



**United States Department of Energy
Environmental Management Los Alamos
Field Office
National Nuclear Security Administration
Los Alamos Field Office
Corrective Action Plan
Phase 2 Radiological Release Event at the
Waste Isolation Pilot Plant**

Revision 4.0

September 15, 2015

Approved by:

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Acronyms

AIB	Accident Investigation Board
AK	Acceptable Knowledge
ASM	Acquisition Services Management Division
BIO	Basis for Interim Operation
CAP	Corrective Action Plan
CAS	Contractor Assurance System
CBFO	U.S. Department of Energy Carlsbad Field Office
CCP	Central Characterization Program
DOE	U.S. Department of Energy
DSA	Documented Safety Analysis
EM-LA	EM Los Alamos Field Office
EPA	U.S. Environmental Protection Agency
ES	Energy Solutions, LLC
EWMO	Environment Waste Facility Operations
FHA	Fire Hazard Analysis
HWFP	Hazardous Waste Facility Permit
ISM	Integrated Safety Management
JHA	Job Hazard Analysis
JON	Judgment of Need
LANL	Los Alamos National Laboratory
CO	Carlsbad Office
LANS	Los Alamos National Security, LLC
NA-LA	NNSA Los Alamos Field Office
NMED	New Mexico Environment Department
NNSA	National Nuclear Security Administration
NWP	Nuclear Waste Partnership LLC
MOA	Memorandum of Agreement
PISA	Potential Inadequate Safety Analysis
QA	Quality Assurance
R2A2	Roles, Responsibilities, Authorities and Accountability
RCRA	Resource Conservation and Recovery Act
RNS	Remediated Nitrate Salt
TAT	Technical Assessment Team
TRU	Transuranic
USQ	Unreviewed Safety Question
USQD	Unreviewed Safety Question Determination
WAC	Waste Acceptance Criteria
WCRRF	Waste Characterization, Reduction, and Repackaging Facility (Building 50-69)
WIPP	Waste Isolation Pilot Plant

1.0 INTRODUCTION

On February 14, 2014, there was a release of radioactive material from a transuranic (TRU) waste container emplaced in Panel 7, Room 7 of the Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) underground near Carlsbad, New Mexico. The release was detected by a continuous air monitor located near the Panel and an alarm activated in the Central Monitoring Room on the WIPP surface, which initiated a shift to filtration of the underground ventilation.

Because access to the underground was restricted following the radiological release and examination of the area and containers was not possible, the investigation was broken down into two phases. Phase 1 focused on the WIPP response to the alarm and associated radiological release to the atmosphere. On April 24, 2014, the results were published in a final report, *Phase 1, Radiological Release Event at the Waste Isolation Pilot Plant*. This Phase 1 report had no conclusions or judgments of need related to the Department of Energy National Nuclear Security Administration Los Alamos Field Office (NA-LA) or Los Alamos National Security, LLC (LANS).

On February 19, 2014, the Carlsbad Field Office (CBFO) requested that the Los Alamos National Laboratory (LANL) Carlsbad Office (CO) develop a list of potential source containers for the release. On February 20, 2014, the LANL-CO provided the list based on a comparison of isotopic ratios calculated from the Waste Data System radionuclide data for each emplaced container in Room 7 of Panel 7 and isotopic ratios calculated from data obtained from analysis of WIPP air filter samples. The list included containers from an Idaho - Rocky Flats waste stream and several drums containing nitrate salts from LANL. Subsequently, on May 1, 2014, CBFO declared a Potential Inadequacy in the Safety Analysis (PISA) regarding the potential for untreated nitrate salt waste being emplaced, which later prompted LANL to declare a PISA as well. On May 15, 2014, photographic evidence confirmed that a LANL-LAMIN02-V.001 waste stream container (drum 68660) was in fact breached.

On March 22, 2015, the Department of Energy established an Environmental Management Los Alamos Field Office (EM-LA) responsible for management of the environmental restoration and the legacy waste management programs at LANL. The NA-LA continues with the responsibility for management of LANL's national security mission and the enduring waste management program (newly generated waste). As a result of this delineation in responsibilities, this corrective action plan was prepared collaboratively between NA-LA and EM-LA Field Offices, with joint responsibility for addressing the Judgement of Needs (JONs) identified in the *Accident Investigation Board Accident Investigation Report, Phase 2 Radiological Release Event at the Waste Isolation Pilot Plant*, February 24, 2014, dated April 2015.

2.0 ACCIDENT INVESTIGATION

On May 19, 2014, the Deputy Assistant Secretary for Safety, Security, and Quality Programs, U.S. Department of Energy, Office of Environmental Management, appointed a Phase 2 Accident Investigation Board (AIB) to complete the radiological release investigation and determine the cause of the TRU waste container(s) failure in accordance with DOE O 225.1B, *Accident Investigations*. The AIB completed the investigation and submitted the Phase 2 final report to the

appointing official on March 31, 2015. Based upon the evidence gathered and analyzed during the investigation, the AIB concluded that the release from the container(s) was preventable. If LANL had adequately developed and implemented repackaging and treatment procedures that incorporated suitable hazard controls and included a rigorous review and approval process, the release could have been prevented.

The AIB concluded the following causes of the accident:

Direct Cause -- the immediate events or conditions that caused the accident.

The AIB identified the direct cause of this accident to be an exothermic reaction of incompatible materials in LANL waste drum 68660 that led to thermal runaway, which resulted in over-pressurization of the drum, breach of the drum, and release of a portion of the drum's contents (combustible gases, waste, and wheat-based absorbent) into the WIPP underground.

Root Cause -- causal factors that, if corrected, would prevent recurrence of the same or similar accidents. Root causes can be local (specific to the one accident), and/or systemic (common to a broad class of similar accidents). For this accident, the AIB identified both local and systemic root causes.

Local Root Cause -- a specific deficiency that, if corrected, would prevent recurrence of the same accident. The AIB identified the local root cause of the radioactive material release in the WIPP underground to be the failure of LANS to understand and effectively implement the LANL Hazardous Waste Facility Permit (HWFP) and Carlsbad Field Office directed controls. Specifically, LANL's use of organic, wheat-based absorbent instead of the directed inorganic absorbent such as kitty litter/zeolite clay absorbent in the glovebox operations procedure for nitrate salts resulted in the generation, shipment, and emplacement of a noncompliant, ignitable waste form.

Systemic Root Cause -- a deficiency in a management system that, if corrected, would prevent the occurrence of a class of accidents, e.g., operational accidents caused by procedural deficiencies. The AIB identified the systemic root cause as the NA-LA¹ and National Transuranic Program/CBFO failure to ensure that LANL had adequately developed and implemented repackaging and treatment procedures that incorporated suitable hazard controls and included a rigorous review and approval process. NA-LA and CBFO did not ensure the adequate flow down of the Resource Conservation and Recovery Act (RCRA) and other upper tier requirements, including the WIPP HWFP, Attachment C, Waste Analysis Plan, WIPP Waste Acceptance Criteria (WAC), and the LANL HWFP requirements into operating procedures at LANL.

