



United States Government

Department of Energy

memorandum

 Carlsbad Field Office
 Carlsbad, New Mexico 88221

DATE: November 12, 2004

 REPLY TO
 ATTN OF: CBFO:OCT:KWW:GS:04-2251:UFC 5822.00

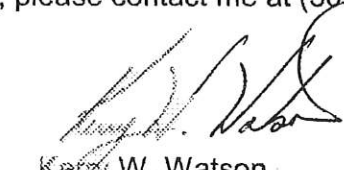
SUBJECT: CBFO Approval of AMWTP Procedure MP-TRUW-8.11, Revision 8

TO: Brian Edgerton, DOE-ID



The Carlsbad Field Office (CBFO) has evaluated the responses to our comments for the Advanced Mixed Waste Treatment Project (AMWTP) procedure MP-TRUW-8.11, Revision 8, *Data Reconciliation*. After comment resolution meetings held in Carlsbad the week of November 8, 2004, we determined that the comments have been adequately addressed and the manual portion of the instructions continues to meet the requirements of the Hazardous Waste Facility Permit "Waste Analysis Plan", the *Contact-Handled Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plan*, and other CBFO requirements. Full implementation and effectiveness using the electronic "Waste Tracking System" will be evaluated during the next scheduled audit.

If you have any questions, please contact me at (505) 234-7357.


 Kerry W. Watson
 Office Director

Office of Characterization and Transportation

Attachment

cc: w/attachment
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041120



CARLSBAD FIELD OFFICE

November 12, 2004

GENERATOR SITE DOCUMENT REVIEW RECORD

SITE: AMWTP

DOCUMENT TITLE: Data Reconciliation

DOCUMENT NUMBER and REVISION: MP-TRUW-8.11, R7 (Comments incorporated In Revision 8)

DOCUMENT DATE: For Approval

TYPE OF REVIEW: Technical and QA

ASSIGNED REVIEWER: Ava Holland & Kerry Watson

DELEGATED REVIEWER: CTAC/Tech Specs

ADDITIONAL INSTRUCTIONS:

FORWARD RESPONSE TO: Site.Documents@wtpd.wv

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
1.	2		There are two signed and issued versions of Rev. 7 of this document, one signed and issued by BNFL on 7/7/04 and the second signed and issued by BNFL on 8/19/04. Investigate and if necessary initiate CAR and revise procedure to correct the duplicate revision numbers. (QAPD Section 1.4.2 D)	<p>MP-TRUW-8.11 Rev. 7 issued on 7/7/04 had been inappropriately categorized as not requiring CBFO review & submitted to Site Documents on 7/7/04 for information only, without QA concurrence. The changes to this revision were made as part of the proposed corrective actions for CBFO CAR 04-032, which were rejected by CBFO. On 7/21/04 after determining the existence of this condition, the QA Manager directed MP-TRUW-8.11 Revision 7 dated 7/7/04 be rescinded, with notifications to the distribution and copy holders.</p> <p>No data reconciliations were conducted between 7/2/04 and 8/24/04, and therefore Rev 7 (7/7/04) of the procedure was not utilized.</p> <p>MP-TRUW-8.11 revision 7 dated 8/18/04 was subsequently reissued for CBFO review and approval on 8/18/04 after further revisions were made as part of the rejected corrective actions to CBFO CAR 04-032 and the corrective actions for CBFO CAR 04-033 Revision 1.</p> <p>A revision to MP-DOCS-18.4 Document Control, submitted to CBFO is implementing a corrective action to prevent this condition from recurring.</p>	X	
2.	2		The affected pages listed for R7 of this procedure issued 8/19/04 are incorrect. They apply to the R7 of this procedure that was issued 7/7/04. Revise to reflect the correct revision log entry. (QAPD 1.4.3 B2)	The revision log will be corrected to accurately reflect changes for Rev 7 issued on 8/19/04	X	
3.	5	1.0	2 nd para. Change "characterization" to "confirmation." (B4-3d)	Changed as requested.	X	
4.	5	1.0	3 rd para. Revise to say this procedure meets the QAPD rather than the WAP. (B5-1)	Revised as requested.	X	
5.	5	1.0	4 th para, MP-TRUW-8.25 discusses collecting samples from SWBs. Either add SWBs here or revise 8.25.	Added as requested	X	

DOCUMENT REVIEW RECORD (continuation)

MP-TRUW-8.11, R7 (Comments Incorporated in Revision 8), Data Reconciliation

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
6.	5	1.0	4 th para. Reconciliation may need to be performed on the payload container (especially if bundling is required). Delete the 2 nd to last sentence.	Deleted as requested	X	
7.	6	2.2	Reference to the WAC was dropped in the second Rev. 7 without noting with sidebar this should be shown in draft to Rev. 8 Formatting error on section 2.2. Numbering for the last reference is a strikeout. It also appears that the change record for some of the changes made in the first rev. 7 document were not captured in the second rev. 7 version. For example, the deletion in this section of reference to the WAC is not noted. If the second version of rev. 7 is to supersede the July issue, the change record for that version must be inclusive of all changes from rev. 6 DB	Corrected in draft Rev. 8 Move Step 4.1.2 to beginning of Section 4.3, and add "by performing the following steps:" to end of sentence. Delete Section 4.1 A verification of documents (Rev 6, Rev 7A, and Rev 7B) was conducted to determine there were no discrepancies with the revision bars, no discrepancies were found. Copies of the affected pages of the noted revisions have been sent to the CBFO.	X	
8.	11	4.0	Correct second sentence, the non-routine functions are presented in sections 4.9 through 4.11	Deleted because procedure sections change between revisions.	X	
9.	11	4.1.1; 4.5.1	Because this procedure is confirming AK, it should not call the AK procedure. The Program flow would be to implement the AK procedure first and this procedure much later. Revise this step to say to verify the AK definition using the Form. (B3-11a, B4, B4-3d) Delete 4.1.1. Move 4.1.2 to the beginning of 4.3 with statement at end of step "by performing the following step".	Section 4.1.1 and 4.4.1 has been revised as requested. Deleted Step 4.1.1. Moved Step 4.1.2 to the beginning of Step 4.3 and added "by performing the following steps" at end of step.	X	
10.	11	4.1.1.1	This should be covered by the AK procedure or confirmation activities would be different. (B4)	Deleted - Steps apply to the electronic process. See section 4.4.	X	
11.	11	4.1.1.2	MP-TRUW-8.14 also says that this summary is prepared according to MP-TRUW-8.13. Because it is a part of the WSPF submittal as a section of the CIS, it apparently should not be here (reconciliation would not require a new summary for each lot). (B3-12b(2))	Deleted - Steps apply to electronic process. See section 4.4.	X	
12.	13	4.2; 4.6	It is not clear why this section is needed. Data reconciliation occurs after these confirmation activities, clarify why this procedure drives the program or delete this section. (B4-3d)	Deleted as requested.	X	
13.	13	4.3.1	This step says to create a lot by assigning containers to a defined lot. If this step is how to create a lot, how is it possible to have an assigned lot already? Revise to say to group a set of containers from the same waste stream into a lot using the criteria in the following substeps.	From this point forward all section and step numbers have changed due to the comments made in item 12 which was to delete sections 4.2 and 4.6. Also, Figure 1 was revised to reflect these changes. Revised as requested - See Step 4.2.1.	X	

DOCUMENT REVIEW RECORD (continuation)

MP-TRUW-8.11, R7 (Comments Incorporated in Revision 8), Data Reconciliation

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
14.	13	4.3.1; 4.7.1.2	<p>Explain the NOTE. "S5000" is a Summary Category Group, and it is not a foregone conclusion that all S5000 waste will be a single, non-mixed waste stream. (B4)</p> <p>Sections 4.3.1 and 4.6.1 say to fill out Form 1597, the DQO reconciliation documentation, but this is performed by completing the following steps. Revise to say to use 1597 to document the evaluations performed in those following steps. (4.6.10.3 appears to be the only place where you say to document the evaluation on the form.)</p>	<p>This note has been deleted from Section 4.2 and 4.5.</p> <p>Step 4.2.1: added Added "by performing the steps in this section and documenting on Form-1597, Reconciliation with Data Quality Objectives" to end of step.</p> <p>Changed Step 4.5.1 to read: "SPM: Conduct DQO reconciliation on a lot by performing the steps in this section and documenting on the DQO Reconciliation Checklist."</p>	X	
15.	14	4.3.1.1.2; 4.7.1.3	<p>Currently, Form 1196 is only used with waste streams that use statistical sampling. Debris waste streams will seldom use this form. Revise to say for solids, soils/gravel, or waste streams that qualify for reduced headspace gas sampling...</p> <p>NOW 4.2.1.2 and 4.5.1.6. Specify where to go to determine if the required number of samples have been collected, and include the need to verify this for reduced HGAS sampling too. You will need to say to go look at the original estimate and compare it to the calculation of the required number based on sampling results and make the evaluation if more is needed or if you are within 20% (or are going to stop).</p> <p>4.2.4.4 and at 4.5.5.2, Need to verify that the correct number of samples for reduced HGAS were collected. After 4.5.5.2.1 they need to send the data to the statistician and then get the results back before the AKE can go to work.</p>	<p>Steps 4.2.1.1.1 and 4.5.1.3.1 have been revised as requested.</p> <p>Change Step 4.1.1.2 to read: "Verify that the required number of random samples was collected as required by statistical evaluation in accordance with MP-TRUW-8.25."</p> <p>Step 4.4.1.6: change "data" to: "results", and add "...as identified on Form-1196."</p> <p>Move old step 4.4.4.2.2 to below Current Step 4.2.4.5 (4.2.4.5.1)</p> <p>Make two steps now: 4.2.4.5.2 and 4.2.4.5.3 which now read: 4.2.4.5.2 Verify that the correct number of samples were taken and documented on Form-1196. 4.2.4.5.3 Verify that the samples used for headspace gas analyses were randomly chosen from a Waste Stream Lot and documented on Form-1196. Also deleted "appropriately" from step.</p> <p>Deleted Step 4.5.5.2 and associated substeps with respect to reduced headspace gas sampling.</p> <p>Verified that manual reduced headspace gas sampling procedural steps are accurate.</p> <p>Added note below 4.2.4.3: NOTE: A determination whether or not an EPA Code should be assigned and an NCR issued will be made by the AKE based on the process defined in MP-TRUW-8.13.</p>	X	
16.	14	4.3.1.1.4	MDA, TAAC, FGE should be added to the acronym list as a minimum and to the definitions list for clarity	These items have been added to sections 3.1 and 3.2 as requested.	X	

DOCUMENT REVIEW RECORD (continuation)

MP-TRUW-8.11, R7 (Comments Incorporated in Revision 8), Data Reconciliation

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
17.	14	4.3.1.1.4.1	A second step should be added at the physicist level that indicates what happens to drums failing the TAAC/FGE test. While this is covered in 4.3.1.1.6 it is not clear, for example, who issues the NCR.	Clarified as requested. See step 4.2.1.1.3 and 4.2.1.1.5.	X	
18.	14	4.3.1.1.4.1	Document MP-CD&M-11.3 should be more completely described in this section and added to the reference list in Section 2.1. It was not provided as part of the review process.	MP-CD&M-11.3 was referenced in error. RPT-TRUW-03, Drum Assay Technical Review Report. See step 4.2.1.1.3.1	X	
19.	15	4.3.1.4	Specify where this sign and date is to be made. No form has been identified.	Deleted - The signature steps occur in steps 4.3.14 and 4.3.16. The referenced forms contain the signature verification.	X	
20.	16	4.4.4.1; 4.8.5	Specify to ensure the data has been tested for a normal distribution before using the UCL ₉₉ equations. (EPA SW-846, Chapter 9)	Step 4.3.4.3 changed as requested. Step 4.6.5 applies to electronic evaluation and is performed automatically in WTS.	X	
21.	16	4.4.4.1	The spreadsheet should be a standard form. It should not be regenerated by each user, it needs to have been validated (software QA), and once run, those results need to be included in the Program records. (B3-11a)	Note in section 4.3.4 the analytical spreadsheets are generated at each use and are retained as part of the CIS.	X	
22.	17	4.4.4.1.3; 4.8.5.2.7	Table 2a needs to include columns to show transformations used and the transformed PRQL. Table 2b reports TICs. This procedure has been silent on what to do with TICs. Add steps to say to do the TIC evaluations. (B3-11a, B4-3d)	Transformations have been added to Form- 1598, Characterization Information Summary and TIC evaluation is covered in section 4.3.11 and 4.6.12	X	
23.	17	4.4.4.2.1	Specify that Form 1198 is where this is documented.	Changed 4.3.4.4.1 as requested.	X	
24.	18	4.4.5.1; 4.8.6	Even if process knowledge says yes, you need to confirm this with the headspace gas sample results (by entering them in e-TRAMPAC as in the next step). (B3-11a, B4-3d)	Changed as requested. See step 4.3.5 and the following note.	X	
25.	18	4.4.6; 4.8.7	Specify to confirm that the data set was tested for a normal distribution before using the equations in App. A. (EPA SW-846, Chapter 9)	Step 4.3.6.2.3 changed as requested. Steps in 4.6.7 is automatically performed in WTS.	X	
26.	19	4.4.6.3	Change the WAP reference to your QAPJP.	Change as requested. See section 4.6.7.1.3	X	
27.	19	4.4.6.6; 4.8.7.1.9	The Tables need to include columns to show transformations used and the transformed PRQL or RTL. This procedure has been silent on what to do with TICs. Add steps to say to do the TIC evaluations. (B3-11a, B4-3d) Clarify how this will be shown when the electronic version is used. (the screen shots do not show transformations)	Transformations have been added to Form- 1598, Characterization Information Summary and TIC evaluation is covered in section 4.3.11 and 4.6.12. The electronic version which has been through software QA process is a simple manipulation of data which populates the CIS (ie., Form-1598).	X	
28.	20	4.4.6.8; 4.4.7.3 (should be 4.8.7.2)	This section is discussing solids results, this step needs to be deleted.	Deleted as requested.	X	

DOCUMENT REVIEW RECORD (continuation)

MP-TRUW-8.11, R7 (Comments Incorporated in Revision 8), Data Reconciliation

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
29.	21	4.4.8.1.2; 4.8.9.1.1	<p>This action uses the results of the UCL₉₀ calculations for both HGAS and solids. There is a question that asks if the UCL₉₀s have been determined, and how you certify that the results are acceptable. Clarify what the reference to SPM 4.4.7 and 4.4.8 means.</p> <p>Specify to review the UCL₉₀ results and the VE miscertification results to ensure the waste stream HWNs are correct at the 90% confidence level. (B3-11a, B4-3d) Clarify how this will be shown when the electronic version is used (the screen shots do not show transformations)</p> <p>Also now 4.6.9. The substeps are reviewing individual containers. This tells you nothing for the waste stream as a whole. This evaluation means to look at the sampling results. See the highlighted portion of the comment above.</p> <p>The manual side is fine, now they need to do the electronic side. Step 4.5.9 should be like 4.2.8.</p>	<p>See steps 4.3.8 and 4.6.9 The reference 4.4.7 and 4.4.8 was deleted. The electronic version which has been through software QA process is a simple manipulation of data.</p> <p>Revised Step 4.2.8.1 to read: Compare the UCL₉₀ to the PRQL from the summary data report on Form-1598 associated with the lot to confirm that all appropriate HWNs are in place.</p> <p>Replaced Step 4.2.8.2 with: IF an additional or missing hazardous waste number is identified, THEN notify the AKE to determine appropriate action for the waste stream or container, as specified by MP-TRUW-8.13.</p> <p>Added step 4.5.9.1.2: "From WTS compare the UCL₉₀ to the PRQL to confirm that all appropriate HWN's are in place."</p> <p>Made two steps now: 4.2.4.5.2 and 4.2.4.5.3 which now read: 4.2.4.5.2 Verify that the correct number of samples were taken and documented on Form-1196.</p> <p>4.2.4.5.4 Verify that the samples used for headspace gas analyses were randomly chosen from a Waste Stream Lot and documented on Form-1196. Also deleted "appropriately" from step.</p> <p>Move old step 4.2.4.5.1 to below Current Step 4.2.4.5.2 (4.2.4.5.1) Now reads: 4.2.4.5.1: If the AKE has determined that an EPA code is to be added to the waste stream based on data from a random sample, an NCR will be issued, and the waste stream will be discontinued as a reduced sampling waste stream. Notify operations to start 100% sampling and ensure that necessary updates are made in WTS.</p> <p>4.2.4.5.2: Verify that the correct number of samples were taken and documented on Form-1196.</p> <p>4.2.4.5.3: Verify that the samples used for headspace gas analyses were randomly chosen from a Waste Stream Lot and documented on Form-1196.</p>	X	
30.	21	4.4.9.1; 4.8.10.1	Change the "or" to an "and." (B2-1)	Changed as directed.	X	

DOCUMENT REVIEW RECORD (continuation)

MP-TRUW-8.11, R7 (Comments Incorporated in Revision 8), Data Reconciliation

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
31.	21	4.4.9.3	Specify where to record this when you are not writing a CIS but rather doing subsequent reconciliation for the waste stream. See step 4.4.15 - it appears that you are always going to do a CIS. (B3-11a) Note that Form 1597 is not a full CIS. A full CIS includes the AK summary and you won't need that for subsequent lots. Do you intend to do a full CIS each time?	Form 1597. See step 4.3.9.3. We complete a CIS when reconciling by lot or waste stream.	X	
32.	22	4.4.11; 4.8.12	Previous steps have already directed the SPM to document the TIC evaluations on the forms from MP-TRUW-8.14. Clarify where in this procedure you wish this to occur. Change the reference to the WAP to a reference to your QAPJP. Now 4.3.11.3. Say where to get the TIC reports and where to show the % calculation. I don't see where the calculation for the percentage of containers having the TIC is done. (4.6.12.2 also)	Step 4.3.11 and 4.6.12 changed from WAP to QAPJP. Deleted step 4.4.11.3 for clarity. Changed Step 4.2.11 to read: SPM; Confirm that all tentatively identified compounds (TICs) for headspace gas and solid sampling analysis have been appropriately identified and reported in accordance with the requirements of Section B3-1 of the MP-TRUW-8.2 for the lot. Changed Step 4.2.11.2 to read: "From the TIC reports in the batch data reports, calculate the percentage of containers with positive hits for each TIC by performing the following calculation for each TIC: 4.2.11.2.1 Divide the number of samples reporting the TIC by the total number of samples evaluated, and multiply by 100 for the percentage value." Add new step 4.2.11.5: <u>2nd</u> SPM: Perform independent verification of the TIC calculations and document on the applicable TIC spreadsheets. Step 4.5.12.2 not changed. WTS automatically calculates TICs in the same manner described.	X	
33.	22	4.4.11.2 4.8.12.3	This calculation is performed on the entire waste stream. Do not do it lot-by-lot and then decide if you need to repeat it for the waste stream. (B3-1) 4.3.11.3 and 4.6.12.2. Specify that this calculation is done using all of the containers reconciled to date, not just the lot under consideration.	Deleted step 4.3.11.5 and 4.6.12.3 as they were redundant steps. Changed Step 4.2.11.3 to read: "Record the results on TIC reporting forms, AND add to the previous numbers of drums and TICs for each lot to obtain running totals for the waste stream." Changed old step 4.6.12.2 to read: Identify TICs that are present in the waste stream lot and the waste stream at a frequency of 25% or higher and are listed in 40 CFR § 261, Appendix VIII.	X	

DOCUMENT REVIEW RECORD (continuation)

MP-TRUW-8.11, R7 (Comments Incorporated in Revision 8), Data Reconciliation

#	PAGE	SECT/ PARA	COMMENT	RESPONSE	ACC	REJ
34.	27	4.7.1.6	Clarify what "well defined" means. (Revise to read like 4.3.1.3.) Now 4.5.1.6. Specify where to go to determine the required number of samples is and add for reduced HGAS sampling also. (4.6.7.1.2 also.) 4.2.4.4 and at 4.5.5.2, Need to verify that the correct number of samples for reduced HGAS were collected. After 4.5.5.2.1 they need to send the data to the statistician and then get the results back before the AKE can go to work.	See Step 4.5.1.6. Step revised and "well-defined" deleted. Changed step 4.4.1.6 to read: Delete containers from the lot with outstanding issues. If working with a lot that includes solid sampling drums, ensure that the population of containers includes the required number of solid sampling results, as identified on Form-1196. No change necessary to 4.6.7.1.2.	X	
35.	28	4.8.2.1	Delete "Currently," there can only be one Waste Matrix Code assigned to a waste stream. (B-1b)	Deleted	X	
36.	28	4.8.4.1	Clarify the note about "spreadsheets." If these are spreadsheets used to confirm the predominant isotopes, they need to be standard and controlled.	The predominant isotopes are defined in RPT-TRUW-03 for each generator and process. Deleted reference to spreadsheet in step 4.6.4.1.	X	
37.	32	4.8.5.2.5	Step 4.8.5.1.1 assumes these calculations are already performed. This step needs to be moved up to the front (the first step needs to be to check normality and do the UCL ₉₀ calc).	Step 4.6.5.1 and 4.6.5.1.1 changed as requested.	X	
38.	39	4.8.16	If this is the electronic section, the directions for manual reconciliation appear to be superfluous.	Manual steps referenced in the electronic section have been deleted.	X	
39.	40	4.10	Specify that characterization can only be performed after the AK report is complete (it's OK if the WTS isn't ready yet, but no confirmation can be performed until the AK that is to be confirmed is complete). (B4-3d)	A note has been added to this affect with the exception of newly generated waste. See section 4.8 NOTE.	X	
40.	A1		App. A would be better suited in the RCRA Statistical Sampling procedure as a set of step-wise instructions (not as a narrative appendix such as this).	Moved to MP-TRUW-8.25 as requested.	X	
41.	A1		App. A, 1 st para, also state that the tests for a normal distribution is not supported by WTS and must be performed manually.	Moved to MP-TRUW-8.25 as requested.	X	
42.	A3	A6	Remove the text regarding "suggested" formats. Standard forms are required by the Program and specifically called out in this procedure to use those found in MP-TRUW-8.14.	Deleted all suggested formats and added form 1597. Reconciliation with Data Quality Objectives.	X	
New comments based on resolution meetings held in Carlsbad the week of 11/8/04.						
N1.		4.2.4.3.1 4.2.4.3.2	Step 4.2.4.3.1 and .2 are not performed by the AKE, they need to come out in the outline to be SPM actions (4.2.4.4 and 4.2.4.5). Step 4.2.4.3 sends the data out to MP-TRUW-8.25, 8.25 sends it back to the SPM.	Moved Step 4.2.4.3.1 and .2 to next higher level (now step 4.2.4.3, and 4.2.4.4). Steps carried out by SPM.	X	
N2.		4.5.5	Note that at Step 4.5.5 there is nothing like steps 4.2.4.3 or 4.5.7.1.2 that calls MP-TRUW-8.25 to get the statistics work done and returned. (WTS does not look at normality, so I don't see how this could be automated.)	Deleted Step 4.5.5.2 and associated substeps with respect to reduced headspace gas sampling.	X	

DOCUMENT REVIEW RECORD (continuation)

MP-7610W-11.1.R1 (Comments incorporated in Revision 2). Data Recertification

COMMENT RESOLUTION APPROVED:

DOT Signature *[Signature]*

Date 11/14/04

QA Signature FOR MPW

Date 11-12-04