DATE: DEC 14 2017

REPLY TO ATTN OF: CBFO:OQA:MPN:BA:17-2617:UFC 2300.00

SUBJECT: Issuance of CARs 18-004, 18-005 and 18-007, Surveillance S-18-16

TO: Mr. James Malmo, DOE-ID

Attached are Corrective Action Reports (CARs) 18-004, 18-005, and 18-007 addressing conditions adverse to quality identified during Surveillance S-18-16 of the Advanced Mixed Waste Treatment Project (AMWTP), which was performed on December 4 – 7, 2017. The conditions were initially identified during Recertification Audit A-17-04 of the AMWTP at the AMWTP facilities in Idaho Falls, Idaho, on December 12 – 16, 2016.

Please provide a documented Corrective Action Plan (CAP) for each CAR, ensuring that each required action indicated in Block 12 is addressed, including a schedule for completion of corrective actions. Please return your CAPs to me on or before the due date identified in Block 14a of the CAR forms.

If you have any questions concerning the CARs, please contact me at (575) 234-7483.

Martin P. Navarrete
Senior Quality Assurance Specialist

Attachment

cc: w/attachment
T. Shrader, CBFO
J. Carswell, CBFO
M. Brown, CBFO
J. R. Stroble, CBFO
D. Miehls, CBFO
M. Fineran, CBFO
M. Stapleton, CBFO
H. Cruickshank, CBFO
J. Zimmerman, DOE-ID
T. Jenkins, DOE-ID
J. Villet, DOE-ID
D. Pruitt, DOE-ID
L. Frost, AMWTP
R. Hubler, AMWTP
G. Byram, AMWTP
J. McCoy, AMWTP
E. Gulbransen, AMWTP
E. Dumas, AMWTP
J. Floerke, AMWTP
G. Tedford, AMWTP
A. Morse, AMWTP
J. Ellis, EPA
T. Peake, EPA
E. Feltcorn, EPA
R. Joglekar, EPA
J. Kieling, NMED
R. Maestas, NMED
D. Biswell, NMED
H. Tellez, NMED
T. Runyon, CTAC
P. Martinez, CTAC
C. Castillo, CTAC
M. Leroch, CTAC
J. Vernon, CTAC
D. Harvill, CTAC
P. Hinojos, CTAC
G. White, CTAC
Site Documents
CBFO QA File
CBFO M&RC
*ED denotes electronic distribution
### CBFO CORRECTIVE ACTION REPORT

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<tbody>
<tr>
<td>4. Controlling document:</td>
<td>MCP-4015, Preparation of Chemical Compatibility Evaluation and Basis of Knowledge Assessment, Rev. 2</td>
<td>5. Responsible CBFO Manager:</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>6. Responsible organization:</td>
<td>AMWTP – Fluor Idaho</td>
<td>7. CAQ discussed with:</td>
<td>Clay Dennert, Steve Carpenter</td>
<td></td>
</tr>
</tbody>
</table>

8. Requirement: MCP-4015, Preparation of Chemical Compatibility Evaluation and Basis of Knowledge Assessment, Revision 2, section 4.1.15[F], states: "RGN Assignments in Attachment 1 are consistent with Attachments 2 and 3."

9. Condition Adverse to Quality (CAQ): See Continuation Sheet

10. CAR Initiator: Randy Fitzgerald 12/13/2017

11. Deficiency classification:
   - 11a. Significant CAQ? (If "Yes", go to block 15b)
     - Yes □ No ☑
   - 11b. Work Suspension recommended? (If "Yes", go to block 15b)
     - Yes □ No ☑
   - 11c. WAP-related Deficiency? (If "Yes", go to block 14b)
     - Yes □ No ☑
   - 11d. Accelerated corrective action required? (If "Yes", go to block 14b)
     - Yes □ No ☑

12. Type of actions required:
   - 12a. Remedial? Yes ☑ No □
   - 12b. Investigative? Yes ☑ No □
   - 12c. Causal Analysis? Yes □ No ☑
   - 12d. Actions to Preclude Recurrence? Yes ☑ No □

13. Trend Code: AK-05

14. Response due date: JAN 12, 2018

15. Concurrence:
   - a. Quality Assurance Director/Quality Assurance Representative: Martin Nasonoff 12/14/17
   - b. CBFO Office of Quality Assurance Director: (If SCAQ, work suspension, or accelerated corrective action; otherwise mark as "N/A") N/A

16. Acceptance of Proposed Corrective Actions: [Printed Name and Title] Date

17. Acceptance of Corrective Action Completion: [Printed Name] Date

18. Closure: [Printed Name] Date
BLOCK 9. Condition Adverse to Quality:

The Chemical Compatibility Evaluation Memorandum (CCEM) for waste stream BNINW216, Attachment 3, EPA Hazardous Waste Compatibility Chart for Waste Stream BNINW216, and Attachment 2, Waste Stream BNINW216 Reactivity Group Number Compatibility Evaluation, do not list the same RGNs and therefore are inconsistent.
INSTRUCTIONS FOR PROVIDING A CORRECTIVE ACTION PLAN

You are requested to provide a corrective action plan (CAP) in response to this corrective action report (CAR) by the date identified in block 14a of the CAR. If this date cannot be met, provide a written request for extension to the Quality Assurance Representative with courtesy copy to the Office of Quality Assurance Director. This request must include justification for the delay and must be provided seven calendar days prior to the response due date (CAR block 14a).

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

In order to develop the CAP, perform an investigative action to determine the extent and impact of the deficiency and to identify the causal factors. Next, determine the actions required to correct the adverse condition. The plan shall include the following information, as appropriate to CAR block 12.

1. Corrective action response for CAR # 18-004
   A. Remedial Actions-Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during discovery.
   B. Investigative Actions-Describe the investigative actions performed to determine the extent and impact of the deficiency and the results of the investigation. This will include a determination of the acceptability of any data generated prior to resolution of the deficiency.
   C. Causal Analysis-Identify the causal factor(s) of the CAR condition. Refer to Step 5.3.2 if the CAR was issued to CBFO or Step 5.3.3 if the CAR was issued to a participant organization.
   D. Actions to Preclude Recurrence-Identify the corrective actions required to address the causal factors of the condition in order to preclude recurrence.

NOTE: Schedule for completion of corrective actions is always required.

2. For each action above, identify 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.
**CBFO CORRECTIVE ACTION REPORT**

<table>
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<tbody>
<tr>
<td>6. Responsible organization:</td>
<td>AMWTP – Fluor Idaho</td>
<td>7. CAQ discussed with:</td>
<td>Clay Dennert, Steve Carpenter, George Byrum</td>
<td></td>
</tr>
<tr>
<td>8. Requirement:</td>
<td>DOE/CBFO-94-1012, Rev. 13, Quality Assurance Program Document, Section 1.4.1[A] states, &quot;Documents shall be reviewed for adequacy, correctness, and completeness prior to approval and use.&quot;</td>
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<tr>
<td>9. Condition Adverse to Quality (CAQ):</td>
<td>See Continuation Sheet</td>
<td></td>
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</tr>
<tr>
<td>10. CAR Initiator:</td>
<td>Printed Name: Randy Fitzgerald</td>
<td>Date: 12/14/2017</td>
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</table>

<table>
<thead>
<tr>
<th>11. Deficiency classification:</th>
<th>12. Type of actions required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>11a. Significant CAQ? (If &quot;Yes&quot;, go to block 15b)</td>
<td>11b. Work Suspension recommended? (If &quot;Yes&quot;, go to block 15b)</td>
</tr>
<tr>
<td>Yes ☐ No ☑</td>
<td>Yes ☑ No ☐</td>
</tr>
<tr>
<td>11c. WAP-related Deficiency?</td>
<td>11d. Accelerated corrective action required? (If &quot;Yes&quot;, go to block 14b)</td>
</tr>
<tr>
<td>Yes ☐ No ☑</td>
<td>Yes ☑ No ☑</td>
</tr>
<tr>
<td>12a. Remedial?</td>
<td>12b. Investigative?</td>
</tr>
<tr>
<td>Yes ☑ No ☐</td>
<td>Yes ☑ No ☐</td>
</tr>
<tr>
<td>12c. Causal Analysis?</td>
<td>12d. Actions to Prevent Recurrence?</td>
</tr>
<tr>
<td>Yes ☑ No ☐</td>
<td>Yes ☑ No ☐</td>
</tr>
<tr>
<td>14a. Response due date:</td>
<td>JAN 12, 2018</td>
</tr>
<tr>
<td>14b. Required corrective action completion date:</td>
<td>N/A</td>
</tr>
<tr>
<td>15. Concurrence:</td>
<td></td>
</tr>
<tr>
<td>a. Quality Assurance Director/Quality Assurance Representative:</td>
<td>Printed Name: Martin M. Montelena 12-14-17</td>
</tr>
<tr>
<td>b. CBFO Office of Quality Assurance Director: (If SCAQ, work suspension, or accelerated corrective action; otherwise mark as &quot;N/A&quot;)</td>
<td>N/A</td>
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</tbody>
</table>

| 16. Acceptance of Proposed Corrective Actions: | |
| Printed Name and Title: | Date |

| 17. Acceptance of Corrective Action Completion: | |
| Printed Name: | Date |

| 18. Closure: | |
| Printed Name: | Date |
BLOCK 9. CONDITION ADVERSE TO QUALITY

In review of the AMWTP documents and procedures associated with the implementation of the Enhanced AK process, the surveillance team noted several weaknesses and editorial changes necessary in the reviewed procedures. Examples include the following:

- MCP-4010, *Collection, Review, and Management of Acceptable Knowledge Documentation*, section 4.6, describes AK Briefings. The entire section describes the required elements of the AK briefing, yet the section is primarily a note rather than procedure steps. There is one single procedure step.

- MCP-4015, *Preparation of Chemical Compatibility Evaluation and Basis of Knowledge Assessment*, section 4.1.20.1, describes the revision of the CCE, if necessary; however, there is no revision history in the several revisions of the CCE that were issued.

