



Department of Energy
 Carlsbad Field Office
 P. O. Box 3090
 Carlsbad, New Mexico 88221



July 6, 2011

Mr. D. K. Ploetz, Manager
 Central Characterization Project
 Retrieval, Characterization and Transportation
 Washington TRU Solutions, LLC
 P.O. Box 2078
 Carlsbad, NM 88221-2078

Subject: Evaluation of the CAP for CAR 11-037 Resulting From Audit A-11-11

Dear Mr. Ploetz:

The Carlsbad Field Office (CBFO) performed Audit A-11-11 of the Los Alamos National Laboratory Central Characterization Project on May 17-19, 2011. CBFO Corrective Action Report (CAR) 11-037 was issued as a result of that audit.

Enclosed are the results of the CBFO review of the Washington TRU Solutions proposed Corrective Action Plan (CAP) for CAR 11-037. Evaluation of the proposed corrective actions is documented on the enclosed CAR Continuation Sheet. The results of the review indicate that the CAP for CAR 11-037 is acceptable, as documented in the CAP evaluation.

If you have any questions regarding this evaluation, please contact me at (575) 234-7491.

Sincerely,

Dennis S. Miehl
 Senior Quality Assurance Specialist

Enclosure

cc: w/enclosure
 R. Unger, CBFO
 M. Navarrete, CBFO
 N. Castaneda, CBFO
 V. Cannon, WTS/CCP
 A. J. Fisher, WTS/CCP
 I. Quintana, WTS/CCP
 M. Walker, WTS/CCP
 Y. Salmon, WTS/CCP
 J. Hoff, WTS
 M. Mullins, WTS
 G. Rael, LASO
 L. Bishop, LASO
 T. Peake, EPA
 M. Eagle, EPA
 E. Feltcorn, EPA
 R. Joglekar, EPA

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S. Ghose, EPA
 R. Lee, EPA
 J. Kieling, NMED
 S. Holmes, NMED
 T. Kesterson, DOE OB WIPP NMED
 D. Winters, DNFSB
 P. Gilbert, LANL-CO
 G. Lyshik, LANL-CO
 P. Hinojos, CTAC
 G. White, CTAC
 T. Bowden, CTAC
 P. Martinez, CTAC
 G. Knox, CTAC
 WIPP Operating Record
 CBFO QA File
 CBFO M&RC

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Block # 16 Acceptance of Proposed Corrective Action

An evaluation has been performed of the proposed Corrective Action Plan (CAP) for CBFO CAR 11-037 submitted via URS/Washington TRU Solutions letter CP:11:01450 UFC:2300.00, dated June 22, 2011, from D. K. Ploetz to Mr. Dennis S. Miehl. Italicized text, taken verbatim from the CAP, is used to show the correlation between the proposed corrective action and the method used for evaluation.

REMEDIAL ACTIONS:

CCP has determined that the following remedial actions are appropriate in response to the CAR condition:

- a) *CCP has revised BDR LA-RTR2-10-0137 to correct the correlation between items identified in the container and the waste material parameter weights.*
- b) *CCP will evaluate the contents of containers 65720 and 87139 and revise data sheets as necessary to correlated waste container inventory with waste material parameters and weights.*
- c) *CCP will add a reference to NCR-LANL-0689-10 to the SPM checklist for BDR LA-RTR2-10-0129.*

Evaluation:

Review of the proposed CAP associated with Remedial Actions submitted by the above referenced letter determined that the proposed remedial actions are acceptable.

INVESTIGATIVE ACTIONS

The CAR condition contains four different concerns. For simplicity and ease of review, CCP has addressed each one in a separate section of this Corrective Action Plan. Impacts and extent-of-condition are addressed for each of the individual concerns.

BDR LA-RTR2-10-0137

- a) *The assigned weights and waste material parameters for container 61265 do not correlate with the actual items identified in the corresponding waste container data sheets.*

Conditions identical to those reported for RTR weights and waste material parameters were previously self-identified by CCP in CAR-CCP-0002-11. The CCP CAR was issued to resolve a potential negative trend in the quality of RTR and NDA Batch Data Reports (BDRs) completed at Data Generation Level. Discovery was triggered by a review in response to an observed increase in the number of CCP project-level NCRs being issued during Site Project Manager (SPM) and Waste Certification Official (WCO) reviews of RTR and NDA BDRs. For RTR, examples included: estimated weights entered in the wrong waste material parameter categories, math errors (weights not added correctly), and other inconsistencies associated with information that is required to be entered in more than one location in the BDR documentation.

Extent

CAR-CCP-0011-02 contained a listing of 22 project-level NCRs for RTR BDRs from four (4) generator sites, and seven (7) project-level NCRs for NDA BDRs from three (3) generator sites. Although not intended to be

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comprehensive, the list is a good reflection of the level of quality performance that was being achieved prior to issuance of the CCP CAR in February 2011.

