



United States Government

Department of Energy

Carlsbad Field Office  
Carlsbad, New Mexico 88221

# memorandum

DATE: September 10, 2002

REPLY TO  
ATTN OF: CBFO:QA:MPN:VW:02-1285:UFC:2300

SUBJECT: Closure of CAR 02-078

TO: Edward Ziemianski, DOE-ID

The Carlsbad Field Office (CBFO) performed Verification of Corrective Action Completion for Corrective Action Report (CAR) 02-078. The corrective actions taken and implemented for this CAR have been completed as evidenced by review of the Documentation and Closeout Package (Objective Evidence Package) submitted by INEEL via DOE-ID memorandum EM-WM-02-184, Edward J. Ziemianski to Ava L. Holland, dated September 5, 2002. The results of the evaluation indicate that INEEL has adequately addressed the issues identified in the CAR 02-078. CAR 02-078 has been closed based on the CBFO Verification of these corrective actions. The CAR Continuation Sheets documenting Verification of Corrective Action Completion and closure of the CAR are attached.

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

*Martin P. Navarrete* //signature on file//  
Martin P. Navarrete  
Quality Assurance Specialist



## Attachment

cc w/attachments:  
 A. Holland, CBFO \*ED  
 K. Watson, CBFO \*ED  
 R. Knerr, CBFO \*ED  
 R. Taft, DOE-ID \*ED  
 J. Wells, DOE-ID \*ED  
 M. Eagle, EPA \*ED  
 S. Monroe, EPA \*ED  
 E. Feltcorn, EPA \*ED  
 R. Joglekar, EPA \*ED  
 S. Zappe, NMED \*ED  
 S. Webb, EEG \*ED  
 D. Winters, DNFSB \*ED  
 T. Monk, INEEL \*ED  
 M. Sherick, INEEL \*ED  
 T. Preston, INEEL \*ED  
 A. Pangle, CTAC \*ED  
 J. May, CTAC \*ED  
 P. Roush, WTS  
 CBFO QA Record File  
 CBFO M&RC

020913



# CBFO CORRECTIVE ACTION REPORT

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2. Activity Report No. A-02-27

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Block # 18 Verification of Corrective Action Completion

The corrective actions taken and implemented for this CAR have been completed as evidenced by review of the Documentation and closeout Package (Objective Evidence Package) submitted by INEEL via DOE-ID Memorandum EM-WM-02-184, Edward J. Ziemianski to Ava L. Holland, dated September 5, 2002.

The corrective action commitments relative the *Remedial, Investigative, Root Cause Determination*, and *Actions to Preclude Recurrence* as described in the INEEL corrective action plan of August 22, 2002 and approved by CBFO via the August 23, 2002 memorandum (CBFO:QA:MPN:GS:02-1269:UFC 2300.00), have been satisfactorily verified, and includes the following:

## Remedial Actions:

**Remedial Action 1** – INEEL incorporated the letter titled, *Solidified Waste Residual Liquid De-Watering Investigation at the Idaho National Engineering and Environmental Laboratory* (CCN 22123), the Arbon de-watering study into the Acceptable Knowledge (AK) record. INEEL incorporated that reference of the study into AK Waste Stream Summary Sheets for Engineering Design File (EDF)-1809, *first/second stage sludge*, EDF-2657, *building 374 sludge*, and EDF-2722, *miscellaneous cemented sludges*. Objective evidence consists of the revised “AK record inventory” and revised AK Waste Stream Summary Sheets (EDFs 1809, 2657, and 2722).

RA1.1 Acceptable Knowledge Source Document Review Summary, Reference Number: U094, Title/Description: Ledger of Acceptable Knowledge Source Documents, August 29, 2002 and Acceptable Knowledge Inventory, RWMC Form-144, 8/29/02 (see pages 26, 49, 51, and 58)

RA1.2 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P226, R3; b) EDF-1809 Revision 4, Waste Stream Summary Sheet – First/Second Stage Sludge, 08/29/02 (record copy); and c) EDF-1809 Revision 4 bubble pages 9 and 14

RA1.3 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P238, R3; b) EDF-2657 Revision 3, Waste Stream Summary Sheet – Building 374 Sludge, 08/29/02 (record copy); and c) EDF-2657 Revision 3 bubble pages 8 and 11

RA1.4 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P286, R2; b) EDF-2722 Revision 3, Waste Stream Summary Sheet – Miscellaneous Cemented Sludges, 08/29/02 (record copy); and c) EDF-2722 Revision 3 bubble pages 7 and 9

# WFO CORRECTIVE ACTION REPORT

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**Remedial Action 2** – INEEL revised the AK Waste Stream Summary Sheets for EDF-1809, EDF-2657, and EDF-2722 to address information relating to the solidified waste residual liquid de-watering issue.

RA2.1 Title page and pages 9 and 10 of EDF-1809 Revision 4, Waste Stream Summary Sheet – First/Second Stage Sludge, 08/29/02

RA2.2 Title page and pages 7 through 9 of EDF-2657 Revision 3, Waste Stream Summary Sheet – Building 374 Sludge, 08/29/02

RA2.3 Title page and pages 6 and 7 of EDF-2722 Revision 3, Waste Stream Summary Sheet – Miscellaneous Cemented Sludges, 08/29/02

**Remedial Action 3** – INEEL revised the Waste Stream Summary Sheets of EDFs 1809, 2657, and 2722 into EDF-363, *Description of the SWEPP Certified Waste Sampling Program*, in order to correctly document the miscertification rate.

