



DOE-ED

United States Government

Department of Energy

memorandumCarlsbad Field Office
Carlsbad, New Mexico 88221

DATE: March 28, 2005
 REPLY TO
 ATTN OF: CBFO:QA:MPN:LC:05-0908:UFC:2300
 SUBJECT: CAR 05-013 Closure Package
 TO: Jeff Snook, DOE-ID



The Carlsbad Field Office (CBFO) performed verification of corrective action completion for Corrective Action Report (CAR) 05-013. The corrective actions taken and implemented for this CAR have been evaluated by the review of the objective evidence submitted in the CAR closure package transmitted via letter ED-AMWTP-016-2005, dated March 15, 2005. The results of the evaluation indicate that AMWTP has addressed the issues identified in CAR 05-013 and has implemented the corrective actions for this issue.

The CAR Continuation Sheet documenting corrective action completion and closure of CAR 05-013 is attached.

If you have questions or comments, please contact me at (505) 234-7483

Martin P. Navarrete
 Senior Quality Assurance Specialist

Attachments

cc w/attachments:
 A. Holland, CBFO *ED
 K. Watson, CBFO ED
 J. Wells, DOE-ID ED
 M. Eagle, EPA ED
 E. Feltcorn, EPA ED
 R. Joglekar, EPA ED
 S. Zappe, NMED ED
 S. Holmes, NMED ED
 E. Schweinsberg, BNFL ED
 E. Dumas, BNFL ED
 A. Dobson, BNFL ED
 D. Winters, DNFSB ED
 A. Pangle, CTAC ED
 C. Riggs, CTAC ED
 L. Price, LANL ED
 CBFO M&RC
 CBFO QA File
 WIPP Operating Record, MS 486-06

*ED denotes electronic distribution

050368



CBFO CORRECTIVE ACTION REPORT

(continuation sheet)

1. CAR No.: 05-013

2. Activity No.: A-05-08

3. Page ___ of ___

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Block # 18: Verification of Corrective Action Completion

The corrective actions taken and implemented for this CAR were evaluated based on closure documentation package transmitted to CBFO via letter number ED-AMWTP-016-2005, dated March 15, 2005, the corrective actions and objective evidence reviewed and found to be satisfactory are as follows:

Remedial Action:

An investigation was conducted on 3/4/05 – 3/6/05 to determine the facts associated with a Corrective Action Report (CAR) identified during the AMWTP Audit, A-05-08. The investigation was conducted by the AMWTP Operations Manager (Patrick Daly), and the AMWTP Deputy Operations Manager (Ken Harrawood). Assisting in the investigation was the AMWTP TRU Programs Manager (Eric Schweinsberg). The purpose of the investigation was to determine the extent of the conditions and the root cause.

Verification Results:

Through review of closure documentation package, verified that AMWTP accomplished an investigation of the condition reported in CAR-03-013. The results of this investigation are documented below.

Investigation and extent of condition:

The investigation concluded that this condition has not affected any waste that has been shipped to WIPP. The investigation also concluded that there is variability in the audio recording of characterization data among operators. The investigation focused on two main topics, but also touched on a secondary concern uncovered during the investigation. The main areas reviewed were 1) RTR scans that were less than adequate with regards to the audio recordings, and 2) Failure to explicitly identify prohibited items on the RTR audio recording. The secondary issue reviewed was the processing of waste without adequate Acceptable Knowledge (AK).

Three drums were reviewed during the WIPP Certification Audit, and were identified as having deficient recordings. The drum numbers were 10002936, 10004014, and 10021668. The first 2 drums were deficient in as much as they did not have adequate audio discussions/recordings during the actual scan. The third drum was deficient due to a failure to verbally acknowledge a prohibited item (sealed container > 4 liters) on the audio recording.

Investigation into specific containers:

10002936 – Processed on 6/5/04 by Brent Dial

Joe Poirier, Level I Validation Team Leader, conducted a review of the tape on 3/5/05. His review confirmed that the audio recording contained less than adequate information. There was insufficient discussion recorded during the scan to allow a reviewer to confirm that the RTR operator was satisfying all procedural requirements. However, review of the electronic RTR Analysis report indicates adequate written documentation of the scan. All required fields were completed, and no prohibited items were identified. The comments section indicated that the "Waste appears to be graphite molds." A Visual Examination (VE) of the drum contents supported the conditions described in the written analysis report. This VE event was completed in front of the auditors as one of the scheduled demonstrations on 3/2/05.

10004014 – Processed on 4/14/05 by Sam Lewis

Joe Poirier, Level I Validation Team Leader conducted a review of the tape on 3/5/05. His review indicated that the audio recording did contain adequate information. There was sufficient discussion recorded during the scan to allow a reviewer to confirm that the RTR operator was satisfying all procedural requirements. All prohibited items were recorded on the audiotape. Additionally, review of the electronic RTR Analysis Report indicates adequate written documentation of the scan. All required fields were completed, and several prohibited items were identified. Prohibited items included numerous "D" size batteries, an

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Investigation into specific containers: (continued)

aerosol can that could not be verified as punctured, and suspected lighting ballasts with potential PCBs. As a result of these prohibited items, this drum was correctly dispositioned as "Facility Treatment, requiring Special Case Waste processing." The original analysis report is attached. Clarification is needed to understand why this container was cited (i.e., as an example of adequate or inadequate verbal record).

10021668 – Processed on 8/20/05 by Dianna Moore

Joe Poirier, Level Validation Team Leader, conducted a review of the tape on 3/5/05. His review confirmed that the audio recording contained less than adequate information. There was insufficient discussion recorded during the scan to allow a reviewer to confirm that the RTR operator was satisfying all procedural requirements. However, review of the electronic RTR analysis Report indicates adequate written documentation of the scan. All required fields were completed, and two prohibited items were identified (possible lead liner and a sealed container >4 liters). Also, a recommended change in IDC was identified and a corresponding NCR was generated (NCR #9328). This analysis was not adequate and was demoted back to Operations for rework when it was reviewed by an ITR. The required rework is yet to be completed. Contributing to the questions about the IDC was the relative lack of information associated with this waste. When this drum was processed, BNFL did not have adequate AK for this waste stream. At that time, Operations Shift Team Leaders contacted the TRU Program Manager, Eric Schweinsberg, to request AK data. They were directed by Mr. Schweinsberg to cease processing these waste streams until adequate AK could be obtained.

Additional areas investigated:

Operations Shift Manager, Brian Warner, reviewed tapes for an additional 10 drums selected at random, performed by seven different operators. The operators made appropriate comments in all cases. The operators performing the debris drum exams did describe the waste appropriately. The drums reviewed were:

10015066 – Griff Nuttall – 4/3/04
 10014773 – Sam Phillips – 4/29/04
 10012624 – Cindy Tiegs – 3/26/04
 10003248 – Kathy Birch – 10/6/03
 10023091 – Cindy Tiegs – 2/12/05
 10027773 – Sam Phillips – 2/12/05
 10032262 – Adam Rozaek – 2/3/05
 10008923 – Richard Steffens – 7/22/04
 10021320 – Angel Aguinaga – 7/22/04
 10021845 – Angel Aguinaga – 7/22/04

In addition for the specific operator that omitted information in the audio record for drum #10002936 four more tapes were reviewed by Characterization Specialist Denise Lee (containers 10008862, 10009841, 10020025, and 10008617) indicating adequate but marginal audio reporting for this specific operator. There is no evidence to indicate that any waste has been promoted with less than adequate characterization or that data quality objectives were not met. See Attachment 1A for Analysis Reports as discussed in Investigation.

Interviewed on shift (3/5/05) RTR qualified operators. In the interview, the Shift Manager asked operators what actions they would take given similar drums as described in the CAR. All operators were consistent in their answers by stating that they would contact the STL when a drum was encountered without sufficient AK as well as not completing the exam. All operators were consistent with the actual examination procedure examining the drum across the top, down through the middle, right and then left on the bottom and up the side. All operators stated they would be verbally articulating drum content characteristics throughout the course of the examination paying close attention to identification of prohibited items. All operators were consistent in this approach.

Interview of the Shift Managers responsible for Characterization did indicate that there is some variability among operators. It was indicated that no characterization should be undertaken with Bettis Lab (BL) waste, as the basis for AK has not been established for this waste stream. It was determined that one individual appears to have marginal performance in the verbal recording of RTR characterization data however, the written record of exams by this operator was determined to be adequate.

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OI-12, "Real Time Radiography Operations (drum)" procedure was reviewed for adequacy of direction for describing the recording of characterization data both the current revision (Rev. 21) and the revisions that were in place during the period of time that the subject drums were run through RTR (Rev. 17 & 18). It was determined that the revisions of OI-12 reviewed contained adequate instruction for the operators concerning the audio recording, however, it was determined that the procedural instruction to operators can be strengthened to reduce the variability in operator performance. The procedure change does not change the process and only provides additional guidance by providing redundancy to describing the prohibitive items in a summary from in addition to the normal required characterization descriptions. The change is considered minor and therefore would not require CBFO approval. However, the revision will be provided to CBFO for information.

Root Cause Determination: Using DOE G 231.1-2

A3 Human Performance Less Than Adequate (LTA)

A3B1C07 Omission, verbal description of waste contents by an RTR qualified operator LTA.

A3 communications Less Than Adequate (LTA)

A5B2C05 Ambiguous instructions. Previous revisions of OI-12 did not provide for redundant instruction for the audio recording of data.

Corrective Action to Preclude Recurrence:

1. Revise OI-12 to add instructions for operators to summarize their written input as to any prohibitive items that have been identified or lack of prohibitive items at the end of the audio recording. This is to be in addition to the current requirement to verbally describe the waste during the recording. The intent is to ensure consistency between the written and verbal records.

Action Operations Support James Harris Revise OI-12.

Due date March 9, 2005

Update Action 1: DCR-4195 initiated for revision of INST-OI-12. INST-OI-12 Rev. 22 was approved on 03-08-05 and effective on 03-09-05. See Attachment #2.

2. Ensure that the characterization of BL waste does not take place until suitable AK has been developed (NCR 12613). The direction will reiterate the direction from TRU programs that no BL waste will be characterized until the AK issue is resolved.

Action: Provide direction to Operations managers and production planning via email by Operations Manager
Completed March 6, 2005.

Update Action 2: Operations Manager provided direction that no BL Waste Drums will be characterized until sufficient AK has been developed. See Attachment #3.

3. Issue expectations via email for audio recording for RTR operators pending the approval of OI-12 revision. The expectation is to summarize the presence of or lack of prohibitive items at the end of the audiotape. This is in addition to the verbal description of the waste during the RTR scan.

Action Operations Manager Patrick Daly

Completed March 6, 2005

Update Action 3: Operations Manager provided additional direction for audio Recording of RTR Data. See Attachment #4.

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4. Counsel RTR operator with evidence of marginal performance of audio recordings as to expectations for performance to the requirements. Note: This operator is not engaged in direct RTR exams as part of his current duties.

Action Shift Manager Brian Warner

Due Date March 10, 2005

Update Action 4: Supervisor counseled RTR Operator. See Attachment #5

5. Identify all BL waste drums that have been through RTR and verify or write an NCR on these containers to prevent further processing. Note: NCR 12613 was issued on 2/23/05 identifying the overall issue of insufficient AK documentation for the Bettis waste.

Action, Production Planning Allen Cain, ID BL drums

Due Date March 8, 2005

Action completed 3/7/05

Action, QA Manager Elvin Dumas, NCR drums

Due Date March 10, 2005

Action completed 3/7/05

Update Action 5: Production identified BL Waste Drums processed through RTR. See Attachment #6 NCRs initiated for identified BL Waste Drums processed through RTR. See Attachment #7.

Verification Results:

Through review of closure documentation, verified that AMWTP has accomplished the following corrective actions satisfactorily:

- DCR 4195 initiated for revision of INST-OI-12. INST-OI-12, Rev. 22, was approved on 03-08-05 and effective on 03-09-05. Revision 22 directs RTR operators to "Summarize in both the audio/visual and written records the disposition of the container and the absence or presence of prohibited items as defined in Exhibit 6.
- Operations Manager provided direction that no BL Waste Drums will be characterized until sufficient AK has been developed.
- Operations Manager provided additional direction for audio Recording of RTR Data.
- Supervisor counseled RTR Operator.
- Production identified BL Waste Drums processed through RTR. NCRs were initiated for identified BL Waste Drums processed through RTR.

Based on the above supporting documentation and actions, it is recommended that CAR-05-13 be closed.

19a. Verified By: _____

Name

3/25/05

Date

19b. Trend Cause Code: 2.1, 3.2.