For reasons provided in the CCP CAR and restated in the Root Cause Determination section of this Corrective Action Plan, the potential negative trend manifested itself during the period from August 2010 to February 2011. Effectiveness of CCP preventive actions are discussed in the Actions to Prevent Recurrence section of this Corrective Action Plan.

Impact

None of the conditions self-identified by CCP in CAR-CCP-0002-11 had any impact on WAP or WAC compliance: the same is true for the conditions identified in CBFO CAR 11-037.

BDR LA-RTR2-10-0129

b) NCRs associated with the BDR are not recorded on the SPM checklist item number 6.

The CAR condition involves two NCRs:

- NCR-LANL-0601-11: Occasionally, CCP is able to characterize enough containers during a single shift to complete more than one BDR. When this happens, CCP-TP-053 allows CCP to take credit in the second BDR for the Replicate scan from the first BDR: i.e., CCP does not have to run another Replicate scan for the second BDR.*
- This NCR is associated with container S832485, which was characterized in BDR-LA-RTR2-10-0128, the first of two BDRs run during the same shift. The container is referenced in BDR-LA-10-0129 only because it was used for the Replicate scan in the first BDR, and was credited in the second BDR.*

The Batch Narrative for BDR LA-RTR2-10-0129_Rev2 explains the situation: "The...Replicate Scan...performed on this data [was] recorded in Batch Data Report LA-RTR2-10-0128_R1. Copies of these documents are included in this Batch Data Report for convenience." [Emphasis added]

Container S832485 was not characterized in BDR-LA-10-0129 and there would be no reason for CCP to include an NCR for a container than was not run in that BDR. Container S832485 is properly controlled in BDR LA-RTR2-10-0128, which does have a copy of NCR-LANL-0601-011 in the package.

Extent

When CCP runs more than one BDR during a single shift, the practice is to insert a copy of the Replicate Scan Data Sheet from the first BDR into the second BDR, since the second BDR takes credit for it. This is done as a convenience only, and there is no requirement to include an NCR for a container which was not run in that BDR. Since the reported condition is standard practice, and violates no requirements, CCP did not perform a review for extent of condition.

Impact

There is no technical impact from the reported condition. Container S832485 is properly controlled in BDR LA-RTR2-10-0128, which does have a copy of NCR-LANL-0601-011 in the package.

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- *NCR-LANL-0689-10: This NCR was written against one of the containers in BDR LA-RTR2-10-0129 and should have been recorded in item number six of the SPM checklist. A copy of this NCR was included in the BDR package: the only failure, due to oversight by the SPM who completed the checklist, was to record the NCR number in the SPM checklist.*

Extent

CCP performed a spot check of several other BDRs from the same time period and did not identify any similar conditions. This appears to be an isolated situation.

Impact

The impact of the reported condition was minor. A copy of NCR-LANL-0689-10 was in the BDR package, and the checklist will be revised to add the NCR.

- c) *The BDRs identified in SPM checklist item numbers 17 and 18 are not recorded correctly.*

The same BDR is referenced in both checklist blocks: LA-RTR2-10-0128_R1, once for the Replicate Scan and once for the Independent Observation. The statement in the CAR that this BDR was not recorded correctly is based on the fact that the Data Sheet for container S832485, included for convenience, identifies the BDR as LA-RTR2-0128-Rev. 1. The base BDR number is the same in both cases: the concern is the difference between "_R1" and "-Rev. 1" as the syntax for designating the revision number of the BDR.

The SPM making the entries did not distinguish between the two methods for designating the revision number of the BDR. Clearly, both forms mean Revision 1 of the documents, and there is no question about which revision is intended. The "_Rx" syntax is the one commonly used to designate a revision to a CCP BDR, and that is probably why the SPM entered the BDR reference the way she did. But there is no requirement for a revision number to be written in a particular way: CCP considers "_Rx," "Rev. x," and "Revision x" to be interchangeable and equally correct.

Extent

The potential for the reported condition appears to be limited to BDRs LA-RTR2-10-0122 through LA-RTR2-0129, which were among the first BDRs to have the Independent Technical Reviews performed by qualified personnel in the CCP project office, rather than by ITRs in the field. The interchangeable and equally correct "Rev.1" syntax was introduced when these BDRs were being revised.

Impact

There is no technical impact from the reported condition. Both forms mean Revision 1 of the documents, and there is no question about which revision is intended.

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- d) The assigned weights and waste material parameters for containers 65720 and 87139 do not correlate with the actual items identified in the corresponding waste container data sheets.

See the investigative actions and conclusions in item a) of this section of the CCP Corrective Action Plan, which also apply to this condition.

Evaluation:

Review of the proposed CAP associated with the Investigative Actions submitted by the above referenced letter determined that the Investigative Actions are acceptable.

ROOT CAUSE DETERMINATION

Items a) and d) [Assigned Weights and Waste Material Parameters]

CCP determined the root cause for the reported conditions in the response to CAR-CCP-0011-02. Several causal factors contributed to the observed increase in the number of project-level NCRs reporting BDR discrepancies:

- a) *In anticipation of upcoming changes to the HWFP-WAP and the WIPP-WAC, CCP conducted a series of training sessions that focused on areas where improper application of the criteria could result in violations of these upper-tier documents. The training was necessary and appropriate, but at Data Generation Level (DGL) it had the unintended consequence of focusing the operators so much on the WAP/WAC-impactive changes that they failed to give sufficient attention to the routine aspects of BDR preparation. The emphasis on issues that would cause a container to be rejected for potential disposal in the WIPP led to inattention to detail regarding the quality of the data that are entered as part of normal characterization. The result was an increase in the number of mistakes described in the CAR.*
- b) *The training had a different effect on the SPMs performing project-level reviews of BDRs. They increased the level of detail applied during their validation and verification reviews of BDRs. As a result, they began identifying a number of issues that previously might have escaped their attention. This led to the increase in the number of project-level NCRs that triggered the CAR.*
- c) *At the same time, CCP was experiencing a backlog of BDRs for both RTR and NDA, due to staffing limitations and priority assignment of limited resources. The delay in project-level review of these BDRs meant that feedback from SPM reviews was not provided to DGL in a timely manner. As a consequence, operators were not made aware of the issues being identified at project-level until the mistakes had been repeated in a number of BDRs: had the project-level reviews been completed in the normal timeframe, many of the discrepancies listed in the CAR would not have continued for such an extended period.*

The potential negative trend in the quality of RTR and NDA BDRs occurred during the period from August 2010, when CCP began conducting the training sessions in anticipation of upcoming changes to the WAP and the WAC, until February 2011, when CAR-CCP-0011-02 was issued.

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Containers 65720 and 87139 in BDR LA-RTR2-10-0129 were examined on October 25, 2010; container 61265 in BDR LA-RTR2-10-1037 was examined on November 18, 2010. These BDRs were prepared in the middle of the period when the potential negative trend was observed, and are additional examples of the same errors already self-identified by CCP.

In the next CCP semi-annual QA trending report to CBFO and CCP management, covering the period from January through June 2011, CCP will specifically evaluate the effectiveness of the corrective actions taken in response to CAR-CCP-0002-11. This is part of CCPs normal program activities, and is separate from this Corrective Action Plan.

Item b) [NCRs Not Recorded on the SPM Checklist]

Due to oversight arising from lack of attention to detail, the SPM neglected to enter one NCR number in the checklist. This was an isolated error.

Item c) [BDR Not Recorded Correctly]

CCP considers the two forms used to designate the revision level for the BDR to be interchangeable and equally correct.

Evaluation:

Review of the proposed CAP associated with Root Cause Determination submitted by the above referenced letter determined that the root cause determination is complete and acceptable.

ACTIONS TO PREVENT RECURRENCE

Most of the errors reported in CAR-CCP-0011-02 were reported on NCRs by the SPMs performing project-level reviews. However, two of the NCRs in the list were written by the WCO assigned to review the BDR data for certification and data entry into WWIS/WDS. The CCP program is one of defense-in-depth, requiring independent reviews and processing checks by different individuals from the time data are first recorded until the containers are certified and shipped. It is expected that that most of the errors in RTR and NDA BDRs would be discovered by the SPMs, the first line of review after Data Generation Level. The fact that two additional errors were caught by the WCO, the next line of defense at project-level, is evidence that the program is working.

Although no process is 100% error-free, the multiple layers of independent review and processing checks built into the CCP program have proven highly effective in identifying and correcting virtually all significant discrepancies before they become WAP/WAC-impactive.

CCP has taken the following action to prevent recurrence of the conditions self-identified in CAR-CCP-0011-02, which also applies to the additional examples cited in the CBFO CAR condition:

- a) *CCP has issued Lessons Learned 2011-06, which contains the following message: Although some pieces of information are more significant than others in terms of WAP and WAC compliance, everything entered into a BDR is there for a reason. Operator are to act on the principle that no data entry is to be treated with lesser importance than*

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any other, and reviewers are to perform their independent checks in the same way. Attention to detail is essential 100% of the time. CCP SPMs and WCOs were included in the target audience for this CCP Lessons Learned.

Evaluation:

Review of the proposed CAP associated with actions to prevent recurrence submitted by the above referenced letter determined that:

- 1) The first two paragraphs are not actions to prevent recurrence, and are more applicable to the investigative actions section.
- 2) The actions to prevent recurrence of the conditions self-identified in CAR-CCP-0002-11 do not provide objective evidence (i.e., training/briefing rosters) that Lessons Learned 2011-06 was acknowledged.

ACCEPTANCE

The proposed CAP for remedial actions, investigative actions, and root cause determination are acceptable. The proposed actions to prevent recurrence are conditionally acceptable provided that objective evidence for acknowledgement of receiving Lessons Learned 2011-06 is provided as part of the CCP CAR closure package. Contingent upon submission of the referenced documentation, it is recommended that the CAP for CAR 11-037 be approved.

Response Evaluated By:  for 07/06/11
Porf Martinez Date