



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

AUDIT REPORT

DOE-OIG-22-32

May 2022

**CORRECTIVE ACTIONS ON THE
OFFICE OF ENTERPRISE ASSESSMENTS
FINDINGS AND DEFICIENCIES**



Department of Energy
Washington, DC 20585

May 18, 2022

MEMORANDUM FOR THE DIRECTOR, OFFICE OF ENTERPRISE ASSESSMENTS,
OFFICE OF ENVIRONMENT, SAFETY AND HEALTH;
THE MANAGER, SAVANNAH RIVER OPERATIONS OFFICE;
AND THE MANAGER, LOS ALAMOS FIELD OFFICE

SUBJECT: Audit Report on Corrective Actions on the Office of Enterprise Assessments
Findings and Deficiencies

The attached report discusses our review of corrective actions for findings and deficiencies that have been identified by the Office of Environment, Safety and Health Assessments. This report contains six recommendations that, if fully implemented, should help protect the Department of Energy's workers, the public, and the environment from hazards. Management concurred with four recommendations included in our final report and nonconcurred with two recommendations.

We conducted this audit from October 2020 through October 2021 in accordance with generally accepted government auditing standards. We appreciated the cooperation and assistance received during this evaluation.

A handwritten signature in black ink that reads "Earl Omer".

Earl Omer
Assistant Inspector General
for Audits
Office of Inspector General

cc: Deputy Secretary
Chief of Staff
Acting Assistant Secretary, Office of Environmental Management



**Department of Energy
Office of Inspector General**

**Corrective Actions on the
Office of Enterprise Assessments
Findings and Deficiencies
(DOE-OIG-22-32)**

**WHY THE OIG
PERFORMED THIS
REVIEW**

The Office of Enterprise Assessments implements an Independent Oversight Program to provide Department of Energy line management, Congress, and other stakeholders with an independent evaluation of the effectiveness of Department policy and line management performance in safety, security, and other critical areas. The Office of Environment, Safety and Health Assessments (EA-30), a subordinate office within the Office of Enterprise Assessments, conducts assessments to provide information on the effectiveness and performance of Department programs in protecting workers, the public, and the environment from hazards.

We initiated this audit to determine whether the Department is addressing findings and deficiencies identified by EA-30.

What Did the OIG Find?

Our review found that the Department did not always fully address findings and deficiencies identified by EA-30. Specifically, in the 18 reports we reviewed at 2 sites, we found that corrective actions taken by Department organizations did not fully address the findings and/or deficiencies for 9 reports and were not documented in the issues management systems, as required, for 4 reports. In addition, we found corrective actions were incorrectly documented for two reports. Finally, corrective action plans were not developed for 6 of the 13 reports that required them.

These issues occurred, in part, because the sites we reviewed did not always provide sufficient oversight pertaining to EA-30 findings and deficiencies, including inconsistent oversight of the issues management processes. In addition, EA-30's processes presented opportunities for improvement, including tracking findings and deficiencies. As a result of this audit, EA-30 has begun to take steps to address these issues.

What Is the Impact?

Department programs may be at risk of unaddressed weaknesses in protecting workers, the public, and the environment from hazards. Effective oversight is an integral part of the Department's responsibility to provide assurance of its safety and security posture to its leadership, its workers, and the public.

What Is the Path Forward?

To address the issues identified in this report, we have made six recommendations that, if fully implemented, should help ensure that findings and deficiencies are addressed, and effective corrective actions are implemented and documented.

BACKGROUND

The Office of Enterprise Assessments (Enterprise Assessments) implements an Independent Oversight Program to provide Department of Energy management, Congress, and other stakeholders with an independent evaluation of the effectiveness of Department policy and management performance in safety, security, and other critical areas. Department Order 227.1A, *Independent Oversight Program* (Department Order 227.1A), outlines Enterprise Assessments' responsibilities for conducting independent evaluations of Department sites, facilities, organizations, and operations in the subject areas of safety and security. Enterprise Assessments' independence in reporting directly to the Office of the Secretary of Energy is intended to provide confidence that the Department's missions are being performed safely and securely. Within Enterprise Assessments, there are three subordinate offices that are principally responsible for implementing the Independent Oversight Program: the Office of Safeguards and Security Assessments; the Office of Cyber Assessments; and the Office of Environment, Safety and Health Assessments (EA-30).

EA-30 is responsible for conducting assessments to provide information on the effectiveness of Department programs and performance in protecting workers, the public, and the environment from hazards present at Department sites and during Department operations. As a result of an EA-30 independent evaluation assessment, a report is typically issued, which may include findings and/or deficiencies for the site to address. A deficiency is an inadequacy in the implementation of an applicable requirement or performance standard that is found during an appraisal. Deficiencies may serve as the basis for one or more findings. Findings are defined as deficiencies that warrant a high level of attention by management. If left uncorrected, findings could adversely affect the Department's mission, the environment, worker safety or health, the public, and national security. Findings and deficiencies may be addressed to any entity within the Department such as Federal site offices or contractors. Per Department Order 227.1A, corrective actions to address findings and deficiencies are required to be prepared, implemented, and tracked in each site's issues management system (IMS). In addition, while corrective action plans (CAPs) are required for findings, they are not required for deficiencies. A CAP is a documented list of corrective actions that an organization agrees to implement in response to findings or commitments.

Given the importance of EA-30's oversight responsibilities, we initiated this audit to determine whether the Department is addressing findings and deficiencies identified by EA-30. Specifically, we analyzed the corrective actions in response to EA-30 reports for assessments (i.e., appraisal reports) issued from fiscal year 2016 through fiscal year 2019 at the Savannah River Site Office (SRS) and the Los Alamos National Laboratory (LANL).

OVERALL FINDINGS

Overall, we found that the Department did not always fully address findings and deficiencies identified by EA-30. Specifically, in the 18 reports we reviewed, we found that corrective actions taken by Department organizations did not fully address the findings and/or deficiencies for 9 reports (Finding 1) and were not documented in the IMS, as required, for 4 reports (Finding 2). In addition, we found corrective actions were incorrectly documented for two reports

(Finding 3). Finally, CAPs were not developed for 6 of the 13 reports that contained findings, as required (Finding 4). See Appendix 4 for further details related to the findings.

Findings Summary Table

EA-30 Report		Finding			
	SRS	1	2	3	4
1	<i>Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility (January 2016)</i>	X		X	X
2	<i>Assessment of Occupational Injury and Illness Recordkeeping and Reporting at the Savannah River Site (August 2018)</i>	X			*
3	<i>Assessment of the Savannah River Site Emergency Management Exercise Program (October 2018)</i>	X		X	X
4	<i>Fire Protection Program Implementation Assessment at the Savannah River Site Salt Waste Processing Facility (August 2019)</i>	X			
5	<i>Safety System Management Assessment at the Savannah River Site Liquid Waste Concentration, Storage, and Transfer Facilities (August 2019)</i>	X			*
6	<i>Assessment of Savannah River Site Tritium Facility Safety System Management (December 2016)</i>		X		
7	<i>Assessment of Safety System Management at the Savannah River Site H-Canyon Facility (January 2019)</i>		X		*
8	<i>Shutdown Facility Risk Management Assessment at the Savannah River Site (June 2019)</i>		X		*
9	<i>Salt Waste Processing Facility Construction Quality and Fire Protection Systems Follow-up Review at the Savannah River Site (January 2016)</i>				
10	<i>Conduct of Operations Assessment at the Savannah River Site Salt Waste Processing Facility (June 2019)</i>				*
11	<i>Review of the Savannah River Site Emergency Management Exercise Program (November 2015)</i>	X			
	Subtotal	6	3	2	2
LANL					
12	<i>Review of the Los Alamos National Laboratory September 2015 Functional Exercise of Selected Emergency Response Capabilities (January 2016)</i>	X			
13	<i>Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality (January 2016)</i>	X			X
14	<i>Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory (April 2018)</i>	X			X
15	<i>Targeted Review of Work Planning and Control and Biological Safety at the Los Alamos National Laboratory (December 2015)</i>		X		X
16	<i>Chronic Beryllium Disease Prevention Program Assessment at the Los Alamos National Laboratory (August 2019)</i>				X
17	<i>Assessment of the Management of Nuclear Safety Issues at the Los Alamos National Laboratory (April 2019)</i>	**			
18	<i>Assessment of the Maintenance of Structures, Systems, Components, and Programmatic Equipment Providing Nuclear Safety at the Los Alamos National Laboratory (September 2019)</i>	**			
	Subtotal	3	1	0	4
	Total	9	4	2	6

* The reports did not contain findings; therefore, CAPs were not required.

** We were unable to determine whether the corrective actions addressed the findings or deficiencies because some of the corrective actions were not yet completed.

CORRECTIVE ACTIONS DID NOT ADDRESS FINDINGS AND/OR DEFICIENCIES

We found that SRS and LANL took some corrective actions but did not fully address the findings and/or deficiencies in 9 of the 18 EA-30 reports reviewed at both sites.

Savannah River Site (SRS)¹

Specifically, we found that SRS' corrective actions did not fully address the findings and/or deficiencies identified in 6 of the 11 EA-30 reports:

- *Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility* (January 2016)
- *Assessment of Occupational Injury and Illness Recordkeeping and Reporting at the Savannah River Site* (August 2018)
- *Assessment of the Savannah River Site Emergency Management Exercise Program* (October 2018)
- *Fire Protection Program Implementation Assessment at the Savannah River Site Salt Waste Processing Facility* (August 2019)
- *Safety System Management Assessment at the Savannah River Site Liquid Waste Concentration, Storage, and Transfer Facilities* (August 2019)
- *Review of the Savannah River Site Emergency Management Exercise Program* (November 2015)

For example, *Fire Protection Program Implementation Assessment at the Savannah River Site Salt Waste Processing Facility* (August 2019) contained a deficiency on the lack of an established procedure and written criteria for performing inspection, testing, and maintenance on the fire alarm system. The deficiency was addressed to Parsons Corporation, a company that designed and constructed the Salt Waste Processing Facility, Process Building 221-J. The Salt Waste Processing Facility is under the direction of the Office of Environmental Management, with the Savannah River Operations Office as the responsible field office. The deficiency was closed in the IMS Site Tracking, Analysis, and Reporting System (STAR) based on an email stating that all initial annual testing had been completed, as required by the National Fire Protection Association 25 and 72. However, this action did not directly address the deficiency. As stated in the deficiency, a procedure and written criteria should have been created to ensure that the contractor met the requirements for performing inspection, testing, and maintenance on the fire alarm system.

¹ SRS incorporates the management and operating contractor and other contractors at the Savannah River Site and the Savannah River Operations Office.

Los Alamos National Laboratory (LANL)²

In addition, we found that LANL corrective actions did not fully address the findings and/or deficiencies identified in three of the seven EA-30 reports. Further, no corrective actions were taken for the second report in the following list:

- *Review of the Los Alamos National Laboratory September 2015 Functional Exercise of Selected Emergency Response Capabilities* (January 2016)
- *Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality* (January 2016)
- *Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory* (April 2018)

For example, *Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory* (April 2018) contained a finding that the Safety Basis Division Office had not effectively implemented Los Alamos National Security, LLC³ processes for issues management, metrics, management assessment, and lessons learned to identify problems, root causes, and areas needing improvement, as required by System Description 330, *Los Alamos National Laboratory Quality Assurance Program*. As a result, significant levels of rework persisted. The actions taken by the site were insufficient in addressing the finding, which resulted in the identification of the finding again in a subsequent report, *Assessment of the Management of Nuclear Safety Issues at the Los Alamos National Laboratory* (April 2019).

Another example, *Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality* (January 2016), contained a finding that the National Nuclear Security Administration's (NNSA) Acquisition Project Management (NA-APM) office at LANL had not established and implemented an effective issues management program capable of categorizing findings based on risk and priority, ensuring relevant line management findings are effectively communicated to the contractors, and ensuring programs are evaluated and corrected on a timely basis, as required by Department Order 226.1B, *Implementation of Department of Energy Oversight Policy* (Department Order 226.1B), Section 4.b.(4). NA-APM did not take action to address this finding.

According to Department Order 227.1A, it is the responsibility of the Heads of Field Elements, which include NNSA and all site offices, to take timely and appropriate action to address the findings identified in Independent Oversight appraisal reports. In addition, Department Order 227.1A requires that other deficiencies be identified in Independent Oversight appraisal reports, in accordance with established issues management processes, as required by Department Order 226.1B. According to the Department Order 226.1B, Attachment 1, *Contractor Requirements*

² LANL incorporates the management and operating contractor for LANL, the NNSA Los Alamos Field Office, and the NNSA Acquisition Project Management.

³ Los Alamos National Security, LLC was the prime management and operating contractor for LANL when the finding was issued.

Document, the contractor is required to have an issues management process capable of categorizing the significance of findings based on risk and priority and other appropriate factors that enable contractor management to ensure that problems are evaluated and corrected on a timely basis. Department Order 227.1A and Department Order 226.1B apply to all Department elements, including NNSA and contractors.

Causes

This occurred because the sites we reviewed did not always provide sufficient oversight pertaining to EA-30 findings and deficiencies. Specifically, we found that the sites were inconsistent in providing oversight of the issues management processes, including the assignment of a risk category. At SRS, the Savannah River Operations Office could not explain why the corrective actions did not address the findings and/or deficiencies issued to the contractors.

Los Alamos National Security, LLC assigned risks other than high-significance for two reports. For example, *Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory* (April 2018) included a finding that was labeled other than high-significance. According to Los Alamos National Security, LLC policy, only issues categorized as “high-significance” require the development of a causal analysis and effectiveness review. According to Department Order 227.1A, findings identified by Enterprise Assessments warrant a high level of management attention, but the Order does not direct the sites to assign Enterprise Assessments findings as “high-significance.” In addition, the Contractor Requirements Document in Department Order 226.1B states that findings categorized as high-significance must have a causal analysis and effectiveness review conducted. A causal analysis is a systematic, structured process that identifies root or apparent causes and contributing factors and helps to ensure effective and sustainable corrective actions. The requirements in the contractor’s policy for high-significance align with the requirements in Department Order 227.1 and Department Order 226.1B for Enterprise Assessments findings. According to Los Alamos National Security, LLC policy, for issues assigned as low-significance, the site considers whether a causal analysis and/or an effectiveness review needs to be completed. Although it is the responsibility of the contractor to assign a rating classification for Enterprise Assessments findings, LANL’s policy should clearly state that the requirements associated with Enterprise Assessments findings ensure that the proper processes are completed to prevent repeat findings. However, in our review, we found two LANL reports with repeat findings.

Regarding the finding in the report, *Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality* (January 2016), no action was taken to address the finding. NA-APM disagreed that Department Order 226.1B, Section 4.b.(4) applies to it. During the assessment, EA-30 provided an opportunity for NA-APM to review and provide comments during the factual accuracy review of the report; however, NA-APM did not state its disagreement with the finding at that time and, subsequently, communicated its disagreement after we initiated our audit. If NA-APM had raised its disagreement with EA-30 during the assessment regarding a difference in interpretation of Department Order 226.1B, Section 4.b.(4), EA-30 would have utilized its process with the Department to make a final determination.

We also found opportunities for improvement in EA-30's processes. For example, we found that EA-30 does not routinely review the sites' CAPs. Although Department Order 227.1A states that the review of CAPs is at the discretion of the Enterprise Assessments Director, or at the request of the cognizant Department manager, EA-30 site leads or team leads can conduct informal reviews of the CAPs. Because there are resources and guidance in place to review CAPs, it would be beneficial for the sites to work informally with Enterprise Assessments' site leads or team leads once the CAPs are developed to help ensure that the CAPs are sufficient. This step may assist with eliminating repeat findings. Ultimately, sites are responsible for developing corrective actions and ensuring that the corrective actions effectively address the identified issues.

Finally, we noted additional improvements needed in EA-30's process for tracking the status of actions addressing findings and deficiencies. EA-30 tracks findings and deficiencies in an Excel spreadsheet. The spreadsheet is updated on a quarterly basis after meeting with the site leads to discuss a status of the findings and deficiencies, among other items. When we reviewed the contents of the spreadsheet, we found inaccurate and outdated data along with empty cells that had not been populated. EA-30 informed us it conducts followup reviews based on risk and resources at the next site assessment.

As a result of this audit, EA-30 has taken steps to address some of the issues we identified. For example, EA-30 issued new guidance, which includes: (1) following up on findings and (2) updating a findings matrix. EA-30 has since implemented working remotely as part of its regular followup assessment strategy. Regarding the finding's spreadsheet, EA-30 indicated that it updated the protocol for tracking findings and the responsibilities for various personnel. For example, administrative staff update the findings spreadsheet weekly, and EA-30 has updated the spreadsheet to remove assessments over 7 years old. As such, EA-30 took actions to address our proposed recommendations related to the tracking and followup of EA-30 findings prior to the issuance of this report. Therefore, no recommendations have been made related to these areas.

CORRECTIVE ACTIONS NOT DOCUMENTED IN IMS

We found that corrective actions were not documented in the IMS for 4 out of the 18 EA-30 reports we reviewed. Specifically, we found SRS' corrective actions were not documented in STAR for three reports:

- *Assessment of Savannah River Site Tritium Facility Safety System Management* (December 2016)
- *Assessment of Safety System Management at the Savannah River Site H-Canyon Facility* (January 2019)
- *Shutdown Facility Risk Management Assessment at the Savannah River Site* (June 2019)

In addition, we found that NNSA Los Alamos Field Office corrective actions were not documented in its IMS, ePegasus, for the following report:

- *Targeted Review of Work Planning and Control and Biological Safety at the Los Alamos National Laboratory* (December 2015)

According to Department Order 227.1A, cognizant Department managers must use site and program-specific issues management processes and systems developed in accordance with Department Order 226.1B, *Implementation of Department of Energy Oversight Policy*, to manage and approve corrective action plans and track them to completion. Findings and other deficiencies identified in Independent Oversight appraisal reports are managed in accordance with Department Order 226.1B processes. Department Order 226.1B states that oversight processes implemented by applicable Department line management organizations must include an issues management process capable of categorizing findings based on risk and priority, ensuring relevant line management findings are effectively communicated to the contractors, and ensuring that problems are evaluated and corrected on a timely basis. Both Department Order 227.1A and Department Order 226.1B apply to all Department elements, including NNSA and contractors.

Causes

This occurred because there was inconsistent oversight on the sites' issues management processes pertaining to EA-30 findings and deficiencies. Specifically, for SRS reports, the Savannah River Operations Office could not provide a direct cause for why two assessments were not in STAR. Also, the Savannah River Tritium Enterprise policy did not require that deficiencies be documented in STAR, which resulted in 14 deficiencies that were not documented in STAR. Upon realizing this, an official from the Savannah River Tritium Enterprise stated that the Management Review Board Charter will be updated to specifically add "deficiencies" in the wording. For the Los Alamos report, the NNSA Los Alamos Field Office stated that its office had a 100 percent turnover in the past few years; therefore, a definitive cause could not be established. However, the NNSA Los Alamos Field Office has since issued guidance on its issues management process. In addition, this finding occurred 6 years ago, and we did not identify additional reports where corrective actions were not documented in IMS. Therefore, no recommendations have been made related to this area.

Overall, the Savannah River Operations Office and the NNSA Los Alamos Field Office expressed confusion regarding what was required when receiving an EA-30 report that identified findings and deficiencies. For example, as stated earlier, there was confusion on whether deficiencies were required to be tracked in the appropriate IMS. During the audit, EA-30 took steps to better communicate requirements when findings and/or deficiencies are issued. Specifically, EA-30 stated that it now includes guidance on handling findings and deficiencies during outbriefs.

