

United States Government

Department of Energy

**memorandum**Carlsbad Field Office  
Carlsbad, New Mexico 88221

DATE: September 20, 2002

REPLY TO  
ATTN OF: CBFO:QA:DSM:GS:02-1298:UFC 2300.00

SUBJECT: Issuance of Corrective Action Reports Initiated During Audit A-02-03

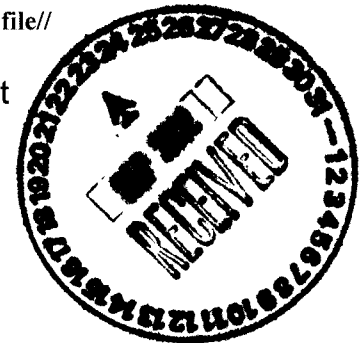
TO: Dave Haar, WTS/CCP

The Carlsbad Field Office (CBFO) performed Audit A-02-03 of the Argonne National Laboratory – East Central Characterization Activities on September 9-13, 2002. CBFO Corrective Action Reports (CARs) 02-087 through 02-092, 02-094 and 02-095 are attached.

Please document on the attached CAR continuation sheets your proposed corrective actions and a schedule for completion and forward to me prior to the response due date identified in CAR block 14.

If you have any questions or comments, please contact me at 234-7491.

*Dennis S. Miehls* //signature on file//  
Dennis S. Miehls  
Quality Assurance Specialist



## Attachments

cc: w/attachments  
K. Watson, CBFO \*ED  
A. Harvey, ANL-E \*ED  
C. Rock, ANL-E \*ED  
T. Harms, DOE-QA \*ED  
M. Eagle, EPA \*ED  
E. Feltcorn, EPA \*ED  
R. Joglekar, EPA \*ED  
S. Monroe, EPA \*ED  
B. Walker, EEG \*ED  
S. Zappe, NMED \*ED  
S. Holmes, NMED \*ED  
D. Winters, DNFSB \*ED  
A. Pangle, CTAC \*ED  
E. Bradford, CTAC \*ED  
P. Roush, WTS  
CBFO QA Record File  
CBFO M&RC

\*ED denotes electronic distribution

020923



## CORRECTIVE ACTION REPORT

<b>1. CAR No.:</b> 02-087	<b>2. Activity Report No.:</b> A-02-03	<b>3. Page</b> <u>1</u> <b>of</b> <u>2</u>
<b>4. Controlling Document:</b> CCP-TP-005, Rev. 7 and CCP-AK-ANL-E-001, Rev. 5	<b>5. CBFO Assessment Team Leader:</b> Ava Holland	
<b>6. Responsible Organization:</b> ANL-E/CCP	<b>7. CAQ Was Discussed With:</b> Ben Gutierrez, Tom Krause	
<b>8. Requirement that was violated:</b> WAP B4-2b, "Required TRU Mixed Waste Stream Information", states...The acceptable knowledge written record shall include a summary that identifies all sources of waste characterization information used to delineate the waste stream. The basis and rationale for delineating each waste stream, based on parameters of interest, shall be clearly summarized and traceable to referenced documents. (See Continuation Sheet)		
<b>9. Condition Adverse to Quality:</b> (See Continuation Sheet)		
<b>10. Suggested Actions (Optional):</b>		
<b>11a. Significant CAQ</b> (Yes or No): Yes <b>11b. Work Suspension Recommended</b> (Yes or No): No <b>11c. RCRA-Related</b> (Yes or No): Yes <b>11d. Accelerated Corrective Action Required</b> (Yes or No): No		
<b>12. Types of Actions:</b> Remedial: <input checked="" type="checkbox"/> Investigative: <input checked="" type="checkbox"/> Root Cause: <input checked="" type="checkbox"/> Actions to Preclude Recurrence: <input checked="" type="checkbox"/>		
<b>13. CAR Initiator:</b> <u>Dick Blauvelt/Steve Davis</u> <b>Date:</b> <u>September 13, 2002</u>		
<b>14. Response Due Date:</b> _____ <b>Corrective Action Plan Required:</b> Yes <b>Required Corrective Action Completion Date:</b> _____		
<b>15. a. Concurrence:</b> _____ <b>b.</b> _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;"> <small>Assessment Team Leader</small>  <small>Date</small> </div> <div style="text-align: center;"> <small>Responsible Assistant Manager</small>  <small>Date</small> </div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;"> <small>c.</small>  <small>Quality Assurance Manager</small>  <small>Date</small> </div> </div>		
<b>16. Corrective Actions Proposed by the Responsible Organization:</b> Use CAR Continuation Sheet		
<b>17. Acceptance of Proposed Corrective Actions:</b> <hr style="width: 30%; margin-left: 0;"/> <div style="display: flex; justify-content: space-between; width: 30%; margin-left: 0;"> <small>Assessment Team Leader</small> <small>Date</small> </div>		
<b>18. Verification of Corrective Action Completion:</b> (Use CAR Continuation Sheet)		
<b>19a. Verified By:</b> _____ <b>Date</b> _____ <div style="display: flex; justify-content: space-around; width: 80%; margin-left: 0;"> <small>Name</small> <small>Date</small> </div>		
<b>19b. Trend Cause Code:</b> _____		
<b>20. Closure:</b> _____ <b>Date</b> _____ <div style="display: flex; justify-content: space-around; width: 80%; margin-left: 0;"> <small>Quality Assurance Manager</small> <small>Date</small> </div>		

# CBFO CORRECTIVE ACTION REPORT

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## Block # 8

Assumptions made in delineating each waste stream also shall be identified and justified. If discrepancies exist between required information, then sites shall apply all hazardous waste codes indicated by the information to the subject waste stream unless the sites choose to justify an alternative assignment and document the justification in the auditable record. The Permittees shall obtain from each site, at a minimum, procedures that comply with the following acceptable knowledge requirements:

- Procedures for identifying and assigning the physical waste form of the waste
- Procedures for delineating waste streams and assigning Waste Matrix Codes
- Procedures for resolving inconsistencies in acceptable knowledge documentation.....
- Procedures to document how changes to Waste Matrix Codes, waste stream assignment, and associated EPA hazardous waste numbers based on material composition are documented for any waste

## Block # 9

Adequacy Issues associated with the Acceptable Knowledge Procedure: CCP-TP-005, Rev. 7, CCP Acceptable Knowledge Documentation:

Changes are required to clarify the AK Procedure regarding AK reevaluation and AK confirmation as discussed during the audit. In addition, there are several other changes needed within the procedure, These changes are as follows:

- The CCP program attempts to document, categorize, roadmap, and present AK information using several checklists and attachments. While this approach is a good way to roadmap information, it does not appear that information presented in attachments is sufficiently summarized in the AK Summary. As a result, the AK Summary is not stand alone, in that one requires not only the attachments, but all of the references in the attachments to derive an understanding of the AK characterization results. The AK Summary must include sufficient discussion to justify conclusions included therein.

Adequacy issues associated with the ANL-E AK Summary Report, CCP-AK-ANL-E-001, Rev. 5, the adequacy issues are as follows:

- There is insufficient justification in the AK Summary Report for assignment and/or lack of assignment of Hazardous Waste Numbers. The appropriate conclusions derived from the supporting reference documents must be included.
- The defense waste determination must be clarified particularly with respect to co-mingling activities.
- The AK record must include cellulostics, plastics, rubber and ferrous/non-ferrous waste material parameter information compiled from the drum specific data.

