



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



AUG 6 2014

Mr. Jon E. Hoff, Manager
Quality Assurance
Nuclear Waste Partnership LLC
P.O. Box 2078
Carlsbad, NM 88221-2078

Subject: Approval of the CAPs for CBFO CARs 14-048, 14-049, and 14-050 from
CBFO Surveillance S-14-33

Dear Mr. Hoff:

Enclosed are the results of the Carlsbad Field Office (CBFO) evaluation of the Corrective Action Plans (CAPs) associated with CBFO Corrective Action Reports (CARs) 14-048, 14-049, and 14-050. The results of the review indicate that the CAPs are acceptable, as documented on the enclosed CAR Continuation Sheets. Upon completion all corrective actions as outlined in the approved CAPs, please provide notification and documentation supporting closure of these CARs, so that verification activities may be performed.

If you have any questions or comments concerning the evaluation, please contact me at (575) 234-7491.

Sincerely,

A handwritten signature in black ink, appearing to read "D. S. Miehl".

Dennis S. Miehl
Senior Quality Assurance Specialist

Enclosures

J.E. Hoff

-2-

AUG 6 2014

cc: w/enclosures

M. Brown, CBFO	*ED
J.R. Stroble, CBFO	ED
M. Navarrete, CBFO	ED
T. Morgan, CBFO	ED
N. Castaneda, CBFO	ED
R. McQuinn, NWP	ED
J. Blankenhorn, NWP	ED
J. Harris, NWP	ED
F. Sharif, NWP/CCP	ED
V. Cannon, NWP/CCP	ED
A.J. Fisher, NWP/CCP	ED
I. Joo, NWP/CCP	ED
M. Walker, NWP/CCP	ED
W. Ledford, NWP/CCP	ED
J. Carter, NWP/CCP	ED
B. Allen, NWP/QA	ED
S. Punchios, NWP/QA	ED
S. Escareno-Soto, NWP/QA	ED
T. Peake, EPA	ED
L. Bender, EPA	ED
E. Feltcorn, EPA	ED
R. Joglekar, EPA	ED
S. Ghose, EPA	ED
R. Lee, EPA	ED
J. Kieling, NMED	ED
T. Kliphuis, NMED	ED
S. Holmes, NMED	ED
R. Maestas, NMED	ED
C. Smith, NMED	ED
R. Allen, CTAC	ED
P. Gomez, CTAC	ED
B. Pace, CTAC	ED
P. Martinez, CTAC	ED
J. Harvill, NWP/CCP	ED
P. Hinojos, CTAC	ED
D. Sellmer, CTAC	ED
G. White, CTAC	ED
Site Documents	ED

CBFO QA File

CBFO M&RC

*ED denotes electronic distribution

CAR CONTINUATION SHEET

1. CAR No: 14-048

2. Activity No: S-14-33

3. Page 1 of 3

Block # 16 Acceptance of Proposed Corrective Actions:

An evaluation was performed of the Corrective Action Plan (CAP) developed to address Carlsbad Field Office (CBFO) Corrective Action Report (CAR) 14-048. The CAP was submitted via Nuclear Waste Partnership LLC letter QA:14:00244 UFC:2300.00, dated July 16, 2014, from Mr. J. E. Hoff, Manager, Quality Assurance, to Mr. D. S. Miehls, Senior Quality Assurance Specialist.

Italicized text, taken verbatim from the CAP, is used to reflect the correlation between the actions required by the CAR and the method used for evaluation.

REMEDIAL ACTION(S)

No remedial actions are required to change any data, all calculations were performed using the correct numbers and procedure steps were performed correctly and in sequence. But, procedure CCP-TP-504 will be revised to add the correct numbers to step 4.3.1[H].