Contributing Causes -- events or conditions that collectively with other causes increased the likelihood or severity of an accident but that individually did not cause the accident. The AIB identified twelve contributing causes to the radiological release investigated in Phase 2 as follows:

¹EM-LA did not exist when the AIB initiated their investigation; while the report only identifies NA-LA, EM-LA will work collaboratively with NA-LA to identify and implement needed corrective actions.

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1. Failure of LANS to implement effective processes for procedure development, review, and change control. Execution of the Waste Characterization, Reduction, and Repackaging Facility (WCRRF) glovebox procedure resulted in a combination of incompatible materials and the generation of an ignitable, noncompliant waste.
 2. Failure of LANS to develop and implement adequate processes for hazard identification and control. As a result, an incompatible absorbent was specified and used during nitrate salt bearing waste processing.
 3. Failure of the LANS Contractor Assurance System (CAS) to identify weaknesses in the processes for operating procedure development; hazard analysis and control; and review that resulted in an inadequate glovebox operation procedure for processing the nitrate salt bearing waste.
 4. Failure of the Central Characterization Program (CCP) to develop an Acceptable Knowledge (AK) for the mixed inorganic nitrate salt waste stream (LA-MIN02-V.001) that adequately captured all available information regarding waste generation and subsequent repackaging activities in order to prevent the generation, shipment, and emplacement of corrosive, ignitable, or reactive waste. Specifically, the AK Summary Report did not capture changes made to the WCRRF glovebox procedure. The addition of a secondary waste material was not adequately considered.
 5. Failure of NA-LA and the National Transuranic Program/CBFO to ensure that the CCP and LANS complied with RCRA requirements in the WIPP HWFP and the LANL HWFP, as well as the WIPP WAC. Examples include the unapproved treatment (neutralization and absorption of liquids) and the addition of incompatible materials. As a result, waste containing incompatible materials were generated and sent to WIPP.
 6. Failure of LANS, EnergySolutions, LLC (ES), and NA-LA to ensure that a strong safety culture existed within the Environmental and Waste Management Operations (EWMO) organization at the Los Alamos National Laboratory (LANL). As a result, although there was a questioning attitude, there was a failure to adequately resolve employee concerns which could have identified the generation of noncompliant waste prior to shipment.
 7. Failure of the execution of the LANL Unreviewed Safety Question (USQ) process to identify the lack of a hazard analysis of the proposed changes to the WCRRF glovebox waste repackaging procedure (i.e., consistent with Integrated Safety Management (ISM) core functions), and to recognize that an incompatible reactive nitrate salt bearing waste would be created by using "organic" absorbents. As a result, the Unreviewed Safety Question Determination (USQD) did not ensure that nuclear safety basis documents, including the WCRRF and Area G Basis for Interim Operation (BIO), were updated to evaluate hazards associated with material incompatibility in the nitrate salt-bearing waste stream and to specify preventive or mitigative controls.
 8. Failure of NA-LA to establish and implement adequate line management oversight programs and processes in accordance with DOE O 226.1B, *Implementation of Department of Energy Oversight Policy*. As a result, weaknesses in LANS/ES programs and waste operations procedures were not identified and corrected which allowed an ignitable, noncompliant nitrate salt-bearing waste to be generated, shipped, and emplaced at WIPP.
 9. Failure of DOE Headquarters to perform adequate or effective line management oversight required by DOE Order 435.1, *Radioactive Waste Management*, dated July 9, 1999. As a result, waste containing incompatible materials were generated and sent to WIPP.
 10. Failure of Nuclear Waste Partnership LLC (NWP) to ensure that the WIPP Fire Hazard Analysis (FHA) recognized the potential for a fire starting within the waste array as well as the potential

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- for propagation within the array. As a result, fire protection controls focused on prevention of propagation to the array from external sources (e.g., vehicles) and did not consider the magnitude of the combustible material hazard.
11. Failure of LANS/ES to adequately train and qualify ES operators and supervisors in the identification and control of incompatible materials during waste processing. As a result, personnel did not question the instruction to add organic absorbent and other secondary waste items to the nitrate salt bearing waste.
 12. Failure of ES operators and LANS/ES supervisors to effectively execute the stop work process when unexpected conditions, including foaming reactions and smoke during waste processing, were encountered at WCRRF. This resulted in waste containing incompatible materials being generated and sent to WIPP.

3.0 CORRECTIVE ACTION PLAN DEVELOPMENT

DOE NA-LA and EM-LA reviewed the Conclusions and JONs from the AIB Report and developed actions to address each of the six (6) JONs and supporting conclusions identified in the report pertaining to DOE NA-LA and EM-LA. The JON action plans and tables in Section 6 of this corrective action plan present the JON, approach, actions, and planned due dates to respond to each JON. Due dates correspond to dates where actions by EM-LA and NA-LA will be completed and objective evidence of the deliverable(s) placed into the DOE LANL corrective action tracking system for review and validation that DOE actions are complete. The EM-LA and NA-LA corrective actions were developed and completion dates were established to integrate with the completion of key LANS corrective actions. This allows EM-LA and NA-LA to sequence Federal oversight of LANS completed corrective actions to ensure they have been effectively implemented prior to commencing new activities.

The EM-LA corrective actions identified in this Corrective Action Plan (CAP) will be approved by the EM-LA Acting Field Office Manager and concurred with by the Environmental Management Deputy Assistant Secretary for Safety, Security, and Quality Programs. The NA-LA Field Office Manager will approve the NA-LA corrective actions identified in this CAP.

4.0 CORRECTIVE ACTION PLAN MANAGEMENT

The EM-LA and NA-LA Corrective Action Plan Managers will monitor and report the status of corrective actions associated with their organization through completion to their respective Field Office Manager.

The EM-LA and NA-LA Corrective Action Plan Managers will conduct monthly status reviews of all the actions in the CAP. Proposed changes to the corrective actions and completion dates will be made in writing to the EM-LA or the NA-LA Field Office Manager for review and approval for their respective corrective actions. EM-LA will develop an integrated schedule of the EM-LA, NA-LA, and LANS corrective actions that will be used to track status of each organizations progress towards completion. The EM-LA Field Office Manager will forward proposed changes to the EM-LA corrective actions to the Environmental Management Deputy Assistant Secretary for Safety, Security, and Quality Programs for review and concurrence. The NA-LA Field Office Manager will approve changes to the NA-LA corrective actions.

5.0 CORRECTIVE ACTIONS VERIFICATION AND EFFECTIVENESS REVIEW

The EM-LA Corrective Action Plan Manager will coordinate with the EM-LA Field Office Manager and Environmental Management Deputy Assistant Secretary Safety for Security, and Quality Programs to assign reviewers and to establish an independent corrective action implementation assessment team. The EM-LA Corrective Action Plan Manager will determine that the provided objective evidence for each corrective action is responsive to the associated JONs identified in this CAP. The assessment team will determine that the corrective actions are completed and implemented to satisfy the JONs identified in the Phase 2 AIB report. The assessment team will provide assessment reports to the EM-LA Field Office Manager and the Environmental Management Deputy Assistant Secretary for Safety, Security, and Quality Programs documenting the effective implementation of the corrective actions.

The EM-LA Field Office Manager will forward the objective evidence associated with their corrective actions to the Environmental Management Deputy Assistant Secretary for Safety, Security, and Quality Programs for concurrence.

The NA-LA Corrective Action Plan Manager will coordinate with the NA-LA Field Office Manager to assign reviewers and to establish an independent corrective action implementation assessment team for their corrective actions. The NA-LA Corrective Action Manager will determine that the provided objective evidence for each corrective action is responsive to the associated JONs identified in this CAP. The assessment team will determine that the corrective actions are completed and implemented to satisfy the JONs identified in the Phase 2 AIB report. The assessment team will provide assessment reports to the NA-LA Field Office Manager documenting the effective implementation of the corrective actions. The NA-LA Corrective Action Manager will forward the objective evidence associated with their corrective actions to the NA-LA Field Office Manager for approval.

There may be certain legacy and enduring waste and environmental operations (e.g. nitrate salt sampling and nitrate salt remediation) that may require various levels of readiness or other independent verification activities before operations can continue or new operations can commence. An *EM-LA and NA-LA Contractor Oversight Plans* will be used to identify what operations can commence or continue using a graded approach. The *EM-LA and NA-LA Contractor Oversight Plans* will also identify the LANS corrective actions that address the AIB JONs that must be completed prior to commencing new operations.

6.0 JON ACTION PLANS

The following subsections include the six (6) JONs pertaining to NA-LA and EM-LA Field Offices. Each subsection includes the AIB Report Conclusion and JON descriptions, and DOE NA-LA and EM-LA Field Offices' approach for addressing the JON. Actions, deliverables, action owners, and planned due dates are listed in table format.

Judgement of Need (JON 3)

Conclusion 3: The NNSA Los Alamos Field Office (NA-LA) oversight activities were ineffective in identifying weaknesses in the execution of waste packaging, characterization and certification of transuranic (TRU) waste at Los Alamos National Laboratory (LANL).

JON 3: NA-LA oversight of characterization and certification of TRU waste sites needs to be improved to include:

- Waste Characterization, Reduction, and Repackaging Facility (WCRRF) repackaging operations that prepare TRU waste for characterization;
- Implementation of waste generator site processes as they relate to TRU waste management; and
- Verification that waste generator activities comply with the generator site Resource Conservation and Recovery Act (RCRA) permit.

Approach

The EM-LA and NA-LA Field Office Managers approach to address JON 3 starts with the development of a Memorandum of Understanding outlining and documenting a mutually agreed to understanding of: accountabilities and authorities; infrastructure ownership; nuclear safety oversight; and, landlord functions that will allow EM to assume direct management of prime contracts established for EM-funded work at LANL, and associated regulatory agreements and requirements. This scope transferred from NNSA to EM is referred to as the EM Los Alamos Legacy Cleanup Completion Project (LCCP).

The EM-LA Field Office Manager's approach to address JON 3 is to develop a new DOE LANL Contractor's Oversight Plan, in a phased approach. The phased approach is envisioned to ensure that adequate and effective oversight is being performed on LANS legacy waste and environmental operations during the development and implementation of the LANS corrective actions that address the AIB JONs. This approach will consist of two phases:

1. The transitional phase will discuss how and what oversight activities will be performed for current legacy waste and environmental operations (e.g. sampling of nitrate salts) and discuss the reliance on NA-LA oversight, while the EM-LA oversight functions are being fully developed. Specifically nuclear safety operations (e.g. review of nuclear safety related documentation) per the *Memorandum of Understanding between the National Nuclear Security Administration Los Alamos Field Office and Department of Energy Environmental Management Los Alamos Field Office for Transition of Legacy Environmental Cleanup Work at Los Alamos from NNSA to EM*. The reliance on NA-LA oversight support will continue until such time that EM-LA has the requisite staff to perform this function for their areas of responsibility.

2. The follow-on phase will discuss the EM-LA oversight approach of the contractor's legacy waste and environmental operations after EM-LA has fully staffed their organization with the requisite level of expertise, and the oversight functions currently being performed by NA-LA (per the above referenced MOU) have transitioned to EM-LA. This follow-on phase will place EM-LA in a position to ensure contractor readiness for ongoing and planned legacy waste and environmental operations during the contractor's implementation of their respective AIB JONS.

EM-LA and NA-LA will benchmark Federal oversight programs at various DOE facilities as a basis for the development of a new EM-LA *Contractor Oversight Plan* and a revised NA-LA *Contractor Oversight Plan*. Site visits to several DOE sites will occur (or via telecommunications) to obtain procedures and plans for planning, performance, and documenting Federal oversight evaluations of contractor programs, and activities; how issues are evaluated, corrected to prevent recurrence and communicated to DOE and contractor management.

EM-LA will also work in collaboration with NA-LA to form a consistent oversight model for LANL to ensure the flow down of DOE O 226.1B, *Implementation of the Department of Energy Oversight Policy*. The EM-LA and NA-LA *Contractor's Oversight Plans* will address the approach for performing oversight, assessments, and evaluations of LANS waste and environmental facilities and operations (e.g. WCRRF, RANT, Dome 231 Permacon and Dome 375 Permacon), equipment, and systems; and their compliance with safety, regulatory (e.g., RCRA, DOT) and federal and commercial disposal facility compliance. The EM-LA and NA-LA will perform oversight of the contractor's compliance with the Los Alamos National Laboratory Hazardous Waste Facility Permit relative to each Field Offices areas of respective responsibility. This oversight will encompass environmental and waste operations activities with specific emphasis on procedural and process changes to ensure compliance with the LANL Hazardous Waste Facility Permit.

NA-LA will support an NNSA-wide effort to redefine federal oversight protocols, and those revised protocols will guide future NA-LA oversight activities. The effort involves the development of a site governance policy framework, the development of an NNSA Supplemental Directive on Oversight, the development of Headquarters and Field Office procedures that implement the revised Oversight approach, and a system of peer reviews to validate the effectiveness of oversight activities. After establishing these roles, responsibilities, policies and procedures, NNSA will reevaluate staffing requirements, staff to meet those requirements and assess oversight system efficacy.

The NA-LA Field Office Manager will revise as warranted their existing *Contractor Oversight Plan* for NA-LA areas of responsibility.

The NA-LA and EM-LA designated oversight staff will be trained to the requirements of DOE O 226.1B, *Implementation of the Department of Energy Oversight Policy*, DOE O 435.1, *Radioactive Waste Management*, and DOE O 422.1, *Conduct of Operations* in performing oversight

activities associated with NA-LA and EM-LA funded waste and environmental operations, conduct of operations, performance assurance, and configuration and work control activities.

NA-LA and EM-LA offices will develop an Annual Integrated Assessment Plan that focuses on risk areas and will be coordinated to maximize resources and avoid duplication. The intent of this plan is to prioritize and schedule assessments and to identify areas that require a high level of oversight (e.g. high hazard operations, waste repackaging operations) to ensure that critical LANS programs and operations (e.g. conduct of operations program, high hazard operations) have been adequately evaluated and assessed, and have the proper level of oversight. This plan will identify a set of core assessments that will be conducted on an annual basis.

The EM-LA will develop and implement a *Document Review* procedure, to establish a method for conducting reviews and/or assessments of key/critical LANS procedures, documents and plans as discussed in the CBFO JON 28. EM-LA will perform reviews of LANS procedures per the *Document Review* procedure; this includes oversight of all reviews conducted by CCP. The approach will ensure that the flow down of all applicable requirements into LANS operating procedures assuring execution of work is compliant.

The EM-LA and NA-LA Field Office Managers will evaluate and assess the LANS waste and environmental operations as they relate to DOE O 435.1 and 422.1 for their respective areas of responsibility. This approach includes evaluating the LANS Conduct of Operations matrix and affected implementing procedures to verify the flow down of upper tier requirements into procedures with special emphasis on work control.

The EM-LA and NA-LA Field Office Managers will evaluate and assess the LANS Radioactive Waste Management Program for compliance with DOE O 435.1 for their respective areas of responsibility. This approach includes evaluating the LANS Radioactive Waste Management Basis and implementing procedures to verify the flow down of upper tier requirements into procedures and effective implementation of operating procedures. EM-LA and NA-LA will also ensure that the contractor has an effective process to flow down requirements into plans and procedures.

The EM-LA and NA-LA Field Office Managers will perform oversight of the contractor's compliance with the LANL HWWRP for their respective areas of responsibilities. This oversight will encompass environmental and waste operations activities with specific emphasis on procedural and process changes to ensure compliance with the LANL HWFP.

Predecessor Actions

- *JON 10: LANS needs to strengthen the processes that ensure flow down of upper tier requirements into their implementing procedures such that execution of work is compliant.*

- JON 13, LANS needs to strengthen documentation to include a detailed technical basis to justify decisions made regarding change control for procedures and processes for the LA-MIN-02-V.001 waste stream.
- JON 14, LANS needs to implement an effective engineering change control process that includes defensible technical bases to justify process modifications.
- JON 25, LANS needs to develop and implement a fully integrated contractor assurance system that provides DOE and LANS confidence that work is performed compliantly, risks are identified, and control systems are effective and efficient.
- JON 32, LANS needs to review and revise EP-DIR-AP-10007 "Environmental Programs Procedure Preparation, Revision, Review, Approval, and Use" to ensure that all procedures and procedure revisions contain the necessary elements prescribed in the AIB Phase 2 report.

EM-LA Corrective Actions for JON 3

Number	Action	Deliverable	Action Owner	Due Date
EM-LA 3-1	Develop an EM-LA and NA-LA Memorandum of Understanding (MOU) outlining and documenting a mutually agreed to understanding of: accountabilities and authorities; infrastructure ownership; nuclear safety oversight; and, landlord functions related to the transition that will support EM's direct management of prime contracts established for EM funded work at LANL, and associated regulatory agreements and requirements. This scope transferred from NNSA to EM is referred to as the EM LCCP.	Approved MOU.	EM-LA Field Office Manager	09-21-2015
EM-LA 3-2	Obtain benchmark examples of Federal oversight programs at other DOE facilities as a basis for the development of a new EM-LA Contractor Oversight Plan.	Benchmark Report.	EM-LA Field Office Manager	10-30-2015
EM-LA 3-3	Develop the transitional EM-LA Contractor Oversight Plan to:	Transitional EM-LA Contractor Oversight Plan.	EM-LA Field Office Manager	12-30-2015
	1. Ensure the flow down of DOE O 226.1B, DOE O 435.1, DOE O 422.1, DOE-STD-1063-2011, RCRA, WIPP, Nevada National Security Site (NNSS), commercial treatment, storage and disposal facilities, and other applicable regulatory requirements are captured in			

	<p>federal procedures.</p> <ol style="list-style-type: none"> 2. Establish requirements for oversight and evaluation of changes to LANL waste management facilities, equipment and operations, and evaluation of their impact on safety and safety-related systems. 3. Establish criteria and process for prioritizing planned oversight activities and determining the appropriate level of oversight rigor (operational awareness, annual assessment schedule). 4. Specify the process for planning, conducting, and documenting oversight evaluations to ensure critical and high risk activities and operations have sufficient oversight. <p>Oversight planning may include WCRRF, RANT, waste generator site processes for TRU waste management, and RCRA compliance.</p> <ol style="list-style-type: none"> 5. Identify an issues management system capable of categorizing issues, communicating issues effectively to management and contractors, ensuring that issues are evaluated and corrected in a timely manner to prevent recurrence, and a mechanism for tracking and trending for feedback and improvement. 		
EM-LA 3-4	Formally train EM-LA designated staff on the transitional phase of the <i>EM-LA Contractor Oversight Plan</i> to obtain and demonstrate core competency for providing oversight.	Training records providing objective evidence that the designated staff required to maintain organizational core competency have successfully completed training to the transitional phase of the <i>Contractor's Oversight Plan</i> .	EM-LA Field Office Manager 01-29-2016
EM-LA 3-5	The <i>EM-LA Contractor Oversight Plan</i> is revised and EM-LA assumes lead from NA-LA support.	Revised follow-on <i>EM-LA Contractor Oversight Plan</i> .	EM-LA Field Office Manager 09-30-2016
EM-LA-3-6	Formally train EM-LA designated staff on the follow-on	Training records providing objective evidence	EM-LA 10-31-2016

