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

SEP 29 2014

Mr. Jon E. Hoff, Manager
Quality Assurance
Nuclear Waste Partnership LLC
P.O. Box 2078
Carlsbad, NM 88221-2078

Subject: Approval of the Revised CAP for CBFO CAR 14-047 from Audit A-14-18, Idaho National Laboratory Central Characterization Program

Dear Mr. Hoff:

Enclosed are the results of the Carlsbad Field Office (CBFO) evaluation of the revised Corrective Action Plan (CAP) associated with CBFO Corrective Action Report (CAR) 14-047. The results of the review indicate that the revised CAP is acceptable, as documented on the enclosed CAR Continuation Sheets. Upon completion of all corrective actions as outlined in the approved CAP, please provide notification and documentation supporting closure of CAR 14-047, so that verification activities may be performed.

If you have any questions concerning CAR 14-047 evaluation, please contact me at (575) 234-7491.

Sincerely,

for Michael R. B

Dennis S. Miehls
Senior Quality Assurance Specialist

Enclosure

CBFO:QAD:DSM:RMS:14-1334:UFC 2300.00

140936

cc: w/enclosure

| | |
|---|---|
| M. Brown, CBFO | |
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| M. Pinzel, CBFO | ED |
| N. Castaneda, CBFO | ED |
| J. Zimmer, DOE-ID | ED |
| J. Wells, DOE-ID | ED |
| B. Roberts, DOE-ID | ED |
| R. McQuinn, NWP | ED |
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| F. Sharif, NWP/CCP | ED |
| D. E. Gulbransen, NWP/CCP | ED |
| V. Cannon, NWP/CCP | ED |
| A.J. Fisher, NWP/CCP | ED |
| I. Joo, NWP/CCP | ED |
| M. Walker, NWP/CCP | ED |
| W. Ledford, NWP/CCP | ED |
| B. Allen, NWP/QA | ED |
| S. Punchios, NWP/QA | ED |
| S. Escareno-Soto, NWP/QA | ED |
| T. Peake, EPA | ED |
| L. Bender, EPA | ED |
| E. Feltcorn, EPA | ED |
| R. Joglekar, EPA | ED |
| S. Ghose, EPA | ED |
| R. Lee, EPA | ED |
| J. Kieling, NMED | ED |
| T. Kliphuis, NMED | ED |
| S. Holmes, NMED | ED |
| R. Maestas, NMED | ED |
| C. Smith, NMED | ED |
| Site Documents | ED |
| V. Daub, CTAC | ED |
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| B. Pace, CTAC | ED |
| D. Blauvelt, CTAC | ED |
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| G. White, CTAC | ED |
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CBFO Form 3.1-2

# CAR CONTINUATION SHEET

| 1. CAR No: 14-047 | 2. Activity No: A-14-18 | 3. Page 1 of 3 |
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**Block # 16 Acceptance of Proposed Corrective Actions:**

An evaluation was performed of the revised Corrective Action Plan (CAP) developed to address Carlsbad Field Office Corrective Action Report (CAR) 14-047. The revised CAP was submitted via Nuclear Waste Partnership LLC letter QA:14:00303 UFC:2300.00, dated September 4, 2014, from Mr. J. E. Hoff, Manager, Quality Assurance, to Mr. D. S. Miehls, Senior Quality Assurance Specialist, Quality Assurance, Carlsbad Field Office.

Italicized text, taken verbatim from the CAP, is used to reflect the correlation between the actions required by the CAR and the method used for evaluation.

## REMEDIAL ACTIONS

*Since the concentrations were less than regulatory limits, the AK contained all the information necessary for characterization and confirmation, and the only remedial action is to correct Attachment 5 of the AK as follows:*

a) *The CCP-TP-005 Attachment 5 for waste stream ID-EBR-S5000 will be revised. The "Suspected Present (Y/N)" column will be changed to "Y" for arsenic, cadmium, chromium, lead, and silver. In addition, the "TC constituent concentration less than regulatory level (Y/N/NA)" column will be changed to "Y" for these same constituents.*

b) *Section 5.4.2.2 of AK Summary Report CCP-AK-INL-600 will be revised to read:*

*"Based on review of AK relative to chemicals and materials used during the EBR-I decommissioning operations, waste stream ID-EBR-S5000 is not contaminated with toxicity characteristic compounds as defined in 40 CFR 261.24 (Reference 11). With the exception of lead (EPA HWN D008), none of the other toxicity characteristic metals were identified in EBR-I decommissioning operations. Although lead was used as shielding in fuel and reactor component transfer coffins and casks, as described in Sections 4.1 and 4.2, lead is not identified as present in the waste containers. The lead reflector, built to replace the NU outer blanket assembly for the Mark IV core experiments as described in Section 5.3, is not identified as present in the container paperwork as it is not expected to have been packaged with the NU components. Arsenic, cadmium, chromium, lead, and silver were detected in spectral analysis of the blanket bricks. However, the concentrations are below the regulatory levels (Reference P838). No toxicity characteristic organic hazardous constituents were identified for EBR-I decommission operations or present on reactor outer blanket components. Therefore no toxicity characteristic EPA HWNs are assigned to waste stream ID-EBR-S5000 (References P777, P778, P838, P881, P954, P4078, P4079, P4082, P4090)."*

**Evaluation:**

Accepted.

## INVESTIGATIVE ACTIONS

*Waste stream ID-EBR-S5000 is somewhat unique in that the waste stream is composed of discreet materials, stainless steel clad depleted uranium items, and characterized as non-mixed waste. The stream was generated from disassembly operations, not hot cell or laboratory operations involving destructive analysis. Other waste materials such as combustible and plastics, tools, etc., were not identified. In addition, the concentrations of TC metals identified from the spectral analysis of the depleted uranium*

*bricks in AK source document P838 are below the regulatory levels.*
*Typically when assessing potential hazardous constituents present in a waste stream, trace contaminants present in materials are considered and EPA HWNs conservatively assigned. Examples of waste items, known or conservatively assumed to contain toxicity characteristic metals above regulatory levels based on previous characterization activities, include circuit boards, incandescent light bulbs, mercury bulbs and thermometers, leaded gloves and aprons, and paint. When these items are identified as potentially used in the waste generating operations or otherwise identified in the waste, the applicable HWNs are assigned to the waste stream. For waste items composed of known metal compositions in a waste stream, such as depleted uranium bricks, or stainless steel tools, the trace contaminants of these metals are known to be present; however, they are not considered toxicity characteristic. However, should the generating process involve destructive operations or analysis of these materials where the TC metal constituents may leach, such as destructive examination of steel cladding, or the use of stainless steel in an acid environment, the EPA HWNs for trace metals present may be assigned to the waste stream if applicable.*

*Extent*

*Because of the special nature of this particular waste stream (as discussed in detail in the section just above), characterized as non-mixed waste, extent of condition is considered to be limited to the waste stream cited in the CAR.*

*Impact*

*Since the concentrations were less than regulatory limits, there was no impact from the CAR condition. The AK contained all the information necessary for characterization and confirmation.*

**Evaluation:**

Accepted.

## ROOT CAUSE DETERMINATION

*None requested.*

## ACTIONS TO PRECLUDE RECURRENCE

*The CCP AK Subject Matter Expert (SME) will provide a briefing to AKEs to reinforce that, for the development of AK reports on future non-hazardous waste streams, extra precautions are to be taken to include verbiage in the AK report: non-impactive metals, chemicals and other compounds are to be mentioned and discounted as necessary. The training will further instruct the AKEs to verify inclusion of trace chemicals, metals, and other compounds on the Attachment 5 as necessary.*

**Evaluation:**

Accepted.

CBFO Form 3.1-2

# CAR CONTINUATION SHEET

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**ACCEPTANCE**

The results of the evaluation of the revised CAP indicate that the remedial and investigative actions satisfactorily address the condition adverse to quality documented in CAR 14-047, and provide adequate measures for precluding recurrence. Therefore, it is recommended that the revised CAP for CAR 14-047 be approved.

Tamara D Ackman for 09/23/14

**Evaluation Performed By:** Dick Blauvelt Date: