

EA Operational Awareness Record		Report Number: OAR-EA-LANL-2017-01-30
Site: Los Alamos National Laboratory	Subject: Assessment of the Contractor Readiness Assessment of the Waste Characterization Reduction and Repackaging Facility	
Dates of Activity: 1/30/2017 – 2/3/2017	Report Preparer: Joseph Probst	
<p>Activity Description/Purpose: The Office of Enterprise Assessments (EA) assessed the conduct of operations and restart activities for Remediated Nitrate Salt (RNS) waste processing. During the Contractor Readiness Assessment (CRA) for restarting operations in the Waste Characterization Reduction and Repackaging Facility (WCRRF) at the Los Alamos National Laboratory (LANL), EA observed key demonstrations in the mockup with surrogate material and desktop evolutions; conducted interviews; and, reviewed the material condition of the WCRRF and the RNS storage location in Area G.</p> <p>EA also independently reviewed documentation and conducted additional observations and interviews to assess the NNSA Los Alamos (NA-LA) field office’s Line Management Review (LMR) supporting its recommendation to the Startup Authorization Authority (SAA) to authorize the Federal Readiness Assessment (FRA) for the WCRRF.</p>		
<p>Result:</p> <p>Performance of the Contractor Readiness Assessment Team</p> <p>The CRA team’s performance was competent and satisfactory, and the CRA team leaders provided good guidance, advice, and compensatory training to the team as needed. The CRA team’s findings were all pre-start findings in the following areas:</p> <ul style="list-style-type: none"> • Startup plan (the plan lacked acceptable operational performance criteria required to be met before starting RNS operations in WCRRF) • Operations procedure development and validation (the CRA team found procedures that could not be implemented as written) • Training (the basis for workers not being certified as fissile material handlers was not documented, and maintenance workers were not trained on vital safety systems) • The beta version of the LANL waste tracking system (WCATS) did not function consistently. <p>EA agrees with the CRA team’s pre-start findings but noted a few inconsistencies with the CRA report that the NA-LA field office agreed to address:</p> <ul style="list-style-type: none"> • The criteria for classifying findings in the plan differed from those found in FSD-115-001, R2, <i>Verification of Readiness to Start Up or Restart LANL Nuclear Facilities, Activities, and Operations</i>. This difference did not result in any misclassified findings. • The CRA Implementation Plan did not include the use of Form 2s to document pre- and post-start findings and the associated requirements violated. • No opportunities for improvement (OFIs) were documented in the CRA report. The CRA Implementation Plan stated that OFIs were to be “passed along to the facility, but not specifically called out in the report.” DOE-STD-3006-2010, <i>Planning and Conducting Readiness Reviews</i>, states: “[i]n addition [to findings], the [readiness assessment] final report should also identify as Opportunities for Improvement those items that are not findings[,] but that, if addressed, would lead to excellence in operations.” EA’s review of the CRA report found approximately 30 OFI-like statements. The LMR team leader also noted that OFIs were not identified and agreed to ensure that LANL evaluated the OFI-like items in the CRA report. LANL’s subsequent review of the CRA report identified 18 improvement items that they considered to warranted additional evaluation. 		

These 18 improvement items were entered into the LANL issues management system. None of these were prioritized to be accomplished before restarting WCRRF operations. EA agrees with the disposition of the OFI-like items from the CRA report.

Conduct of Operations

The CRA team noted the lack of effective procedure validation as a pre-start finding. EA also identified approximately a dozen procedure deficiencies and provided them to the CRA team for consideration in the CRA report.

Additionally, EA identified some deficient work practices, including a wire rope on the drum lift rubbing against sheet metal in the mockup facility, which could potentially have led to a fraying failure. Also, the operator had not reported residual surrogate material in the waste handling glovebox, as required by the procedure to ensure that the glovebox was free of residual material. These deficiencies were corrected during the CRA. LANL management appropriately discussed with its workers the need to report deficiencies for resolution and immediately began resolving deficiencies identified by its operators and the CRA team.

Feedback and Improvement

Overall, the corrective actions taken in response to the pre-start findings of the Management Self-assessment (MSA) for the CRA were satisfactory. Three pre-start actions were appropriately carried forward in a manageable items list.

Federal Oversight

The NA-LA field office has invested considerable resources in conducting LMRs; the WCRRF CRA is the fourth such effort. A revision of the *NA-00-LA Readiness Review Procedure* (MP 06.01), describing the LMR methodology, was in draft and not available for use. The team leader for the LMR cited the NA-LA Shadowing procedure, WI-00.04, as the basis for the process currently being followed to oversee the CRA. Several attributes of the Shadowing procedure make it inappropriate for an LMR:

- The Shadowing procedure is not expected to be used for an assessment the field office is required to perform. DOE Order 425.1D requires DOE to verify the contractor's readiness to proceed to the FRA: "In the verification process, DOE field element line management must document their actions to verify field element and contractor readiness, including; 1) Review of the closure of the contractor's [readiness assessment] findings, 2) Assessment of completion of defined prerequisites, and 3) Other assessments performed to ascertain readiness."
- The Shadowing procedure permits up to three assessors to be assigned to a review, but the LMR team for the WCRRF CRA had more than six people.

The NA-LA field office's LMR plan provided adequate direction to the LMR team to meet the requirements of DOE Order 425.1D. The LMR team ensured that deficiencies and potential improvement items noted during the CRA but not clearly documented in the CRA team's final report were entered into the LANL issues management system. The LMR team lead appropriately recommended the authorization of WCRRF FRA to the SAA based on the review of actions taken following the MSA and CRA and the prerequisites for the FRA, but this was not documented according to the review plan. Specifically, the LMR team did not "prepare a summary report documenting the results of the team's conclusions as a basis ... to proceed to allow the WCCRRF FRA to start." NA-LA management instead decided to provide a summary of its oversight of the MSA and CRA with its report issued after the FRA supporting the SAA approval for restarting operations.

OFI-NA-LA-01: NA-LA should reconsider formally documenting the results of the LMR team's oversight of the MSA and CRA (e.g., in an interim report(s)) to ensure the scope and findings from the line management review are clearly and accurately communicated to the FRA team.

EA Participants:	References (Interviews, Observations, and/or Documents):
<ol style="list-style-type: none"> 1. Joseph Probst (lead) 2. Eric Swanson 	<p>Documents:</p> <ol style="list-style-type: none"> 1. AREAG-WO-DOP-1383, TA-54 Area G RNS Waste Shipment Preparation 2. WCRR-FO-DOP-1193, R.0 WCRRF Waste Characterization Glovebox Annual Drum Lift Surveillance 3. WCRR-FO-DOP-1364, R.0,IPC-1, WCG Drum Lift Annual Inspection 4. WCRR-FO-DOP-1397, R.1, WCRRF Operator Rounds 5. WCRR-FO-DOP-1403, R.0, IPC-1, Opening and Closing WCRRF Vehicle Barrier Gate and Wire Ropes 6. WCRR-WO-DOP-1370, R.0, WCRRF WCG Vertical Drum Bag-Off and Closure 7. WCRR-WO-DOP-1376, R.4, WCRRF RNS Waste Treatment 8. WCRR-WO-DOP-1378, R.2, WCRRF RNS Waste Container Receipt and Handling 9. WCRR-WO-DOP-1379, R.0, WCRRF Waste Container Shipment Preparation 10. WCRR-WO-DOP-1380, R.2, IPC-1, WCRRF Waste Characterization Glovebox Parent Drum Operations 11. WCRR-WO-DOP-1381, R.1, WCRRF Waste Characterization Glovebox Daughter Drum Operations 12. WCRR-WO-DOP-1390, R.2, WCRRF RNS Waste Container Monitoring and Refrigerator Rounds 13. WCRR-WO-DOP-1396, R.1, WCRRF WCATS Operations for RNS Waste Treatment 14. WCRR-PLAN-1387, R.1, WCRRF RNS Waste Operations Startup Plan 15. OS-DO-RA-17-001P, Rev.1, Implementation Plan (IP) for the Restart of the WCRRF Contractor Readiness Assessment 16. OS-DO-RA-17-001R, Final Report for the Waste Characterization, Reduction, and Repackaging Facility (WCRRF) Contractor Readiness Assessment (CRA) dated 2/17/2017 17. Line Management Review [Plan] of TA-50 WCRRF and TA-54 Area G Operations Management Self-Assessment and Contractor Readiness Assessment dated 1/23/2017 <p>Interviews:</p> <ul style="list-style-type: none"> • CRA Team, Team Leader, Senior Advisor • WCRRF Line Managers, Operations managers, Operators, Radiation Protection personnel, and other procedure performance personnel • LMR Team Leader • WCRRF Facility Representative <p>Observations:</p> <p>Performance demonstrations and tabletop walk through of operating procedures.</p>
<p>Were there any items for EA follow up? ? <input checked="" type="checkbox"/>Yes <input type="checkbox"/>No</p>	

EA Follow Up Items:

Review during next Readiness Review:

- Revision to FSD-115-001, R2, *Verification of Readiness to Start Up or Restart LANL Nuclear Facilities, Activities, and Operations*
- Revision to MP 06.01, *NA-00-LA Readiness Review Procedure*