Evaluation:

Accepted. Per CBFO MP 3.1, Revision 12, Remedial Actions are to "Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during the investigations." Though the response is confusingly worded (i.e., there are no calculations performed here, only notification of the Site Project Manager for his evaluation of the observed activity conditions), the last sentence does commit to correcting the specific condition identified. However, the claim that procedural step 4.3.1 [H] was historically "performed correctly" even though it specified incorrect evaluation limits for Co-60 and Cs-137, and no limit for Eu-154, cannot be substantiated with the evidence provided here, but will need to be confirmed through the closure documentation. Therefore, the final closure documentation for this CAR will need to include sufficient information to verify the correct performance of this step through each use of this procedure (where a conversion record was generated and performance of this step required) since Revision 15 was issued.

INVESTIGATIVE ACTIONS

A review of the development history of CCP-TP-504, Revision 15, available in CCP Document Services showed the following:

- *The initial mark-up of draft Revision 15 was based on some preliminary limiting values calculated by Rad Engineering early in the creation of the Sum of Fractions equation*
- *At the time the initial mark-up was submitted, and all the way through Draft B of Revision 15, the Record of Revision block had only a general description of the change, with no quantitative values, and Attachment 13 did not yet exist*
- *By the time Draft C of Revision 15 was circulated for review, Rad Engineering had finalized on the limiting values for the Sum of Fractions equation. The final, correct values were added to the Record of Revision block at this time, and Attachment 13 (also with the correct limiting values) was introduced for the first time*
- *Since the equation with correct values was now included in Attachment 13, the text in the body of the draft procedure (the section with the now-incorrect preliminary limiting values that had been in the draft from its inception) were deleted from Draft C*
- *Draft C of Revision 15 was completely correct and acceptable, with the final limiting values in both the Record of Revision block and in Attachment 13, and the incorrect preliminary values deleted from the body of the draft. There would have been no reason to correct values in a section of the document that was being deleted – the section was simply removed*

CAR CONTINUATION SHEET

1. CAR No: 14-048

2. Activity No: S-14-33

3. Page 2 of 3

- *One of the comments to Draft C of Revision 15 was that, even though Attachment 13 now contained the correct formulation with the final limiting values, it would be better if the procedure still made reference to them in Section 4.0 (the body of the procedure)*
- *In response to the comment, Draft D was created, with the original text restored to the body of the procedure*
- *No one noticed that the restored section was now incorrect, and no longer agreed with the final limiting values in the Record of Revision block and in Attachment 13*

From the initial mark-up of Revision 15 through Draft B, the only place in the procedure that contained quantitative limiting values was the text in the body of Section 4.0. At the same time when the final values were added to the Record of Revision block and Attachment 13 was created, in Draft C, the section with the now-incorrect preliminary values was deleted. Just before Revision 15 was issued, the section with preliminary values was added back into the procedure in response to a reviewer comment. No one noticed that the restored section was different from the correct information that appeared everywhere else in the procedure.

Extent

A few containers have been characterized at INL that were evaluated using Attachment 13 and assessed correctly as the form displays the correct values.

Impact

The incorrect values procedural step 4.3.1[H] (sic) did not impact the evaluation of the INL containers as Attachment 13 has the correct values. The waste containers at Sandia cannot be evaluated until the scaling factors are developed for each container. The container that was demonstrated during the surveillance will not have the scaling factors developed until August and the procedure revision will have been issued.

Evaluation:

Accepted. As required by CBFO MP 3.1, Revision 12, the Investigative Actions present a summary of the investigation performed, and the extent and impact of the identified condition adverse to quality. The bulleted summary appears to describe issues with the document review process, yet that is not captured in the extent or impact statements. The described sequence of events does not appear to be unusual, but merely the routine process of document preparation, review, and resolution. The subsequent failure in that process that “no one noticed that the restored section was different from the correct information...” should still be investigated. In addition the containers characterized through the use of this procedure should be specifically listed and not just generally summarized to assure the Investigative Actions were diligently performed and are complete. Finally, as noted above, step 4.3.1 [H] does not affect the calculation of the “sum of fractions,” but actually governs the notification of the SPM. The impact would therefore be whether the SPM should have been potentially notified, but was not due to errors in the procedure. However, based on discussions with NWP personnel, the Investigative Actions are deemed to be acceptable. Sufficient information will need to be supplied as part of the closure package to allow verification that the document review correctly followed the procedure, the extent of condition was clearly investigated as expected, and the impacts were investigated to assure proper SPM notifications and reviews were performed.

1. CAR No: 14-048

2. Activity No: S-14-33

3. Page 3 of 3

ROOT CAUSE

Not required by the CAR.

ACTIONS TO PREVENT RECURRENCE

The CAR condition resulted from a very unusual sequence of events in the development of limiting values for the Sum of Fractions equation during the review and approval cycle of the various draft versions of the procedure. Actual values were still preliminary, with final values being calculated, when the initial mark-up and first drafts of Revision 15 were circulated for review and approval.

- a. *CCP will issue a Lessons Learned, focused on the unusual sequence of events that resulted in the presence of incorrect limiting values in a procedure that had been completely correct and acceptable just before the final draft and issuance.*

Evaluation:

Accepted. As required by CBFO MP 3.1, Revision 12, the described Actions to Preclude Recurrence appear to support that goal; however, the described sequence of events does not appear to be that unusual, but merely the process of document preparation, review, and resolution. As described in Investigative Actions, the closure documentation will need to include sufficient detail to assure the necessary actions were performed to clearly identify the correct Actions to Preclude Recurrence needed and that these Actions to Preclude Recurrence have been satisfactorily completed.

COMMITMENTS**DUE DATES**

CCP to issue Lessons Learned focused on the unusual sequence of events that resulted in the presence of incorrect limiting values in a procedure that had been completely correct and acceptable until just before the final draft and issuance.

July 31, 2014

CCP to revise CCP-TP-504, Dose-to-Curie Survey Procedure for Remote-Handled Transuranic Waste, to correct Step 4.3.1[H]

August 15, 2014

Provide closure documentation to NWP Quality Assurance

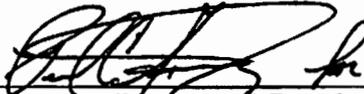
August 22, 2014

NWP QA, transmit closure documentation to the CBFO.

August 29, 2014

ACCEPTANCE

The results of the evaluation of the CAP indicate that the proposed corrective actions satisfactorily address the conditions adverse to quality documented in CAR 14-048, and provide adequate measures to preclude recurrence. Therefore, it is recommended that the CAP for CAR 14-048 be approved.


Evaluation Performed By: Joe Harvill

8/4/2014
Date:

CAR CONTINUATION SHEET

1. CAR No: 14-049

2. Activity No: S-14-33

3. Page 1 of 3

Block # 16 Acceptance of Proposed Corrective Actions:

An evaluation was performed of the Corrective Action Plan (CAP) developed to address Carlsbad Field Office (CBFO) Corrective Action Report (CAR) 14-049. The CAP was submitted via Nuclear Waste Partnership LLC letter QA:14:00244 UFC:2300.00, dated July 16, 2014, from Mr. J. E. Hoff, Manager, Quality Assurance, to Mr. D. S. Miehls, Senior Quality Assurance Specialist.

REMEDIAL ACTION(S)

No remedial actions are required to change any data, all calculations were performed using the correct numbers and procedure steps were performed correctly and in sequence. But, procedure CCP-TP-504 will be revised to change the note on page 13.

Evaluation:

Accepted. Per CBFO MP 3.1, Revision 12, Remedial Actions are to "Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during the investigations." The condition identified does not question the accuracy of any calculations, but documents an error in the described sequence of steps to be performed. Although this is in reference to a Note, the step sequence is acknowledged as being incorrectly described and, as stated in the last sentence of the Remedial Actions, will be revised. Based on the Investigative Actions discussion below, this is the only Remedial Action that should be performed.

INVESTIGATIVE ACTIONS*Incomplete Presentation of Procedure Steps*

The requirement cited in the CAR is the part of Section 18.7 of CCP-PO-005, which states that all CCP operations will be conducted with the procedure open and followed step-by-step. The procedure was properly open and in use during the demonstration of the dose (sic) measurements. The actual procedure steps are correct as written and were being followed step-by-step, with the following clarifications.