CORRECTIVE ACTIONS INCORRECTLY DOCUMENTED

We found SRS' corrective actions were documented incorrectly in STAR for two EA-30 reports:

- *Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility* (January 2016)
- *Assessment of the Savannah River Site Emergency Management Exercise Program* (October 2018)

Specifically, we found in *Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility* (January 2016) that the contractor's corrective actions were documented in a system other than STAR. In addition, SRS combined the findings in STAR from an internal assessment with EA-30 findings and deficiencies in *Assessment of the Savannah River Site Emergency Management Exercise Program* (October 2018). Therefore, it was difficult to differentiate between EA-30 findings and deficiencies and SRS' internal assessment findings.

According to Department Order 227.1A, cognizant Department managers must use site and program-specific issues management processes and systems developed in accordance with Department Order 226.1B to manage and approve corrective action plans and track them to completion. Findings and other deficiencies identified in Independent Oversight appraisal reports are managed in accordance with Department Order 226.1B processes. Department Order 226.1B states that oversight processes implemented by applicable Department line management organizations must include an issues management process capable of categorizing findings based on risk and priority, ensuring relevant line management findings are effectively communicated to the contractors, and ensuring that problems are evaluated and corrected on a timely basis. Both Department Order 227.1A and Department Order 226.1B apply to all Department elements, including NNSA and contractors.

This issue occurred because Savannah River Operations Office did not provide consistent oversight on the site's issues management processes pertaining to EA-30 findings and deficiencies. As a result of our audit, the Savannah River Operations Office updated its internal procedure to reflect that assessments conducted by Enterprise Assessments must be documented properly in STAR.

CORRECTIVE ACTION PLANS FOR FINDINGS NOT DEVELOPED

Finally, we identified 13 EA-30 reports that required CAPs; however, 6 of the reports did not have CAPs developed. Specifically, we found that SRS did not develop CAPs for findings for two reports:

- *Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility* (January 2016)

- *Assessment of the Savannah River Site Emergency Management Exercise Program* (October 2018)

In addition, we found the NNSA Los Alamos Field Office did not develop CAPs for findings in three reports:

- *Targeted Review of Work Planning and Control and Biological Safety at the Los Alamos National Laboratory* (December 2015)
- *Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory* (April 2018)
- *Chronic Beryllium Disease Prevention Program Assessment at the Los Alamos National Laboratory* (August 2019)

Last, we found that NNSA Acquisition Project Management did not develop a CAP for a finding in one report:

- *Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality* (January 2016)

According to Department Order 227.1A, corrective action plans must be developed and implemented for Independent Oversight appraisal findings. Department Order 227.1A applies to all Department elements, including NNSA and contractors. When findings are issued to the site office, the site office is responsible for developing a CAP. However, when findings are issued to the contractor, the site office approves the CAP after the contractor develops it. The Contractor Requirements Document in Department Order 227.1A states that, when requested, contractors must review the draft reports for factual accuracy and the initial development of corrective actions. The contractors must then prepare, implement, and track corrective actions to address the findings.

The Savannah River Operations Office and the NNSA Los Alamos Field Office expressed confusion regarding whether a CAP was required for EA-30 findings although the requirement is clearly stated in Department Order 227.1A. In particular, Savannah River Operations Office officials were unaware that CAPs were always required for EA-30 findings. Also, according to NNSA Los Alamos Field Office policy, only high-risk issues receive a CAP. When the NNSA Los Alamos Field Office received the three reports from EA-30, the NNSA Los Alamos Field Office assigned the findings other than high-risk, resulting in those findings not having a CAP, which conflicts with Department Order 227.1A. According to Department Order 227.1A, findings are defined as deficiencies that warrant a high level of management attention and must have a CAP. During the audit, EA-30 took steps to better communicate requirements when issuing findings and/or deficiencies. Specifically, EA-30 stated that it now includes guidance on how to handle findings and deficiencies during outbriefs, including when CAPs are required. Additionally, EA-30 stated that it plans to include this information in future report transmittal memos.

POTENTIAL RISKS TO DEPARTMENT IF ISSUES NOT ADDRESSED

As a result of the issues identified in this report, the Department may be at risk of weaknesses not being addressed in protecting workers, the public, and the environment from hazards. Prompt and proper corrective actions must be implemented to resolve findings and deficiencies identified in independent oversight appraisals. However, our audit identified three reports containing repeat findings; therefore, corrective actions were neither effective nor completed. Finally, effective oversight, including independent oversight of Federal and contractor operations, is an integral part of the Department's responsibility as a self-regulating agency to provide assurance of its safety and security posture to its leadership, its workers, and the public.

RECOMMENDATIONS

To ensure that Enterprise Assessments report findings and deficiencies are properly addressed, and effective corrective actions are implemented, we recommend that the Director, Enterprise Assessments, EA-30:

1. Set expectations with the applicable site office and contractor during the assessment regarding what is required, in accordance with Department Orders 227.1A and 226.1B.

To ensure that corrective actions are documented, we recommend that the Manager, Savannah River Operations Office:

2. Ensure that EA-30 findings and deficiencies are properly documented and tracked in the issues management system, in accordance with Department Orders 227.1A and 226.1B.
3. Ensure consistent oversight for the issues management process, including the development of CAPs for EA-30 findings.
4. Work with EA-30 site leads or team leads, as needed, to ensure that once the CAPs are developed, they are sufficient.

To ensure that corrective actions are documented, we recommend that the Manager, NNSA Los Alamos Field Office:

5. Update policies to ensure required CAPs are completed and causes are identified to help minimize repeat findings from EA-30 appraisal reports.
6. Direct the contractor to update policies to work with EA-30 site or team leads, as needed, to ensure that once the CAPs are developed, they are sufficient.

MANAGEMENT RESPONSE

EA-30 concurred with Recommendation 1 (Recommendation 2 in Appendix 3, Page 19), stating that it had implemented processes to provide guidance on handling findings in outbriefs and the

transmission memos accompanying reports. EA-30 nonconcurred with an additional recommendation (Recommendation 1 in Appendix 3, Page 19) that we had proposed in our draft report regarding improvements in its report writing process because its current process provides ample opportunity for program offices to review the report before issuance. As explained in Auditor Comments below, the recommendation was removed from the final report.

SRS concurred with the three recommendations addressed to it, although with caveats for Recommendation 2 (Recommendation 3 in Appendix 3, Page 24). Regarding Recommendation 2, SRS stated that it currently has processes for proper documentation and tracking of external organizations' findings and deficiencies in STAR. EA-30 findings will be entered as findings requiring CAPs and EA-30 deficiencies will be entered as findings without a CAP. Regarding Recommendation 3 (Recommendation 4 in Appendix 3, Page 25), SRS reiterated that EA-30 findings will be entered into STAR with a CAP requirement. Finally, regarding Recommendation 4 (Recommendation 5 in Appendix 3, Page 25), SRS indicated that its next revision of the Integrated Performance Assurance Manual will address additional responsibilities for ensuring that CAPs are sufficient. Subsequently, SRS completed corrective actions for Recommendations 3 and 4, and we will now consider these recommendations closed.

NNSA nonconcurred with the two recommendations addressed to it. Specifically, for:

- Recommendation 5 (Recommendation 6 in Appendix 3, Page 22), NNSA asserted that the audit team did not accurately conduct the corrective action plan analysis based on misinterpreting two Department Orders and local procedures. Specifically, NNSA stated that the audit team was incorrect in its assertion that plans were not prepared for certain findings. NNSA stated that the audit team's conclusion was based on the incorrect premise that information provided in the issues management system did not meet the criteria of a CAP and that all CAPs required documented causal analyses and effectiveness reviews, regardless of risk or significance. Additionally, NNSA stated current local policies are consistent with Departmental policies. However, NNSA will consider strengthening language in its policy to clarify that corrective actions properly documented in the issues management system satisfy the requirement for CAPs under Departmental policy. NNSA estimated the completion for this action will be 120 days following the release of the OIG's final report.
- Recommendation 6 (Recommendation 7 in Appendix 3, Page 23), NNSA asserted that an update to the contractor's procedures was not needed due to the flexibility and discretion allowed in the Department policy for EA and NNSA to engage as appropriate in the evaluation of CAPs. Additionally, NNSA stated that it will continue to work cooperatively with EA, including discussion of plans for addressing its findings, as appropriate. Finally, NNSA considered this recommendation closed.

Management comments are included in Appendix 3.

AUDITOR COMMENTS

Auditor Response to NNSA's Management Comments

We disagree with the comments we received from NNSA on Recommendations 5 and 6 (Recommendation 6 and 7 in Appendix 3, Pages 22-23), and its planned actions do not meet the intention of the recommendations. For Recommendation 5, NNSA suggests that EA revise Departmental policy rather than revising NNSA policies. For Recommendation 6, NNSA points out that EA has discretion regarding the level of engagement in the CAP process, and changes in the contractor's policies are therefore not needed. In response, we note that Department Order 227.1A clearly places the responsibility for preparing and implementing a CAP on the program office, not EA. Given our findings regarding NNSA Los Alamos Field Office's not creating CAPs in advance of actions taken and having repeat EA findings, we consider that the recommendations made to NNSA to improve its processes are warranted.

Response to Recommendation 5

We stand by our finding that NNSA Los Alamos Field Office had not developed three required CAPs to address findings in EA-30 reports and continued to recommend that it update policies ensuring required CAPs are completed and causes identified to minimize repeat findings from EA-30 appraisal reports. Instead of developing an upfront CAP documenting its intended actions to address the findings, NNSA merely documented actions taken in the IMS. The creation of a CAP before actions are taken is important because it allows for appropriate managers to: (1) review and approve the plan to ensure the intended actions are appropriately designed to address the identified issues; and (2) track the action items to completion. Department Order 227.1A clearly places the responsibility for preparing and implementing a CAP on the program office and further states that processes must be in place to "manage and approve these corrective action plans and track them to completion."

Detailed responses to individual aspects of NNSA's comments regarding Recommendation 5 include:

- **OIG's Analysis of CAP Requirements:** We disagree with management's conclusion that the OIG's analysis on the CAPs was inaccurate. Management stated, "OIG's assertion that plans were not prepared for certain findings is based on the premise that information provided in the issues management system does not meet the criteria of a CAP and that all CAPs required documented causal analyses and effectiveness reviews, regardless of risk or significance." As noted on Page 9 in the report, NNSA Los Alamos Field Office did not develop CAPs for any of its three EA-30 assessment reports that had findings. For these three reports, NNSA Los Alamos Field Office had documented completed actions taken in its system but had not developed an upfront CAP documenting the actions that it originally planned to take. EA-30 reviewed the documentation and agreed with the OIG that CAPs were not developed. It is important for CAPs to be developed because EA-30 reports do not identify causes to correct the findings and CAPs requires management approval on the planned actions.

