Element staff adequately trained to complete the assessments? Technically qualified? Assessment training?
- Is there a procedure or process for entering deficiencies and findings from oversight processes into a corrective action system?
 - O Do procedures or processes require that issues be communicated to the contractor in a timely manner?
 - o Is the contractor required to respond to and correct deficiencies and findings identified in the report?
- Do the oversight procedures require that the Field Element review the contractor self-assessment program (as it relates to emergency management) to ensure compliance with DOE directives and policy?
 - O Does a procedure or process govern the review of the contractor's self-assessments?
 - o Is there a set of criteria established for the review the contractor's self-assessments?
 - o Are roles and responsibilities for oversight of the contractor self-assessments clearly established?
 - Are the results of the reviews required to be documented? Oversight system entries? Formal reports?
 - What does the Field Element do with the information gleamed from these reviews?
- Does the Field Element oversight verify that the contractor self-assessments are thorough and effective? For example, does the Field Element oversight process verify that:
 - o All elements of the emergency management program assessed every year?
 - The contractor met the schedule for conducting assessments?
 - The contractor used appropriately objectives/criteria/LOIs in conducting the self-assessment appropriate?
 - o Appropriately qualified site/facility contractor personnel conducted the assessments (i.e., emergency management, fire, rad, safety)?
 - o The annual self-assessments included a response activity (tabletop, drill, exercise) which is evaluated for performance?
- Is the assessment program part of Integrated Safety Management (ISM) reviews?
- Do plans/procedures require the Field Element issue reports on the observations of the Field Element assessment of the site/facility contractor?
 - o Who in the Field Element reviews the report prior to issuance?
 - o Do the site/facility contractor have the opportunity to comment on the assessment? How?
 - o Is the Field Element Manager involved in review and approval of the assessment report?

Corrective actions

- Is there a process in place to correct any deficiencies and weaknesses found in the Field Element emergency management program?
- Is there a process/procedure utilized to identify the causes of problems and corrective actions to prevent recurrence?
- Do processes/procedures require a corrective action plan be formulated that adequately addresses the deficiencies and weaknesses?
- Do processes/procedures require corrective actions be placed into a tracking system to ensure closure?
- Do processes/procedures require corrective actions involving revision of procedures or training of personnel be completed before the next exercise?

- For Defense Nuclear Facility, do processes/procedures require corrective actions to be verified and validated?
 - O Do the corrective action plans indicate the verification and validation process for each corrective action?
 - o Is there a validation process at site/facility/the Field Element?
 - o What processes have been utilized for validation (training exams, drills, tabletops, exercises)?
 - O Do processes/procedures require verification and validation actions be documented in the tracking system?
 - o Do processes/procedures require the individuals who have verified the corrective actions be independent of the individuals who have performed these actions?
 - o Do processes/procedures require the individuals who have validated the corrective actions be independent of the individuals who have performed these actions and verified the actions?
 - O Do processes/procedures require having findings from program and exercise evaluations by external organizations be validated by the evaluating organizations?
 - O Do processes/procedures require the Quality Assurance Department of site/facility/the Field Element be used to either verify or validate?
- Does the Field Office have an effective issues management system?
 - o Is there a procedure or process for entering deficiencies and findings from oversight processes into an issues tracking system?
 - O Do processes/procedures require Field Element personnel be involved in critiques, fact-finding, or causal analysis of Findings?
 - O Do processes/procedures require Field Element personnel involvement in reviewing and/or approving contractor corrective actions?
 - Do processes/procedures require Field Element personnel review corrective actions in the contractor's issues management system to verify that appropriate risk significance has been assigned to the Finding?
 - o Do processes/procedures require Field Element personnel assigned to verify and validate closeout of Findings?