RA3.1 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P303 and b) EDF-363 Revision 19, *Description of the SWEPP Certified Waste Sampling Program*, 08/29/02 (see pages 9 and 10)

**Remedial Action 4** – Documentation resulting from the INEEL investigative actions listed below has been incorporated into the AK record and the Waste Stream Summary Sheets, EDF-1809, EDF-2657, and EDF-2722.

RA4.1 Pages 1, 26, 49, 51, and 58 of Acceptable Knowledge Inventory, RWMC Form-144, 8/29/02 (Note: This is the AK Record Inventory as required by the CAP)

RA4.2 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P226, R3 and b) the title page and pages 10 and 15 of EDF-1809 Revision 4, Waste Stream Summary Sheet – First/Second Stage Sludge, 08/29/02

RA4.3 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P238, R3 and b) the title page and pages 8, 9, 11, and 12 of EDF-2657 Revision 3, Waste Stream Summary Sheet – Building 374 Sludge, 08/29/02

RA4.4 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P286, R2 and b) the title page and pages 7, 9, and 10 of EDF-2722 Revision 3, Waste Stream Summary Sheet – Miscellaneous Cemented Sludges, 08/29/02

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**Investigative Actions**

**Investigative Action 1** – INEEL initiated AK resolution of the solid miscertification drums resulting from excess residual liquids in the homogenous solids wastes.

IA1.1 INEEL Acceptable Knowledge Resolution Checklist, Form Number: AK-02-261, 8/28/02

**Investigative Action 2** – INEEL evaluated the previous Real Time Radiography (RTR) scans and confirmatory Visual Examination (VE) that resulted in miscertifications of sludge waste drums due to excess liquids and determine whether it supports or contradicts any required acceptable knowledge documentation.

IA2.1 a) Acceptable Knowledge Source Document Review Summary, Reference Number: C244, and b) INEEL Interoffice Memorandum, T. F. Fallon to T. H. Monk, Subject: CAR 02-078, Investigative Action 2, TFF-005-02, August 28, 2002

**Investigative Action 3** – INEEL evaluated compliance to Waste Analysis Plan (WAP) criteria for supplemental AK information from February 4, 2001 to present. This was accomplished by updating the Dr. R. E. Arbon compliance analysis issued in letter from T. H. Monk to Mr. L. S. Sygitowicz, THM-081-01, Solidified Waste Residual Liquid De-Watering Investigation at the Idaho National Engineering and Environmental Laboratory, dated May 30, 2001, CCN 22123.

IA3.1 a) INEEL Interoffice Memorandum, S. M. Edgett to T. H. Monk, Subject: CAR 02-078 Investigative Action No. 3 – Evaluation of Compliance to WAP Criteria, SME-002-02, September 4, 2002; b) Acceptable Knowledge Source Document Review Summary, Reference Number: C243; and c) INEEL Interoffice Memorandum, J. J. Einerson to S. M. Edgett, Subject: Update of RTR Miscertification Rate Due to Excess Free Liquids – JJE-10-2002, August 19, 2002

**Apparent Cause**

RC1.1 Apparent Cause Report, Solidified Waste Residual Liquid De-watering Investigation Not Referenced in Acceptable Knowledge Summary, CAR 02-078, RWMC-02-06, 9/3/02

**Actions to Preclude Recurrence**

**Actions to Preclude Recurrence 1** – INEEL incorporate visual records reflecting miscertifications into the AK record inventory. INEEL utilized the existing AK resolution process to incorporate references in Waste Stream Summary Sheets for EDFs 1809, 2657, and 2722.

APR1.1 Pages 1, 49, 51, 58, and 73 of Acceptable Knowledge Inventory, RWMC Form-144, 8/29/02

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- APR1.2 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P226, R3 and b) the title page and pages 10 and 15 of EDF-1809 Revision 4, Waste Stream Summary Sheet – First/Second Stage Sludge, 08/29/02
- APR1.3 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P238, R3 and b) the title page and pages 8 and 11 of EDF-2657 Revision 3, Waste Stream Summary Sheet – Building 374 Sludge, 08/29/02
- APR1.4 a) Acceptable Knowledge Source Document Review Summary, Reference Number: P286, R2 and b) the title page and pages 7 and 10 of EDF-2722 Revision 3, Waste Stream Summary Sheet – Miscellaneous Cemented Sludges, 08/29/02
- APR1.5 INEEL Acceptable Knowledge Resolution Checklist, Form Number: AK-02-261, 8/28/02

**Actions to Preclude Recurrence 2** – A Site Project Manager (SPM) generated guidance letter was distributed to “acceptable knowledge experts”(AKEs). This letter provided guidance to the AKE to initiate AK resolution of miscertified liquids/events.

- APR2.1 INEEL Letter, Thomas H. Monk to Distribution, Subject: Guidance to Acceptable Knowledge Experts to Initiate Acceptable Knowledge Resolutions for Miscertifications Associated with Excess Liquids, CCN 35384, September 3, 2002

Based on the above information and the supporting documentation, the recommendation is for closure of this CAR.

Block 19a Verified By: Jeffrey D. May //signature on file//  
Steve Calvert

9/9/02  
Date

Block 19b Trend Cause Code: 6.1 & 6.5