- Issues Management Processes:** NNSA also stated that “DOE Order 227.1A specifies that managers must use issues management processes developed in accordance with DOE Order 226.1, Implementation of Department of Energy Oversight Policy, to manage and approve CAPs. DOE Order 226.1 only requires CAPs with causal analysis and effectiveness reviews for issues categorized as high-significance findings.” Department Order 227.1A does specify that managers use the issues management processes developed in accordance with Department Order 226.1. However, Department Order 227.1A further states that those processes must be used to “manage and approve these corrective action plans and track them to completion.” Thus, the Order specifically establishes that a plan must be developed and approved, and then the planned actions should be subsequently tracked to completion.
- Causal Analysis:** Our report does not assert a requirement of having a causal analysis completed for every CAP, regardless of risk or significance. We understand that under provisions of Department Order 226.1, the NNSA Los Alamos Site Office only does such analyses for issues it classifies as high-risk findings. Regardless of such classifications, identifying the causes associated with the EA-30 findings would benefit the development of planned actions to adequately address the findings. If a causal analysis and an effectiveness review had been conducted for findings in two EA-30 appraisal reports, then EA-30 may not have had the same finding in followup appraisal reports.
- Form and Content of CAPs:** We agree with NNSA’s comment that “[Department Order 227.1A] does not dictate the form and content of such plans [CAPs].” As such, we concluded that any documentation in its system of planned actions that were approved by a Department official met the requirement of a CAP, regardless of its form or content. Further, it is true that “[Department Order 227.1A] does not include the definition of a CAP used by the OIG.” On Page 3 of our report, we updated the definition of a CAP to incorporate the NNSA Los Alamos Field Office’s description from its procedures rather than using the contractor’s because the associated recommendation was made to the NNSA Los Alamos Field Office. The updated report now defines a CAP as a documented list of corrective actions that an organization agrees to implement in response to findings.
- Confusion Regarding Requirements:** Further, we disagree with management’s assertion that “the report and the recommendations to NNSA suggest confusion over certain requirements of Department Orders 226.1 and 227.1 related to preparation of corrective action plans, which is driving the OIG’s conclusions.” When NNSA receives an EA-30 appraisal report, NNSA is required to create a CAP for any EA-30 finding, per Department Order 227.1A, then assess the significance level of the finding to determine whether a causal analysis or an effectiveness review should be performed, per Department Order 226.1B. Therefore, there appears to be a disconnect at NNSA when discussing risk or significance as it applies a rating to an EA-30 finding or when a CAP is required.
- Consistency of Local Policies:** As stated on Page 5 of the report, NNSA Los Alamos Field Office procedure requires high-risk findings to develop a CAP. If NNSA Los

Alamos Field Office assigns a risk other than “high” to an EA-30 finding, then the finding would not have a CAP, which conflicts with Department Order 227.1A. Therefore, management’s comments inaccurately state, “Current local policies are consistent with Departmental policies” since NNSA Los Alamos Field Office procedures will only result in a CAP for EA-30 findings that are considered high-risk by the NNSA Los Alamos Field Office.

- **Addressing a Recommendation to EA-30:** We also disagree with NNSA’s suggestion for the “OIG to recommend EA-30 update Departmental policy to address the OIG’s observations in this report, as necessary.” We made a recommendation to EA-30 to set expectations on what is required in Department Orders 227.1A and 226.1B on Page 10 of the report. EA-30 concurred with our recommendation and updated its internal procedures to include outbriefs for senior Department site and contractor managers that establish clear expectations for addressing EA-30 reports, such as creating a CAP for a finding, which warrants high-level attention on management’s part. Since Department Order 227.1A’s requirement for the development of a CAP for EA findings is clear, and EA-30 will set clear expectations in its outbriefs for senior Department site and contractor managers’ responses, the existing Department order should be sufficient to achieve its objective.
- **NNSA’s Proposed Action Not Sufficient:** Although NNSA stated that it “will consider strengthening language in the [Los Alamos Field Office’s] policy to clarify that corrective actions properly documented in the issues management system satisfy the requirement for CAPs under Department Policy,” we concluded that this action is not sufficient to address the issue. As previously stated, the existing practice of documenting corrective actions already taken does not meet the requirement to have a CAP which documents the future corrective actions planned. EA-30 agreed with us that the actions documented in the IMS for these audits did not constitute a CAP, as required by Department Order 227.1A.

Response to Recommendation 6

We continue to recommend that the NNSA Los Alamos Field Office direct its contractor to update policies to work with EA-30 site or team leads, as needed, to ensure the sufficiency of the CAPs once developed. Without updating policy to facilitate communication between the parties, there is a risk that ineffective corrective actions in significant areas could put the Department at risk. Our recommendation is further supported by the fact that we identified two reports containing repeat findings and three reports that had ineffective implementation of corrective actions at LANL. If the contractor had communicated with EA-30 to develop a sufficient CAP with effective corrective actions, subsequent repeat findings could have been avoided. We do not consider this recommendation closed. Additionally:

- **Current Policies Are Silent on Communication with EA-30:** We disagree with NNSA’s statements that current policies and processes already provide ample opportunity, flexibility, and discretion for EA and NNSA to engage, as appropriate, in the evaluation of CAPs. LANL’s local procedures do not mention any form of

communication between the site and EA-30. The absence in the local procedures of how EA-30 and LANL have the opportunity, flexibility, and discretion to communicate, ultimately impedes the ability of contractors to understand the importance of CAPs. Additionally, contractor employee turnover will inevitably occur, and having updated local procedures can ensure future employees are aware that EA-30 can provide support and review of a CAP for sufficiency. Further, NNSA asserts that it works cooperatively with EA, including discussion of plans for addressing its findings; however, we do not have any evidence to support this assertion.

- **Consulting with EA-30 Should Be on an as Needed Basis:** Finally, our recommendation does not mandate that the contractor work with EA-30's site or team leads for every CAP; rather, they will do so only on a needed basis. Updating the local procedures to include options for the contractor to work with EA-30 to ensure that the CAP is sufficient, when necessary, would benefit all parties involved. We concur with NNSA that communication between EA and the entity under review is important to ensure mutual understanding of findings and to support effective CAP development. As stated on Page 10 of the report, effective oversight, including independent oversight of Federal and contractor operations, is an integral part of the Department's responsibility as a self-regulating agency to provide assurance of its safety and security posture to its leadership, its workers, and the public.

Auditor Response to EA-30's and SRS' Management Comments

EA-30's and SRS' comments and proposed corrective actions for Recommendations 1 through 4 (Recommendations 2 through 5 in Appendix 3, Pages 19–20, 24–26) were responsive to our recommendations, and we agree with actions taken. Additionally, based on EA-30's response to our draft report, we reconsidered and removed an additional recommendation regarding potential improvements in EA-30's report writing process. After reviewing EA-30's comments on this recommendation, we conducted another review of our audit documentation and confirmed that we were not made aware of any systemic issues with the report processes while conducting the site interviews. Therefore, we agreed to remove the recommendation.

Appendix 1: Objective, Scope, and Methodology

OBJECTIVE

We conducted this audit to determine whether the Department of Energy is addressing findings and deficiencies identified by the Office of Environment, Safety and Health Assessments (EA-30).

SCOPE

The audit was performed from October 2020 through October 2021 at Department Headquarters in Germantown, Maryland; the Savannah River Site in Aiken, South Carolina; and the Los Alamos National Laboratory in Los Alamos, New Mexico. The scope of the audit included corrective actions to address the findings and deficiencies identified in the Office of Enterprise Assessments EA-30 reports issued from fiscal year (FY) 2016 through FY 2019. The audit was conducted under Office of Inspector General project number A20GT023.

METHODOLOGY

To accomplish our audit objective, we:

- Reviewed Department Order 227.1A, *Independent Oversight Program*, and Department Order 226.1B, *Implementation of Department of Energy Oversight Policy*.
- Reviewed prior reports issued by the Office of Inspector General.
- Identified the universe of findings and deficiencies issued by EA-30 from FY 2016 through FY 2019.
- Identified a judgmental sample of two sites based on the number of EA-30 findings. Because the sample was selected judgmentally, the result and overall conclusions could not be projected to the population. Therefore, we selected the Savannah River Site [11 reports] and Los Alamos National Laboratory [7 reports] and performed a 100 percent review of the findings and deficiencies identified in the reports. See Appendix 4 for a list of the reports we reviewed.
- Reviewed policies and procedures pertaining to issues management processes at selected sites.
- Reviewed the corrective actions and corrective action plans, as applicable, associated with the reports from issues management systems (IMS).
- Interviewed personnel from EA-30; Savannah River Nuclear Solutions, LLC; Parsons Corporation; Savannah River Operations Office; Triad National Security, LLC; National Nuclear Security Administration, Los Alamos Field Office; and National Nuclear Security Administration Acquisition Project Management to understand each entity's

Appendix 1: Objective, Scope, and Methodology

roles and responsibilities, as well as issues management procedures and processes. In addition, we obtained an understanding of the findings and/or deficiencies and the associated corrective actions.

- Performed analyses to determine whether the corrective actions addressed the findings and/or deficiencies identified in the reports by reviewing documentation from each site's IMS and obtaining input from EA-30 to determine whether corrective actions were sufficient.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed the control activities component and the related implementation principle. However, because our review was limited to this internal control component and underlying principle, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit. Finally, we did not solely rely on computer-processed data to satisfy our audit objective. However, we did find issues with the quality of data in the EA-30 tracking spreadsheet and the IMS. Specifically, our testing revealed instances in which corrective actions to address findings and deficiencies were not tracked in the IMS and the status of corrective actions had not been updated on EA-30's tracking spreadsheet. As a result, we made recommendations designed to improve the IMS and the EA-30 tracking process.

Management officials waived an exit conference.

Appendix 2: Prior Report

Audit Report on [*The Office of Science's Audit Resolution and Followup Process*](#) (DOE-OIG-20-45, July 2020). The review found that the Office of Science's audit resolution and followup process was not in accordance with all of the requirements of Department of Energy Order 224.3, *Audit Resolution and Follow-up Program*. Specifically, the review found that required audit followup assessments were not performed for four sampled reports and that formal procedures did not exist for the Office of Science's audit resolution and followup program. The review found that resolution for a Government Accountability Office audit report was not submitted timely to the Office of Management and Budget and Congress. Further, justifications were not documented in the Departmental Audit Report Tracking System for audit reports that were open for more than 1 year in the Departmental Audit Report Tracking System. To its credit, the review found that the Office of Science resolved the three Office of Inspector General reports in a timely manner, as required by the Order. Finally, the review found that information in the Departmental Audit Report Tracking System was not always complete and accurate.

Appendix 3: Management Comments



Department of Energy
Washington, DC 20585

January 19, 2022

MEMORANDUM FOR EARL OMER
ASSISTANT INSPECTOR GENERAL FOR AUDIT
OFFICE OF INSPECTOR GENERAL

FROM: JOHN P. DUPUY 
DIRECTOR
OFFICE OF ENTERPRISE ASSESSMENTS

SUBJECT: Inspector General's Draft Audit Report on "Corrective Actions on the Office of Enterprise Assessments Findings and Deficiencies (A20GT023)"

Thank you for the opportunity to comment on the subject report. We understand that the IG conducted this audit to review of corrective actions for findings and deficiencies that have been identified by the Office of Environment, Safety and Health Assessments.

We have provided the management responses for recommendations for the Office of Enterprise Assessments below.

If you have any questions regarding this response, please contact Kevin Kilp, Director of Environment, Safety and Health Assessments, at Kevin.kilp@hq.doe.gov or 301-903-9431.

Recommendation 1. (EA)

Strengthen the oversight responsibilities of EA-30 assessments by improving the report writing process, including the site reviewing the report, with full findings and deficiencies, before issuance of the final assessment report, unless no changes were made.

Response: Non-concur

EA's report writing and review process already provides the sites ample opportunity to review the report, with full findings and deficiencies, before issuance of the final assessment report. EA does not believe providing an additional review added to an already comprehensive and rigorous comment process will have any positive impact on sites' issues management performance and will serve only to cause unnecessary delays to the distribution and publishing of EA reports. A detailed response regarding this recommendation has been provided in the factual accuracy comments worksheet. EA considers this recommendation to be completed. Based on our January 4, 2022 conversation with the audit team, we understand this Recommendation will be removed from the final report.

Recommendation 2. (EA)

Set expectations with the applicable site office and contractor during the assessment regarding what is required in accordance with Department Orders 227.1A and 226.1B

Response: Concur

As stated in the draft report, EA-30 has already taken steps to better communicate requirements when findings and/or deficiencies are issued. Specifically, EA-30 now routinely includes guidance



on handling findings and deficiencies during inbriefs and outbriefs. Guidance is also provided to site managers in the transmission memo accompanying reports, in all case where findings and/or deficiencies have been issued. Finally, EA-30 staff have been directed to take opportunities throughout the assessment process to communicate expectations and requirements to site office and contractor staff. EA considers all actions to address this recommendation to be complete.

Appendix 3: Management Comments



Department of Energy
Under Secretary for Nuclear Security
Administrator, National Nuclear Security Administration
Washington, DC 20585



February 25, 2022

MEMORANDUM FOR TERI L. DONALDSON
INSPECTOR GENERAL

FROM:

JILL HRUBY

A handwritten signature in black ink that reads "Jill Hruby".

SUBJECT:

Response to the Office of Inspector General Draft Report *Corrective Actions on the Office of Enterprise Assessments Findings and Deficiencies* (A20GT023)

Thank you for the opportunity to review and comment on the subject draft report. NNSA fully supports the independent oversight program and takes findings and deficiencies identified by the Office of Enterprise Assessments (EA) seriously. We appreciate the auditors' observations and look forward to working with EA to evaluate any opportunities to jointly strengthen our coordination and communication throughout the assessment process.

Detailed responses to each recommendation directed to NNSA are included in the attached management decision. Our subject matter experts have also provided technical comments under separate cover to enhance the accuracy of the report. If you have any questions regarding this response, please contact Mr. Dean Childs, Director, Audits and Internal Affairs, at (301) 903-1341.

Attachment

NATIONAL NUCLEAR SECURITY ADMINISTRATION
Management Decision

*Corrective Actions on the Office of Enterprise Assessments Findings and Deficiencies
(A20GT023)*

The Office of Inspector General (OIG) recommended that the Manager, Los Alamos Field Office:

Recommendation 6: Update policies to ensure required corrective action plans (CAPs) are completed and causes are identified to help minimize repeat findings from EA-30 appraisal reports.

Management Response: Non-concur as written. NNSA disagrees with the report's conclusion that Los Alamos Field Office did not prepare CAPs as required. The OIG's assertion that plans were not prepared for certain findings is based on the premise that information provided in the issues management system does not meet the criteria of a CAP and that all CAPs required documented causal analyses and effectiveness reviews, regardless of risk or significance. This is incorrect. While DOE Order 227.1A, *Independent Oversight Program*, states that corrective action plans must be developed and implemented for independent oversight appraisal findings, the Order does not dictate the form and content of such plans and does not include the definition of a CAP used by the OIG. With one exception, Los Alamos Field Office documented corrective actions in the issues management system for all the reports cited by the OIG as not having a corrective action plan, which meets the policy requirement. NNSA acknowledged during the audit that corrective actions were not documented in the issues management system for one EA report from 2015. However, the Los Alamos Field Office and the OIG confirmed that the issues noted in that report were addressed and that procedures were implemented to prevent reoccurrence. Current local policies are consistent with Departmental policies, and no trend or systemic issue has been identified by the auditors to warrant a policy change at the field level.

Additionally, DOE Order 227.1A specifies that managers must use issues management processes developed in accordance with DOE Order 226.1, *Implementation of Department of Energy Oversight Policy*, to manage and approve CAPs. DOE Order 226.1 only requires CAPs with causal analysis and effectiveness reviews for issues categorized as high-significance findings. The report and the recommendations to NNSA suggest confusion over certain requirements of DOE Orders 226.1 and 227.1 related to preparation of corrective action plans, which is driving the OIG's conclusions. NNSA continues to suggest that the OIG recommend DOE EA update Departmental policy to address the OIG's observations in this report, as appropriate.

While NNSA finds Los Alamos Field Office's current policy and processes compliant, the Field Office will consider strengthening language in its policy to clarify that corrective actions properly documented in the issues management system satisfy the requirement for CAPs under Departmental policy. NNSA will also discuss the auditors' observations with DOE EA and make any adjustments deemed necessary and appropriate, consistent with existing policy. The

Appendix 3: Management Comments

Attachment

estimated completion date for these actions is 120 days following release of the OIG's final report.

Recommendation 7: Direct the contractor to update policies to work with EA-30 site or team leads, as needed to ensure that once the CAPS are developed, they are sufficient.

Management Response: Non-concur. NNSA agrees communication between EA and the entity under review is important to ensure complete understanding of findings and to support effective CAP development. Current policies and processes already provide ample opportunity for EA and NNSA to engage as appropriate in the evaluation of CAPs. As the auditors note in the report, Departmental policy provides flexibility and discretion to EA regarding their level of engagement in the CAP process, and expansion of contractor policies is not warranted. NNSA will continue to work cooperatively with EA, including discussion of plans for addressing their findings, as appropriate. NNSA considers this recommendation closed.

Appendix 3: Management Comments



Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

MEMORANDUM FOR EARL OMER
ASSISTANT INSPECTOR GENERAL FOR AUDIT
OFFICE OF INSPECTOR GENERAL

FROM: MICHAEL D. BUDNEY
SAVANNAH RIVER SITE MANAGER
SAVANNAH RIVER OPERATIONS OFFICE

SUBJECT: Office of Inspector General IG Draft Report Corrective Actions on
the Office of Enterprise Assessments Findings and Deficiencies,
DOE/IG-22-XX (A20GT023)

Thank you for the opportunity to review and comment on the subject final report. The Department of Energy Savannah River Operations Officer (DOE-SR) Office of the Chief Financial Officer appreciates the auditors' audit work and provides the following comments below:

Management's response is indicated below:

Recommendation 3

Ensure that EA-30 findings and deficiencies are properly documented and tracked in the issues management system, in accordance with Department Orders (O) 227.1A and 226.1B.

Response: Concur (with caveats)

Action Plan:

The DOE-SR Savannah River Manual "Integrated Performance Assurance Manual (IPAM)," current version describes how DOE-SR fulfills its responsibilities under DOE O 226.1, "Implementation of Department of Energy Oversight Policy," current version and DOE O 414.1, "Quality Assurance," current version, to establish and implement an effective Performance Assurance System. Compliance with the requirements stipulated in the IPAM is mandatory for all DOE-SR organizations. Currently IPAM Section 7, "DOE-SR External Assessment Process," designates DOE-SR Office of Safety and Quality Assurance (OSQA) as the DOE-SR External Assessment Liaison and delineates the applicable responsibilities regarding coordination with the applicable DOE-SR and/or contractor organizations for the performance of the external assessment. These current responsibilities include the proper documentation and tracking of external organizations' (to include EA-30) findings and deficiencies in the Site Tracking, Analysis, And Reporting System (STAR) which is the database used to implement DOE-SR's issue management program. In order to ensure that external assessment findings are afforded the appropriate priority and resource allocation, issues identified through external assessment will be entered and documented within the existing framework of the STAR system (e.g., EA-30 findings

Appendix 3: Management Comments

Mr. Omer

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will be entered as “Findings requiring a Corrective Action Plan (CAP),” deficiencies will be entered as “Findings without a CAP,” and observations will be entered as Opportunities for Improvement or Noteworthy Practices as applicable).

Estimated Completion Date: Completed, Effective February 25, 2021

Recommendation 4

Ensure consistent oversight for the issue’s management process, including the development of CAPs for EA-30 findings.

Response: Concur

Action Plan:

The DOE-SR Savannah River Manual IPAM,” current version describes how DOE-SR fulfills its responsibilities under DOE O 226.1, “Implementation of Department of Energy Oversight Policy,” current version and DOE O 414.1, “Quality Assurance,” current version to establish and implement an effective Performance Assurance System. Compliance with the requirements stipulated in the IPAM is mandatory for all DOE-SR organizations. Currently IPAM Section 7, “DOE-SR External Assessment Process,” designates DOE-SR OSQA as the DOE-SR External Assessment Liaison and delineates the applicable responsibilities regarding coordination with the applicable DOE-SR and/or contractor organizations for the performance of the external assessment. These current responsibilities include the development of CAPs for external organizations (to include EA-30) in STAR, the database used to implement DOE-SR’s issue management program. Please note, as indicated in the Action Plan for Recommendation 3, only EA-30 findings will be entered into the Savannah River Site STAR system with a CAP requirement. SRM 226.1.H will be revised to include specific language regarding the process that will be implemented by the DOE-SR External Assessment Liaison in order to coordinate the development and approval of CAPs for external organizations (to include EA-30).

Estimated Completion Date: Completed, Effective February 25, 2021

Recommendation 5

Work with EA-30 site leads or team leads, as needed, to ensure that once the CAPs are developed, they are sufficient.

Response: Concur

Action Plan:

The DOE-SR Savannah River Manual IPAM, current version describes how DOE-SR fulfills its responsibilities under DOE O 226.1, “Implementation of Department of Energy Oversight Policy,” current version and DOE O 414.1, “Quality Assurance,” current version to establish and implement an effective Performance Assurance System. Compliance with the requirements stipulated in the IPAM is mandatory for all

Appendix 3: Management Comments

Mr. Omer

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DOE-SR organizations. Currently IPAM Section 7, “DOE-SR External Assessment Process,” designates DOE-SR OSQA as the DOE-SR External Assessment Liaison and delineates the applicable responsibilities regarding coordination with the applicable DOE-SR and/or contractor organizations for the performance of the external assessment.

These current responsibilities include the development of CAPs for external organizations (to include EA-30) in STAR, the database used to implement DOE-SR’s issue management program.

Upon the next revision of the IPAM, for all external assessments (to include EA-30), section 7, “DOE-SR External Assessment Process” will document additional responsibility to ensure all developed CAPS are sufficient.

Estimated Completion Date: April 30, 2022

<p>Michael D. Budney</p> <p>Michael D. Budney</p> <p>Signature of Management Official</p>	<p>Digitally signed by Michael D. Budney Date: 2022.01.27 10:11:14 -05'00'</p> <p>Manager, Savannah River Operations Office</p> <p>Title of Management Official</p>
<p>_____</p> <p>Date Provided to Management</p> <p>_____</p>	<p>_____</p> <p>Date Response Received from Management</p> <p>_____</p>

FD-22-0015 Rev.1

Appendix 4: List of Reports Associated with Our Findings

Corrective Actions Did Not Address Findings and Deficiencies		
Savannah River Site (SRS)		
Title of Report	Findings and Deficiencies	Reason
Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility (January 2016)	<p>Finding F-SRNS-1: The Safety Analysis Report (SAR) does not fully identify, evaluate, and protect the safety functions associated with the facilities' stacks.</p>	<p>Savannah River Nuclear Solutions, LLC (SRNS) has not committed to changing the hazard analysis to account for safety functions. In addition, further effort is required to ensure stack collapse will not affect structures nearby.</p>
	<p>Finding F-SRNS-2: The system description, functional requirements, system evaluation, Technical Safety Requirements, and supporting technical basis for the F-Area Outside Underground fire water supply system and the fire suppression system are insufficient to demonstrate that the systems will remain operable and capable of performing their established safety functions.</p>	<p>The finding is an amalgamation of half a dozen comments from the body of the report. SRNS only addressed one of the comments, leaving the others unaddressed. The other items are important because they needed to ensure the reliability of the fire supply water system, which is outside of the facility.</p>
	<p>Finding F-SRNS-3: The hazard control set for the explosive accidents is incomplete, and the description of some controls is not sufficient to support identifying the safety function and functional requirements.</p>	<p>The finding is an amalgamation of three dozen comments from the body of the report. SRNS corrective actions address only one of the comments, leaving the others unaddressed. The comments in the report should have been addressed individually.</p>
	<p>Finding F-SRNS-4: The SAR does not appropriately designate some credited Safety Significant administrative controls as Specific Administrative Controls.</p>	<p>The finding is an amalgamation of several comments from the body of the report. SRS addressed only one of the comments, leaving the others unaddressed. The Office of Environment, Safety and Health Assessments (EA-30) stated the finding was not addressed properly. SRS' corrective actions state that it will examine the issue during the next annual update.</p>
Assessment of Occupational Injury and Illness Recordkeeping and Reporting at the Savannah River Site (August 2018)	<p>Deficiency: SRNS did not properly classify four occupational injuries and illnesses, as required by Title 10 Code of Federal Regulations (CFR) 851.26(a)(2) and 29 CFR 1904.4.</p>	<p>Since the issuance of the report, SRNS reclassified one case of four. After reviewing the corrective actions, EA-30 accepted the rationale for not reclassifying two out of the remaining three cases. However, EA-30 disputes one case that should be reclassified, stating that "[t]he employee was unable to perform his routine weekly work activities for at least the period from the day after the accident until June 27, 2018 [injury date June 14, 2017]. The Computerized Accident/Incident Reporting System and Occupational Safety and Health [Administration] Log should be updated to</p>

Appendix 4: List of Reports Associated with Our Findings

		<p>reflect 13 days of restricted work activity.” SRNS determined the case remained classified as a Medical Treatment Case and stated that work restrictions do not prevent the employee from performing routine work activity.</p>
<p>Assessment of the Savannah River Site Emergency Management Exercise Program (October 2018)</p>	<p>Finding F-SRNS-01: SRNS did not effectively implement Protective Action (PA) requirements, neglecting to identify predetermined PAs for responders consistent with the hazards based on the results of Emergency Planning Hazards Assessments and evaluate incidents in which combinations of PAs may apply.</p> <p>Finding F-SRNS-02: SRNS did not effectively communicate among SRS response facilities, and responders, and offsite command centers to provide a full common operating picture and shared situational awareness of the emergency response.</p> <p>Finding F-SRNS-03: SRNS corrective actions did not fully address one of the findings from EA’s 2015 assessment report and the corrective actions did not include validation of the effectiveness of corrective actions in resolving the original finding; during the 2018 exercise there was recurrence of several performance weaknesses observed and documented as findings during the 2014 full-scale exercise.</p> <p>Deficiency: The Savannah River Operations Office did not provide effective oversight by thoroughly reviewing and evaluating the exercise plan (specifically the 5-year exercise schedule) or validating that corrective actions for external findings ensured programmatic effectiveness (corrective actions did not prevent recurrence), as required by Department of Energy Order 151.1D, Appendix A, Paragraph 10.f(4–5), and Department Order 226.1B, Paragraphs 4.b and 5.e.</p> <p>Deficiency: SRNS has not conducted an exercise with the Office of Secure Transportation (OST) in the last 4 years, and the current 5-year schedule does not</p>	<p>The findings and deficiencies were combined with internal assessment findings; therefore, it was difficult to differentiate between the corrective action plan and the corrective actions. Therefore, we could not determine whether the corrective actions adequately addressed the findings and deficiencies.</p>

Appendix 4: List of Reports Associated with Our Findings

	<p>include an exercise with OST, as required by Department Order 151.1D, Attachment 4, Paragraph 15.f.</p> <p>Deficiency: SRNS has not developed effective Exercise Evaluation Guides to test and validate emergency plans and procedures during exercises, contrary to Department Order 151.1D, Attachment 3, Paragraph 14.</p> <p>Deficiency: SRNS has not established a complete communications protocol between SRS response facilities and offsite command centers to provide a full common operating picture of the emergency response and shared situational awareness, by providing access to unclassified emergency response information, such as notification forms, emergency status updates, plume projections, significant incident data, and field monitoring data, contrary to Department Order 151.1D, Attachment 3, Paragraph 11.b.(6).</p> <p>Deficiency: SRNS has not established mechanisms, consistent with the National Incident Management System for expanding the initial response capability and establishing control at an incident complex, contrary to Department Order 151.1D, Attachment 3, Paragraph 3.g.</p>	
<p>Fire Protection Program Implementation Assessment at the Savannah River Site Salt Waste Processing Facility (August 2019)</p>	<p>Deficiency D-Parsons-4: Parsons Corporation has not provided an evaluation of smoke from a cell fire, which could compromise the exhaust high efficiency particulate air filters in the Documented Safety Analysis Chapter 4 system performance evaluation.</p>	<p>This deficiency has a discovery date of September 4, 2019, and is open. The Office of Inspector General and EA-30 determined this deficiency should have been addressed by now. Parsons Corporation must provide something in the Documented Safety Analysis performance evaluation to determine whether high efficiency particulate air filters provided the safety function with smoke buildup.</p>
	<p>Deficiency D-Parsons-7: Parsons Corporation does not have an established procedure and written criteria for performing inspection, testing, and maintenance on the fire alarm system.</p>	<p>This deficiency was not adequately addressed because an email was used as a corrective action; however, a procedure should have been developed.</p>

Appendix 4: List of Reports Associated with Our Findings

<p>Safety System Management Assessment at the Savannah River Site Liquid Waste Concentration, Storage, and Transfer Facilities (August 2019)</p>	<p>Deficiency D-SRR-1: Contrary to the requirements of E7 2.31A, Liquid Waste Engineering Calculations, Savannah River Remediation issued calculation T-ESR-H-00005 with procedural noncompliances and nonconservative assumptions that invalidate the calculation conclusions. This calculation was used to support temporary modifications to several Safety Class purge and ventilation exhaust stacks.</p>	<p>SRS addressed the immediate impact as the calculation had a number of problems that were on page three of the EA-30 report. There were technical inadequacies, which resulted in the calculation not showing that this vent stack met its qualification requirements. EA-30 examined the affected tanks to determine what the vent stack could hit if it fell over, which related to seismic concerns. The site’s closure statement states there is nothing it can hit if it falls over. EA-30 accepted this for the near term. However, this does not address the calculation. SRS would need to address the inadequate calculation.</p>
<p>Review of the Savannah River Site Emergency Management Exercise Program (November 2015)</p>	<p>Finding F-SRNS-1: Contrary to Department Order 151.1C, the SRNS exercise program does not validate all elements of the emergency management program over a 5-year period. SRNS does not validate all elements of the emergency management program within a 5-year period, as required by Department Order 151.1C. B Because the SRNS exercise program requires only a sample of each response element for validation, some significant items, such as alternate command facilities, backup power systems, sheltering of workers, evacuation of workers, and most National Nuclear Security Administration (NNSA) radiological assets, have not been validated in the past 5 years.</p>	<p>EA-30 reviewed the corrective actions of the report in its subsequent 2018 report and had the same findings. As a result, EA-30 issued a finding in the 2018 report directed toward the site office, stating that it would defer to the findings and deficiencies in the 2018 report rather than focusing on findings and/or deficiencies in the 2015 report. The audit team deemed this report as not addressing the findings and deficiencies because EA-30 found the same issues in the 2018 report.</p>
	<p>Finding F-SRNS-2: Contrary to Department Order 151.1C, completed corrective actions for some internal and external evaluation findings were not effective in resolving the original finding. SRNS has ineffectively managed significant issues and corrective actions identified through some external and internal assessments. For example, SRNS has inadequately addressed a finding from 2012 regarding the lack of a comprehensive set of criteria and lines of inquiry for use during programmatic evaluations and has not implemented planning and preparedness requirements associated with the OST. Additionally, the SRNS</p>	

Appendix 4: List of Reports Associated with Our Findings

	<p>exercise program has had recurring findings on public address system problems over a very long period but has not yet acquired a reliable system for communicating PA information.</p>	
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<p align="center">Corrective Actions Did Not Address Findings and Deficiencies</p>		
<p align="center">Los Alamos National Laboratory (LANL)</p>		
<p>Title of Report</p>	<p>Findings and Deficiencies</p>	<p>Reason</p>
<p>Review of the Los Alamos National Laboratory September 2015 Functional Exercise of Selected Emergency Response Capabilities (January 2016)</p>	<p>Finding F-LANS-1: Los Alamos National Security, LLC (LANS) did not effectively provide emergency notifications to workers, emergency response personnel/organizations, appropriate Department and NNSA elements, and local organizations, as required by Department Order 151.1C.</p>	<p>EA-30 stated that corrective actions did not completely address the finding because an effectiveness review was not performed. This was evident when EA-30 performed a followup assessment and found that the corrective actions were not effective. In addition, LANS rated the finding as “Other Performance Feedback.” Had the finding been rated as high-risk, then an effectiveness review would have been performed per LANL policy. In a followup report conducted by EA-30, <i>Emergency Management Assessment at the Los Alamos National Laboratory</i> (August 2020), EA-30 found that LANL has established communication systems and process capabilities to support Emergency Response Organization communications, and Triad National Security, LLC (Triad) promptly provided initial notifications to all stakeholders. However, the Emergency Response Organization did not always communicate effectively throughout the response and issued inaccurate and incomplete initial notifications to most stakeholders, primarily due to insufficiently detailed procedures.</p>

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Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory (April 2018)	<p>Finding F-LANS-1: For safety basis submittals, Safety Basis Division Office has not effectively implemented LANS processes for issues management, metrics, management assessment, and lessons learned to identify problems, root causes, and areas needing improvement, as required by SD 330, <i>Los Alamos National Laboratory Quality Assurance Program</i>, thereby allowing significant levels of rework to persist.</p>	<p>EA-30 stated that corrective actions were inadequate because LANS did not perform a causal analysis. If a causal analysis was performed, then a repeat issue would not have been identified in the report, <i>Assessment of the Management of Nuclear Safety Issues at the Los Alamos National Laboratory</i> (April 2019). LANS assigned a low-risk rating to the finding. If the finding was assigned a high-risk rating, per its policy, a causal analysis would have been performed.</p>
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Corrective Actions Did Not Address Findings and Deficiencies		
NNSA - Acquisitions Project Management (NA-APM)		
Title of Report	Findings and Deficiencies	Reason
Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality (January 2016)	<p>Finding F-NA-APM-1: The NA-APM office at LANL has not established and implemented an effective issues management program that is capable of categorizing findings based on risk and priority, ensuring relevant line management findings are effectively communicated to the contractors, and ensuring that programs are evaluated and corrected on a timely basis, as required by Department Order 226.1B, Section 4.b.(4).</p>	<p>During a meeting on November 24, 2020, NA-APM stated an Issues Management System (IMS) was not created in response to the EA-30 finding because NA-APM does not consider the office as a field element, thus Department Order 226.1B would not apply. NA-APM utilizes Department Order 413.3B, Change 5, which focuses on project management. If a systemic issue arises, NA-APM communicates to the NNSA Los Alamos Field Office to document the issue in its IMS. EA-30 stated Department Order 226.1B would apply to NA-APM. EA-30 cites Department Order 226.1B, stating that the Order applies to all Department elements, including NNSA. In addition, the Order applies to oversight processes implemented by Department line management organizations that manage onsite oversight programs.</p>

Appendix 4: List of Reports Associated with Our Findings

Corrective Actions Not Documented in IMS	
SRS	
Title of Report	Findings and Deficiencies
Assessment of Savannah River Site Tritium Facility Safety System Management (December 2016)	<p>Deficiency: SRNS has not demonstrated a basis for how the H-Area New Manufacturing and Tritium Extraction Facility Glovebox Oxygen Monitor and Environmental Conditioning Enclosure Oxygen Monitor System High-High alarm setpoints satisfy the safety margin requirements of National Fire Protection Association Code 69, Section 7.7.2.4, while continuing to meet the requirements of Section 7.7.2.5.</p>
	<p>Deficiency: SRNS has not demonstrated the continued validity of the required Safety Integrity Level-1 qualifications of the Safety Significant Glovebox Oxygen Monitor (GBO2M) and Environmental Conditioning Enclosure Oxygen Monitor (ECEO2M) systems, as required by Department Order 420.1C, DOE-STD-1195-2011, and The American National Standards Institute/ International Society of Automation-84.00.01-2004, Part 1, in light of recent increases in component failure rates and the use of outdated 1998 SRS sitewide failure rate data.</p>
	<p>Deficiency: There is no well-defined method for tracking open items and unverified assumptions to closure in issued calculations, as required by 10 CFR 830.</p>
	<p>Deficiency: The Savannah River Tritium Enterprise site critical spare parts inventory management process is mostly an expert-based process with no procedures desk instructions, contrary to Department Order 414.1D, Quality Assurance, Attachment 2, 5.a.</p>
	<p>Deficiency: The Tritium Facility configuration management implementation plan does not address most aspects of a configuration management program compliant with DOE-STD-1073-2003.</p>
	<p>Deficiency: The assessment program does not adequately assess configuration management program implementation, as required by DOE-STD-1073-2003.</p>
	<p>Deficiency: Contrary to Department Order 433.1B, the SRNS Nuclear Maintenance Management Program, and site procedures, preventive maintenance is not performed at the frequency prescribed in the established maintenance program.</p>
	<p>Deficiency: Contrary to the <i>SRNS Manual</i>, 1Y, Procedure 8.20, <i>Work Control Procedure</i>, Section 5.6, the lead work group managers do not always evaluate worker feedback and take appropriate action.</p>
	<p>Deficiency: Contrary to Department Order 426.2, the training program for Savannah River Tritium Enterprise electrical, instrumentation, and mechanical maintenance mechanics does not include systems training and related industry and facility-specific experience.</p>

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	<p>Deficiency: No effective analysis of the failure mechanisms was performed for the Tritium Extraction Facility Tritium Air Monitor internal pumps and flow switches, as required by E7 3.04 Sections 4.3 and 8.5. Likewise, the System Health Presentations did not provide supporting analysis of flow switch and pump failure mechanisms, contrary to the requirements of E7 1.10, Section 4.4, and Department Order 420.1C.</p> <p>Deficiency: The System Health Presentations do not establish performance criteria against which system and component performance can be assessed, as required in Department Order 420.1C.</p> <p>Deficiency: Contrary to E7 3.04, Sections 3.0, 5.1, 8.5, and 8.8, the availability calculation is no longer used in system health reports, and the methodology used to calculate and assess the availability of the Tritium Air Monitors and Glovebox Oxygen Monitor (GBO2Ms) is ineffective.</p> <p>Deficiency: Self-assessment reports directly related to verification of safety basis controls contain some incomplete scope descriptions, and self-assessment results are superficial and lack sufficient rigor, contrary to Department Order 226.1B, <i>Implementation of Department of Energy Oversight Policy</i>, CRD, 2.b.(2).</p> <p>Deficiency: Some significant safety system performance issues were not appropriately categorized in accordance with the graded approach of the <i>SRNS Manual</i>, 1B, Procedure 4.23, <i>Corrective Action Program</i>.</p>
<p>Assessment of Safety System Management at the Savannah River Site H-Canyon Facility (January 2019)</p>	<p>Deficiency: Several calculations do not comply with the requirements of E7 2.31 and/or <i>Engineering Guide</i> 15060-G. Problems include improper classification, inadequate design inputs, and technically inadequate stress analysis.</p> <p>Deficiency: Several Design Change Forms do not contain technical justification for the proposed change, as required by E7 2.37. Similarly, contrary to the requirements of E7 2.38, the technical justification for some Design Change Packages is inadequate.</p> <p>Deficiency: Contrary to the requirements of DOE-STD-3009-94, the clutches on three Canyon Exhaust System fans were downgraded from Safety Class to General Service.</p> <p>Deficiency: H-Canyon installation documentation or database records do not provide traceability of evaporator thermowells and Resistance Temperature Detectors from the point of manufacturing to the point of installation in accordance with 1Q 8-1.</p> <p>Deficiency: Contrary to 10 CFR 830, Subpart A § 830.122(e)(3), the damper for Canyon Exhaust System (CAEX) fan #3 has operated in a degraded condition since April 2012 (2012 Non-Conformance Report (NCR)-30-0012), and Canyon Exhaust System (CAEX) fans #1 and</p>

Appendix 4: List of Reports Associated with Our Findings

	#4 have had degraded flange bolting since October 2013 (2013-NCR-30-0036).
	Deficiency: Contrary to the requirements of Department Order 422.1, Attachment 2, Section 2, Paragraph 3.j., not all procedures are technically and administratively accurate.
	Deficiency: Contrary to the requirements of 2S 5.5, administrative control of equipment is implemented with uniquely numbered seals instead of locks without any local procedure authorizing the use of seals in place of locks.
Shutdown Facility Risk Management Assessment at the Savannah River Site (June 2019)	Deficiency: Contrary to the requirements of <i>Manual 2Q</i> , Procedure 2.14, Section 5.6, the current Fire Hazard Analysis for C Reactor does not adequately identify existing fire protection features or define conditions necessary before they can be permanently removed during the transition to shutdown.
	Deficiency: Contrary to the requirements of 10 CFR 830.6, SRNS could not produce a reference document cited in the safety basis for Building 235-F (U-BIO-F-00003).
	Deficiency: Contrary to the requirements of Department Order 420.1C, Attachment 2, Chapter V, Section 3.c.(3).(c), the spent fuel program moderator storage cognizant system engineer did not compare moderator storage tank wall thickness to established performance criteria prior to accepting the tank for continued service.

Corrective Actions Not Documented in IMS	
NNSA Los Alamos Field Office	
Title of Report	Findings and Deficiencies
Targeted Review of Work Planning and Control and Biological Safety at the Los Alamos National Laboratory (December 2015)	<p>Finding F-NALA-01: NNSA Los Alamos Field Office (NALA) has not approved the LANL Contractor Assurance System, as required by Department Order 226.1B.</p> <p>Finding F-NALA-02: The Facility Representative (FR) program does not meet the requirements of the staffing analysis performed in accordance with DOE-STD-1063-2011, nor does it meet the requirements of the annual work force analysis required by the Federal Technical Capability Program. The site office has not developed a staffing plan to address the FR shortfall identified in these staffing analyses, as required by Department Order 426.1.</p>

Appendix 4: List of Reports Associated with Our Findings

Corrective Actions Documented Incorrectly		
SRS		
Title of Report	Findings and Deficiencies	Reason
Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility (January 2016)	Finding F-SRNS-1: SAR does not fully identify, evaluate, and protect the safety functions associated with the facilities’ stacks.	Findings were not documented in the official IMS Site Tracking, Analysis, and Reporting System.
	Finding F-SRNS-2: The system description, functional requirements, system evaluation, Technical Safety Requirements, and supporting technical basis, for the F-Area Outside Underground fire water supply system and the fire suppression system are insufficient to demonstrate that the systems will remain operable and capable of performing their established safety functions.	
	Finding F-SRNS-3: The hazard control set for the explosive accidents is incomplete, and the description of some controls is not sufficient to support identifying the safety function and functional requirements.	
	Finding F-SRNS-4: SAR does not appropriately designate some credited Safety Significant administrative controls as Specific Administrative Controls.	
Assessment of the Savannah River Site Emergency Management Exercise Program (October 2018)	Finding F-SRNS-01: SRNS did not effectively implement PA requirements, neglecting to identify predetermined PAs for responders consistent with the hazards based on the results of Emergency Planning Hazards Assessments and evaluate incidents in which combinations of PAs may apply.	EA-30 findings and deficiencies were combined with internal, non-EA-30 findings.
	Finding F-SRNS-02: SRNS did not effectively communicate among SRS response facilities and responders and offsite command centers to provide a full common operating picture and shared situational awareness of the emergency response.	
	Finding F-SRNS-03: SRNS corrective actions did not fully address one of the findings from EA’s 2015 assessment report, and the corrective actions did not include validation of the effectiveness of corrective actions in resolving the original finding; during the 2018 exercise, there was recurrence of several performance weaknesses observed and documented as findings during the 2014 full-scale exercise.	

Appendix 4: List of Reports Associated with Our Findings

	<p>Deficiency: the Savannah River Operations Office did not provide effective oversight by thoroughly reviewing and evaluating the exercise plan (specifically the 5-year exercise schedule) or validating that corrective actions for external findings ensured programmatic effectiveness (corrective actions did not prevent recurrence), as required by Department Order 151.1D, Appendix A, Paragraph 10.f(4–5), and Department Order 226.1B, Paragraph 4.b. and Paragraph 5.e.</p>	
	<p>Deficiency: SRNS has not conducted an exercise with the OST in the last 4 years, and the current 5-year schedule does not include an exercise with the OST, as required by Department Order 151.1D, Attachment 4, Paragraph 15.f.</p>	
	<p>Deficiency: SRNS has not developed effective Exercise Evaluation Guides to test and validate emergency plans and procedures during exercises, contrary to Department Order 151.1D, Attachment 3, Paragraph 14.</p>	
	<p>Deficiency: SRNS has not established a complete communications protocol between SRS response facilities and offsite command centers to provide a full common operating picture of the emergency response and shared situational awareness by providing access to unclassified emergency response information, such as notification forms, emergency status updates, plume projections, significant incident data, and field monitoring data, contrary to Department Order 151.1D, Attachment 3, Paragraph 11.b.(6).</p>	
	<p>Deficiency: SRNS has not established mechanisms, consistent with the National Incident Management System for expanding the initial response capability and establishing control at an incident complex, contrary to Department Order 151.1D, Attachment 3, Paragraph 3.g.</p>	

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Corrective Action Plans Not Developed for Findings	
SRS	
Title of Report	Findings and Deficiencies
Targeted Review of the Safety Basis at the Savannah River Site F-Area Central Laboratory Facility (January 2016)	Finding F-SRNS-1: SAR does not fully identify, evaluate, and protect the safety functions associated with the facilities' stacks.
	Finding F-SRNS-2: The system description, functional requirements, system evaluation, Technical Safety Requirements, and supporting technical basis, for the F-Area Outside Underground fire water supply system and the fire suppression system are insufficient to demonstrate that the systems will remain operable and capable of performing their established safety functions.
	Finding F-SRNS-3: The hazard control set for the explosive accidents is incomplete, and the description of some controls is not sufficient to support identifying the safety function and functional requirements.
	Finding F-SRNS-4: SAR does not appropriately designate some credited Safety Significant administrative controls as Specific Administrative Controls.
Assessment of the Savannah River Site Emergency Management Exercise Program (October 2018)	Finding F-SRNS-01: SRNS did not effectively implement PA requirements, neglecting to identify predetermined PAs for responders consistent with the hazards based on the results of Emergency Planning Hazards Assessments and evaluate incidents in which combinations of PAs may apply.
	Finding F-SRNS-02: SRNS did not effectively communicate among SRS response facilities and responders and offsite command centers to provide a full common operating picture and shared situational awareness of the emergency response.
	Finding F-SRNS-03: SRNS corrective actions did not fully address one of the findings from EA's 2015 assessment report, and the corrective actions did not include validation of the effectiveness of corrective actions in resolving the original finding; during the 2018 exercise, there was recurrence of several performance weaknesses observed and documented as findings during the 2014 full-scale exercise.

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Corrective Action Plans Not Developed for Findings	
NNSA Los Alamos Field Office	
Title of Report	Findings and Deficiencies
Targeted Review of Work Planning and Control and Biological Safety at the Los Alamos National Laboratory (December 2015)	Finding F-NALA-01: NA-LA has not approved the LANL Contractor Assurance System, as required by Department Order 226.1B.
	Finding F-NALA-02: The FR program does not meet the requirements of the staffing analysis performed in accordance with DOE-STD-1063-2011, nor does it meet the requirements of the annual work force analysis required by the Federal Technical Capability Program. The site office has not developed a staffing plan to address the FR shortfall identified in these staffing analyses, as required by Department Order 426.1.
Assessment of the Development and Maintenance of Safety Bases at Los Alamos National Laboratory (April 2018)	Finding F-NA-LA-1: Contrary to 10 CFR 830, Appendix A, Section I. Paragraph 1, NA-LA has not ensured timely reviews of the Evaluation of the Safety of the Situation (ESS) for existing Hazard Category-2 or -3 nuclear facilities at LANL to verify that safe and stable conditions have been established by LANS and has not always provided timely and formal communication of concerns to LANS. In one case, NA-LA did not formally communicate its concerns with an ESS to LANS after reviewing it for almost a year. NA-LA also took 6 months to document its concerns with an ESS instead of ensuring that LANS used its Unreviewed Safety Question process to have an error evaluated by LANS in “hours or days” to determine whether additional immediate actions were warranted to ensure safe and stable conditions.
Chronic Beryllium Disease Prevention Program Assessment at the Los Alamos National Laboratory (August 2019)	Finding F-NA-LA-1: Contrary to Department Order 226.1B, Paragraph 4.a.2, NA-LA is not maintaining sufficient technical capability and knowledge of site and contractor activities relating to worker safety and health to make informed decisions about hazards, risks, and resource allocation; provide direction to contractors; and evaluate contractor performance.

Corrective Action Plans Not Developed for Findings	
NA-APM	
Title of Report	Findings and Deficiencies
Review of the Los Alamos National Laboratory Transuranic Waste Facility Construction Quality (January 2016)	Finding F-NA-APM-1: The NA-APM office at LANL has not established and implemented an effective issues management program that is capable of categorizing findings based on risk and priority, ensuring relevant line management findings are effectively communicated to the contractors, and ensuring that programs are evaluated and corrected on a timely basis, as required by Department Order 226.1B, Section 4.b.(4).

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