The Carlsbad Field Office (CBFO) has determined that AMWTP has misidentified the populations available for homogeneous solid sampling for waste streams BNINW216 and BNINW218. As a result of this condition adverse to quality, Corrective Action Report (CAR) 04-033 has been issued and is attached. Please note that this CAR has been classified as an accelerated CAR and must be closed by the required correction action completion date listed in block 14.

Associated with this CAR, CBFO has imposed a work suspension. The scope of the work suspension is as follows:

- Shipments of waste streams BNINW216 and BNINW218 to the Waste Isolation Pilot Plant are suspended until further notice.

- Entry of data for these waste streams into the WIPP Waste Information System shall be suspended until further notice.

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. Also attached are the instructions for providing corrective action responses for your use in preparing the required responses.

If you have any questions or comments, please contact me at (505) 234-7483.

Martin P. Navarrete
Quality Assurance Specialist

Attachment(s)
cc: w/attachments
A. Holland, CBFO *ED
K. Watson, CBFO *ED
R. Knerr, CBFO *ED
E. Schweinsberg, BNFL *ED
A. Dobson, BNFL *ED
J. Wells, DOE-ID *ED
E. Dumas, BNFL *ED
M. Eagle, EPA *ED
E. Feltcorn, EPA *ED
R. Joglekar, EPA *ED
S. Zappe, NMED *ED
S. Holmes, NMED *ED
D. Winter, DNFSB *ED
J. May, CTAC *ED
A. Pangle, CTAC *ED
WIPP Operating Record, MS 486-06
CBFO QA File
CBFO M&RC

*ED denotes electronic distribution
CBFO/QA/MPN/GS:04-1566/UFC 2300.00
CORRECTIVE ACTION REPORT

1. CAR No.: 04-033  
2. Activity Report No.: NA  
3. Page 1 of 4

4. Controlling Document: HWFP WAP

5. CBFO Assessment Team Leader: Kerry Watson

6. Responsible Organization: Advanced Mixed Waste Treatment Project (AMWTP)

7. CAQ Was Discussed With:
   - E. Schweinsberg (BNFL)
   - D. Swale (BNFL)
   - A. Holland (CBFO)
   - E. Dumas (BNFL)
   - J. Wells (DOE-ID)

8. Requirement that was violated:
   See Continuation Sheet

9. Condition Adverse to Quality:
   See Continuation Sheet

10. Suggested Actions (Optional):
    See Continuation Sheet

11a. Significant CAQ (Yes or No):

11b. Work Suspension Recommended (Yes or No):

11c. RCRA-Related (Yes or No):

11d. Accelerated Corrective Action Required (Yes or No):


13. CAR Initiator: Kerry Watson/  Date: 7/19/04

14. Response Due Date: 7/26/04  Corrective Action Plan Required: YES/NO
   Required Corrective Action Completion Date: 8/18/04

15. a. Concurrence: Kerry Watson/ Assessment Team Leader  Date: 7/19/04
   b. Responsible Assistant Manager  Date: 7/19/04
   c. Quality Assurance Manager  Date: 7/19/04

16. Corrective Actions Proposed by the Responsible Organization: Use CAR Continuation Sheet

17. Acceptance of Proposed Corrective Actions:
   Assessment Team Leader  Date

18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)

19a. Verified By:
   Name  Date

19b. Trend Cause Code:

20. Closure:
   Quality Assurance Manager  Date
Block #8 Requirement that was violated:

B-1a Waste Stream Identification (Excerpt)

“All of the waste within a waste stream may not be available for sampling and analysis at one time. In these instances, generator/storage sites may divide waste streams into waste stream lots based on staging, transportation, or handling issues. Characterization activities shall then be undertaken on a waste stream lot basis.”

B-3a(2) Homogeneous Waste Sampling and Analysis (Excerpt)

“The waste containers for sampling and analysis are to be selected randomly from the population of containers for the waste stream.”

B2-2a Statistical Selection of Containers for Totals Analysis (Excerpts)

“The Permittees shall require each site project manager to verify that the samples collected from within a waste stream were selected randomly.”

NMED Approval of the Advanced Mixed Waste Treatment Project Final Audit Report, Audit A-03-05 (December 23, 2003) (Excerpt)

“However, this approval is limited to only those waste containers remaining from the first lot of the original 3100 m³ sampling “pool” described in the December 12, 2003 Response to Observer Inquiry letter and documented in Waste Stream Profile Number INW216.001....”

Based on this stipulation, CBFO issued CBFO Certification Letter CBFO:NTF:KWW:VW:04-1061, Dated March 9, 2003, which states in part:

“Based on the results of Audit A-03-05, the CBFO is granting authority for characterization, certification and transportation of homogeneous solids waste (S3000). For the first and second stage sludge TRU waste stream, this authority is limited as follows:

1. Preliminary solids sampling and analysis data collected by INEEL during the 3100 m³ project may be used for containers identified to be within lot one....”

Block #9 Condition Adverse to Quality:

Approval of Waste Stream Profile BNINW216 (First and Second Stage Sludges) and Waste Stream Profile BNINW218 (Building 374 Sludges) by CBFO was based on BNFL’s statement that the remaining inventory of containers in retrievable storage were part of the original population that was randomly sampled by the INEEL 3100 m³ project. Review of the 3100 m³ project’s waste stream profiles and sampling plans (EDF-909) indicated that there were 6751 First and Second Stage Sludge drums available for sampling and 6,083 55 gallon drums of Building 374 Sludges available for sampling.

The total number of containers certified by the 3100 m³ project and shipped to the WIPP plus the total number of containers BNFL has stated remains in the population for both waste streams exceeds the number of containers available for random sampling for both waste streams. If these additional containers were not in the population available for sampling, then the sampling of the containers BNFL has identified as being in the waste stream would not have been random. This is because each container would not have an equal probability of being sampled.

This indicates that BNFL had not identified the original population available for sampling, thereby misidentifying the population available for sampling for both waste streams. In this case, the requirements for random sampling as specified in the Permit have not been met.
Scope of the Work Suspension.

CBFO has suspended further shipments of waste streams INW216 and INW218 until further notice. BNFL shall also cease entry of data into WWIS for these waste streams until further notice.

Block #10  Suggested Actions (Optional):

BNFL should, at a minimum, perform the following:

1. Locate and place into configuration control the list of 6751 drums originally part of the 3100 m³ project’s for First and Second Stage Sludges (WSP INW216) and the list of 6083 drums originally part of the 3100 m³ project’s for Building 374 Sludges (WSP INW218). A copy of this list must be provided to the CBFO.
2. Provide documented evidence to the CBFO of the traceability of these lists to the original sampling populations and efforts.
3. Physically or administratively segregate the actual BNI NW216 and BNI NW218 containers that were not available for sampling from the remaining containers within those waste streams.
4. Determine if this condition adverse to quality applies to any other waste streams or waste stream lots.
5. Determine the impact of this condition adverse to quality on waste containers that have been shipped to WIPP.
6. Provide CBFO verification from the Site Project Manager that the samples for the waste streams or waste stream lots were selected randomly based on information obtained during investigation of this condition adverse to quality.
7. Implement an effective formal system of controls to ensure that drums only from approved lots can be made available for shipment.
INSTRUCTIONS FOR PROVIDING CORRECTIVE ACTION RESPONSE

WASTE ISOLATION PILOT PLANT
U.S. DEPARTMENT OF ENERGY
Carlsbad Field Office

INSTRUCTIONS FOR COMPLETING A CORRECTIVE ACTION RESPONSE TO A CAR ADDRESSING A CONDITION ADVERSE TO QUALITY

You are requested to provide a corrective action in response to this corrective action report (CAR) by the due date identified in block 14 of the CAR. If this date cannot be met, provide a written request for extension to the assessment team leader (block 5). This request must include justification for the delay and must be provided prior to the due date.

The response shall address the corrective actions indicated in block 12. As appropriate, develop the response in accordance with the following sequence and format:

In order to develop the CAR response, perform an investigative action to determine the extent and impact of the deficiency and to identify the root cause. Next, determine the actions required to correct the adverse condition.

The response shall include the following information, as appropriate to block 12.

1. Corrective action response for CAR # 04-033

   A. **Remedial Action**-Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during the investigations.

   B. **Extent and Impact of the Deficiency**-Describe the investigative actions performed to determine the extent and impact of the condition and the results. This will include a determination of the acceptability of any data generated prior to resolution of the deficiency.

   C. **Root Cause Determination**-Identify the root cause of the condition as determined through investigative action.

   D. **Corrective Action to Preclude Recurrence**-Identify the actions required to address the root cause of the condition in order to preclude recurrence.

2. For each action above, identify the individual assigned responsibility for completion of the action and the anticipated (or actual, if complete) completion date.

3. The response must identify the individual having the overall responsibility for completion of the corrective actions.