- 1. The NOTE on page 13, cited in the CAR, refers to a set of steps that does not include all the actions necessary to complete Attachment 1 of the procedure. While CCP always intends that all information in procedures be accurate (in accordance with quality assurance requirements), NOTES (as defined in CCP-QP-010) are for supplemental information and are not to be treated as actual steps, or as modifications to steps. As long as the operator followed the actual step-by-step flow of the procedure, as he is required to do, the work would necessarily be correctly performed and documented – the incomplete reference to the set of steps in the NOTE is nothing more than a minor error with no influence on the correct completion of Attachment 1 to the procedure.*
- 2. The response is similar to item 1.0, above. As long as the operator follows the actual step-by-step flow of the procedure, as he is required to do, the work will necessarily be correctly performed and documented, regardless of which steps are called out.*

Step Sequences Not Used at SNL (Gamma Spectroscopy)

Following receipt of the CAR, CCP met with CBFO QA and the auditor who initiated the CAR, to get clarification on the meaning of the third (last) bulleted example in the Condition Adverse to Quality section of the CAR: "Other step sequences in the procedure are not used at SNL (e.g., gamma spectroscopy)." The auditor stated that he was aware that the gamma spectroscopy section of CCP-TP-504 is used at other Host locations, and explained that third bullet was intended to mean that the gamma spectroscopy section also has sequences/ranges of steps that are incorrectly presently (sic). He did not specify the locations in the CAR, since gamma spectroscopy was not being audited at SNL.

CAR CONTINUATION SHEET

1. CAR No: 14-049

2. Activity No: S-14-33

3. Page 2 of 3

Based on this explanation, CCP evaluated the gamma spectroscopy section of CCP-TP-504, and considers that the sequence/range of steps is correct.

Extent

CCP is unaware of any other procedures containing a referenced string of procedural steps that are incomplete. The CAR condition appears to be isolated to the procedure cited in the CAR.

Impact*Incomplete Presentation of Procedure Steps*

Operators are required to follow procedures step-by-step. Following the actual procedure steps in CCP-TP-504 will necessarily result in the correct completion of Attachment 1. For reasons described above, the CAR condition has nothing to do with whether or not Attachment 1 will be correctly completed. There is no technical impact from the reported condition.

Step Sequences Not Used at SNL (Gamma Spectroscopy)

Based on the CCP evaluation of the gamma spectroscopy section of CCP-TP-504, and the conclusion that the sequence/range of steps is correct, there can be no technical impact.

Evaluation:

Accepted: As required by CBFO MP 3.1, Revision 12, the Investigative Actions present a summary of the investigation performed, and the extent and impact of the identified condition adverse to quality. The summary describes the current understanding of how the steps are correctly (though somewhat confusingly) organized; something that could not be explained at the time of the surveillance by either the operators or the technical staff present. The current explanation of the procedure flow appears to be acceptable, as does the evaluation of Impact. However, the Extent evaluation is almost anecdotal in that it states this is isolated since we are "unaware" of any other case, but provides no information about how the Extent was actually evaluated. Additional detail should be presented on which procedures were examined or what percentage of existing procedures was examined to determine that this was an isolated condition. This information will need to be provided as part of the closure documentation for this CAR and CAP.

ROOT CAUSE

Not required by the CAR.

ACTIONS TO PREVENT RECURRENCE

There was no compelling reason to reference the actual string of affected steps in either location in the procedure {in the NOTE or in 4.1.2[G]}. Putting too much detail in a procedure can lead to error-prone situations, such as when a string of affected steps is not correctly updated when the document is revised.

CAR CONTINUATION SHEET

1. CAR No: 14-049

2. Activity No: S-14-33

3. Page 3 of 3

1. CCP will issue a Lesson Learned on the pitfalls associated with including superfluous levels of detail such as strings of affected steps in procedures, when the procedure steps by themselves result in the desired outcome.

Evaluation:

Accepted. As required by CBFO MP 3.1, Revision 12, the described Actions to Preclude Recurrence appear to support that goal. The commitments provided below will be reviewed as part of the closure documentation.

COMMITMENTS

DUE DATES

CCP-TP-504, Dose-to- Curie Survey Procedure for Remote-Handled Transuranic Waste revision 16 issued	August 15, 2014
CCP to Issue Lessons Learned on the pitfalls of including superfluous levels of detail in procedures	July 17, 2014
Provide closure documents to NWP Quality Assurance	August 22, 2014
NWP QA, transmit closure documentation to the CBFO.	August 29, 2014

ACCEPTANCE

The results of the evaluation of the CAP indicate that the proposed corrective actions satisfactorily address the conditions adverse to quality documented in CAR 14-049, and provide adequate measures to preclude recurrence. Therefore, it is recommended that the CAP for CAR 14-049 be approved.


 Evaluation Performed By: Joe Harvill


 Date:

CAR CONTINUATION SHEET

1. CAR No: 14-050

2. Activity No: S-14-33

3. Page 1 of 3

Block # 16 Acceptance of Proposed Corrective Actions:

An evaluation was performed of the Corrective Action Plan (CAP) developed to address Carlsbad Field Office (CBFO) Corrective Action Report (CAR) 14-050. The CAP was submitted via Nuclear Waste Partnership LLC letter QA:14:00241 UFC:2300.00, dated July 14, 2014, from Mr. J. E. Hoff, Manager, Quality Assurance, to Mr. D. S. Miehl, Senior Quality Assurance Specialist.

Italicized text, taken verbatim from the CAP, is used to reflect the correlation between the actions required by the CAR and the method used for evaluation.

REMEDIAL ACTION(S)

As discussed in the Investigative Actions section of this Correction Action Plan, CCP will address the deletion of the Facility Records Custodian/CCP Records Custodian positions and the deletion of the "NDA Technical Lead" title from Revision 15 of CCP-TP-504, in the Record of Revision block for Revision 16.

Evaluation:

Accepted. Per CBFO MP 3.1, Revision 12, Remedial Actions are to "Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during the investigations." The proposed remedial actions, along with the positions discussed below under Investigative Actions, appear satisfactory.

INVESTIGATIVE ACTIONS

The Condition Adverse to Quality section of the CAR is primarily focused on the adequacy of the description of the changes in the Record of Revision block of CCP-TP-504; the addition and deletion of steps (the first five bullets). The last bullet introduces a related, but different concern; failure to provide vertical revision bars for the sequence of steps cited in the CAR. These two conditions are addressed separately in this section.

Adequacy of Record of Revision Block

The Requirement That is Involved section of the CAR is a paraphrase, condensed from several different sections of CCP-QP-010. The section of the procedure that is relevant to this condition is Section 4.1.10, which reads in full as follows:

"Format and edit draft document, AND make an entry in the Record of Revision briefly describing the purpose of the revision or new document."

- *Deletion of NDA Technical Lead: Revision 14 assigned the responsibility for evaluating gamma spectroscopy data and documenting the results of the evaluation to the "NDA Technical Lead or Expert Analyst." Revision 15 removed the title "NDA Technical Lead" so that the same responsibilities became the sole responsibility of the Expert Analyst. The procedure was not de-scoped: the evaluations and corresponding documentation continue to be performed just as before. Under these circumstances, CCP considers it allowable under CCP-QP-010 not to have included this change in the Record of Revision. However, CCP agrees to address this change in the Record of Revision block for Revision 16, stating that the "NDA Technical Lead" title was removed as part of the previous revision.*
- *Facility Records Custodian and CCP Records Custodian: CCP agrees that it would have been appropriate for the Record of Revision block to have addressed the removal of these positions from the procedure. In order to document this change in the revision history for CCP-TP-504, CCP will address this change in the*

CAR CONTINUATION SHEET

1. CAR No: 14-050

2. Activity No: S-14-33

3. Page 2 of 3

Record of Revision block for Revision 16, stating that the Facility Records Custodian and CCP Records Custodian positions were removed as part of the previous revision.

- *Addition of Steps such as 4.1.2[A] and 4.1.2[E]: The steps add a reference to performance of replicate measurements (already a part of the procedure) under certain circumstances, and clarify the steps required for different probes (e.g., some fields in Attachment 1 maybe "N/A'd" if not used). Whether if not these changes were discussed in the Record of Revision block depended on how important the developers of the revision considered them to be: this was a judgment call without a definitive answer.*
- *Deletion of Steps: See the general conclusion at the end of this section.*
- *Renumbering of bullets to Steps (see Steps 4.2.14 to 4.2.20): Seven of 10 bullets were converted to individual steps: the text in two of the steps was modified slightly (e.g., "(if applicable)" was removed from Step 4.1.16); the text in the other five steps remained identical with the corresponding bullets in Revision 14. CCP considers this change to fall well below the threshold of the requirement in CCP-QP-010 to "...briefly describe the purpose of the revision..."*

General conclusion: CCP understands that the bulleted examples in the CAR are just that, and the CAR does not attempt to call out every change that was made to the procedure in Revision 15. For that reason, CCP has evaluated the set of changes as a whole, and address the complete removal of the Facility Records Custodian and CCP Records Custodian functions from the document.

Extent

A spot check of CCP documents showed that there is a range of level of detail provided in Record of Revision blocks, depending on the particular set of reviewers and approvers assigned to the document in Q&MIS. With a few exceptions (e.g., the Facility Records Custodian and CCP Records Custodian functions were removed from other CCP documents), the level of detail in these other documents appears to fall into the allowable range as defined in CCP-QP-010.

Impact

The level of detail in the Record of Revision block never has an impact on the technical content of any document.

No side-barring of changes (see Steps 4.2.14 to 4.2.20)

Seven of 10 bullets in Revision 14 were converted to individual steps in Revision 15.

The text in two of the steps was modified slightly (e.g., "(if applicable)" was removed from Step 4.1.16): these two steps were marked with vertical revision bars.

The text in the other five steps remained identical with the corresponding bullets in Revision 14: these five steps were not marked to show that the bullets had become individual steps. According to standard practice in Document Services, these five steps should have been marked with vertical change bars.

Extent

Standard practice in Document Services is to apply vertical revision bars in the situation described in the CAR condition. This appears to be an isolated case.

Impact

The presence or absence of vertical side bars never has an impact on the technical content of any content of any document.

CAR CONTINUATION SHEET

1. CAR No: 14-050

2. Activity No: S-14-33

3. Page 3 of 3

Evaluation:

Accepted. As required by CBFO MP 3.1, Revision 12, the Investigative Actions present a summary of the investigation performed, and the extent and impact of the identified condition adverse to quality. The summaries provided appear to cover the necessary investigation and extent and impact of the identified conditions.

ROOT CAUSE

Not requested.

ACTIONS TO PREVENT RECURRENCE

Document Services personnel and the set of internal fixed reviewers (no Host site reviewers) for Revision 15 of CCP-TP-504 will be notified in writing of the conditions identified in the CAR, with a request for increased diligence in the preparation and review of the content of Record of Revision blocks in CCP documents.

Evaluation:

Accepted. As required by CBFO MP 3.1, Revision 12, the described Actions to Preclude Recurrence appear to support that goal.

COMMITMENTS

DUE DATES

CCP to provide written notification of the CAR conditions to internal fixed reviewers for Revision 15 of CCP-TP-504, with a request for increased diligence in the preparation and review of Record of Revision blocks in CCP documents.

July 18, 2014

CCP to revise CCP-TP-504 to incorporate changes described in the Corrective Action Plan.

August 15, 2014

CCP, transmit closure documentation to NWP QA.

August 22, 2014

NWP QA, transmit closure documentation to the CBFO.

August 29, 2014

ACCEPTANCE

The results of the evaluation of the CAP indicate that the proposed corrective actions satisfactorily address the conditions adverse to quality documented in CAR 14-050, and provide adequate measures to preclude recurrence. Therefore, it is recommended that the CAP for CAR 14-050 be approved.


 Evaluation Performed By: Joe Harvill

8/4/2014
 Date: