



Conduct of Operations Assessment at the West Valley Demonstration Project

November 2019

Office of Enterprise Assessments
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Acronyms

CFR	Code of Federal Regulations
CHBWV	CH2M HILL-BWXT West Valley, LLC
ConOps	Conduct of Operations
DOE	U.S. Department of Energy
DOE-WVDP	<i>DOE WVDP Field Office</i>
EA	Office of Enterprise Assessments
<i>FR</i>	<i>Facility Representative</i>
IV	Independent Verification
LO/TO	Lockout/Tagout
MWV	Management Workplace Visit
OA	Operator Aid
PPE	Personal Protective Equipment
PSO	Plant Shift Operator
RHWF	Remote Handled Waste Facility
WVDP	West Valley Demonstration Project

Conduct of Operations Assessment at the West Valley Demonstration Project June 17-21 and July 15-19, 2019

Summary

Scope:

This assessment evaluated the effectiveness and implementation of the elements of the West Valley Demonstration Project (WVDP) conduct of operations program, as implemented by the decommissioning contractor, CH2M HILL-BWXT West Valley, LLC (CHBWV). The elements assessed, selected from U.S. Department of Energy (DOE) Order 422.1, *Conduct of Operations*, include:

- Organization and Administration
- Shift Routines and Operating Practices
- Control Area Activities
- Investigation of Abnormal Events, Conditions, and Trends
- Notifications
- Lockout and Tagouts, and Caution Tags
- Independent Verification
- Logkeeping
- Turnover and Assumption of Responsibilities
- Technical Procedures
- Operator Aids
- Component Labeling.

This assessment also evaluated the DOE WVDP Field Office processes for conducting oversight of operational activities at WVDP. This assessment was conducted at the request of the DOE WVDP Field Office to help identify and resolve any significant issues.

Significant Results for Key Areas of Interest:

Overall, CHBWV adequately implements the conduct of operations program at WVDP; however, two deficiencies were identified. In addition, the DOE Field Office is effectively conducting oversight of operational activities at WVDP.

CHBWV's Conduct of Operations Program

Under the Organization and Administration element, CHBWV's monitoring and self-assessment program lacks rigor and critical in-depth examination of the activities observed. With regard to CHBWV's operating practices program, operating practices were not consistently executed in accordance with CHBWV procedures, and operators involved did not exhibit a sufficient questioning attitude to challenge the conditions observed.

WVDP Oversight

Overall, the DOE WVDP Field Office has implemented an effective program for, and is actively and effectively conducting, oversight of operational activities at WVDP. The DOE WVDP Field Office provides the results to CHBWV management to improve safety and mission performance.

Best Practices and Findings

No best practices or findings were identified as part of this assessment.

Follow-up Actions:

No follow-up activities are planned.

Conduct of Operations Assessment at the West Valley Demonstration Project

1.0 INTRODUCTION

The U.S. Department of Energy (DOE) Office of Nuclear Safety and Environmental Assessments, within the independent Office of Enterprise Assessments (EA), conducted an assessment of the effectiveness of selected elements of the conduct of operations (ConOps) program at the West Valley Demonstration Project (WVDP). The purpose of this assessment was to evaluate the performance of ConOps, as implemented by the decommissioning contractor, CH2M HILL-BWXT West Valley, LLC (CHBWV), at WVDP. The assessment team conducted the onsite portion of this assessment on June 17-21 and July 15-19, 2019.

The DOE WVDP Field Office (DOE-WVDP) requested that EA assess the effectiveness and implementation of selected elements of the CHBWV ConOps program, processes, and procedures, in accordance with the requirements of DOE Order 422.1, *Conduct of Operations*. EA also assessed DOE-WVDP processes for conducting oversight of operational activities at WVDP. This scope was in accordance with the *Plan for the Office of Enterprise Assessments Assessment of Conduct of Operations Processes at the West Valley Demonstration Project, June – July 2019*.

WVDP was created in 1980 to demonstrate the vitrification of high-level liquid radioactive waste generated by nuclear fuel reprocessing into a robust, impermeable waste form suitable for disposal. Having completed the vitrification, WVDP is currently undergoing decontamination and decommissioning, with the current focus on demolishing ancillary facilities around the Main Plant Process Building. Additional decontamination and decommissioning efforts include the packaging of legacy waste for offsite disposal.

2.0 METHODOLOGY

The DOE independent oversight program is described in and governed by DOE Order 227.1A, *Independent Oversight Program*, which is implemented through a comprehensive set of internal protocols, operating practices, assessment guides, and process guides. This report uses the terms “best practices, deficiencies, findings, and opportunities for improvement” as defined in DOE Order 227.1A.

As identified in the assessment plan, this assessment considered requirements related to DOE Order 422.1, and the criteria and lines of inquiry presented in the following objectives from EA Criteria and Review Approach Document 30-02, *Review of Conduct of Operations Criteria Review and Approach Document*, Rev. 0:

- Organization and Administration
- Shift Routines and Operating Practices
- Control Area Activities
- Investigation of Abnormal Events, Conditions, and Trends
- Notifications
- Lockout and Tagouts (LO/TOs), and Caution Tags
- Independent Verification (IV)
- Logkeeping
- Turnover and Assumption of Responsibilities
- Technical Procedures
- Operator Aids (OAs)
- Component Labeling.

The assessment team also reviewed the remaining objectives included in Criteria and Review Approach Document 30-02; however, due to the limited number of WVDP activities occurring during the onsite assessment periods, the assessment team did not have sufficient opportunities to observe the following objectives in a manner that would support a conclusion. As such, the following objectives are not included in this report:

- Communications
- On-Shift Training
- Control of Equipment and System Status
- Control of Interrelated Processes
- Required Reading
- Timely Instructions/Orders.

The assessment team examined key documents, including system descriptions, work packages, procedures, manuals, analyses, policies, and associated records; interviewed key personnel responsible for developing and executing the associated programs; observed various operations and support activities; and walked down relevant portions of the WVDP facility. The members of the assessment team, the Quality Review Board, and management responsible for this assessment are listed in Appendix A.

There were no items for follow-up during this assessment.

3.0 RESULTS

3.1 Organization and Administration

The objective of this portion of the assessment was to evaluate the policies, programs, and procedures that define CHBWV's operations organization.

The assessment team reviewed the policies, programs, and procedures that defines CHBWV's operations organization, and interviewed key management and staff. CHBWV has established and implemented written policies that effectively implement a Conduct of Operations program, which includes clearly defined responsibilities, authorities, and accountability across the organization. Also in place is a monitoring and self-assessment program, documented in CHBWV Executive Management Directive EMD-010, Rev. 1, *Management Workplace Visit Program*, dated September 1, 2015, which includes expectations for regular Management Workplace Visits (MWV) by supervisors. However, based on a review of the documentation for 299 self-assessments and MWVs performed since 2017, and observations of two MWVs conducted by CHBWV supervisors, the assessment team determined that, contrary to DOE O 422.1, CHBWV's self-assessment program lacks rigor and does not sufficiently perform self-critical and in-depth examinations of activities observed.

Specifically, CHBWV's self-assessment program is implemented by assignment of various managers and supervisors to assess Conduct of Operation elements. These managers assess various activities at the job site, using a checklist approach in which each line of inquiry is rated as either satisfactory (SAT), unsatisfactory (UNSAT), or not applicable (NA), or "Yes" (for following the procedure), "No" (for not following the procedure), or "NA." While the self-assessments provide a comment field, it was rarely utilized. For the MWVs reports reviewed, and the two that were observed, inconsistencies were noted indicating that CHBWV can improve its self-questioning culture and follow-up to ensure lessons-learned are applied in an appropriate and timely manner. Similarly, for the MWV reports reviewed, and the two that were observed, CHBWV can improve its promotion of a self-questioning culture, and to follow up to ensure that lessons-learned are applied and that significant insights and expectations are widely communicated. (See **Deficiency D-CHBWV-1**).

While overall CHBWV appropriately incorporates the relevant requirements of DOE Order 422.1 in organizing and administrating their operations program, their monitoring and self-assessment program needs additional attention.

3.2 Shift Routines and Operating Practices

The objective of this portion of the assessment was to evaluate CHBWV's processes and procedures for shift routines and operating practices.

CHBWV conducts plan-of-the-day (POD) meetings each workday. The assessment team observed seven POD meetings, which effectively communicated the day's activities. The various CHBWV sub-organizations were represented, and the representatives clearly and succinctly reported on their schedule of activities for the day. The CHBWV sub-organizations willingly supported each other, sharing resources to achieve the day's objectives. Following the 6:30 a.m. POD meeting, the assessment team observed start-of-day briefs that were held by individual work groups. The assessment team concluded that the POD meetings and start-of-day briefs were effective in communicating each day's planned work, ensuring that CHBWV staff members were alerted to significant activities, and informing the staff of changing conditions.

The assessment team observed supervisors assigning operators tasks at five start-of-shift briefings. The briefs were performed in a thorough and deliberate manner. The briefings were appropriately interactive, with the operators engaging with their supervisors in discussing the day's activities.

The assessment team observed 10 evolutions, including operator rounds, pre-job briefs, system valve lineups, ion exchange resin replacement, and locked high radiation area entry. Operators were knowledgeable of their duties and responsibilities. During procedures containing critical steps, the procedures were appropriately performed with the procedure in hand, as required for such procedures. However, as discussed below, the assessment team observed five instances where operating practices were not consistently executed in accordance with CHBWV procedure SOP 00-52, *Conduct of Operations*, Section 5.2, "Shift Routines and Operating Practices," which incorporates the relevant requirements from DOE Order 422.1. In addition, the operators involved did not exhibit a sufficient questioning attitude to challenge the conditions observed. (See **Deficiency D-CHBWV-2.**)

In some instances, personal protective equipment (PPE) requirements were not met, which could have resulted in personnel injury:

- When conducting rounds, an operator entered an area wearing only one set of hearing protection; however, signage stated that double hearing protection was required. The operator stated that double hearing protection was not needed since the rounds being conducted in that area only took a short time to accomplish.
- An operator decontaminating a piece of equipment prior to maintenance did not wear work gloves under the anti-contamination gloves, contrary to the PPE requirements stated in the industrial work permit.
- Operators adding resin to an ion exchange column did not continuously wear goggles or face shields, and wore disposal latex gloves instead of the required rubber work gloves, contrary to the PPE requirements stated in the activity's procedure.

In other instances, radiological protection standards were not met, which could have resulted in the spread of contamination:

- Operators performing valve manipulations on skid “A” in the LLW2 facility did not comply with the procedure requirement to wear disposable sleeves when reaching across a contamination boundary to manipulate valves.
- An operator loading resin into liquid waste skid “A” in the LLW2 facility did not adhere to radiological buffer boundaries and crossed the boundary without the required frisking or personal contamination monitor scan.

Overall, CHBWV supervisors effectively communicate shift expectations and standards to ensure that operators are informed of conditions and operate equipment properly. Operators are knowledgeable in their areas of responsibility. However, the assessment team observed five instances where operating practices were not consistently executed in accordance with requirements. Following discussion with CHBWV management about these instances, CHBWV management took action to reinforce the need to meet requirements.

3.3 Control Area Activities

The objective of this portion of the assessment was to evaluate CHBWV’s processes and procedures for control area activities.

Control area activities are conducted in accordance with SOP 00-52, Section 5.3, “Control Area Activities.” The assessment team observed 10 activities in 2 different control areas, including watch turnovers and start-of-shift briefs. The observed control areas were the Plant Shift Operator (PSO) Hub, the only permanently established control area, and the Remote Handled Waste Facility (RHWF), which establishes a temporary control area when remote handling activities are in progress. Neither the PSO Hub nor the RHWF control areas can be considered operating control rooms; however, given the significance of activities at the time of the observations, appropriate standards were exercised commensurate with the activities in progress. An appropriate level of professionalism and discipline was demonstrated, command and control was evident, and distractions were held to a minimum. Access was effectively controlled in both areas, with personnel requesting permission prior to entry. Operators properly responded to alarm conditions and made appropriate public address system announcements in response to abnormal conditions. Operators used procedures and questioned directions when appropriate; however, three-way communication was not used when directions were being given, as required by SOP 00-52, Section 5.4.6, “Oral Instructions and Informational Communications.”

Overall, CHBWV executed control area activities effectively and in accordance with site procedures. Supervisors and operators were observed maintaining a professional atmosphere and executing procedures effectively.

3.4 Investigation of Abnormal Events, Conditions, and Trends

The objective of this portion of the assessment was to evaluate CHBWV’s processes and procedures for investigating events to determine their impact and prevent recurrence.

The assessment team reviewed CHBWV’s investigations of the 13 most recent events preceding this EA assessment; the results indicated that appropriate responses were taken, including initial reporting, tracking, causal analysis, corrective actions, trending, and final reporting. Following an investigation into the causes for numerous minor injuries related to slips, trips, and falls, CHBWV implemented, in addition to other corrective actions, an encouraged, but not required, practice of beginning each work day with stretching activities prior to the start of work activities. Reviewed documents indicate that a significant

percentage of the workforce participates in this program, and that it has been credited in assisting in reducing minor injuries.

The process for investigating abnormal events, conditions, and trends is established in accordance with SOP 00-52, Section 5.6, “Investigation of Abnormal Events, Conditions, and Trends,” which adequately incorporates the relevant requirements from DOE Order 422.1. The process for investigating events to determine their impact and prevent recurrence is adequately implemented by WVDP-242, *Event Investigation and Reporting Manual*, and other procedures identified in WVDP-106, *West Valley Demonstration Project (WVDP) Conduct of Operations Applicability Matrix*.

3.5 Notifications

The objective of this portion of the assessment was to evaluate CHBWV’s processes and procedures for notifications.

The assessment team reviewed three months of logbook entries for issues that might require a notification and found the logs to be sufficiently thorough in detailing occurrences during the operating shift. In addition, the assessment team reviewed issues that could have triggered a notification against reporting criteria and determined that CHBWV adequately evaluated each of them. The WVDP Facility Manager demonstrated a thorough knowledge of the notification process. The WVDP Plant Shift Operations Supervisor and Off-Shift Grade 9 PSO Operators/Incident Commanders undergo training/retraining on notification requirements, which provides a suitable level of information to enable them to perform their duties.

During this assessment, CHBWV activated the emergency notification system three times in response to severe weather threats. Throughout these activations of the emergency notification system, the CHBWV operations staff appropriately evaluated the situations and effectively made the requisite notifications and protective actions. This observed performance provides confidence that CHBWV is implementing requisite notifications.

3.6 Lockout and Tagouts, and Caution Tags

The objective of this portion of the assessment was to evaluate CHBWV’s processes and procedures that implement the LO/TO program.

The assessment team observed CHBWV personnel adequately performing LO/TO activities, applying caution tags in accordance with established procedures, and demonstrating appropriate attention to detail. Subsequent interviews with these personnel indicated that they understood the importance of correctly de-energizing equipment prior to work. In preparation for an inspection of the fire water tank, CHBWV operators performed the LO/TO with proper system isolation, application of locks and tags on required components, and adherence to the required elements of isolation confirmation and IV.

Operators at the RHWF properly applied personnel protective locks and tags for workers repairing a remote handling device inside a high radiation area. In addition, the CHBWV supervisor appropriately implemented a process referred to as “designated worker,” which allowed an individual outside the high radiation contaminated area, at the specific direction of the workers being protected, to apply and remove personnel protection locks and reposition breakers that were providing protection. This process provided an effective way to proceed with troubleshooting and repairs while avoiding the challenges involved with workers exiting and reentering the high radiation contaminated area.

3.7 Independent Verification

The objective of this portion of the assessment was to evaluate CHBWV's processes and procedures for IV.

CHBWV operators involved with the IV activities associated with the fire water tank LO/TO, discussed in Section 3.6, understood and demonstrated compliance with the restrictions of time and distance. The operators performing the IV activities were thorough and verified that the component label and position configuration matched the expected label and position indicated on the form. Subsequent interviews with these personnel indicated that they understood the importance of IV.

3.8 Logkeeping

The objective of this portion of the assessment was to evaluate CHBWV's processes and procedures for logkeeping.

The assessment team observed operators properly taking logs, both on log sheets requiring specific readings as well as in logbooks, which required narrative entries. Operators demonstrated an appropriate level of knowledge with the systems and areas in which they conducted rounds and recorded log readings. The operators performed their rounds diligently, taking note of, and correcting, any abnormal conditions and reviewing their readings for any abnormal trends. Specifically, the operators compared log readings to established minimum and maximum levels, and to previous days' readings for any changes or trends. Log entries were circled in red when outside the expected operating range, and corrections were made with single line strikeouts and initials. Three months of logbook entries were reviewed and found to be appropriately entered, meeting procedural standards and expectations established for such entries. The assessment team observed that CHBWV supervisors reviewed log sheets and logbooks as established in site procedures, and routinely reinforced logkeeping standards with operators.

Overall, CHBWV logkeeping is diligently performed by knowledgeable operators in a manner that satisfactorily records data and documents events and equipment operations in accordance with procedure SOP 00-52, Section 5.11, "Logkeeping." Corrections are made appropriately, and supervisory reviews are performed and documented.

3.9 Turnover and Assumption of Responsibilities

The objective of this portion of the assessment was to evaluate CHBWV's processes and procedures for turnover and assumption of responsibilities.

The assessment team observed operators effectively perform turnover in the PSO Hub on three occasions. The oncoming shift personnel begin turnover sufficiently early to allow for thorough review of logs and other documents. The operators clearly communicated evolutions completed during the previous shift, and any evolutions that needed completion during the upcoming shift. An effective exchange of information allowed the oncoming shift to accept the watch with no concerns. Turnovers were interactive with all operators engaged and showing a questioning attitude to ensure understanding of site conditions prior to assuming the watch.

Turnover and assumption of responsibilities were appropriately conducted in accordance with CHBWV procedure SOP 00-52, Section 5.12, "Turnover and Assumption of Responsibilities."

3.10 Technical Procedures

The objective of this portion of the assessment was to evaluate CHBWV's processes and procedures for the development, maintenance, and use of technical procedures.

The assessment team's review of 15 operating and administrative procedures identified that most were clearly written and followed the procedure writing guidance established by the site. The use of critical steps was appropriately implemented, and those procedures were classified as continuous use, as required for such procedures. The assessment team also reviewed 67 open procedure change requests that are tracked by the site, and none were overdue at the time of review.

Although most procedures reviewed had the appropriate level of technical guidance for implementation, one observed evolution was not adequately driven by the procedure. This lack of procedural guidance contributed to an evolution that allowed operators to take actions that were contrary to good operating practices. This evolution, which added resin to an ion exchange column, lacked sufficient direction in the prerequisites to address actions needed if an alternate resin was used. Specifically, the procedure lacked guidance regarding the need for a pre-job brief and a review of the resin safety data sheet (SDS). The operator stated that the evolution was frequently conducted, that the supervisor had the SDS, and that the evolution was adequately controlled by the procedure. In addition, the resin mix being used was directed by an e-mail from the system engineer. Although the procedure did not address this approach, the supervisor stated that the approach was the accepted practice by which the system engineer altered the resin beds based on the analysis of the water effluent samples. There was no verification that the e-mail was current so as to ensure configuration control over the resin mixture. The assessment team reviewed the SDS for the resin and identified that the operators were not wearing the appropriate PPE required by the SDS. The lack of procedure formality by which the process was routinely controlled potentially impacted the safety of the operators and precluded an appropriate level of configuration control over the resin mix. Therefore, the procedure did not provide sufficient guidance, and the operators lacked a questioning attitude to stop the evolution and address the issues. (See **Deficiency D-CHBWV-2.**)

Overall, CHBWV has established appropriate standards in procedure SOP 00-52, Section 5.16, "Technical Procedures," for the development, maintenance, and use of technical procedures. Procedures reviewed were generally well written, and procedure change requests were tracked and completed in a timely manner. Although most of the evolutions observed were conducted in accordance with procedure expectations, one instance was observed in which operator performance did not meet requirements as set forth in CHBWV's procedures; following discussion with CHBWV management about this instance, CHBWV management took action to reinforce the need to meet procedure requirements.

3.11 Operator Aids

This section addresses the assessment of processes and procedures for the development, maintenance, and use of OAs.

The assessment team observed that OA indexes are appropriately maintained in the PSO Hub and in the RHWF operating aisle. The PSO Hub and RHWF OA indexes contained, respectively, 19 and 11 OAs that were properly entered and had received a periodic supervisor review as required by SOP 00-52. The OAs posted in the field were in good condition and current. One of the OAs in the PSO index had been removed from the index but was still found posted in the field, and there were four instances where items were posted in the field that were not appropriately marked and annotated in the PSO Hub's OA index. These items were acknowledged and immediately corrected by the CHBWV staff. The RHWF had no instances with uncontrolled OAs.

Overall, CHBWW posts and maintains OAs in accordance with SOP 00-52, Section 5.17, “Operator Aids.”

3.12 Component Labeling

The objective of this portion of the assessment was to evaluate CHBWW’s processes and procedures for component labeling.

CHBWW adequately implements a graded approach to labeling components scheduled for deactivation and closure by only replacing labels, as necessary, to ensure safe operation and essential surveillance and maintenance. The WVDP Facility Manager is ultimately responsible for the component labeling program and works effectively with operations staff to ensure that procedural requirements are followed. The WVDP Facility Manager appropriately appointed a label coordinator to supervise the initial labeling of all equipment in accordance with SOP 00-30, *System and Component Labeling*. Inspections of five WVDP facilities confirmed that CHBWW personnel had adequately identified and labeled requisite components. CHBWW personnel effectively ensure administrative control of component labels, including promptly identifying and replacing lost or damaged labels, prohibiting unauthorized or incorrect labels, and controlling temporary labels. Document reviews, interviews, inspections, and observations indicate that CHBWW is appropriately performing effective component labeling.

3.13 DOE Field Element Oversight

The objective of this portion of the assessment was to evaluate DOE-WVDP processes for conducting oversight of operational activities at WVDP.

DOE-WVDP provides leadership, direction, contract management, and oversight for all aspects of WVDP. In accordance with DOE Order 422.1, DOE-WVDP has implemented an effective Facility Representative (FR) program to provide CHBWW and DOE-WVDP line managers with accurate, objective information on the effectiveness of contractor work performance and practices. DOE-WVDP has one full-time FR and one in training, which adequately meets staffing needs. The qualification process for FRs follows the applicable DOE requirements, resulting in technically competent FRs who are able to effectively carry out their oversight responsibilities. The FRs’ main responsibility is to conduct broad-based observation and assessment of CHBWW operations and activities that are considered important to maintaining the safety of workers and the public. The assessment team reviewed 15 recent FR oversight records and accompanied the FR on three sets of rounds, and found the records to be appropriately detailed and the rounds effective in observing ongoing activities. In addition, the FR oversight records reviewed detailed similar observations to that of the assessment team, discussed above.

DOE-WVDP oversight of operational activities at WVDP is augmented by support contractor personnel, and by the Office of Environmental Management’s Consolidated Business Center (EMCBC), to support DOE-WVDP’s oversight activities; however, while DOE-WVDP is conducting adequate oversight of CHBWW’s operations, it relies on external subject matter expertise, supplied by organizations like EMCBC, to provide additional oversight capabilities. Additional staffing would allow DOE-WVDP the opportunity to expand its in-depth oversight of the WVDP contractor, especially as consideration is being given to rebidding the contract to complete the demolition and decontamination of the WVDP site.

Overall, DOE-WVDP is meeting the requirements of DOE Order 422.1 and has implemented an effective FR program for conducting oversight of operational activities at WVDP. DOE-WVDP actively and effectively conducts oversight of WVDP operational activities and provides the results to CHBWW management to improve safety and mission performance.

4.0 BEST PRACTICES

There were no best practices identified as part of this assessment.

5.0 FINDINGS

There were no findings identified as part of this assessment.

6.0 DEFICIENCIES

Deficiencies are inadequacies in the implementation of an applicable requirement or standard. Deficiencies that did not meet the criteria for findings are listed below, with the expectation from DOE Order 227.1A for site managers to apply their local issues management processes for resolution.

CH2M HILL-BWXT West Valley, LLC

- **D-CHBWV-1:** CHBWV’s self-assessment program lacks rigor and critical in-depth examination of the activities observed; specifically, the reviewed self-assessments and MWVs demonstrated a lack of a self-questioning attitude, insufficient follow-up to ensure that lessons-learned are applied, and a need to more fully ensure that significant CHBWV senior management insights and expectations are widely communicated. (DOE Order 422.1, Attachment 2, Section 2.a, *Organization and Administration*)
- **D-CHBWV-2:** CHBWV’s operating practices were not consistently executed in accordance with CHBWV procedure SOP 00-52, *Conduct of Operations*, Section 5.2, “Shift Routines and Operating Practices,” which incorporates the relevant requirements from DOE Order 422.1, and the operators involved did not exhibit a sufficient questioning attitude to challenge the conditions observed. (DOE Order 422.1, Attachment 2, Section 2.b, *Shift Routines and Operating Practices*)

7.0 OPPORTUNITIES FOR IMPROVEMENT

There were no opportunities for improvement identified as part of this assessment.

Appendix A Supplemental Information

Dates of Assessment

Onsite Assessment: June 17-21 and July 15-19, 2019

Office of Enterprise Assessments (EA) Management

Nathan H. Martin, Director, Office of Enterprise Assessments
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