



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

OCT 6 2010



Mr. Steve Zappe, Project Leader  
Hazardous Materials Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

Subject: Transmittal of Responses and Revised B6 Checklists Addressing NMED  
Comments Associated with CBFO Audit A-10-14

Dear Mr. Zappe:

Enclosed are the responses and revised B6 checklists addressing New Mexico Environment Department (NMED) comments associated with Carlsbad Field Office (CBFO) Audit A-10-14 of Los Alamos National Central Characterization Project. The comments were transmitted to the CBFO by letter dated September 22, 2010.

Should you have any questions, please contact Ms. Ava L. Holland, CBFO Director of Quality Assurance, at (575) 234-7423.

Sincerely,

David C. Moody  
Manager

Enclosure



Mr. Steve Zappe

-2-

October 6, 2010

cc: w/o enclosures

|                                |     |
|--------------------------------|-----|
| E. Ziemianski, CBFO            | *ED |
| A. Holland, CBFO               | ED  |
| W. Mackie, CBFO                | ED  |
| G. Basabilvazo, CBFO           | ED  |
| S. McCauslin, CBFO             | ED  |
| N. Castaneda, CBFO             | ED  |
| M. Navarrete, CBFO             | ED  |
| D. Miehl, CBFO                 | ED  |
| D. Haar, WTS/CCP               | ED  |
| D. Ploetz, WTS/CCP             | ED  |
| V. Cannon, WTS/CCP             | ED  |
| A. J. Fisher, WTS/CCP          | ED  |
| M. Walker, WTS/CCP             | ED  |
| Y. Salmon, WTS/CCP             | ED  |
| J. Hoff, WTS                   | ED  |
| M. Mullins, WTS                | ED  |
| G. Rael, LASO                  | ED  |
| L. Bishop, LASO                | ED  |
| T. Peake, EPA                  | ED  |
| M. Eagle, EPA                  | ED  |
| E. Feltcorn, EPA               | ED  |
| R. Joglekar, EPA               | ED  |
| S. Ghose, EPA                  | ED  |
| R. Lee, EPA                    | ED  |
| J. Bearzi, NMED                | ED  |
| S. Holmes, NMED                | ED  |
| J. Kieling, NMED               | ED  |
| T. Kesterson, DOE OB WIPP NMED | ED  |
| D. Winters, DNFSB              | ED  |
| P. Gilbert, LANL-CO            | ED  |
| G. Lyshik, LANL-CO             | ED  |
| P. Hinojos, CTAC               | ED  |
| K. Martin, CTAC                | ED  |
| G. Knox, CTAC                  | ED  |
| WWIS Database Administrators   | ED  |
| R. Chavez, WRES                | ED  |
| W. Most, WRES                  | ED  |
| D. Streng, WRES                | ED  |
| L. Pastorello, WRES            | ED  |
| D. Guevara, WRES               | ED  |

\*ED denotes electronic distribution

cc: w/enclosures

WIPP Operating Record, MS: 452-09

CTAC QA File

CBFO M&RC

**RESPONSE TO NMED COMMENTS ON THE LANL/CCP  
FINAL AUDIT REPORT A-10-14**

The NMED letter dated September 22, 2010, for Final Audit Report A-10-14 included three comments related to the report and associated B6 checklists (shown here in italics). The actions taken to address the comments are provided in the following responses.

1. *In Question 314 of the B6 Checklist, CCP-TP-113 is cited as meeting the VE QAOs for Accuracy, Completeness, and Precision, but not for Comparability; instead, the CCP Training Program (CCP-PO-001 and CCP-QP-002) is cited as meeting the QAO for Comparability. Upon further discussion with CBFO, NMED acknowledges that Questions 2 and 22 of Attachment 3 in CCP-TP-113 (ITR Checklist) do address the Comparability OAO, albeit indirectly. The Permittees should eliminate the following comment because it is incorrect: "Precision, accuracy, and completeness are verified during ITR review per CCP-TP-113. Comparability is assured via the training program described in CCP-PO-001 and CCP-QP-002."*

Response: The B6-6 checklist has been revised to remove the comment for questions 314 and 314a. A copy of the revised checklist is provided as evidence of the correction.

2. *In question 313 of the B6 Checklist, there is no basis in the Revision 13 of CCP-TP-113 (included in the audit report) for the following statement in the comments column: "Although this approach is allowed by the Permit for non-transparent containers, CCP would conservatively reject such a container as not containing as little residual liquid as is reasonably achievable." This is, however, addressed in revision 14. The Permittees must revise this comment or cite (and submit) revision 14 as the implementing procedure.*

Response: NMED is correct in that CCP-TP-113 Revision 13 does not specifically address liquids in non-transparent containers identified during visual examination. As question 313 is not directly addressed, CBFO believes the identified comment is necessary to assure stakeholders that a more conservative approach was taken by the Permittee in rejecting any such containers. NMED is also correct in stating that this issue is addressed in Revision 14 of CCP-TP-113; however, CBFO is unable to cite Revision 14 as an implementing document as, with a 06/30/2010 release date, it was unavailable for use during LANL Audit A-10-14, which was performed 4/27-29/2010.

3. *CBFO Car 10- 25 was written to address the following Condition Adverse to Quality (CAQ): "During visual examination (VE) in TA-55 and TA-50, the CCP VE operators record their field observations manually on data forms. These are surveyed out and the data are then transferred to electronic versions of the VE data sheets for the output container that are included in the BDR. The original handwritten field record is destroyed after the data are entered in the final VE data sheets. Therefore, the ITR does not have an opportunity to verify the data have been properly transferred and reduced from the field records."*

*Section B3-10a(1) of CCP-PO-001 is cited as a requirement that was violated. Section B3-10a(1) of CC-PO-001 and the permit require that the independent technical reviewer ensure that "QAOs have been met according to the methods outlined in Sections B3-2 through B3-9."*

*A requirement of the Corrective Action Plan (CAP) was that CCP-TP-113 be revised to require that field records (raw data) be included in the BDR. Question 314 of the B6 Checklist, which corresponds to Permit Section B3-4b (VE QAOs), includes the following statement in the Comments Column: "Precision, accuracy, and completeness are verified during ITR review per CCP-TP-113 and CP-TP-069." However, Revision 13 of CCP-TP-113 (included in the Audit Report) does not include the requirement that the raw data is included in the BDR, and therefore the above statement is not supported because the ITR cannot meet the Precision QAP. The Permittees must revise the comment to note that CAR 10-025 was written to address the requirement and cite (and submit) Revision 14 of CCP-TP-113 as the implementing procedure.*

Response: The CAP submitted by CCP, and approved by CBFO, for CAR 10-025 states that "CCP has issued Standing Order CCP-SO-LANL-042, Revision 0, on May 13, 2010, directing VE operators to include any field records generated during VE of containers in the BDR documentation, making the information available for review by the Independent Reviewer. The Standing Order will remain in effect until CCP-TP-113 has been revised to incorporate the requirements of the standing order into the procedure." The accepted commitment made by CCP was to issue a Standing Order, not to revise CCP-TP-113. This was verified by CBFO during the CAR Closure review and acceptance of the CCP closure package, which was transmitted to WTS on July 2, 2010. CCP-TP-113, Revision 14, was issued June 30, 2010, and did incorporate, per CCP-PO-005, Revision 21, section 17.5, *CCP Conduct of Operations*, the requirements of CCDP-SO-LANL-042, Revision 0.

B6-6 checklist question 314a has been revised to reference CBFO CAR 10-025, but CBFO will not reference CCP-TP-113, Revision 14, as an implementing document in Audit A-10-14, as Revision 14 was released after the performance of the audit. As requested, a copy of the revised B6-6 checklist, as well as a copy CCP-TP-113, Revision 14, is being provided for NMED review.

**Table B6-6 Visual Examination (VE) Checklist  
LANL/CCP Recertification Audit, A-10-14, April 27 – 29, 2010**

(This page intentionally blank)

### Visual Examination (VE) Checklist

|   | WAP Requirement <sup>1</sup><br>LANL/CCP Recertification Audit, A-10-14<br>Table B6-6 Visual Examination (VE) Checklist   | Procedure Documented   |                        | Example of Implementation/ Objective Evidence, as applicable |                  | Comment<br>(e.g., any change in procedure since last audit, etc.) |
|---|---|--|------------------------|--|------------------|---|
|   |   | Location   | Adequate?<br>Y/N (Why) | Item Reviewed  | Adequate?<br>Y/N |   |
| <b>TRAINING</b>                               |   |  |                        |  |                  |   |
| <b>296</b>                                    | Is there documentation which shows that a standardized training program for visual examination personnel has been developed? Is it specific to the site and include the various waste configurations generated/stored at the site?<br>(Section B1-4)  | CCP-PO-001<br>S. B1-4<br>CCP-QP-002<br>S. 4.1.3[E.3]<br>S. 4.2.6                 | Y                      | Training Files<br><b>(GEN-16)</b>                            | Y                |   |
| <b>297</b>                                    | Is there documentation which shows that the visual inspectors receive training on the specific waste generating processes, typical packaging configurations, and waste material parameters expected to be found in each waste matrix code at the site?<br>(Section B1-4)  | CCP-PO-001<br>S. B1-4<br>CCP-QP-002<br>S. 4.1.3[E.3]<br>S. 4.2.6                 | Y                      | Training Files<br><b>(GEN-16)</b>                            | Y                |   |
| <b>298</b>                                    | Are the visual examination personnel requalified once every two years?<br>(Section B1-4)  | CCP-PO-001<br>S. B1-4<br>CCP-QP-002<br>S. 4.1.3[F]                               | Y                      | Training Files<br><b>(GEN-16)</b>                            | Y                |   |
| <b>VISUAL EXAMINATION EXPERT REQUIREMENTS</b> |   |  |                        |  |                  |   |
| <b>300</b>                                    | Does documentation ensure that the site has designated a visual examination expert? Is the visual examination expert familiar with the waste generating processes that have taken place at the site? Is the visual examination expert familiar with all of the types of waste being characterized at that site?<br>(Section B1-4) | CCP-PO-001<br>S. B1-4<br>CCP-QP-002<br>S. 4.2.6[C]<br>S. 4.3<br>NOTE<br>4.3.1    | Y                      | Training Files<br><b>(GEN-16)</b>                            | Y                |   |
| <b>301</b>                                    | Does documentation ensure that the visual examination expert shall be responsible for the overall direction and implementation of the visual examination aspects of the program? Does the site's QAPJP specify the selection, qualification, and training requirements of the visual examination expert?<br>(B1-4)                | CCP-PO-001<br>S. B1-4<br>CCP-QP-002<br>S. 4.2.6[C]<br>S. 4.3<br>NOTE<br>S. 4.3.1 | Y                      | Training Files<br><b>(GEN-16)</b>                            | Y                |   |
| <b>VISUAL EXAMINATION PROCEDURES</b>          |   |  |                        |  |                  |   |
| <b>304</b>                                    | Do procedures indicate that all visual examination activities are recorded on audio/videotape or alternatively, by using a second operator to provide additional verification by reviewing the contents of the waste container to ensure correct  | CCP-TP-113<br>S. 1.1   | Y                      | BDRs:<br><br>LAVE500335                                      | Y                |   |

