DATE: AUG 10 2016
REPLY TO ATTN OF: CBFO:OQA:MRB:RMS:16-1467:2300.00 UFC
SUBJECT: Verification and Acceptance of Corrective Actions for CBFO CAR 16-008 Resulting from CBFO Audit A-16-01
TO: Benjamin Roberts, DOE-ID

The Carlsbad Field Office (CBFO) has completed its review and verification of completion of the corrective actions associated with CBFO Corrective Action Report (CAR) 16-008. The results of the verification are documented on the attached CAR Continuation Sheets and indicate that the documentation of completion of corrective actions is acceptable.

The verification concluded that the associated corrective actions have been fulfilled and are satisfactorily implemented. Therefore, the CAR is considered closed.

If you have any questions or comments concerning the CAR closure, please contact me at (575) 234-7476.

Michael R. Brown, Director
CBFO Office of Quality Assurance

Attachments

cc: w/attachments
M. Brown, CBFO *ED
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G. Birge, CBFO ED
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P. Hinojos, CTAC ED
G. White, CTAC ED
Site Documents ED
CBFO QA File ED
CBFO M&RC ED

*ED denotes electronic distribution
Blots 16 and 17 (previously blocks 17 & 18) Acceptance of Corrective Action Completion & Closure:

The Carlsbad Field Office (CBFO) has reviewed the closure package for Corrective Action Report (CAR) 16-008, including objective evidence and supporting documentation, submitted via Fluor Idaho letter CCN 319523, dated July 18, 2016, from Mr. Frederick P. Hughes, PMP and Project Manager, to Mr. Martin Navarrete, Senior Quality Assurance Specialist, CBFO Office of Quality Assurance.

Italicized text, taken verbatim from the revised Corrective Action Plan (CAP), is used to reflect the correlation between the actions required by the CAR and the method used for evaluation.

REMEDIAL ACTIONS

Document change request 14531 was drafted on 11-15-2015 to correct the issues, however; the DCR was put on hold pending resolution of CBFO and EPA's concern for impenetrable objects. No remedial actions were taken. A Timely Order (MP-COPS-9.13, Section 3.1) cannot be used to change or supplement operating procedures.

Verification:

Remedial actions were evaluated and found acceptable, as documented in CBFO CAP acceptance memorandum CBFO:QQA:MRB:BA:16-1299:UFC 2300.00.

INVESTIGATIVE ACTIONS

1. Investigative actions identified that this issue is not RCRA related nor does this issue rise to the level of a significant condition adverse to quality.

2. The RTR equipment at AMWTP does not generate sufficient energy to penetrate the center portion of the drum. Instead, as the drum is rotated, RTR provides a clear image on the outside edge, where the density is at a minimum, and becomes increasingly opaque as the image moves to the centerline of the drum, where the density is at a maximum. The AK for this waste stream is the key to why this has been accepted; this is a waste stream generated at Rocky Flats from a production line process, where the waste form and content were consistent from drum to drum. This has been confirmed by the processing of well over 10,000 of these containers, some as far back as when VE was used to confirm mis-cert rates, and several thousand recently sent through an ARP drum repackaging station as part of the Sludge Repack Project. This project involved the repackaging and VE of 6000 drums, and during the entire campaign, no prohibited items were found in the drums that had not already been identified by RTR. These containers were being repacked almost exclusively to address liquids in excess of 1%, either by condensation or from separation of the liquid from the solids matrix, which is a condition that can clearly be identified by RTR, as the free liquids migrate to the bottom of the container, and can be seen along the edges when present. Thus, AK supports the position that VE would not provide additional relevant information to the RTR examination, and AMWTP has trained the operators accordingly.

3. Impenetrable objects are not a prohibited item. NCRs are written for impenetrable objects that prevent full examination of the container. Based on AK for associated IDCs; operators have been trained to answer 'no' to the impenetrable objects question as AK supports that visual examination would provide no additional relevant information.
4. AMWTP is generating RTR Impenetrable Object NCRs when required. TrackWise was queried and 1,687 NCRs, for impenetrable objects were initiated October 1, 2014 through October 31, 2015. Query results are attached.

5. Additional investigation has been completed for concern related to conduct of operations issues associated with procedure compliance and inconsistencies in RTR operator identification of nonconforming conditions and associated training. ITG’s investigation determined there is no basis for this concern. During the audit, INST-01-12 and RPT-TRUW-05 were correctly followed as described in Item 6 below.

6. The RTR certification scans performed during the audit were different IDCs. INST-01-12, section 4.6.40, instructs the operator to verify the physical form of the waste is consistent with the IDC, WMC, summary category and waste stream description (as defined in RPT-TRUW-05) or for waste NOT covered in RPT-TRUW-05, other approved applicable AK documents and reports. Both operators consistently identified impenetrable waste, however; the difference is the IDC and what is written in RPT-TRUW-05. The Special Notes for IDC RF-001 states that “Visual examination of this bulk or direct loaded sludge packaged in 55-, 83- or 85-gallon drums would not provide additional relevant information to the RTR examination” so for container 10563430 there was no NCR generated. For IDC BN-511 (container 10563396), RPT-TRUW-05 states that the waste is PCB Organic Homogeneous Solids that is loose or cross contaminated organic homogeneous solids derived from historically stored waste (e.g., organic setups IDCs RF-003 or RF-743) that were repackaged during retrieval, characterized, treated, and stored at the AMWTP may or may not be PCB contaminated. In the Special Notes it goes on to state that PCB waste with any observable liquid is prohibited from disposal at WIPP and that organic waste derived from IDC RF-003 or IDC RF-743 is PCB waste. NCR 98412 was issued for Impenetrable Objects.

Verification:
Investigative actions were evaluated and found be acceptable, as documented in CBFO CAP acceptance memorandum CBFO:OQA:MRB:BA:16-1299:UFC 2300.00.

ROOT CAUSE DETERMINATION

1. A review of INST-OI-12, Real-Time Radiography Examinations (Certification Scans), Rev. 57, Section 4.6.36.1 has determined that the procedure needs to provide specific direction regarding when NCRs shall be initiated for impenetrable objects and include information as to why sludge containers do not require NCRs and 'impenetrable objects' is answered no. Root cause determination: AS Communications LTA/B2 Written Communication Content LTA/C05 Ambiguous instructions/requirements.

Verification:
Root Cause Determinations were evaluated and found be acceptable, as documented in CBFO CAP acceptance memorandum CBFO:OQA:MRB:BA:16-1299:UFC 2300.00.
1. Revise INST-OI-12, Real-Time Radiography Examinations (Certification Scans) to provide specific direction regarding examination of $S3000$ waste.

2. A documented briefing shall be provided to RTR operators regarding recent changes of INST-OI-12 once procedure approval is received and the document can be issued.

**Verification:**
Verified actions to preclude recurrence through the review of supporting documentation submitted in the CAR 16-008 closure package. The reviewed documentation included reviews of the revised procedure INST-OI-12, and the documented briefings provided to the RTR operators. The reviewed documentation contains relevant information to support completion of corrective actions.

**CLOSURE ACCEPTANCE**
Based on the results of the review and verification of the objective evidence included in the CAR 16-008 closure package, it is recommended that CAR 16-008 be closed.

Evaluation Performed By: Pon Martinez  
Date: 8/8/16