ERAP

- Do processes/procedures require the Field Element to review the site/facility contractor ERAP?
- Do processes/procedures require:
 - A procedure/checklist be used to review the ERAP?
 - The site/facility contractor ERAP be submitted to the Field Element on a timely basis (by October 15)?
 - o The site/facility (contractor) ERAP be reviewed in a timely manner?
 - o The Field Element to document any comments/revisions to the site/facility contractor ERAP?
 - The Field Element to approve the site/facility contractor ERAP?
 - o The Field Element Manager to sign the ERAP or transmitting memo?
- Do processes/procedures require the Field Element to submit an ERAP summarizing its programs and its facility and activity submissions, to the Program Secretarial Officer and the Director, Office of Emergency Operations by November 30?
 - Does the Field Element have a process in place to track and collect the Field Element emergency management activities (throughout the year) to be included in the annual consolidated ERAP?
- Do processes/procedures require the Field Element to submit the consolidated ERAP to the Director, Office of Emergency Operations and the Program Office by November 30th?
 - o Is there a process/procedure for writing the ERAP?
 - o Is there a formal process for submitting the Field Element/site/facility (contractor) ERAP to the Program Office and the Director, Office of Emergency Operations?

Lessons Learned

- Do processes/procedures require the Field Element participated in the DOE/NNSA Corporate Lessons Learned program by submitting entries?
- Do processes/procedures require lessons learned from training, drills, actual responses and the site-wide lessons learned program to be incorporated and tracked in the readiness assurance program? [DOE O 226.1A, Att.2, 2.c.(2), (DOE G 151.1-3, D.3.4, P5.8)]
- Do processes/procedures require
 - o Reviewing/incorporating lessons learned?
 - o Lessons-learned to be collected from the Field Element / site/facility contractor lessons learned program, the DOE Corporate Lessons Learned Program and/or both?
 - o Clear roles and responsibilities be assigned?
 - o Lessons-learned be entered into the system and submitted?
 - o A specific person at the Field Element review, approve, and/or submit lessons learned?
 - A process to identify, plan, and implement "corrective" actions based on internal lessons learned? External lessons learned?
 - o A process to assign priority to lessons learned "corrective" actions?
 - o A site/facility contractor/Field Element lessons learned data base?

REVIEW APPROACH

Document/Record Review

Review and approval activities

• Exercise planning documents and records, including exercise findings.

Performance measures

• Contracts with performance indicator/expectation clauses related to emergency management.

Field Element Self-Assessment

- Field Element emergency plan(s) and procedures related to performing assessments.
- CRADs used to perform Field Element self-assessment.
- Field Element self-assessment reports (including exercises)
- Exercise findings related to Field Element performance.

Emergency management program oversight and assessment

- Field Element reports on the contractor's emergency management program.
- Documentation and records related to emergency management evaluation program.
- Field Element/site/facility emergency plan(s) and procedures related to performing assessments.

Corrective actions

- Field Element corrective action process if it is not the same system as the contractor.
- Field Element corrective action plan.
- Field Element/Site/facility emergency plan(s) and procedures related developing, implementing, tracking and closing corrective actions.

- Field Element corrective action process if it is not the same system as the contractor.
- Review several assessments and exercise evaluations reports to determine findings and compare to
 corrective action plans to determine if a causal analysis has been done and if the corrective actions
 address the finding.

Contractor oversight/readiness assurance

- Field Element/site/facility emergency plan(s) and procedures related to readiness assurance.
- Schedule for readiness assurance activities, including contractor schedule.
- Field Element emergency plan(s) and procedures related to the process for reviewing contractor self-assessments
- Assessor training and qualifications.
- Field Element CRADs used for the contractor assessment.
- Program reviews, corrective actions, documents/Field Element reports/notes/correspondence on the contractor's self-assessment reports.
- Schedule for readiness assurance activities.
- Field Element staff training and qualifications for evaluating emergency management program effectiveness.

ERAP

- ERAPs submitted and Headquarters' feedback for the past three years.
- Field Element/Site/facility emergency plan(s) and procedures related to developing and approving ERAPs.
- ERAP and documentation of program reviews, corrective actions, and documents that track findings and corrective actions, including a process to verify and validate results.

Lessons Learned

- Procedures related to lessons learned.
- Documentation for the incorporation of lessons learned.

Interview

- Individual with responsibility for the readiness assurance program.
- Individual with responsibility for developing/reviewing ERAPs.
- Individual with responsibility for the Field Element lessons learned program as it applies to the emergency management program.
- Individual with responsibility for the site-wide lessons learned program
- Individuals with responsibility for performing emergency management assessments of the contractor.

Observation

• Pick several corrective actions that have been closed. Verify through observation or document check that the issue identified has been resolved