## CORRECTIVE ACTION REPORT

<b>1. CAR No.:</b> 02-088	<b>2. Activity Report No.:</b> A-02-03	<b>3. Page</b> <u>1</u> <b>of</b> <u>3</u>
<b>4. Controlling Document:</b> CH-WAC Appendix A, QAPD, Section 1.2, (Personnel Qualification and Training)		<b>5. CBFO Assessment Team Leader:</b> Ava Holland
<b>6. Responsible Organization:</b> ANL-E/CCP		<b>7. CAQ Was Discussed With:</b> Ben Gutierrez, Tom Krause
<b>8. Requirement that was violated:</b> CH-WAC, Appendix A, Section A.2.2 "Acceptable Knowledge (AK) Documentation", states, The use of AK information concerning the radiological composition of a waste stream will be documented either in the AK summary report for the waste characterization of the waste stream or in another controlled document approved by the Site Project Manager. (See Continuation Sheet)		
<b>9. Condition Adverse to Quality:</b> (See Continuation Sheet)		
<b>10. Suggested Actions (Optional):</b>		
<b>11a. Significant CAQ</b> (Yes or No): Yes <b>11b. Work Suspension Recommended</b> (Yes or No): No <b>11c. RCRA-Related</b> (Yes or No): Yes <b>11d. Accelerated Corrective Action Required</b> (Yes or No): No		
<b>12. Types of Actions:</b> Remedial: <input checked="" type="checkbox"/> Investigative: <input checked="" type="checkbox"/> Root Cause: <input checked="" type="checkbox"/> Actions to Preclude Recurrence: <input checked="" type="checkbox"/>		
<b>13. CAR Initiator:</b> <u>Dick Blauvelt/Steve Davis</u> <b>Date:</b> <u>September 12, 2002</u>		
<b>14. Response Due Date:</b> _____ <b>Corrective Action Plan Required:</b> Yes <b>Required Corrective Action Completion Date:</b> _____		
<b>15. a. Concurrence:</b> _____ <b>b.</b> _____ <small>Assessment Team Leader Date Responsible Assistant Manager Date</small>  <b>c.</b> _____ <small>Quality Assurance Manager Date</small>		
<b>16. Corrective Actions Proposed by the Responsible Organization:</b> Use CAR Continuation Sheet		
<b>17. Acceptance of Proposed Corrective Actions:</b> _____ <small>Assessment Team Leader Date</small>		
<b>18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)</b>		
<b>19a. Verified By:</b> _____ <b>Date</b> _____ <small>Name Date</small>		
<b>19b. Trend Cause Code:</b> _____		
<b>20. Closure:</b> _____ <b>Date</b> _____ <small>Quality Assurance Manager Date</small>		

# CBFO CORRECTIVE ACTION REPORT

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**Block: #8**

Should this information be contained in AK package(s) prepared to meet other general waste characterization requirements, it need not be duplicated in other controlled documents that address the radiological properties of the waste stream; however, all relevant information must be included in the AK record. Section A.6.5, "Data Comparability", states, "...Additional, comparison of measured data with AK derived or based values, as applicable, provides a means to assess comparability on a waste stream basis. Section A.2.2.1, "Required Elements", states, "...The type and quantity of supporting documentation may vary by waste stream and shall be compiled in a written record that shall include a summary identifying all sources of information used to delineate the waste stream's isotopic distribution. The basis and rationale for the delineation shall be clearly summarized in an AK report and traceable to referenced documents. Assumptions made in this delineation shall be identified.

QAPD Section 1.2, "Personnel Qualification and Training", "Personnel shall be trained and qualified to ensure they are capable of performing their assigned tasks and to ensure that job proficiency is maintained."

**Block: #9**

The CCP has failed to correctly interpret and implement the requirements of DOE/WIPP-02-3122, Rev. O, Appendix A. Impacted are the AK procedure and the ANL-E Waste Summary Report.

Issues related to the AK Procedure, CCP-TP-005, Rev. 7:

- The CH WAC states that AK, measurement, and/or combinations thereof may be used to characterize waste. However, this statement does not relieve the site/CCP of performing adequate AK data assembly and compilation. It is apparent that some have interpreted the WAC sentence to mean that because NDA measurements are being performed, less or no AK data compilation is required, but this is not the case and is not consistent with commitments made by DOE in either the WAP or CCA and associated attachments. The procedure must be revised to ensure that activities are not performed which promote (either intentionally or unintentionally) inadequate AK compilation. AK must be completed regardless of data quality or availability of isotopic ratios for all information; all available isotopic information must be reported even if it applies to only a few of the ten WIPP tracked isotopes
- Comparability states that "comparison of measured data with AK derived or based values, as applicable, provides a means to assess comparability on a waste stream basis". Section 4.5 or another appropriate section of the procedure must be revised to reflect the need to perform qualitative and/or quantitative comparisons of AK-derived radiological information and that information obtained through measurement (depending upon the nature of AK data assembled).
- The procedure must reflect AK-related data collection requirements of the CH WAC. If the AK record does not support generation or presentation of the information, this must be so stated in the AK Summary. These CH-WAC AK requirements include:
  - 1) Waste identification and categorization schemes relevant to the isotopic composition of waste and description of isotopic composition of waste streams.
  - 2) Physical/chemical waste composition that could affect isotopic distribution.
  - 3) Numerical adjustments applied to derive isotopic composition.
  - 4) Isotopic ratio determination for the 10 WIPP tracked radionuclides and, if applicable, the radionuclides that comprise 95% of the waste.

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Block: #9 (Continued)

Regarding AK-NDA Measurement comparisons supporting AK confirmation/comparison, the CH WAC, Section A.6.5, Data Comparability

Issues related to the ANL-E AK Summary Report, CCP-AK-ANL-E-001, Rev. 5:

- With the AK procedural inadequacies noted in bullet one above, the AK Summary must be revised to address several issues. The AK record includes drum-specific AK information that often includes radionuclide data, old measurement values, waste material parameter information, etc. However, this information has not been adequately "rolled up" and summarized in the AK Summary. The CCP personnel must look for and examine drum-specific information pertaining to radionuclide data, including isotopic information and potential isotopic ratios, and summarize this information *as appropriate* in the AK Summary Report. It is understood that not all drums may have AK isotopic data or available data may not be representative of the waste stream, and CCP may therefore not wish to assign isotopic ratios to the waste stream as a whole from this limited information. However, this radionuclide information must be discussed in the AK Summary at least qualitatively and the reasons for *dismissing* this information stated.
- The AK Summary Report must be revised to address the information/data derived from the procedural changes noted above.

AK training issue:

- CCP must reevaluate the current CCP AK training methodology and processes, based upon the issues identified above.

## CORRECTIVE ACTION REPORT

1. CAR No.: 02-089	2. Activity Report No.: A-02-03	3. Page <u>1</u> of <u>2</u>
4. Controlling Document: CCP-TP-031	5. CBFO Assessment Team Leader: Ava Holland	
6. Responsible Organization: ANL-E/CCP	7. CAQ Was Discussed With: Mike Williams, Jessie Melton	
8. Requirement that was violated: A. CCP-TP-031, Attachment 2; B. CCP-TP-031 section 4.3; C. WAP B3-5, Comparability (See Continuation Sheet)		
<p>9. Condition Adverse to Quality: Procedure CCP-TP-031, CCP Headspace Gas Sampling Using Automated Manifold, has not adequately addressed WAP requirements in the following areas:</p> <p style="margin-left: 20px;">A. Identifies equations 8 and 10 for calculation of concentrations, but does not specify the Analytes calculated by each equation.</p> <p style="margin-left: 20px;">B. A default value of 0.01 for Methane was assigned as the MDL, however assignment of default values is not addressed.</p> <p style="margin-left: 20px;">C. No instructions exist for generating the record that contains the lot number and cylinder number for BFB.</p>		
10. Suggested Actions (Optional):		
<p>11a. Significant CAQ (Yes or No): Yes</p> <p>11b. Work Suspension Recommended (Yes or No): No</p> <p>11c. RCRA-Related (Yes or No): Yes</p> <p>11d. Accelerated Corrective Action Required (Yes or No): No</p>		
12. Types of Actions: Remedial : <u>X</u> Investigative : <u>X</u> Root Cause : <u>X</u> Actions to Preclude Recurrence: <u>X</u>		
13. CAR Initiator: <u>Dorothy Gill</u> Date: <u>September 13, 2002</u>		
<p>14. Response Due Date: _____ Corrective Action Plan Required: Yes</p> <p>Required Corrective Action Completion Date: _____</p>		
<p>15. a. Concurrence : _____ b. _____</p> <p style="margin-left: 40px;">Assessment Team Leader                      Date                      Responsible Assistant Manager                      Date</p> <p style="margin-left: 40px;">c. _____</p> <p style="margin-left: 40px;">Quality Assurance Manager                      Date</p>		
16. Corrective Actions Proposed by the Responsible Organization: Use CAR Continuation Sheet		
<p>17. Acceptance of Proposed Corrective Actions:</p> <p>_____ Date</p> <p style="margin-left: 40px;">Assessment Team Leader</p>		
18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)		
<p>19a. Verified By: _____ Date</p> <p style="margin-left: 40px;">Name</p>		
19b. Trend Cause Code: _____		
<p>20. Closure: _____ Date</p> <p style="margin-left: 40px;">Quality Assurance Manager</p>		

# CBFO CORRECTIVE ACTION REPORT

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**Block # 8 Requirement that was violated:**

Procedure CCP-TP-031, Attachment 2 - Calibration and Quality Control (QC) Equations and section 4.3, include the requirements relative the equations for calculation of concentrations, and Method Detection Levels (MDLs).

WAP section B3-5, Comparability - states in part that for VOC analysis, data generated through analysis of samples from different sites shall be comparable... each site to achieve comparability by using standardized methods and traceable standards...”



## CORRECTIVE ACTION REPORT

1. CAR No.: 02-090	2. Activity Report No.: A-02-03	3. Page <u>1</u> of <u>2</u>
4. Controlling Document: WAP	5. CBFO Assessment Team Leader: Ava Holland	
6. Responsible Organization: ANLE/CCP	7. CAQ Was Discussed With: Jessie Melton, Mike Williams	
<b>8. Requirement that was violated:</b> : A: WAP B1-1a(1), Second Paragraph; B: TRAMPAC, Section 5.2.3 and Appendix 5.7, QAPP for TRUPACTII Gas Generation Test Program, Section 4.3; C: WAP table B3-2, CCP-TP-034 (See Continuation Page)		
<b>9. Condition Adverse to Quality:</b> Implementation of requirements were not addressed for the following: <ul style="list-style-type: none"> <li>A. Real-time equipment blanks are not collected through all of the sampling equipment.</li> <li>B. Accuracy for the measurement of Hydrogen and Methane is not assessed. Measurements to certify waste that does not fall within the analytical category must demonstrate the precision and accuracy requirements for the Gas Generation Test Program.</li> <li>C. The detection limit reported for analytes was not adjusted to accommodate the dilution shown in Sample #02064-07, of batch AEHSG01082602a which had a dilution factor of 12.782. In addition, procedure CCP-TP-034 does not address sample dilution.</li> </ul>		
<b>10. Suggested Actions (Optional):</b>		
11a. Significant CAQ	(Yes or No): Yes	
11b. Work Suspension Recommended	(Yes or No): No	
11c. RCRA-Related	(Yes or No): Yes	
11d. Accelerated Corrective Action Required	(Yes or No): No	
<b>12. Types of Actions:</b> Remedial: <input checked="" type="checkbox"/> Investigative: <input checked="" type="checkbox"/> Root Cause : <input checked="" type="checkbox"/> Actions to Preclude Recurrence: <input checked="" type="checkbox"/>		
<b>13. CAR Initiator:</b> <u>Dorothy Gill</u> <b>Date:</b> <u>09/16/02</u>		
<b>14. Response Due Date:</b> _____ <b>Corrective Action Plan Required:</b> Yes <b>Required Corrective Action Completion Date:</b> _____		
<b>15. a. Concurrence :</b> _____ <b>b.</b> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="text-align: center; width: 45%;">                     Assessment Team Leader      Date                 </div> <div style="text-align: center; width: 45%;">                     Responsible Assistant Manager      Date                 </div> </div> <b>c.</b> _____ <div style="display: flex; justify-content: center; width: 100%;"> <div style="text-align: center; width: 45%;">                     Quality Assurance Manager      Date                 </div> </div>		
<b>16. Corrective Actions Proposed by the Responsible Organization:</b> Use CAR Continuation Sheet		
<b>17. Acceptance of Proposed Corrective Actions:</b> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="text-align: center; width: 45%;">                     Assessment Team Leader                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		
<b>18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)</b>		
<b>19a. Verified By:</b> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="text-align: center; width: 45%;">                     Name                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		
<b>19b. Trend Cause Code:</b> _____		
<b>20. Closure:</b> _____ <div style="display: flex; justify-content: center; width: 100%;"> <div style="text-align: center; width: 45%;">                     Quality Assurance Manager                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		

# CBFO CORRECTIVE ACTION REPORT

(continuation sheet)

1. CAR No.: 02-090

2. Activity No.: A-02-03

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**Block # 8 Requirement that was violated:**

WAP section B1-1a(1) states in part that: "The manifold shall also be equipped with a purge assembly that allows applicable QC samples to be collected through all sampling components that may affect compliance with the QAOs...sites to demonstrate and document the effectiveness of the sampling equipment design in meeting the QAOs..."

TRAMPAC, section 5.2.3, Appendix 5.7.4.3 and TRUPACT II Gas Generation Test Program, section 4.3 include the requirements relative compliance with flammable gas/VOC limits by measurement, and Quality Assurance Objectives (QAOs) for precision and accuracy for hydrogen/methane gas sampling analyses.

WAP table B3-2, Gas VOCs Target Analyte List and Quality Assurance Objectives, include the requirements relative program required quantitation limits (PRQLs).



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<p>Block #_</p>		

# CORRECTIVE ACTION REPORT

<b>1. CAR No.:</b> 02-092	<b>2. Activity Report No.:</b> A-02-03	<b>3. Page</b> <u>1</u> <b>of</b> <u>1</u>
<b>4. Controlling Document:</b> WAP, Section B1-3a	<b>5. CBFO Assessment Team Leader:</b> Ava Holland	
<b>6. Responsible Organization:</b> Westinghouse TRU Solutions - Central Characterization Project	<b>7. CAQ Was Discussed With:</b> D. Nisius, R. Bernardi	
<b>8. Requirement that was violated:</b> WAP Section B1-3a; "To perform radiography, the waste container is scanned while the operator views the television screen. An audio/videotape or equivalently non-alterable media is made of the waste container scan and is maintained as a non-permanent record."		
<b>9. Condition Adverse to Quality:</b> An audio/videotape of the operator analysis (scan) of the data is not produced during real time operation of the DR/CT. The audio record is created after the DR/CT examination by the operator reading the radiography data form. The audio/videotape is required to be produced while the operator is analyzing the data to identify the waste items and estimate WMP weights.		
<b>10. Suggested Actions (Optional):</b> A simultaneous audio/video record must be produced which captures the analysis process and the determinations made during the analysis process.		
<b>11a. Significant CAQ</b> (Yes or No): Yes <b>11b. Work Suspension Recommended</b> (Yes or No): No <b>11c. RCRA-Related</b> (Yes or No): Yes <b>11d. Accelerated Corrective Action Required</b> (Yes or No): No		
<b>12. Types of Actions:</b> Remedial: <input checked="" type="checkbox"/> Investigative : <input checked="" type="checkbox"/> Root Cause: <input checked="" type="checkbox"/> Actions to Preclude Recurrence: <input checked="" type="checkbox"/>		
<b>13. CAR Initiator:</b> <u>K. Gaydosh</u> <b>Date:</b> <u>September 13, 2002</u>		
<b>14. Response Due Date:</b> _____ <b>Corrective Action Plan Required:</b> Yes <b>Required Corrective Action Completion Date:</b> _____		
<b>15. a. Concurrence :</b> _____ <b>b.</b> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="text-align: center; width: 45%;">                     Assessment Team Leader      Date                 </div> <div style="text-align: center; width: 45%;">                     Responsible Assistant Manager      Date                 </div> </div> <b>c.</b> _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center; width: 45%;">                     Quality Assurance Manager                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		
<b>16. Corrective Actions Proposed by the Responsible Organization: Use CAR Continuation Sheet</b>		
<b>17. Acceptance of Proposed Corrective Actions:</b> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="text-align: center; width: 45%;">                     Assessment Team Leader                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		
<b>18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)</b>		
<b>19a. Verified By:</b> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="text-align: center; width: 45%;">                     Name                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		
<b>19b. Trend Cause Code:</b> _____		
<b>20. Closure:</b> _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center; width: 45%;">                     Quality Assurance Manager                 </div> <div style="text-align: center; width: 45%;">                     Date                 </div> </div>		

# CBFO CORRECTIVE ACTION REPORT

(continuation sheet)

1. CAR No.:	2. Activity No.:	3. Page ___ of ___
<p>Block #_</p>		

# CORRECTIVE ACTION REPORT

<b>1. CAR No.:</b> 02-094	<b>2. Activity Report No.:</b> A-02-03	<b>3. Page</b> <u>1</u> <b>of</b> <u>2</u>
<b>4. Controlling Document:</b> CAO-94-1012, CBFO QAPD and CCP-QP-022, CCP TRU Software Quality Assurance		<b>5. CBFO Assessment Team Leader:</b> Ava Holland
<b>6. Responsible Organization:</b> ANL-E/CCP		<b>7. CAQ Was Discussed With:</b> S. Djordjevic and A. J. Fisher
<b>8. Requirement that was violated:</b> (See Continuation Sheet)		
<b>9. Condition Adverse to Quality:</b> (See Continuation Sheet)		
<b>10. Suggested Actions (Optional):</b> (See Continuation Sheet)		
<b>11a. Significant CAQ</b>	(Yes or No): Yes	
<b>11b. Work Suspension Recommended</b>	(Yes or No): No	
<b>11c. RCRA-Related</b>	(Yes or No): No	
<b>11d. Accelerated Corrective Action Required</b>	(Yes or No): No	
<b>12. Types of Actions:</b> Remedial: <input checked="" type="checkbox"/> Investigative: <input checked="" type="checkbox"/> Root Cause: <input checked="" type="checkbox"/> Actions to Preclude Recurrence: <input checked="" type="checkbox"/>		
<b>13. CAR Initiator:</b> James R. Schuetz _____ <b>Date:</b> September 12, 2002		
<b>14. Response Due Date:</b> _____ <b>Corrective Action Plan Required:</b> Yes <b>Required Corrective Action Completion Date:</b> _____		
<b>15. a. Concurrence :</b> _____ <b>b.</b> _____ <div style="display: flex; justify-content: space-around; font-size: small;"> <span>Assessment Team Leader      Date</span> <span>Responsible Assistant Manager      Date</span> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>c. _____</span> <span>_____</span> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>Quality Assurance Manager</span> <span>Date</span> </div>		
<b>16. Corrective Actions Proposed by the Responsible Organization:</b> Use CAR Continuation Sheet		
<b>17. Acceptance of Proposed Corrective Actions:</b> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <div style="display: flex; justify-content: space-between; font-size: x-small;"> <span>Assessment Team Leader</span> <span>Date</span> </div>		
<b>18. Verification of Corrective Action Completion:</b> (Use CAR Continuation Sheet)		
<b>19a. Verified By:</b> _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> <span>Name</span> <span>Date</span> </div>		
<b>19b. Trend Cause Code:</b> _____		
<b>20. Closure:</b> _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> <span>Quality Assurance Manager</span> <span>Date</span> </div>		

# CBFO CORRECTIVE ACTION REPORT

( Continuation Sheet )

1. CAR No.: 02-094

2. Activity No.: A-02-03

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## Block # 8 Requirement that was violated:

- a. CAO -94-1012, Rev. 3, CBFO QAPD, Section 2.1.2c States in part that "Individuals performing work shall comply with implementing procedures..."
- b. CCP-QP-022, Rev. 2, CCP TRU Software Quality Assurance, Section 4.9.1 States in part that "The reviewer reviews the document for the items in the appropriate document checklist. If necessary, the reviewer provides comments by filling out fields 1-5 of the Review Comment (Software) form (Attachment 4)..."
- c. CCP-QP-022, Rev. 2, CCP TRU Software Quality Assurance, Section 4.4.6 States in part that "The SCMC updates the Software Code Management: Code Information Summary Form (Attachment 14) with summary information for production and retired software..."
- d. CCP-QP-022, Rev. 2, CCP TRU Software Quality Assurance, Section 4.5.2 States in part that "The version ID# indicating the revision, page change, or addendum should reflect the modified software version to maintain configuration baseline traceability."

## Block # 9 Condition Adverse to Quality:

- a. The review of the software inventory list by the software code sponsor is not documented. (Reference CCP-QP-022, Rev. 2, CCP TRU Software Quality Assurance, Section 4.5, stating that "The code sponsors review the production software information listing and summary listing for accuracy...")
- b. Comments on an Attachment 4 Review Comment form, stating that a software quality assurance plan for the APNEA software was not provided by the vendor, have not been resolved and the resolution has not been documented.
- c. The Software Code Management: Code Information Summary is not up-to-date and does not include all software being used in the field.
- d. The changes noted on Software Problem Report 02-0015 and Change Control Form 02-016 for Agilent C00.08 HSG software are not noted on the Software Installation and Checkout Form and have not received a unique version number to track the change.

## Block # 10 Suggested Corrective Actions:

- a. Include signature lines on the software inventory list to serve as documentation of the review of code by code sponsors.
- b. Investigate to see if any other review comments have not been resolved and/or documented and investigate the resolution of the comment, secure the necessary life-cycle document, review the document, accept the document, and revise the Review Comment form Attachment 4. Consider a revision to the procedure to detail comment resolution and define delegated responsibility.
- c. Circulate the *Software Code Management: Code Information Summary* to the appropriate facility managers who use and/or develop software and request review of status and completeness of the list. Revise status of the noted software packages and up-date the list with appropriate newly identified software packages. Determine if APNEA Ver. 1.072 should be retired and if any other software items are candidates for retirement. Complete Attachment 13 including a reason for retirement as appropriate. Evaluate the *eqa-agilent.mdb*, flat file generator program, and promote from exempt to system status. Perform testing on this database and control under configuration management.
- d. Provide a unique identification for the change described on the problem report and change control forms and revise these and the installation and checkout forms to include the tracking number and provide reference between the forms.



# CORRECTIVE ACTION REPORT

<b>1. CAR No.:</b> 02-095	<b>2. Activity Report No.:</b> A-02-03	<b>3. Page</b> <u>  1  </u> <b>of</b> <u>  1  </u>
<b>4. Controlling Document:</b> HWFP, NM 4890139088-TSDF, S. B-4 (1) (i); Table B-8;	<b>5. CBFO Assessment Team Leader:</b> Ava Holland	
<b>6. Responsible Organization:</b> ANL-E/CCP	<b>7. CAQ Was Discussed With:</b> A. Romo	
<b>8. Requirement that was violated:</b> Hazardous Waste Facility Permit (HWFP) 4890139088-TSDF, S. B-4(1)(i); "All generator/storage sites planning to ship TRU mixed waste to WIPP will supply the required data to the WWIS. Table B-8 contains a listing of the data fields contained in the WWIS that are required as part of this permit."		
<b>9. Condition Adverse to Quality:</b> During visual examination, prohibited items are being removed but the weights of the items are not being deducted from the total waste weight and WMP weights reported in e-QA (which is reported to WWIS). The waste weight and WMP weights are required WWIS data. The weight data being reported to the WWIS, therefore, is incorrect.		
<b>10. Suggested Actions (Optional):</b>		
<b>11a. Significant CAQ</b>	(Yes or No): Yes	
<b>11b. Work Suspension Recommended</b>	(Yes or No): No	
<b>11c. RCRA-Related</b>	(Yes or No): Yes	
<b>11d. Accelerated Corrective Action Required</b>	(Yes or No): No	
<b>12. Types of Actions:</b> Remedial: <u>  X  </u> Investigative: <u>  X  </u> Root Cause: <u>  X  </u> Actions to Preclude Recurrence: <u>  X  </u>		
<b>13. CAR Initiator:</b> <u>  K. Gaydosh  </u> <b>Date:</b> <u>  September 16, 2002  </u>		
<b>14. Response Due Date:</b> _____ <b>Corrective Action Plan Required:</b> Yes <b>Required Corrective Action Completion Date:</b> _____		
<b>15. a. Concurrence :</b> _____ <b>b.</b> _____ <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <small>Assessment Team Leader</small>  <small>Date</small> </div> <div style="text-align: center;"> <small>Responsible Assistant Manager</small>  <small>Date</small> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <small>c.</small>  <small>Quality Assurance Manager</small>  <small>Date</small> </div> </div>		
<b>16. Corrective Actions Proposed by the Responsible Organization:</b> Use CAR Continuation Sheet		
<b>17. Acceptance of Proposed Corrective Actions:</b> _____ <div style="display: flex; justify-content: space-between;"> <small>Assessment Team Leader</small> <small>Date</small> </div>		
<b>18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)</b>		
<b>19a. Verified By:</b> _____ <div style="display: flex; justify-content: space-between;"> <small>Name</small> <small>Date</small> </div>		
<b>19b. Trend Cause Code:</b> _____		
<b>20. Closure:</b> _____ <div style="display: flex; justify-content: space-between;"> <small>Quality Assurance Manager</small> <small>Date</small> </div>		

# CBFO CORRECTIVE ACTION REPORT

(continuation sheet)

1. CAR No.:	2. Activity No.:	3. Page ___ of ___
<p>Block #_</p>		