|            | WAP Requirement <sup>1</sup><br>LANL/CCP Recertification Audit, A-10-14<br>Table B6-6 Visual Examination (VE) Checklist   | Procedure Documented                                    |                        | Example of Implementation/ Objective Evidence, as applicable  |                  | Comment<br>(e.g., any change in procedure since last audit, etc.)   |
|------------|---|---|------------------------|---|------------------|---|
|            |   | Location  | Adequate?<br>Y/N (Why) | Item Reviewed   | Adequate?<br>Y/N |   |
|            | reporting?<br>(Section B1-4)  | CCP-TP-069<br>(All)                                     |                        | LAVE500290<br>LAVE500234<br>LAVE500222<br>LAVE550030<br>LAVE550025<br>LAVE550021<br>LAVE2310001<br>LA-09- SR-VE-017<br>LA-09- SR-VE-015<br>LA-09- SR-VE-005<br>LA-09- SR-VE-003<br><b>(VE-1)</b>                            |                  |   |
| <b>313</b> | Do site procedures ensure that when liquids are found, the non-transparent container holding the liquid will be assumed to be filled with liquid and this volume will be added to the total liquid in the payload container? The payload container would then be rejected and/or repackaged to exclude the container if it is over the TSDF-WAC limits.<br>(Section B-3c) | CCP-TP-113<br>S. 4.4<br>Table 1<br>CCP-TP-069<br>Att. 4 | Y                      | BDRs:<br><br>LAVE500335<br>LAVE500290<br>LAVE500234<br>LAVE500222<br>LAVE550030<br>LAVE550025<br>LAVE550021<br>LAVE2310001<br>LA-09- SR-VE-017<br>LA-09- SR-VE-015<br>LA-09- SR-VE-005<br>LA-09- SR-VE-003<br><b>(VE-1)</b> | Y                | Although this approach is allowed by the Permit for non-transparent containers, CCP would conservatively reject such a container as not containing as little residual liquid as is reasonably achievable. |

|            | WAP Requirement <sup>1</sup><br>LANL/CCP Recertification Audit, A-10-14<br>Table B6-6 Visual Examination (VE) Checklist  | Procedure Documented  |                        | Example of Implementation/ Objective Evidence, as applicable  |                  | Comment<br>(e.g., any change in procedure since last audit, etc.)   |
|------------|--|---|------------------------|---|------------------|---|
|            |  | Location  | Adequate?<br>Y/N (Why) | Item Reviewed   | Adequate?<br>Y/N |   |
| <b>314</b> | <p>Are process procedures in place to meet the following Quality Assurance Objectives?:</p> <p><u>Precision</u></p> <p>Precision is maintained by reconciling any discrepancies between the operator and the independent technical reviewer with regard to identification of waste matrix code, liquids in excess of TSDF-WAC limits, and compressed gases.</p> <p><u>Accuracy</u></p> <p>Accuracy is maintained by requiring operators to pass a comprehensive examination and demonstrate satisfactory performance in the presence of the VE expert during their initial qualification and subsequent requalification.</p> | CCP-TP-113<br>S. 4.8<br>Att. 3<br>CCP-TP-069<br>S. 4.3<br>Att. 7<br>CCP-PO-001<br>S. B1-4<br>CCP-QP-002<br>S. 4.2.6 | Y                      | BDRs:<br>LAVE500335<br>LAVE500290<br>LAVE500234<br>LAVE500222<br>LAVE550030<br>LAVE550025<br>LAVE550021<br>LAVE2310001<br>LA-09- SR-VE-017<br>LA-09- SR-VE-015<br>LA-09- SR-VE-005<br>LA-09- SR-VE-003<br><b>(VE-1)</b> | Y                | <p><del>Precision, accuracy, and completeness are verified during ITR review per CCP-TP-113 and CCP-TP-069.</del></p> <p><del>Comparability is assured via the training program described in CCP-PO-001 and CCP-QP-002.</del></p> <p><u>(Revised per NMED comments Final Report, 23SEP10)</u></p> |

|             | WAP Requirement <sup>1</sup><br>LANL/CCP Recertification Audit, A-10-14<br>Table B6-6 Visual Examination (VE) Checklist   | Procedure Documented  |                        | Example of Implementation/ Objective Evidence, as applicable  |                  | Comment<br>(e.g., any change in procedure since last audit, etc.)  |
|-------------|---|---|------------------------|---|------------------|--|
|             |   | Location  | Adequate?<br>Y/N (Why) | Item Reviewed   | Adequate?<br>Y/N |  |
| <b>314a</b> | <p><u>Completeness</u></p> <p>A validated VE data form will be obtained for 100 percent of the waste containers subject to VE.</p> <p><u>Comparability</u></p> <p>The comparability of VE data from different operators shall be enhanced by using standardized VE procedures and operator qualifications.</p> <p>(Section B3-4b)</p> | CCP-TP-113<br>S. 4.8<br>Att. 3<br><br>CCP-TP-069<br>S. 4.3<br>Att. 7<br><br>CCP-PO-001<br>S. B1-4<br><br>CCP-QP-002<br>S. 4.2.6 | Y                      | BDRs:<br><br>LAVE500335<br>LAVE500290<br>LAVE500234<br>LAVE500222<br>LAVE550030<br>LAVE550025<br>LAVE550021<br>LAVE2310001<br>LA-09- SR-VE-017<br>LA-09- SR-VE-015<br>LA-09- SR-VE-005<br>LA-09- SR-VE-003<br><b>(VE-1)</b> | Y                | <p><del>Precision, accuracy, and completeness are verified during ITR review per CCP-TP-113 and CCP-TP-069.</del></p> <p><del>Comparability is assured via the training program described in CCP-PO-001 and CCP-QP-002.</del></p> <p><u>CBFO CAR 10-25</u></p> <p><u>It was observed during the Audit that raw data, generated in the hotcell during VE activities, is being discarded after transferring the information to the VE data sheets and is not available for ITR review to verify proper transference of data from field records.</u></p> <p><u>(Revised per NMED comments on Final Report, 23SEP10)</u></p> |

1. The WAP requirements should be presented in documents, such as procedures. Each of the questions posed under WAP requirements is meant to ask whether procedures are in place or whether documents are evident which demonstrate that the specific WAP requirement is or can be met.

# CCP-TP-113

Revision 14

## CCP

### Standard Contact-Handled Waste Visual Examination

EFFECTIVE DATE: 06/30/2010

Larry Porter

PRINTED NAME

APPROVED FOR USE

## RECORD OF REVISION

| Revision Number | Date Approved | Description of Revision  |
|-----------------|---------------|--|
| 0               | 03/26/2004    | Initial Issue.   |
| 1               | 04/02/2004    | Incorporated Facility Oversight Review Committee Comment resolutions, from Los Alamos National Laboratory, into Sections 1.0, 2.0 and 4.0.   |
| 2               | 07/15/2004    | Revised in response to CBFO CAR #04-026. The change in this document involved addition of a note for clarification and implementation on percent fill of a drum. As such, this change is data quality affecting.   |
| 3               | 01/25/2005    | Made corrections to procedure per LANL, to comply with the MSA review.   |
| 4               | 12/22/2005    | Revised Table 4 to add the weight of an 85- and 110-Gallon Drum as well as a 55-Gallon 12-mil. Plastic Bag. Revised responsibility for pagination of the BDR.  |
| 5               | 08/28/2006    | Revised to address CAR LANL-0006-06.   |
| 6               | 11/16/2006    | Revised to implement changes to the Waste Isolation Pilot Plant Hazardous Waste Facility Permit requirements resulting from the Section 311/RH PMR.  |
| 7               | 03/19/2007    | Revised to clarify notes and procedural steps. Revised to record Output Drum information in Section 4 of Attachment 1. Revised to record Waste Container ID on each page of Attachment 1.  |
| 8               | 09/04/2007    | Revised to separate and clarify each Visual Examination (VE) process. Revised Attachment 1, CCP Waste Visual Examination Data Form and Attachment 2, CCP Waste VE Independent Technical Reviewer Checklist, to support the changes. Added new Section 4.11, Newly Generated Waste Container Data Submission, and Attachment 5, CCP Newly Generated Waste Container Data, to assist in container tracking. Incorporated additional editorial changes. |
| 9               | 03/05/2008    | Revised to add a step to Section 2.4 for use of Host site procedures for anomalous conditions. Attachment 1, Section 5, Prohibited Items revised to be consistent with Central Characterization Project (CCP) Nondestructive Examination (NDE) procedures and made additional editorial changes.   |