	<i>EM-LA Contractor Oversight Plan</i> to obtain and demonstrate core competency for providing oversight.	that the EM-LA Manager's designated staff required to maintain organizational core competency have successfully completed training to the <i>Contractor's Oversight Plan.</i>	Field Office Manager	
EM-LA 3-7	Develop an <i>Annual Integrated Assessment Plan</i> that addresses the two phase approach discussed in the JON 3 Approach.	<i>Approved Annual Integrated Assessment Schedule.</i>	EM-LA Field Office Manager	11-30-2015
EM-LA 3-8	Develop an EM-LA procedure for <i>Operational Awareness and Issues Management</i> , for identifying, communicating, and managing issues to resolution. This includes verifying completion of LANS corrective actions identified during oversight and assessments of EM-LA environmental waste management operations.	Approved <i>Operational Awareness and Issues Management</i> procedure.	EM-LA Field Office Manager	12-30-2015
EM-LA 3-9	Provide training to the EM-LA designated staff on the <i>Operational Awareness and Issues Management</i> procedure.	Training records providing objective evidence of the EM-LA Manager's designated staff required to maintain organizational core competency have successfully completed training to the new <i>Operational Awareness and Issues Management</i> procedure.	EM-LA Field Office Manager	01-30-2016
EM-LA 3-10	At a minimum provide training to the EM-LA designated staff on the following: <ul style="list-style-type: none"> • DOE O 226.1B, <i>Implementation of the Department of Energy Oversight Policy.</i> • DOE O 435.1, <i>Radioactive Waste Management.</i> • DOE O 422.1, <i>Conduct of Operations.</i> • DOE-STD-1063-2011, <i>Facility Representatives.</i> • Resource Conservation and Recovery Act. • TRUPACT Authorized Methods for Payload Control (TRAMPAC). • WIPP's Hazardous Waste Facility Permit, Attachment C, Waste Analysis Plan. • LANL Hazardous Waste Facility Permit. • Additional training will be identified on an as 	Review existing training program to confirm inclusion at a minimum the specified training requirements. Training records providing objective evidence of the EM-LA Field Office Manager's designated staff required to maintain organizational core competency have successfully completed this training.	EM-LA Field Office Manager	12-30-2016

	needed basis to ensure capabilities are commensurate with areas of responsibilities.			
EM-LA 3-11	Evaluate the current EM-LA organizational structure and identify specific staffing needs related to line management, technical discipline, current oversight functions, facility representatives, and overall organizational performance and effectiveness. This staffing analysis needs to include an evaluation of: - Facility Representatives - Senior Technical Safety Manager - Environmental compliance and permitting Manager - Contracting Officer	Submit workforce analysis and succession plan to DOE HQ. Transmittal of proposed organizational changes to EM-HQ for approval. Evidence that positions have been filled.	EM-LA Field Office Manager	Complete 12-23-2016
EM-LA 3-12	Within EM-LA, establish an organization to perform contractor oversight that is independent of the line management overseeing the EM-LA Legacy Waste Program.	EM Approval of Phase 2 EM-LA organization realignment and letter from EM-LA Manager to staff describing the roles, responsibilities, authorities and accountability (R2A2s). Develop Functional Responsibilities and Authorities with new responsibilities from EM-LA organization.	EM-LA Field Office Manager	12-31-2015 12-30-2015
EM-LA 3-13	Develop and revise technical qualifications to align with the DOE Technical Qualification Program, as necessary, for designated EM-LA personnel performing oversight of facility industrial and radiological safety, operations, environmental and waste management compliance, conduct of operations, engineering and nuclear safety.	New or revised EM-LA technical qualifications for oversight personnel.	EM-LA Field Office Manager	12-30-2015
EM-LA 3-14	Develop and implement an EM-LA Document Review procedure/plan specifying technical areas of review, for key and critical documents.	EM-LA Document Review procedure/plan.	EM-LA Field Office Manager	12-23-2015
EM-LA 3-15	Formally train current EM-LA designated personnel on the EM-LA Document Review procedure.	Training records indicating the current EM-LA Manager's designated staff required to maintain organizational core competency have read the Document Review procedure and attended the required briefing.	EM-LA Field Office Manager	01-29-2016

EM-LA 3-16	The EM-LA Field Office Manager issues a memorandum stating expectations for legacy related waste management activities and environmental compliance (RCRA), and responsibilities for performing oversight which will hold personnel accountable for implementing oversight activities.	Issuance of EM-LA Field Office Manager memorandum to EM-LA staff. Responsibilities, accountabilities and expectations will be included in EM-LA employee annual performance plans.	EM-LA Field Office Manager	11-30-2015
EM-LA 3-17	Individual Development Plans will include necessary training.	Revised <i>Individual Development Plans</i> and qualifications.	EM-LA Field Office Manager	11-30-2015
EM-LA 3-18	Perform initial evaluation and assessment of the LANS waste and environmental operations and implementation as it relates to DOE O 435.1 and 422.1 for EM-LA funded scope.	<i>Initial Draft Assessment and Evaluation Report.</i>	EM-LA Field Office Manager	Complete
EM-LA 3-19	Perform final evaluation and assessment of the LANS waste operations and implementation as it relates to DOE O 435.1 and 422.1 for EM-LA funded scope.	<i>Final Assessment and Evaluation Report.</i>	EM-LA Field Office Manager	09-30-2016
EM-LA 3-20	Evaluate LANS completion of corrective actions in response to the Office of Enforcement, Inspector General, Technical Assessment Team (TAT) and DOE ALB Phase 2 Report JONs for validation of effective completion related to EM-LA funded scope.	<i>Assessment Report.</i>	EM-LA Field Office Manager	11-30-2016
EM-LA 3-21	Perform an independent assessment review of oversight being performed by EM-LA of the contractor for EM-LA funded scope.	<i>Assessment Report.</i>	EM-LA Field Office Manager	09-30-2016

NA-LA Corrective Actions for JON 3

Number	Action	Deliverable	Action Owner	Due Date
NA-LA 3-1	Develop an EM-LA and NA-LA Memorandum of Understanding (MOU) outlining and documenting a mutually agreed to understanding of: accountabilities and authorities; infrastructure ownership; nuclear safety oversight; and, landlord functions related to the transition that will allow EM to assume direct	Approved MOU.	NA-LA Field Office Manager	09-30-2015

	management of prime contracts established for EM funded work at LANL, and associated regulatory agreements and requirements. This scope transferred from NNSA to EM is referred to as the EM LCCP.		
NA-LA 3-2A	NA-LA will support an NNSA-wide effort to redefine federal oversight protocols.	NNSA Supplemental Directive on Oversight	NA-LA Field Office Manager 11-15-2015
NA-LA 3-2B	NA-LA will revise the NA-LA Contractor Oversight Plan based upon the conclusions of the new Supplemental Directive on Oversight.	NA-LA Revised Contractor Oversight Plan.	NA-LA Field Office Manager 03-31-2016
NA-LA 3-3	Formally train NA-LA designated staff on the NA-LA Contractor Oversight Plan to obtain and demonstrate core competency for providing oversight.	Training records providing objective evidence the NA-LA Manager's designated staff required to maintain organizational core competency have successfully completed training to the Contractor Oversight Plan.	NA-LA Field Office Manager 06-30-2016
NA-LA 3-4	Develop an Annual Integrated Assessment Plan that addresses the NA-LA portion of the two phase approach discussed in the JON 3 Approach.	Approved Annual Integrated Assessment Schedule.	NA-LA Field Office Manager 01-29-2016
NA-LA 3-5	At a minimum provide training to the NA-LA designated staff on the following for enduring waste management: <ul style="list-style-type: none"> • NA-LA Contractor Oversight Plan • DOE O 226.1B, Implementation of the Department of Energy Oversight Policy. • DOE O 435.1, Radioactive Waste Management. • DOE O 422.1, Conduct of Operations. • Resource Conservation and Recovery Act. • WIPP Waste Acceptance Criteria. • TRUPACT Authorized Methods for Payload Control (TRAMPAC). • WIPP's Hazardous Waste Facility Permit, Attachment C, Waste Analysis Plan. • LANL Hazardous Waste Facility Permit. • Additional training will be identified on an as 	Training records providing objective evidence the NA-LA Manager's designated staff required to maintain organizational core competency have successfully completed this training.	NA-LA Field Office Manager 03-30-2016

	needed basis to ensure capabilities are commensurate with areas of responsibilities.		
NA-LA 3-6	Evaluate the current NA-LA organizational structure and identify specific staffing needs related to line management, technical discipline, current oversight functions, facility representatives, and overall organizational performance and effectiveness. This staffing analysis needs to include an evaluation of: <ul style="list-style-type: none"> - Facility Representatives - Senior Technical Safety Manager Qualification - Environmental Compliance - Senior Technical Advisor (position filled) 	<p><i>Staffing Gap Analysis.</i></p> <p>Transmittal of proposed organizational changes to NNSA-HQ for approval. Evidence of filling new and vacant positions.</p>	NA-LA Field Office Manager 9-29-2015
	Request from NNSA Headquarters additional resources identified from the Staffing Gap Analysis.		
NA-LA 3-7	The NA-LA Field Office Manager issues a policy stating oversight expectations for enduring waste management activities and environmental compliance (RCRA), and responsibilities for performing oversight which will hold personnel accountable for implementing oversight activities.	<p>Issuance of NA-LA Field Office Manager Memorandum to NA-LA staff. R2A2s will be included in NA-LA employee annual performance plans.</p>	NA-LA Field Office Manager 04-30-2016
NA-LA 3-8	Perform initial evaluation and assessment of the LANS enduring waste and environmental operations and implementation pertaining to enduring waste management as it relates to DOE O 435.1, 422.1 and operation of DOE O 435.1, LLW disposal facilities.	<p><i>Initial Draft Assessment and Evaluation Report.</i></p>	NA-LA Field Office Manager 3-30-2016
NA-LA 3-9	Perform final evaluation and assessment of the LANS enduring waste and environmental operations and implementation as it relates to DOE O 435.1, 422.1 and operation of DOE O 435.1, LLW disposal facilities.	<p><i>Final Assessment and Evaluation Report.</i></p>	NA-LA Field Office Manager 09-30-2016
NA-LA 3-10	Evaluate LANS completion of corrective actions in response to the DOE A1B Phase 2 Report JONs for validation of effective completion pertaining to enduring waste management and operation of DOE O 435.1, LLW disposal facilities.	<p><i>Evaluation Report.</i></p>	NA-LA Field Office Manager 11-30-2016

Judgement of Need (JON 24)

Conclusion 15: The Los Alamos National Security, LLC (LANS) Unreviewed Safety Question (USQ) process was ineffective in ensuring that important procedure changes related to processing of nitrate salts were adequately evaluated for impacts to the safety basis.

JON 24: The NNSA Los Alamos Field Office (NA-LA) needs to conduct an assessment of the LANS USQ program.

Approach

EM-LA will assist NA-LA with an independent assessment of the LANS Unreviewed Safety Question (USQ) process related to waste operations for legacy waste program and the enduring waste program. Performance of oversight and assessments of the LANS USQ process will be structured to verify adequacy of implementation and effectiveness of USQ reviews for the legacy waste program and the enduring waste program.

Predecessor Actions

- JON 13, LANS needs to strengthen documentation to include a detailed technical basis to justify decisions made regarding change control for procedures and processes for LA-MIN-02-V-001.
- JON 14, LANS needs to implement an effective engineering change control process that includes defensible technical bases to justify process modifications.
- JON 22: LANS needs to ensure that Unreviewed Safety Question (USQ) evaluators are organizationally independent of line management.
- JON 23: LANS needs to conduct retraining of USQ process evaluators/approvers focused on implementation of the Unreviewed Safety Question Determination (USQD) process consistent with DOE Guide 424.1-1B, Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements.

EM-LA Corrective Actions for JON 24

Number	Action	Deliverable	Action Owner	Due Date
EM-LA 24-1	EM-LA will staff the organization with experienced Nuclear Safety personnel.	Evidence of filling new and vacant positions.	EM-LA Field Office Manager	12-23-2016
EM-LA 24-2	EM-LA will assist NA-LA with an evaluation of the LANS USQ program for implementation and effectiveness.	Input to the NA-LA report of the evaluation.	EM-LA Field Office Manager	10-30-2015

EM-LA 24-3	EM-LA will assist NA-LA with an evaluation of the LANS USQ programs assisted by EM-LA for implementation and effectiveness.	Verify that the LANS corrective actions have been entered into their CA system and verify closure.	EM-LA Field Office Manager	06-30-2016
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NA-LA Corrective Actions for JON 24

Number	Action	Deliverable	Action Owner	Due Date
NA-LA 24-1A	NA-LA will perform an evaluation of the LANS USQ programs assisted by EM-LA for implementation and effectiveness.	NA-LA report of the evaluation.	NA-LA Field Office Manager	10-30-2015
NA-LA 24-1B	NA-LA will perform an evaluation of the LANS USQ programs assisted by EM-LA for implementation and effectiveness.	Verify that the LANS corrective actions have been entered into their CA system and verify closure.	NA-LA Field Office Manager	06-30-2016

Judgement of Need (JON 26)

Conclusion 17: The NNSA Los Alamos Field Office (NA-LA) oversight was ineffective in identifying weaknesses that contributed to this event.

JON 26: NA-LA needs to strengthen its oversight of Los Alamos National Security, LLC (LANS) Environmental and Waste Management Operations (EWMO) to ensure that:

- Resource Conservation and Recovery Act(RCRA) oversight is performed;
- Focus is placed on operational oversight in addition to budget/financial oversight;
- On the ground operational oversight expands beyond that performed by the Facility Representatives to include adequate subject matter expertise;
- NA-LA performs oversight of contractor activities related to waste certification in accordance with the WIPP Waste Acceptance Criteria (WAC);
- Roles and responsibilities for oversight of Waste Characterization, Reduction, and Repackaging Facility (WCRRF) operations are made clear;
- Staffing shortages are addressed, including:
 - Facility Representatives, short three fulltime equivalencies (FTEs);
 - Senior Technical Safety Manager, short two FTEs;
 - The staffing reduction in environmental compliance, down from five to three FTEs since 2011; and
 - Senior technical advisor position has been vacant since 2008.
- Formal verification that there is an effective LANS Contractor Assurance System (CAS) in place for environmental compliance.

Approach

See JON 3 Approach discussion.

Predecessor Actions

See predecessor actions for JON 3.

EM-LA Corrective Actions for JON 26

Number	Action
EM-LA 3-1 through 3-21.	See Actions for JON 3, Actions EM-LA 3-1 through EM-LA 3-21.

NA-LA Corrective Actions for JON 26

Number	Action
NA-LA 3-1 through 3-10.	See Actions for JON 3, Actions NA-LA 1 through NA-LA 10.

Judgement of Need (JON 27)

Conclusion 17: The NNSA Los Alamos Field Office (NA-LA) oversight was ineffective in identifying weaknesses that contributed to this event.

JON 27: NA-LA needs to verify that LANS has developed and implemented a DOE O 226.1B, Implementation of Department of Energy Oversight Policy compliant CAS.

Approach

The EM-LA and NA-LA Field Office Managers will evaluate the LANS Environment and Waste Management Organization (NNHO - EWMO) programs and management systems, including site assurance systems, for effectiveness of performance (including compliance with requirements). Such evaluations will be based on the results of operational awareness activities; assessments of facilities, operations, and programs; and assessments of the contractor's assurance system.

The EM-LA and NA-LA Field Office Managers will develop or revise assessment plans and schedules for planned assessments, focus areas for operational oversight, and reviews of the contractor's self-assessment of processes and systems for legacy waste program and the enduring waste program. Planned assessments will be identified and scheduled as part of the each Field Offices annual *Integrated Assessment Plan* and will be coordinated with planned contractor assessments.

Predecessor Actions

JON 25: LANS needs to develop and implement a fully integrated contractor assurance system that provides DOE and LANS confidence that work is performed compliantly, risks are identified, and control systems are effective and efficient.

EM-LA Corrective Actions for JON 27

Number	Action	Deliverable	Action Owner	Due Date
EM-LA 27-1	EM-LA will develop and implement a transitional phase assessment plan and schedule, identified in JON 3 EM-LA 3-7, for performing an initial assessment of the LANS CAS to DOE O 226.1B, <i>Implementation of Department of Energy Oversight Policy</i> focusing on implementation related to EM-LA environmental and waste operations.	Transitional Phase Annual <i>Integrated Assessment Schedule</i> .	EM-LA Field Office Manager	11-30-2015
EM-LA 27-1B	EM-LA will review the recently completed ADEP CAS	Contractor Officer Representative Letter.	EM-LA	10-15-2015

	assessment and issue a contractor officer representative letter to LANS directing them to undertake specific CAS related corrective actions.	Field Office Manager	
EM-LA 27-2	EM-LA will develop and implement a follow-on assessment plan and schedule, identified in JON 3 EM-LA 3-7, for performing a follow-on assessment of the LANS CAS to DOE O 226.1B, <i>Implementation of Department of Energy Oversight Policy</i> focusing on implementation related to EM-LA environmental and waste operations.	Follow-on Annual Integrated Assessment Schedule.	EM-LA Field Office Manager 10-15-2016
EM-LA 27-3	Develop an EM-LA Safety Culture Sustainability Plan.	Approved Safety Culture Sustainability Plan.	EM-LA Field Office Manager 12-30-2015

NA-LA Corrective Actions for JON 27

Number	Action	Deliverable	Action Owner	Due Date
NA-LA 27-1A	NA-LA will develop and implement a transitional phase assessment plan and schedule, identified in JON 3 NA-LA 3-4.	Transitional Phase Annual Integrated Assessment Schedule.	NA-LA Field Office Manager	10-15-2015
NA-LA 27-1B	NA-LA will review the recently completed ADEP CAS assessment and issue a contractor officer representative letter to LANS directing them to undertake specific CAS related corrective actions.	Contractor Officer Representative Letter.	NA-LA Field Office Manager	10-15-2015
NA-LA 27-1C	NA-LA will utilize new NNSA oversight approach and CAS validation to assess CAS effectiveness.	Report of multiparty peer review of LANL CAS effectiveness.	NA-LA Field Office Manager	8-31-2016
NA-LA 27-2	Utilizing information obtained from the CAS oversight validation, NA-LA will develop and implement a follow-on assessment plan and schedule, identified in JON 3 NA 3-4 for performing assessments of the LANS CAS to DOE O 226.1B, <i>Implementation of Department of Energy Oversight Policy</i> focusing on implementation	Follow-on Annual Integrated Assessment Schedule.		09-30-2016

	related to NA-LA environmental and waste operations.		
NA-LA 27-3	Revise a NA-LA Safety Culture Sustainability Plan.	Approved Safety Culture Sustainability Plan.	NA-LA Field Office Manager

Judgment of Need (JON 29)

Conclusion 18: The Federal roles, responsibilities and execution for oversight of the activities between the generator site transuranic (TRU) waste program (LANL) and the TRU Waste Central Characterization Program (CCP) were inadequate.

JON 29: NA-LA and CBFO needs to perform effective Federal oversight of CCP review and approval of waste management operating procedures/process changes, e.g., WCRRF glovebox operating procedure.

Approach

NA-LA action included in JON 3 action NA-LA 3-7, EM-LA action included in JON 3 action EM-LA 3-16.

The Memorandum of Agreement (MOA) between the NA-LA and EM-LA and CBFO will be revised to officially agree and clearly define R2A2s for the strategy to mutually support the safe and compliant characterization and disposition of legacy and newly generated transuranic waste at LANL. This will include defining the methods for performing effective oversight of CCP and LANL operations, including review of documentation (e.g. procedures, plans).

As shown in the CBFO CAP (see CBFO JON 6), the EM Deputy Assistant Secretary for Waste Management will develop and recommend to the Assistant Secretary for the Office of Environmental Management a policy on R2A2s for the management of the National TRU Program (including National TRU Program authority at TRU waste generator sites). Subsequent to the approval of a policy, the EM Deputy Assistant Secretary for Waste Management will work to have the policy reflected in DOE O 435.1, Radioactive Waste Management.

The CBFO Manager will revise and issue the CBFO Contractor Oversight Plan stating oversight expectations for mission related TRU waste management activities and environmental compliance (i.e. RCRA), and responsibilities for performing federal oversight of the certified program. This plan will include expectations for federal oversight of process changes that affect WIPP WAC compliance and verification of the incorporation into acceptable knowledge.

New MOAs will be developed between CBFO and the EM-LA and NA-LA Field Offices; the MOA's will clarify expectations and federal oversight roles and responsibilities. EM-R2A2s will be reflected in the appropriate EM-LA procedure(s).

Interfaces, Predecessors, Successors, and Parallel Actions

- JON 6: DOE Headquarters needs to review expectations documented in existing National TRU Program policy directives and take actions necessary to clearly assert that CBFO, as the manager of the WIPP repository, has the authority to conduct oversight of waste generator site programs and processes necessary to provide assurance that any activities that could impact characterization and certification of waste are verified to be compliant.
- JON 28: The National TRU Program needs to clarify NA-LA and CBFO expectations and oversight roles and responsibilities between the generator site TRU waste program (LANL) and the TRU waste CCP.

EM-LA Corrective Actions for JON 29

Number	Action	Deliverable	Action Owner	Due Date
EM-LA 29-1	EM-LA action included in JON 3 Action EM-LA 3-16.	See deliverable for JON 3 Action EM-LA 3-16.	EM-LA Field Office Manager	11-30-2015
EM-LA 29-2	Develop new memorandums of agreement (MOA) between EM-LA and CBFO to further define R2A2s and goals for disposition of TRU waste from LANL beyond the EM-1 National TRU Program delegation memo as described in the Phase 2 Radiological Release Report JON 6. The MOA's will clarify expectations and federal oversight roles and responsibilities, including TRU waste processing procedure revisions. See CBFO JON 28 Action 1.	Revised and approved MOA between EM-LA and CBFO.	EM-LA Field Office Manager	See CBFO Phase 2 CAP JON 6

NA-LA Corrective Actions for JON 29

Number	Action	Deliverable	Action Owner	Due Date
NA-LA 29-1	NA-LA action included in JON 3 Action NA-LA 3-7.	See deliverable for JON 3 Action NA-LA 3-7.	NA-LA Field Office Manager	04-30-2016
NA-LA 29-2	Develop new memorandums of agreement (MOA) between NA-LA and CBFO to further define R2A2s and goals for disposition of TRU waste from LANL beyond	Revised and approved MOA between NA-LA and CBFO.	NA-LA Field Office Manager	See CBFO Phase 2 CAP JON 6

	the EM-1 National TRU Program delegation memo as described in the Phase 2 Radiological Release Report JON 6. The MOA's will clarify expectations and federal oversight roles and responsibilities, including TRU waste processing procedure revisions. See CBFO JON 28 Action 1.	

Judgment of Need (JON 39)

Conclusion 23: Los Alamos National Security, LLC (LANS), EnergySolutions, LLC (ES) and NNSA Los Alamos Field Office (NA-LA) allowed the safety culture at the Los Alamos National Laboratory (LANL) to deteriorate within pockets of the organization as evidenced by the workers' feedback that they did not feel comfortable identifying issues that may adversely affect management direction, delay mission-related objectives, or otherwise affect cost or schedule. In addition, management failed to effectively respond to workers' issues regarding unexpected conditions, i.e., generation of smoke and foaming, encountered during waste processing activities.

JON 39: LANS and NA-LA need to develop and implement a more rigorous, effective integrated safety management system that embraces and implements the attributes of DOE G 450.4-1C, Integrated Safety Management Guide, including but not limited to:

- Demonstrated leadership in risk-informed, conservative decision making;
- Improved learning through error reporting and effective resolution of problems;
- Line management encouraging a questioning attitude without fear of reprisal and following through to resolve issues identified by the workforce.
- Consideration should also be given to some additional contract incentive associated with leading a culture change that fosters the desired work environment. The LANS, ES, and NA-LA stop work related processes need to ensure that response to issues raised by workers are based on sound, technical justification.

Approach

The EM-LA and NA-LA Field Office Managers will improve the effectiveness of the Integrated Safety Management System by addressing the importance of establishing and maintaining a safety culture, including addressing questioning attitude, demonstrated leadership in risk-informed decision making, reporting and effective resolution of problems, and improvement in nuclear safety cultural attributes embracing the Safety Culture Focus Areas in DOE G 450.4-1C, Integrated Safety Management Guide. The EM-LA and NA-LA Field Office Managers will perform a self-assessment to evaluate if improvement is needed with implementation of the ISM framework for EM-LA funded work scope, as well as NA-LA enduring waste management funded work scope.

Interfaces, Predecessors, Successors, and Parallel Actions

- Interface with LANS JON 39 corrective action response.

EM-LA Corrective Actions for JON 39

Number	Action	Deliverable	Action Owner	Due Date
EM-LA 39-1	Formally train EM-LA designated personnel to the following: <ul style="list-style-type: none">• DOE P 450.4A, <i>Integrated Safety Management Policy.</i>• DOE O 450.2, <i>Integrated Safety Management System.</i>• 10 CFR 851, <i>Worker Safety and Health Program.</i>	Training records indicating that EM-LA Field Office Manager's designated staff required to maintain organizational core competency have been trained.	EM-LA Field Office Manager	12-23-2015
EM-LA 39-2	Perform a self-assessment of the EM-LA safety culture using DOE G 450.4-1C, <i>Integrated Safety Management Guide</i> and the DOE ISM framework applicable to organizations involved in environmental and waste operations. Assessment will also include LANS performance against the LANS Safety Culture Sustainability Plan.	Assessment Report.	EM-LA Field Office Manager	11-30-2016
EM-LA 39-3	Develop an EM-LA Safety Culture Sustainability Plan.	Approved Safety Culture Sustainability Plan.	EM-LA Field Office Manager	12-30-2015

NA-LA Corrective Actions for JON 39

Number	Action	Deliverable	Action Owner	Due Date
NA-LA 39-1	Formally train NA-LA designated personnel to the following: <ul style="list-style-type: none">• DOE P 450.4A, <i>Integrated Safety Management Policy.</i>• DOE O 450.2, <i>Integrated Safety Management System.</i>• 10 CFR 851, <i>Worker Safety and Health Program.</i>	Training records indicating that NA-LA Field Office Manager's designated staff required to maintain organizational core competency have been trained.	NA-LA Field Office Manager	12-23-2015
NA-LA 39-2	Perform a self-assessment of the NA-LA safety culture using DOE G 450.4-1C, <i>Integrated Safety Management</i>	Assessment Report.	NA-LA Field Office	03-31-2016

	<i>Guide</i> and the DOE ISM framework applicable to organizations involved in enduring waste operations. Assessment will also include LANS performance against the LANS Safety Culture Sustainment Plan, U1402227 and an evaluation of the LANS System description for compliance with DOE O 450.4-1C.		Manager
NA-LA 39-3	NA-LA will revise the Nuclear Safety Culture Improvement Plan based on the results of the assessment identified in corrective action 39-2.	Approved Nuclear Safety Culture Improvement Plan.	NA-LA Field Office Manager 05-31-2016