## RECORD OF REVISION (Continued)

| Revision Number | Date Approved | Description of Revision  |
|-----------------|---------------|--|
| 10              | 07/09/2008    | Revised to address U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) Corrective Action Request (CAR) Number CAR-08-021 and New Mexico Environmental Department (NMED) Observer Inquiry from Audit A-08-16. Also, revised to maintain control of internal package/items so that payload containers are surveyed at <200 millirem per hour (mrem/hr). |
| 11              | 11/12/2008    | Revised to incorporate concurrent use with CCP-TP-163, <i>CCP Standard Visual Examination of Records</i> .   |
| 12              | 12/01/2008    | Minor revision to add notes for clarification of visual examination (VE) of record.  |
| 13              | 03/11/2009    | Revised to address the U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) Corrective Action Report (CAR) Number 09-015 and Environmental Protection Agency (EPA) Issue Numbers INL-CCP-RH-VE-T1-002CR, 003CR, and 007CR.   |
| 14              | 06/30/2010    | Revised to incorporate modifications to Hazardous Waste Facility Permit. Revised to address CBFO Corrective Action Report (CAR) 10-019. Revised to address procedural steps, to accommodate the visual examination (VE) process for newly generated waste and to make additional editorial changes.  |

TABLE OF CONTENTS

1.0 PURPOSE..... 6  
1.1 Scope..... 6

2.0 REQUIREMENTS..... 7  
2.1 References ..... 7  
2.2 Training Requirements..... 7  
2.3 Equipment List..... 7  
2.4 Precautions and Limitations..... 7  
2.5 Prerequisite Actions ..... 8  
2.6 Definitions ..... 8

3.0 RESPONSIBILITIES..... 10  
3.1 Site Project Manager (SPM) ..... 10  
3.2 Visual Examination Expert (VEE) ..... 10  
3.3 Visual Examination Operator (VEO) ..... 10  
3.4 Independent Technical Reviewer (ITR)..... 10  
3.5 Vendor Project Manager (VPM) ..... 10  
3.6 Facility Records Custodian ..... 10

4.0 PROCEDURE..... 11  
4.1 General Information and Performance Checks..... 11  
4.2 Previously Packaged Input Waste Container Preparation. .... 15  
4.3 Output Waste Container Verification..... 16  
4.4 Visual Examination (VE) ..... 18  
4.5 Container Lid Installation and Closure Verification ..... 24  
4.6 Batch Data Report Preparation..... 25  
4.7 VE Independent Technical Review ..... 26  
4.8 Newly Generated Waste Container Data Submission ..... 26

5.0 RECORDS..... 27

LIST OF TABLES

Table 1. Prohibited Items .....28  
Table 2. Layers of Confinement .....29  
Table 3. Waste Material Parameters .....30  
Table 4. Waste Item Weights and Weighing Codes .....31

LIST OF ATTACHMENTS

Attachment 1 – CCP Waste Visual Examination General Information Form .....34  
Attachment 2 – CCP Waste Visual Examination Data Form .....35  
Attachment 3 – CCP Waste VE Independent Technical Reviewer Checklist .....40  
Attachment 4 – CCP Waste VE Batch Data Report Table of Contents .....42  
Attachment 5 – CCP Waste VE Batch Data Report Cover Sheet ..... 43  
Attachment 6 – CCP Newly Generated Waste Container Data .....44

## 1.0 PURPOSE

CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*, Section B-3c, requires that containers be examined to verify the physical form of the waste and to identify items that are prohibited from disposal at the Waste Isolation Pilot Plant (WIPP). This procedure establishes how to perform visual examination (VE) of contact-handled (CH) transuranic (TRU) waste containers, which may include the removal of prohibited items; and how to prepare and review Batch Data Reports (BDRs) generated from the VE process. This procedure is designed to be accomplished in conjunction with Host site facility operating procedures that address the use of those facilities for VE. All Host site requirements for health, safety, and operations in the work place will be addressed in a Host site procedure.

### 1.1 Scope

This procedure applies to retrievably stored and newly generated S3000 homogeneous solids, S4000 soils/gravel, and S5000 debris waste streams. VE will be used when necessary to examine a waste container to verify its physical form and to detect and remediate items that are prohibited from disposal at the WIPP.

VE cannot identify prohibited items imbedded in forms, such as S3000 and S4000, when the material is not removed from the characterized container.

VE may be performed on S3000 or S4000 when the material is not removed from the characterized container if CBFO approves the method for the specific waste form, typically from a surveillance.

There are two methods allowed for performing a VE process. Method 1 uses one VE Operator (VEO) with audio/video recording of the process, and Method 2 uses two VEOs (without audio/video recording of the process).

Full use of this procedure is **NOT** currently authorized at Los Alamos National Laboratory (LANL), in that processing of a prohibited item(s) found during VE of homogeneous solid waste containers is **NOT** authorized at this time.

## 2.0 REQUIREMENTS

### 2.1 References

#### Baseline Documents

- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-PO-003, *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*
- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*

#### Referenced Documents

- CCP-QP-002, *CCP Training and Qualification Plan*
- CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*
- CCP-QP-008, *CCP Records Management*

### 2.2 Training Requirements

- 2.2.1 Personnel performing this procedure will be trained and qualified in accordance with CCP-QP-002, *CCP Training and Qualification Plan*, prior to performing this procedure.

### 2.3 Equipment List

#### 2.3.1 Torque Wrenches

#### 2.3.2 Certified VE Scale

#### 2.3.3 Certified Container Scale

#### 2.3.4 Certified Weights

### 2.4 Precautions and Limitations

- 2.4.1 Processing of prohibited item(s) found during VE of homogeneous solid waste containers is **NOT** authorized at LANL at this time.
- 2.4.2 Containers with a total dose rate >200 millirem per hour (mrem/hr) at surface **SHALL NOT** be processed under this procedure.

2.4.3 Host site procedures may be used in conjunction with this procedure in order to handle anomalous conditions, as necessary.

## 2.5 Prerequisite Actions

2.5.1 Prepare containers for VE in accordance with Host site procedures.

2.5.2 Ensure **NO** hold tags that would prevent the performance of VE are on the containers before proceeding.

2.5.3 Review the radiation levels of the containers before proceeding.

2.5.4 Ensure Method 1 or Method 2 for performing the VE has been determined by the Site Project Manager (SPM).

2.5.5 Ensure Input Waste Container(s) is on the AK Tracking Spreadsheet.

2.5.6 For Newly Generated waste processing, confirm that waste is described in an approved AK Summary Report.

## 2.6 Definitions

2.6.1 **Calibration Due Date** - The date recorded on a tool's or scale's sticker/label that indicates the last date the tool or scale is in calibration.

2.6.2 **Method 1** - One VEO with audio/video recording of the process created during VE.

2.6.3 **Method 2** - Two VEOs (without audio/video recording of the process) performing VE. Each VEO shall observe for themselves the waste being placed in the waste container or the contents within the examined waste container when the waste is not removed.

2.6.4 **Outermost Container** – Outer container that holds waste at time of VE.

2.6.5 **Internal Container** – A container inside the outermost container examined during visual examination. Drum liners, liner bag, plastic bags used for contamination control, capillary-type labware, and debris not designed to hold liquid at the time of original waste packaging are not internal containers.

2.6.6 **Observable Liquid** – Liquid that is observable by a qualified operator performing VE of the waste.

2.6.7 **Field Records** – are records which are generated in the field under adverse conditions (i.e., personnel are wearing Anti Cs), which need to be transcribed into a final format for legibility. Field records shall be obtained using the forms from this procedure to ensure the required information is obtained. The field record shall be signed and dated by the operator(s) performing the task. Field records that are transcribed will be included in the Batch Data Reports to ensure the absence of transcription errors.

2.6.8 **Package Control Indicator (PCI)** – A device with a unique identifier that is used when a package is uncontrolled.

### 3.0 RESPONSIBILITIES

#### 3.1 Site Project Manager (SPM)

3.1.1 Determines the use of Method 1 or Method 2 for performing a VE process.

#### 3.2 Visual Examination Expert (VEE)

3.2.1 Responsible for the overall direction and implementation of the VE operations.

#### 3.3 Visual Examination Operator (VEO)

3.3.1 Performs the VE.

3.3.2 Assembles, paginates, and reviews the BDR.

#### 3.4 Independent Technical Reviewer (ITR)

---

#### **NOTE**

The ITR will be someone, other than the VEO, who is qualified to have performed the work.

---

3.4.1 Reviews the BDR.

#### 3.5 Vendor Project Manager (VPM)

3.5.1 Ensures the safe operation of the VE process.

3.5.2 Ensures all personnel maintain proficiency and identifies any additional training that may be required.

3.5.3 Coordinates remediation of prohibited items with the Host site.

3.5.4 Facilitates container tracking and management.

#### 3.6 Facility Records Custodian

3.6.1 Receives, processes, and transmits all records generated by this procedure in accordance with CCP-QP-008, *CCP Records Management*.

## 4.0 PROCEDURE

---

### NOTE

Weights will be recorded in kilograms (kg) out to one tenth of a kg.

A Testing Batch includes all data pertaining to VE for up to 20 waste containers without regard to waste matrix.

If, during the performance of VE, multiple Input Waste Containers are used to produce an Output Waste Container or multiple Output Waste Containers are generated from an Input Waste Container, separate data sections shall be completed for each waste container, as applicable.

N/A shall be marked in all fields of the Attachments that are not applicable.

The sections of this procedure may be performed independently and concurrently to accommodate the VE process; however, the internal steps should be performed in order. The internal steps in this procedure may only be performed in a different order than specified when required by Host site facility-specific operation procedures or as otherwise directed in that section.

For VE of Newly Generated Waste, Section 4.2 is not performed.

Remediation of prohibited items (e.g., removal, absorption, etc.) may be performed in unison with Waste Material Parameter (WMP) identification (ID).

Prohibited items are listed in Table 1, Prohibited Items are remediated per Host site procedures, as necessary.

Any liquid in non-transparent internal containers, detected from shaking the internal container, will be handled by assuming that the internal container is filled with liquid.

Data changes and requisite approvals **SHALL** be made by the individual or individuals who originally collected the data, **OR** by an equally-qualified individual or individuals authorized to change data.

---

## VEO

### 4.1 General Information and Performance Checks

4.1.1 Record Batch Data Report No. on Attachment 1, CCP Waste Visual Examination General Information Form, and Attachment 2, CCP Waste Visual Examination Data Form, (xxVEzzyyyy - where xx is the Site Identifier [e.g., LA for LANL], zz is the VE area identifier, and yyyy is a sequential number for that site).

- [A] Record the following information on Attachment 1:
  - [A.1] Mark applicable VE process to be performed.
  - [A.2] Mark VE Method used.
  - [A.3] Site ID and Location
  - [A.4] Examination Date
  - [A.5] Procedure No.
  - [A.6] Revision No.

#### 4.1.2 Camera(s) Check (Method 1)

---

#### NOTE

If the VE continues for more than one day, a camera check will be conducted prior to continuing the VE for the new day. The results of the second camera check will be recorded on the audio/video media and noted in the Comments block on Attachment 1. The audio/video camera will be checked prior to each VE BDR to ensure proper operation of the camera. The test image segment SHALL remain intact without being erased or recorded over.

---

- [A] **IF** audio/video recording will **NOT** be created, **THEN** mark N/A on Attachment 1, **AND GO TO** step 4.1.3.
- [B] Record the Date, Container ID Number(s), BDR Number, and the Audio/Video Media Recording Number on the Audio/Video Media Label.
- [C] Ensure the audio/video media is at its beginning or at the point where recording was stopped the previous day.
- [D] Start the camera(s).
- [E] Record a test image and narrative.
- [F] Review the test segment by playing the audio/video media, **AND** verify the image is in focus and the narration is clear.

- [G] Save the test recording (i.e., stop the audio/video media at the end of the playback).
  - [G.1] **IF** the results are UNSAT,  
**THEN** notify the VEE and VPM.
    - (a) **WHEN** the camera/audio/video media recording system is operational,  
**THEN** repeat steps 4.1.2[D] through 4.1.2[H].
- [H] Record the results of the camera/audio/video media recording check as SAT on Attachment 1.

#### 4.1.3 Scale Operational Check

---

##### **NOTE**

If the VE continues for more than one day, a scale operational check will be conducted prior to continuing the VE for the new day. The results will be recorded in the Comments block on Attachment 1.

The VEE will determine when the VE Scale or the Container Scale will not be used. This section will be performed when scales are used in the performance of the VE process.

---

- [A] VE Scale
  - [A.1] **IF** VE Scale is **NOT** used,  
**THEN** mark N/A on Attachment 1, **AND GO TO** step 4.1.3[B].
  - [A.2] Start the camera(s) in the record mode for the Scale Operational Check, as applicable.
  - [A.3] Verbally record the Scale Serial/ID Number and the Calibration Due Date on the audio/video media, if in use, **AND** record the data on Attachment 1.
  - [A.4] Place test weight(s) on the scale to verify the scale's operability.
    - (a) **IF** the reading is within the scales calibration tolerance,  
**THEN** record as SAT on Attachment 1.
    - (b) **IF** the reading is **NOT** within the scales calibration tolerance,  
**THEN STOP WORK, AND** notify the VPM,  
**AND** record as UNSAT on Attachment 1.

[A.5] Record the following Test Weight Information data on Attachment 1:

- (a) Test Weight Serial/ID Number and Calibration Due Date for each weight used.
- (b) Test Weight Total placed on the scale.
- (c) Tray Weight, as required.

[A.6] With the tray placed on the scale, set the Tare to zero, as required.

[B] Container Scale

[B.1] Record the Scale Serial/ID Number and the Calibration Due Date on Attachment 1.

[B.2] Perform an operational check of the scale as follows:

- (a) Place a known check weight(s) on the scale, **AND** verify the scale reads within 1.0 percent of the check weight used.
  - (a.1) **IF** the scale reads within the operational range, **THEN** record SAT on Attachment 1.
  - (a.2) **IF** the scale reads outside of the operational range, **THEN, SUSPEND WORK, AND** notify the VPM **AND** record as UNSAT on Attachment 1.

4.1.4 Record the following on Attachment 1:

[A] Method 1

**VEO 1**

[A.1] Print name, sign, and date.

[A.2] Mark VEO 2 as N/A.

[B] Method 2

VEO 1

[B.1] Print name, sign, and date.

VEO 2

[B.2] Print name, sign, and date.

4.2 Previously Packaged Input Waste Container Preparation.

**NOTE**

Section 4.2 is not performed for VE of Newly Generated Waste.

4.2.1 Record the Input Waste Container ID in Section 1, Output Waste Container Data, of Attachment 2.

**NOTE**

When performing Method 1, audio/video media recording is created to document activities that manipulate waste during the VE. It is expected that recording will be halted whenever VE is suspended. If recording is suspended, the reason is verbally documented on the audio/video media.

4.2.2 Position the camera(s) to record the VE of the Input Waste Container and its contents, **AND** start the camera(s) (If using Method 1).

4.2.3 Record verbally the Input Waste Container ID (If using Method 1).

**NOTE**

The Radiological Control Technician (RCT) SHALL be present to conduct radiological surveys in accordance with the Host site Interface Document and Host site procedures.

4.2.4 Remove/verify removal of the input waste container lid in accordance with Host site procedures.

[A] **IF** a rigid liner lid is present, **AND** the rigid liner lid is **NOT** vented (>0.3 in.) or filtered, **SUSPEND WORK, AND** notify the VPM

[B] Remove the rigid liner lid, if applicable, in accordance with Host site procedures.

---

**NOTE**

VE on large or heavy packages/items SHALL be performed as they are removed from the container.

Waste from the Input Waste Container may be segregated for VE as determined by the VEO.

---

4.2.5 Remove/verify removal of the waste from the Input Waste Container, as appropriate.

4.2.6 Open/verify opening of waste package/items, as appropriate.

4.3 Output Waste Container Verification

4.3.1 Record the following data for the Output Waste Container in Section 1 of Attachment 2:

[A.1] Output Waste Container ID

[A.2] Waste Stream ID

[A.3] Container Type (e.g., 55-gallon drum)

[A.4] TRUCON Code

[A.5] Waste Matrix Code

[A.6] Audio/Video Media Recording Number (if applicable)

---

**NOTE**

The RCT SHALL be present to conduct radiological surveys in accordance with the Host site Interface Document and Host site procedures.

---

4.3.2 Perform the following, **AND** record the applicable data for the Output Waste Container in Section 1 of Attachment 2:

[A] Record Output Waste Container Tare Weight.

[B] Remove the container lid in accordance with Host site procedures, as applicable.

[C] **IF** a rigid liner is **NOT** present, **THEN** perform the following:

[C.1] Record NO, Rigid Liner Present?

[C.2] Record NO, Rigid Liner Lid Present?

[C.3] Record N/A, Rigid Liner Lid is Vented (>0.3 in.), Filtered, and Serial No.?

[C.4] GO TO step 4.3.2[G].

[D] **IF** a rigid liner is present,  
**THEN** record YES, the Type of Liner, and Thickness.

[E] **IF** a rigid liner lid is NOT present,  
**THEN** record NO **AND** perform the following:

[E.1] Record N/A, Rigid Liner Lid is Vented (>0.3 in.) or Filtered?

[E.2] GO TO step 4.3.2[G].

[F] **IF** a rigid liner lid is present,  
**THEN** record YES, **AND** perform the following:

[F.1] **IF** the rigid liner lid is vented (punctured) **AND** the puncture is >0.3 inches,  
**THEN** record Vented, **AND** measure and record the Hole Size.

[F.2] **IF** the rigid liner lid is filtered,  
**THEN** record Filtered, **AND** the Model No. and Serial No.

[F.3] Remove the rigid liner lid, if applicable, in accordance with Host site procedures.

[G] **IF** a bag liner is used,  
**THEN** record YES.

[H] **IF** NO bag liner is used,  
**THEN** record NO.

4.4 Visual Examination (VE)

---

**NOTE**

Steps 4.4.1 through 4.4.8 may be repeated, as necessary, until loading of the Output Waste Container is complete.

Waste container(s) SHALL be closed and have a Tamper Indicating Device (TID)/Lock applied when access to the container is uncontrolled.

A new Section 2 of Attachment 2 SHALL be used each time the waste container is opened, the TID/Lock is removed, and waste is added.

Steps 4.4.1 through 4.4.5 may be performed in any order to accommodate the process.

Individual package/item(s) may be inspected and have a Section 2 of Attachment 2 completed for each, prior to bag out. A package control indicator (PCI) may be applied to these package/item(s) for verification purposes.

---

4.4.1 **IF** a container TID/LOCK is applied to the waste container lid, **THEN** remove TID/LOCK in accordance with Host site procedures, **AND** record Removed Container TID/LOCK Number in Section 2 of Attachment 2, as required.

4.4.2 Remove lid in accordance with Host site procedures, as required.

4.4.3 Position that camera(s) to record the VE of the Output Waste Container and its contents, **AND** start the camera(s), as applicable.

4.4.4 Record verbally the Output Waste Container ID, as applicable.

---

**NOTE**

When performing Method 1, the camera(s) may require repositioning to record (audio/video) the weighing and final weight of each package from the container.

---

4.4.5 Examine the waste, **AND** record the applicable data in Section 2 of Attachment 2, except as noted:

[A] Examination Location (Building, room, and facility), as applicable.

[B] Date.

[C] Record Package Number, as applicable.

---

**NOTE**

VEE will make determination on the disposition of waste > 200 mrem/hr at the surface.

---

[D] **IF** the waste is > 200 mrem/hr at the surface, **AND** is going to be placed into the Output Drum, **THEN** perform the following:

(a) **WHEN** loading the waste, **THEN** position as close as reasonably achievable to the side of the output container.

(b) **IF** the waste is a can with material in it, **THEN** document it in the Comments block of Section 1 of Attachment 2.

[E] Record Waste Description.

[F] Determine the contents by WMP category per Table 3, **AND** document as follows:

[F.1] Ensure that there are no prohibited items present in the waste package/item.

---

**NOTE**

WMP weight and the method used to determine the weight of the WMP from Table 4 may be recorded in Steps 4.4.5[F.2] **OR** 4.4.9 **OR** 4.4.14[A] to accommodate the process.

---

[F.2] Weight of each WMP and the method used to determine the weight of the WMP from Table 4, as required.

[G] Place a PCI on the package/item **AND** record the number, as required

[H] Place the package/item into the Output Waste Container as needed.

[I] **IF** package/item(s) are not to be direct loaded, **THEN** record the following in Section 2 of Attachment 2:

VEO 1

[I.1] Print name, sign, and date to annotate VE of package/item(s) is complete, **AND NO** Prohibited Items, listed in Table 1, are present.

(a) **IF** Method 1 is being performed,  
**THEN** mark VEO 2 as N/A.

VEO 2

[I.2] **IF** Method 2 is being performed,  
**THEN** print name, sign, and date to annotate VE of package/item(s) is complete, **AND NO** Prohibited Items, listed in Table 1, are present.

4.4.6 **IF** loading an Output Waste Container(s) with package/items(s) that were previously inspected,  
**THEN** obtain appropriate Section 2(s) for items being loaded **AND** verify the information recorded on the Section 2(s) matches the package/items.

[A] **IF** package/item information recorded **DOES NOT** match the package/item,  
**THEN** SUSPEND work and notify VPM.

4.4.7 Record Output Waste Container ID in Section 2 of Attachment 2.

4.4.8 Place the package/item into the Output Waste Container, as needed.

4.4.9 Record the weight of each WMP and the method used to determine the weight of the WMP from Table 4 in Section 2 of Attachment 2, as required.

4.4.10 **IF** additional waste packages/item(s) are to be added at a later time and access to the waste container is going to be left uncontrolled,  
**THEN** perform the following:

[A] Apply the container TID/LOCK to the waste container in accordance with Host site procedures, **AND** record the Applied TID/LOCK Number on Section 2 of Attachment 2, as required.

**VEO**

4.4.11 **IF** loading an Output Waste Container(s) with package/item(s) that were previously inspected, **AND** the loading is completed for the day,  
**THEN** record the following on Section 2 of Attachment 2:

**VEO 1**

[A.1] **IF** Method 1 is being performed,  
**THEN** mark VEO 2 as N/A.

**VEO 2**

[A.2] **IF** Method 2 is being performed,  
**THEN** print name, sign and date.

4.4.12 **WHEN** loading of the Output Waste Container is complete,  
**THEN** perform the following:

[A] Paginate page(s) of Section 2 of Attachment 2.

[B] Record the data listed below for the Output Waste Container in Section 1 of Attachment 2 as follows:

---

**NOTE**

The Volume Utilization Percentage (VUP) of the container is based on the highest level of the bulk of the waste. Items (e.g., pipe, scrap angle, plastic bags) which protrude above the bulk of the waste are **NOT** to be included in the fill percent determination. The fill percent is to be recorded in five percent increments (e.g., 35%, 40%, 45%).

---

[B.1] Estimate the VUP.

[B.2] Record NO or YES, to indicate whether the waste is consistent with the assigned Waste Stream Description and Waste Matrix Code.

(a) **IF** NO,  
**THEN** initiate an NCR in accordance with CCP-QP-005, **AND** record the NCR No. in Section 1 of Attachment 2.

[B.3] Record Closure Method for layers of confinement, if applicable (see Table 2).

[B.4] Using Table 2, determine the number and record the Number of Layers of Confinement, as applicable.

[C] GO TO Section 4.5 for Output Waste Container Lid Installation and Closure Verification.

4.4.13 Apply the TID/LOCK to the waste container **AND** record the Applied TID/LOCK Number on Section 2 of Attachment 2, as required.

4.4.14 Record the Gross Weight by weighing the Output Waste Container after it is released to be moved to its staging area, in Section 1 of Attachment 2.

[A] Record the weight of each WMP and the method used to determine the weight of the WMP from Table 4 in Section 2 of Attachment 2, as required.

4.4.15 Perform the following, **AND** record the data in Section 3 of Attachment 2:

[A] Weigh or use Table 4 to estimate the weight of the Packaging Materials of the Output Waste Container, **AND** Total Packaging Weight.

[B] Weights of the WMPs by reviewing the WMPs listed in Section 2(s) of Attachment 2, **AND** combine all consistent WMPs.

[C] Total the WMPs, **AND** record the Total WMP Weight.

[D] Ensure the total of the WMP weights (Section 3, Attachment 2) is within five percent of the net weight of waste of the Output Waste Container obtained from subtracting the tare weight from the gross weight (Section 1, Attachment 2).

4.4.16 Record the following information in Section 4, Prohibited Item(s) Summary, of Attachment 2

[A] Output Waste Container ID.

[B] **IF** Section 2(s) of Attachment 2 were completed for individual package/items(s), **THEN** verify signatures in Section 2(s) of Attachment 2, answer questions in Section 4 of Attachment 2 **NO OR NA**, as applicable.

[C] IF packaged/item(s) were direct loaded into Output Waste Container,  
**THEN** answer NO, YES, or N/A appropriately, to the questions in Section 4 with all explanations annotated in the Comments block of Section 4 of Attachment 2.

[C.1] IF YES is marked in Section 4,  
**THEN** initiate an NCR in accordance with CCP-QP-005, **AND** record the NCR No. in Section 1 of Attachment 2.

4.4.17 Determine (e.g., via Radiological Label or Dose Rate Survey) if the total dose rate of the waste container is >200 mrem/hr at the surface, **AND** record YES or NO in Section 1 of Attachment 2.

[A] IF the total dose rate is >200 mrem/hr at the surface,  
**THEN** initiate an NCR in accordance with CCP-QP-005,  
**AND** record NCR No. in Section 1 of Attachment 2.

4.4.18 STOP the camera(s) recording when VE is complete, as applicable.

4.4.19 Ensure YES or NO is recorded in Section 1 of Attachment 2 to indicate if any NCRs are associated with the applicable waste container.

[A] IF YES,  
**THEN** ensure the appropriate NCR number(s) are recorded.

---

**NOTE**

All areas in the attachments that **DO NOT** have completed information **SHALL** be marked N/A.

---

4.4.20 Ensure Examination date recorded on Attachment 1 is the date the examination was completed.

4.4.21 Record the following in Section 5, Approvals, of Attachment 2:

[A] Method 1

**VEO 1**

(a) Print name, sign, and date to annotate that the VE process has been completed.

(b) Mark VEO 2 as N/A.

(c) Prepare two (2) audio/video media recordings.

[B] Method 2

**VEO 1**

[B.1] Print name, sign, and date to annotate that the VE process has been completed.

**VEO 2**

[B.2] Print name, sign, and date to annotate that the VE process has been completed.

**VEO**

4.4.22 Affix new CCP Container Traveler(s) (Labels) to the Output Waste Container(s) in accordance with appropriate CCP Site Container Management procedure, as necessary.

4.4.23 **WHEN** all containers for a batch are complete,  
**THEN GO TO** Section 4.6.

4.5 Container Lid Installation and Closure Verification

---

**NOTE**

Steps 4.5.1[A], [B], [C], [D], and [E] may be performed at any time during or after, Output Waste Container setup.

---

4.5.1 Perform the following, **AND** record the applicable data, for the Output Waste Container, in Section 1 of Attachment 2:

[A] Verify the Filter and Lid Ring/Bolt Torque Wrenches to be used are in calibration.

[B] Filter Torque Wrench Serial/ID Number and Calibration Due Date.

[C] Container Lid Filter Model and Serial Number.

[D] Ensure the filter is installed in accordance with the manufacturer's instructions.

[E] Torque the filter to the manufacturer's specifications, **AND** record the Torque Value.

[F] Ensure the container lid is installed in accordance with the manufacturer's instructions.

[G] Lid Ring/Bolt Torque Wrench Serial/ID Number and Calibration Due Date.

[H] Torque the Container Lid Ring/Bolt(s) to the manufacturer's specifications, **AND** record the Torque Value.

4.5.2 GO TO step 4.4.13 as applicable.

**VEO**

4.6 Batch Data Report Preparation

4.6.1 Verify Field Records have been transcribed into the appropriate forms.

4.6.2 Assemble the following data for the BDR ensuring that the BDR number and, Examination Date, and Output Waste Container ID(s), as needed, are recorded on each Attachment:

[A] Attachment 5, CCP Waste VE Batch Data Report Cover Sheet

[B] Attachment 4, CCP Waste VE Batch Data Report Table of Contents

[C] Attachment 1, CCP Waste VE General Information Form

[D] Attachment 2, CCP Waste Visual Examination Data Form

[E] Attachment 3, CCP Waste VE Independent Technical Reviewer Checklist

[F] Copies of NCRs, if applicable

[G] Field Records, if applicable

4.6.3 Paginate the BDR.

4.6.4 Complete Attachment 4.

4.6.5 Forward the BDR package and the audio/video media, if applicable, to the ITR.

---

4.7 VE Independent Technical Review

---

**NOTE**

The independent technical review is conducted by an individual who is qualified to have performed the initial work, but who is **NOT** directly responsible for performing the work. The ITR can **NOT** review his/her own work.

If any item on Attachment 3 is marked NO and the condition **CAN NOT** be mitigated, an NCR will be initiated, per CCP-QP-005, **AND** only as a single NCR that identifies all deficiencies.

---

**Independent Technical Reviewer (ITR)**

- 4.7.1 Review the BDR to the criteria in Attachment 3, **AND** document.
- 4.7.2 Items marked NO require explanation in the Comments block, **AND** items marked NA may require explanation in the Comments block, as necessary to clarify.
- 4.7.3 Print, sign, and date Attachment 3 and Attachment 5.
- 4.7.4 Forward the BDR and the audio/video media, if applicable, to the Facility Records Custodian.

**Facility Records Custodian**

- 4.7.5 Receive, process, and transmit the BDR and the audio/video media, if applicable, in accordance with CCP-QP-008.

4.8 Newly Generated Waste Container Data Submission

**VPM/Designee**

- 4.8.1 Complete Attachment 6, CCP Newly Generated Waste Container Data, for newly generated waste containers generated during the performance of VE for the BDR.
- 4.8.2 Print name, sign, and date Attachment 6.
- 4.8.3 Transmit the Attachment 6 to the Facility Records Custodian and transmit a copy of Attachment 6 to the cognizant Acceptable Knowledge Expert (AKE).

**Facility Records Custodian**

- 4.8.4 Receive, process, and transmit the Attachment 6 in accordance with CCP-QP-008.

## 5.0 RECORDS

5.1 Records generated during the performance of this procedure are maintained as Quality Assurance (QA) records in accordance with CCP-QP-008. The records are the following:

### 5.1.1 QA/Lifetime

#### [A] Batch Data Report (BDR)

[A.1] Attachment 1 - CCP Waste Visual Examination General Information Form

[A.2] Attachment 2 - CCP Waste Visual Examination Data Form

[A.3] Attachment 3 - CCP Waste VE Independent Technical Reviewer Checklist

[A.4] Attachment 4 - CCP Waste VE Batch Data Report Table of Contents

[A.5] Attachment 5 - CCP Waste VE Batch Data Report Cover Sheet

[A.6] Copies of NCRs, if applicable

[A.7] Field Records, if applicable

#### [B] Attachment 6 - CCP Newly Generated Waste Container Data

### 5.1.2 QA/Nonpermanent

[A] Two (2) Audio/Video Media Recordings (VHS Tape or DVD), if applicable

Table 1. Prohibited Items

| <b>LIST OF PROHIBITED ITEMS</b>   |
|---|
| <p>Liquid waste is not acceptable at WIPP</p> <ul style="list-style-type: none"> <li>- Observable liquid shall be no more than 1 percent by volume of the outermost container.</li> <li>- Internal containers with more than 60 milliliters or 3 percent by volume observable liquid, whichever is greater, are prohibited</li> <li>- Containers with Hazardous Waste Number U134 assigned shall have no observable liquid</li> <li>-Overpacking the outermost container that was examined or redistributing untreated liquid within the container shall not be used to meet the liquid volume limits.</li> </ul> |
| Non-Radionuclide Pyrophorics  |
| Non-mixed hazardous waste   |
| <p>Incompatible wastes</p> <p>(Wastes that are incompatible with backfill, seal and panel closure materials, container and packaging materials, shipping container materials, and/or other wastes.)</p>   |
| Explosives  |
| Compressed Gases/Pressurized containers (e.g., aerosol cans)  |
| Polychlorinated Biphenyl (PCB) Liquids  |
| Ignitables  |
| Corrosives  |
| Reactive waste  |
| Sealed containers greater than 4 liters   |
| Heat-sealed bags (unvented) with a surface area <390 square inches  |
| Sharp or heavy objects not adequately blocked, braced, or packaged  |
| Waste that has ever been managed as high-level waste and waste from tanks specified in Table B-8 of CCP-PO-001.   |

Table 2. Layers of Confinement

| Container <sup>a</sup> |         | Plastic Bags   |         | Metal Cans |         |
|------------------------|---------|----------------|---------|------------|---------|
| Twist and Tape         | CTT/STT | Twist and Tape | TT      | Sealed     | C       |
| Fold and Tape          | CFT/SFT | Fold and Tape  | FT      |            |         |
| Other Closure          | COC/SOC | Other Closure  | OC      |            |         |
| Vented                 | (add) F | Vented         | (add) F | Vented     | (add) F |

<sup>a</sup> Container: "C" - Container  
 "S" - Standard Waste Box (SWB)

Liner lids and packaging layers are distinguished as follows:

Layers of confinement are defined, per Section 3.8 of the CH-TRU Payload Appendices, as any boundary that restricts, but does not prohibit, the release of hydrogen gas across the boundary.

Examples of confinement layers are plastic bags (smaller inner bags or larger container liner bags) with the allowable closure methods described below and metal containers fitted with filter vents.

- Fold and tape closure
- Twist and tape closure
- Heat-seal closure or twist and tape closure with a minimum of one filter vent

**NOTE**

Punctured plastic bags, liner bags open at the end, pieces of plastic sheeting wrapped around the waste for handling, and metal containers with lid closures that allow free hydrogen release are not considered as confinement layers.

Table 3. Waste Material Parameters

| Waste Material Parameter            | Description   |
|-------------------------------------|---|
| Iron-based metals/alloys (IM)       | Iron and steel alloys in the waste; does not include the waste container materials  |
| Aluminum-based metals/alloys (AM)   | Aluminum or aluminum-based alloys in the waste materials  |
| Other metals (OM)                   | All other metals found in the waste materials   |
| Other inorganic materials (OI)      | Nonmetallic inorganic waste, including concrete, glass, firebrick, ceramics, sand, and inorganic sorbents   |
| Cellulosics (C)                     | Materials generally derived from high polymer plant carbohydrates (e.g., paper, cardboard, wood, cloth)   |
| Rubber (R)                          | Natural or man-made elastic Latex materials (e.g., surgeon's gloves, leaded rubber gloves)  |
| Plastics (waste materials) (PW)     | Generally man-made materials, often derived from petroleum feedstock (e.g., polyethylene, polyvinylchloride)  |
| Organic matrix (OR)                 | Cemented organic resins, solidified organic liquids, and sludges  |
| Inorganic matrix (IN)               | Any homogeneous materials consisting of sludge, or aqueous-based liquids which are solidified with cement, calcium silicate, or other solidification agents (e.g., waste water treatment sludge, cemented aqueous liquids, and inorganic particulate) |
| Soils (S)                           | Generally consists of naturally occurring soils which have been contaminated with inorganic waste materials   |
| Steel (packaging materials) (ST)    | Container (e.g., 208-liter [55-gal.] drums)   |
| Plastics (packaging materials) (PP) | Liner (e.g., 90-mil polyethylene drum liner and plastic bags)   |

Table 4. Waste Item Weights and Weighing Codes

Page 1 of 3

| ITEM  | WEIGHT   |
|---|----------|
| 3" Roll of Duct Tape                              | 0.7 kg   |
| 3" Roll of Masking Tape                           | 0.4 kg   |
| 10' Tape Measure                                  | 0.1 kg   |
| Channel Lock Pliers                               | 0.3 kg   |
| Crescent Wrench                                   | 0.2 kg   |
| Flashlight With Batteries                         | 0.5 kg   |
| Flashlight Without Batteries                      | 0.1 kg   |
| Flat File   | 0.4 kg   |
| Hacksaw With Blade                                | 0.5 kg   |
| Hammer  | 0.6 kg   |
| Large Open-End Wrench                             | 0.5 kg   |
| Razor Knife                                       | 0.1kg    |
| Scissors  | 0.2 kg   |
| Vice Grip Pliers                                  | 0.5 kg   |
| Welder's Chipping Hammer                          | 0.4 kg   |
| Wire Brush  | 0.1 kg   |
| Wooden Folding Ruler                              | 0.2 kg   |
| Wooden Wedge                                      | 0.2 kg   |
| 13 oz. Aerosol Can ¼ Full                         | 0.2 kg   |
| 17 oz. Aerosol Can Full of Liquid                 | 0.5 kg   |
| 17" Section of 1" Electrical Conduit              | 0.5 kg   |
| 17" Section of 1" Sch 40 S/s Pipe                 | 1.1 kg   |
| 2' X 4' Board 20" long                            | 0.7 kg   |
| Empty 2-Gallon Car-boy                            | 0.7 kg   |
| Empty 6-Gallon Car-boy                            | 2.0 kg   |
| Empty POC   | 154.2 kg |
| Empty SWB   | 290.3 kg |
| 2-Gallon Car-boy ½ Full of Water                  | 5.8 kg   |
| 6-Gallon Car-boy ½ Full of Water                  | 14.0 kg  |
| 5-Gallon Metal Bucket                             | 1.3 kg   |
| Metal Can   | 0.2 kg   |
| Metal Can (for salt wastes)                       | 1.1 kg   |
| Aluminum Sphincter Can                            | 0.2 kg   |
| Sand Bag ½ Full of Gravel                         | 12.7 kg  |
| Plastic Bag for Waste                             | 0.6 kg   |
| Liner Bags – Large                                | 0.5 kg   |
| Rad Bags – Medium and Small                       | 0.1 kg   |
| 55-Gallon 10-mil Plastic Bag (each)               | 1.8 kg   |
| 55-Gallon 5-mil Plastic Bag (each)                | 0.3 kg   |
| 55-Gallon 12-mil Plastic Bag (each)               | 2.1 kg   |
| O-ring Plastic Bag (e.g., sludge, organic setups) | 9.0 kg   |

Table 4. Waste Item Weights and Weighing Codes (Continued)

| ITEM  | WEIGHT       |
|---|--------------|
| 55-Gallon Drum PVC O-ring Bag (60.96 x 213.36 cm)               | 22.0 kg      |
| 55-Gallon Fiberboard Disk                                       | 48.0 kg      |
| 55-Gallon Drum Round Bottom 10-mil Liner                        | 9.0 kg       |
| (White) 55-Gallon Drum 90-mil Rigid Liner No Lid, used at LANL  | 4.3 kg       |
| 55-Gallon Drum 110-mil Rigid Liner                              | 7.6 kg       |
| (Black) 55-Gallon Drum 125-mil Rigid Liner No Lid, used at LANL | 7.6 kg       |
| 55-Gallon Drum Poly Liner (122 x 122 x 213 cm)                  | 12.0 kg      |
| 55-Gallon Cardboard Liner (graphite mold waste)                 | 9.0 kg       |
| 55-Gallon Fiberboard Drum Liner (122 x 122 x 213 cm)            | 9.0 kg       |
| 55-Gallon Lead Liner, 180 cm long, 0.16 cm thick                | 23.0 kg      |
| 55-Gallon Lead Liner, 180 cm long, 0.32 cm thick                | 46.0 kg      |
| Fiber Pack  | 13.0 kg      |
| Fiber Pack Lead-Lined   | 66.0 kg      |
| HEPA Filter (8 x 8 3-1/16)                                      | 1.0 kg       |
| HEPA Filter (8 x 8 x 5-7/8)                                     | 1.9 kg       |
| HEPA Filter (12 x 12 x 5-7/8)                                   | 2.5 kg       |
| Lead Brick (5.1 x 10 x 20 cm)                                   | 12.0 kg      |
| Oil-Dry   | 0.4 kg/liter |
| Vermiculite   | 0.1 kg/liter |
| Poly Bottles (1 gallon)   | 2.2 kg       |
| Poly Bottles (1 liter)  | 0.5 kg       |
| Setup Portland Cement   | 1.1 kg/liter |
| Uncured Portland Cement   | 2.9 kg/liter |
| Leaded Glovebox Glove   | 0.8 kg       |
| Leaded Rubber Glove   | 2.5 kg       |
| Leaded Rubber Glove   | 12.0 kg      |
| Leaded Rubber Apron   | 2.4 kg       |
| Leaded Rubber Apron   | 11.5 kg      |
| Coveralls   | 0.9 kg       |
| 25' Plastic Suit Hose   | 2.3 kg       |
| 50' Plastic Suit Hose   | 5.0 kg       |
| Plastic Suit Top and Pants                                      | 2.3 kg       |
| 55-Gallon Drum (painted – tan or white)                         | 27.7 kg      |
| 55-Gallon Drum (painted – mustard yellow)                       | 24.0 kg      |
| 55-Gallon Drum (painted – green)                                | 30.0 kg      |
| 55-Gallon Drum (painted – grey)                                 | 26.3 kg      |
| 55-Gallon Drum (galvanized)                                     | 29.0 kg      |
| 85-Gallon Drum (painted)  | 37.2 kg      |

Table 4. Waste Item Weights and Weighing Codes (Continued)

| ITEM   | WEIGHT  |
|--|---------|
| Item Description (1 lb = 0.454 kgs) (All containers are 55-gal drums, unless otherwise noted)          |         |
| 110-Gallon Drum (painted)  | 45.0 kg |
| Lead-Lined Drum (1/16" thick, 28" high by 72" long)  | 22.7 kg |
| Lead-Lined Drum (1/8" thick, 28" high by 72" long) (.4 lb/in. <sup>3</sup> )                           | 45.4 kg |
| Galvanized DOT 17C (Dull Finish) [Drum Bottom Labels 00040-00705]                                      | 31.7 kg |
| Galvanized (Shiny Drum and Lid Finish) [Drum Bottom Labels 01391 - 01568]                              | 24.2 kg |
| Hanford Galvanized (Speckled Dull Finish - UNA1A2)<br>[Drum Bottom Labels 00754 - 00933]               | 30.0 kg |
| Myers Galvanized (Shiny Finish - Labeled G5501)<br>[Drum Bottom Labels 01200 - 01384]                  | 22.7 kg |
| Myers Galvanized (Shiny Drum/Shiny Speckled Lid - Labeled G5501)<br>[Drum Bottom Labels 00950 - 01150] | 24.0 kg |
| Myers Yellow Painted   | 21.5 kg |
| Rocky Flats White Painted  | 27.2 kg |
| Black 90-mil Slip Fit Lid  | 7.4 kg  |
| Black 110-mil Inner Lid  | 7.7 kg  |
| Black 110-mil Beveled Top  | 7.4 kg  |
| White 90-mil Slip Fit Lid  | 7.5 kg  |
| 125-mil Rigid Liner Lid  | 1.3 kg  |
| B251 Bag - Tare Weight   | 0.1 kg  |
| 55-Gallon Fiberboard Liner (90 Mil)  | 3.7 kg  |
| 5-Gallon drum (LANL)   | 2.3 kg  |
| 7-Gallon drum (LANL)   | 2.8 kg  |
| 10-Gallon drum (LANL)  | 7.5 kg  |
| 30-Gallon drum (LANL)  | 16.4 kg |

**Weighing Notes and Codes**

<sup>a</sup> Record weights in kg out to one-tenth of a kg.

|          |                                  |
|----------|----------------------------------|
| <b>W</b> | Weight measured by the Operator. |
|----------|----------------------------------|

Attachment 1 – CCP Waste Visual Examination General Information Form

**Batch Data Report No.:** \_\_\_\_\_

|   |  |       |
|---|--|-------|
| <input type="checkbox"/> VE for Previously Packaged Waste <input type="checkbox"/> VE for Newly Generated Waste                 |  |       |
| <input type="checkbox"/> Method 1 <input type="checkbox"/> Method 2   |  |       |
| Site ID and Location:   |  |       |
| Examination Date:   |  |       |
| Procedure No.:  | Revision No.:  |       |
| Camera/Audio/Video Media<br>Recording Check: <input type="checkbox"/> N/A <input type="checkbox"/> SAT                          |  |       |
| VE Scale Information: <input type="checkbox"/> N/A  | Serial/ID Number:<br>Calibration Due Date:<br>Operational Check: <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT                   |       |
| Test Weight Information<br>Test Weight Total:                      kg.<br>Tray Weight:                                      kg. | Serial/ID Number:<br>Calibration Due Date:<br><br>Serial/ID Number:<br>Calibration Due Date:<br><br>Serial/ID Number:<br>Calibration Due Date: |       |
| Container Scale Information:  | Serial/ID Number:<br>Calibration Due Date:<br>Operational Check: <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT                   |       |
| Comments:   |  |       |
| Visual Examination Operator 1:  |  |       |
| _____   | _____  | _____ |
| Print Name  | Signature  | Date  |
| Visual Examination Operator 2:  |  |       |
| _____   | _____  | _____ |
| Print Name  | Signature  | Date  |

Attachment 2 – CCP Waste Visual Examination Data Form

Page 1 of 5

Batch Data Report No.: \_\_\_\_\_

| Section 1: Output Waste Container Data   |   |
|--|---|
| Input Waste Container ID, as applicable:   |   |
| Output Waste Container ID:   | Waste Stream ID:  |
| Container Type:  | TRUCON Code: Waste Matrix Code:   |
| Audio/Video Media Recording Number: <input type="checkbox"/> N/A   |   |
| Waste Container Weights:   |   |
| Tare Wt: _____ kg.   | Gross Wt: _____ kg.   |
| Rigid Liner Present? <input type="checkbox"/> NO <input type="checkbox"/> YES<br>Type of Liner: <input type="checkbox"/> Lead <input type="checkbox"/> Plastic<br><input type="checkbox"/> Fiberboard <input type="checkbox"/> Other:<br>Thickness: <input type="checkbox"/> 30-mil <input type="checkbox"/> 90-mil <input type="checkbox"/> 110-mil<br><input type="checkbox"/> 125-mil | Rigid Liner Lid Present? <input type="checkbox"/> NO <input type="checkbox"/> YES<br>Rigid Liner Lid is Vented (>0.3 in.) or Filtered?<br><input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> N/A<br><input type="checkbox"/> Vented: Hole Size: <input type="checkbox"/> N/A<br><input type="checkbox"/> Filtered: Model No.: <input type="checkbox"/> N/A<br>Serial No.: <input type="checkbox"/> N/A |
| Bag Liner Present? <input type="checkbox"/> NO <input type="checkbox"/> YES  | Volume Utilization Percentage: _____ %  |
| Does the physical form of the waste match the Waste Stream Description (i.e., Homogeneous Solids, Soil/Gravel, or Debris Waste [including uncategorized metals])?<br><input type="checkbox"/> NO <input type="checkbox"/> YES  |   |
| Does the physical form of the waste match the Waste Matrix Code?<br><input type="checkbox"/> NO <input type="checkbox"/> YES   |   |
| Closure Method:<br>Number of Layers of Confinement:  |   |
| Filter Torque Wrench<br>Serial/ID No.:<br>Calibration Due Date:<br>Filter: Model No.:<br>Serial No.:<br>Torque Value:  | Lid Ring/Bolt Torque Wrench<br>Serial/ID No.:<br>Calibration Due Date:<br><br>Lid Ring/Bolt Torque Value:   |
| Is total dose rate greater than 200mrem/hr? <input type="checkbox"/> NO <input type="checkbox"/> YES   |   |
| NCR(s) associated with the output container? <input type="checkbox"/> NO <input type="checkbox"/> YES<br>NCR No.: _____<br>NCR No.: _____  |   |
| Comments:  |   |

Attachment 2 – CCP Waste Visual Examination Data Form (continued) Page 2 of 5

Batch Data Report No.: \_\_\_\_\_ Date: \_\_\_\_\_

Examination Location: \_\_\_\_\_

| Section 2: Waste Package Data                           |                   |                    |   |  |
|---|-------------------|--------------------|---|--|
| Package and<br>Package PIC<br>Number<br>(as applicable) | Waste Description | WMP<br>[ Table 3 ] | Weight<br>( kg )<br>[ Table 4, <sup>a</sup> ] | Weighing<br>Code(s)<br>[Table 4 <sup>b</sup> ] |
|   |                   |                    |   |  |
|   |                   |                    |   |  |
|   |                   |                    |   |  |
|   |                   |                    |   |  |
|   |                   |                    |   |  |
|   |                   |                    |   |  |
|   |                   |                    |   |  |

\_\_\_\_\_  
VEO 1: Print Name      Signature      Date

\_\_\_\_\_  
VEO 2: Print Name      Signature      Date  
Signatures annotate the absence of prohibited items.

Output Waste Container ID: \_\_\_\_\_

TID/LOCK Number Removed: \_\_\_\_\_ TID/LOCK Number Applied: \_\_\_\_\_

\_\_\_\_\_  
VEO 1: Print Name      Signature      Date

\_\_\_\_\_  
VEO 2: Print Name      Signature      Date

Attachment 2 – CCP Waste Visual Examination Data Form (continued) Page 3 of 5

Batch Data Report No.: \_\_\_\_\_

Output Waste Container ID: \_\_\_\_\_

| <b>Section 3: Packaging Material and Waste Material Parameters</b> |                       |
|--|-----------------------|
| Packaging Material:  | Estimated Weight (kg) |
| Steel (ST):  |                       |
| Plastics (PP):   |                       |
| Others:  |                       |
| Total Packaging Weight:  |                       |
| Waste Material Parameter:  | Estimated Weight (kg) |
| Iron-based Metal/Alloys (IM):                                      |                       |
| Aluminum-based Metals/Alloys (AM):                                 |                       |
| Other Metals (OM):   |                       |
| Other Inorganic Materials (OI):                                    |                       |
| Cellulosics (C):   |                       |
| Rubber (R):  |                       |
| Plastics (waste materials) (PW):                                   |                       |
| Organic Matrix (OR):   |                       |
| Inorganic Matrix (IN):   |                       |
| Soils (S):   |                       |
| Total WMP Weight:  |                       |

Attachment 2 – CCP Waste Visual Examination Data Form (continued)

Page 4 of 5

Batch Data Report No.: \_\_\_\_\_ Output Waste Container ID: \_\_\_\_\_

| <b>Section 4: Prohibited Item(s) Summary</b><br>( Questions answered "YES" will be explained in the Comments block )   |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|
|  | Yes                      | No                       | N/A                      |
| Is there liquid in the container?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there any observable liquid in internal containers, that is more than 60 milliliters or 3 percent by volume, whichever is greater.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the total volume of observable liquid in the outermost container <b>GREATER</b> than 1% of the container?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there detectable observable liquid in outermost containers with an EPA Hazardous Waste Number of U134?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there an indication of non-radionuclide pyrophoric materials, such as elemental potassium?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there an indication of hazardous wastes not occurring as co-contaminants with TRU mixed wastes (non-mixed hazardous wastes)?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there an indication of wastes incompatible with backfill, seal and panel closures materials, container and packaging materials, shipping container materials, or other wastes (i.e., waste does <b>NOT</b> match TRUCON Code[s])? | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there an indication of wastes containing explosives or compressed gases?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there PCB liquids present?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is there an indication of the waste exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003)?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Is the physical form of the waste inconsistent with the Waste Stream Description or the Waste Matrix Code?   | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| <b>TRUPACT II Criteria</b>   |                          |                          |                          |
| Are there heat-sealed bags (unvented) <b>GREATER</b> than 4 liters and <b>LESS</b> than 390 square inches in the waste?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Were there Non-approved Closure Methods used on liner bags or inner bags greater than 4 liters?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Are there sealed containers <b>GREATER</b> than 4 liters?  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Are there indications of inadequate protection (blocked or braced) for heavy and/or sharp objects?   | <input type="checkbox"/> | <input type="checkbox"/> |                          |

Attachment 2 – CCP Waste Visual Examination Data Form (continued) Page 5 of 5

Batch Data Report No.: \_\_\_\_\_ Output Waste Container ID: \_\_\_\_\_

**Section 4: Prohibited Item(s) Summary (Continued)**

( Questions answered "YES" will be explained in the Comments block )

Comments:

**Section 5: Approvals**

Visual Examination Operator 1:

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Visual Examination Operator 2:

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Attachment 3 – CCP Waste VE Independent Technical Reviewer Checklist

Batch Data Report No.: \_\_\_\_\_

Page 1 of 2

| Description  |                             |                              |                              |
|--|-----------------------------|------------------------------|------------------------------|
| 1. Data generation and reduction were conducted in a technically correct manner in accordance with the methods used?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 2. Was the correct revision of operating procedure used?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 3. Are the waste material parameters (WMPs) entered correctly?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 4. Verify the hand calculations on the VE Data Form for the following:   |                             |                              |                              |
| a. WMP weight totals (Section 3, Attachment 2)   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| b. Weight totals (Section 4, Attachment 2)   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| c. Summed volume of observable liquid, as necessary  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| d. The total of the WMP weights (Section 4, Attachment 2) is within 5% of the net weight of waste of the Output Waste Container obtained from subtracting the tare weight from the gross weight (Section 2, Attachment 2). | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 5. Is the data reported in the correct units and correct number of significant figures?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 6. Has the data been reviewed for transcription errors?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 7. Does the Testing Batch Report include VE for up to 20 containers?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 8. BDR contents are complete and match the CCP Waste VE Batch Data Report Table of Contents?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 9. Is all the data signed and dated in reproducible ink and by the individual(s) generating it?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 10. Is all data recorded clearly, legibly, and accurately?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 11. All changes to original data lined out, initialed and dated by the individual making the changes?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 12. Were data changes made by the individual who originally collected the data or an equally qualified individual?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 13. Did the physical form of the waste match the Waste Matrix Code and Waste Stream Description?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |

Attachment 3 – CCP Waste VE Independent Technical Reviewer Checklist (continued)

Batch Data Report No.: \_\_\_\_\_

Page 2 of 2

| Description   |                             |                              |                              |
|---|-----------------------------|------------------------------|------------------------------|
| 14. Was the waste in the Output Waste Container(s) examined for prohibited items?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 15. Is there an adequate written description of the contents of each item?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 16. Were the scale(s) in calibration prior to the VE and documented correctly?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 17. Were the scale checks SAT prior to the VE and documented correctly?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 18. Was the audio/video media recording properly prepared and labeled for each waste container?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 19. Was the audio/video media recording check performed satisfactorily prior to the VE?   | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 20. Precision: Was precision maintained by reconciling any discrepancies between the operator and the independent technical reviewer with regard to identification of waste matrix code, liquids in excess of TSDF-WAC limits, and compressed gases?              | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 21. Accuracy: Was accuracy maintained by requiring operators to pass a comprehensive examination and demonstrate satisfactory performance in the presence of the VE expert during their initial qualification and subsequent requalification (operators on LOQI)? | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 22. Completeness: Is there a completed VE data form for each waste container in the BDR?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| 23. Were NCRs initiated as required and dispositioned appropriately?  | <input type="checkbox"/> NO | <input type="checkbox"/> YES | <input type="checkbox"/> N/A |
| Comments:   |                             |                              |                              |
| I have reviewed 100 percent of the container-specific and batch data in this report and find it acceptable.   |                             |                              |                              |
| Independent Technical Reviewer:   |                             |                              |                              |
| _____   | _____                       | _____                        |                              |
| Printed Name  | Signature                   | Date                         |                              |

Attachment 4 – CCP Waste VE Batch Data Report Table of Contents

Batch Data Report No.: \_\_\_\_\_ Examination Date: \_\_\_\_\_

| Table of Contents |   |          |
|-------------------|---|----------|
| Item              | Description   | Page No. |
| 1                 | CCP Waste VE Batch Data Report Cover Sheet            |          |
| 2                 | CCP Waste VE Batch Data Report Table of Contents      |          |
| 3                 | CCP Waste Visual Examination General Information Form |          |
| 4                 | CCP Waste Visual Examination Data Forms               |          |
| 5                 | CCP Waste VE Independent Technical Reviewer Checklist |          |
| 6                 | Copy of NCRs (N/A, If Not Applicable)                 |          |
| 7                 | Field Records (N/A, If Not Applicable)                |          |

Attachment 5 – CCP Waste VE Batch Data Report Cover Sheet

Batch Data Report No.: \_\_\_\_\_ Examination Date: \_\_\_\_\_

| Waste Container ID Number: |  |
|----------------------------|--|
| 1                          |  |
| 2                          |  |
| 3                          |  |
| 4                          |  |
| 5                          |  |
| 6                          |  |
| 7                          |  |
| 8                          |  |
| 9                          |  |
| 10                         |  |
| 11                         |  |
| 12                         |  |
| 13                         |  |
| 14                         |  |
| 15                         |  |
| 16                         |  |
| 17                         |  |
| 18                         |  |
| 19                         |  |
| 20                         |  |

Independent Technical Reviewer:

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