- The AKA for BNINW216 waste at the WHB, AK Source Document Review Summary, Item 10, Source Document Data Limitations (if any), incorrectly states: "This AKA is specific to AMWTP at Waste Control Specialists."

- The AKA for BNINW216 waste at the WHB, Attachment 1, Container Specific Information, 2nd row, the Inner Container listed is 10305406, yet on next-to-last column titled "Short Explanation of where the liquid is" incorrectly the liquid description for container 10213598 rather than 10305406.

- The CCEM for the AMWTP waste stream BNINW216, Attachment 2, Waste Stream BNINW216 Reactivity Group Number Compatibility Evaluation, includes the reaction codes GF, H for the combination of RGN 10 and RGN 23; however, the codes were inadvertently omitted from Attachment 3, EPA Hazardous Waste Compatibility Chart for Waste Stream BNINW216.
INSTRUCTIONS FOR PROVIDING A CORRECTIVE ACTION PLAN

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

INSTRUCTIONS FOR PROVIDING A CORRECTIVE ACTION PLAN

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

In order to develop the CAP, perform an investigative action to determine the extent and impact of the deficiency and to identify the causal factors. Next, determine the actions required to correct the adverse condition. The plan shall include the following information, as appropriate to CAR block 12.

1. Corrective action response for CAR # 18-005
   A. Remedial Actions-Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during discovery.
   B. Investigative Actions-Describe the investigative actions performed to determine the extent and impact of the deficiency and the results of the investigation. This will include a determination of the acceptability of any data generated prior to resolution of the deficiency.
   C. Causal Analysis-Identify the causal factor(s) of the CAR condition. Refer to Step 5.3.2 if the CAR was issued to CBFO or Step 5.3.3 if the CAR was issued to a participant organization.
   D. Actions to Preclude Recurrence-Identify the corrective actions required to address the causal factors of the condition in order to preclude recurrence.

   NOTE: Schedule for completion of corrective actions is always required.

2. For each action above, identify 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.
CBFO CORRECTIVE ACTION REPORT

1. CAR No.: 18-007  
2. Activity Report No.: 5-18-16  
3. Page 1 of 2

5. Responsible CBFO Manager: N/A

6. Responsible organization: AMWTP – Fluor Idaho  
7. CAQ discussed with: Gina Tedford/Ed Gulbransen

8. Requirement: See Continuation Sheet

9. Condition Adverse to Quality (CAQ): See Continuation Sheet

10. CAR Initiator: Jim Vernon  
Printed Name: FOR  
Date: 12/14/17

11. Deficiency classification:
   11a. Significant CAQ? (If "Yes", go to block 15b)  
       Yes ☐ No ☑  
   11b. Work Suspension recommended? (If "Yes", go to block 15b)  
       Yes ☐ No ☑  
   11c. WAP-related Deficiency?  
       Yes ☐ No ☑  
   11d. Accelerated corrective action required? (If "Yes", go to block 14b)  
       Yes ☐ No ☑  

12. Type of actions required:
   12a. Remedial?  
       Yes ☐ No ☑  
   12b. Investigative?  
       Yes ☐ No ☑  
   12c. Causal Analysis?  
       Yes ☐ No ☑  
   12d. Actions to Preclude Recurrence?  
       Yes ☐ No ☑

13. Trend Code: SW-05

14a. Response due date: JAN 12, 2018  
14b. Required corrective action completion date: N/A

15. Concurrence:
   a. Quality Assurance Director/Quality Assurance Representative: Michael Brown  
      Printed Name:  
      Date: 12-14-17
   b. CBFO Office of Quality Assurance Director: (If SCAQ, work suspension, or accelerated corrective action; otherwise mark as "N/A")  
      Printed Name: N/A  
      Date

16. Acceptance of Proposed Corrective Actions:  
    Printed Name and Title:  
    Date

17. Acceptance of Corrective Action Completion:  
    Printed Name:  
    Date

18. Closure:  
    Printed Name:  
    Date
<table>
<thead>
<tr>
<th>Block 8. Requirement:</th>
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<tbody>
<tr>
<td>MCP-3998 <em>Software Inventory Classification</em>, Revision 2 section 4.1.3 states &quot;Maintain an inventory of Class I, II or III software and software included in LST-1000 that identifies the software name, classification, exemption status, operating environment, and the person and organization responsible for the software (this inventory is listed in Appendix A).&quot;</td>
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<tr>
<th>Block 9. Condition Adverse to Quality:</th>
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<tbody>
<tr>
<td>A spreadsheet to upload the Enhanced Acceptable Knowledge (AK) data into the Waste Data System (WDS) was provided to Advanced Mixed Waste Treatment Project (AMWTP) by the WDS administrators. No evidence was presented to the surveillance team that the spreadsheet has been added to the AMWTP software inventory and classified.</td>
<td></td>
</tr>
</tbody>
</table>
INSTRUCTIONS FOR PROVIDING A CORRECTIVE ACTION PLAN

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1. Corrective action response for CAR # 18-007
   A. **Remedial Actions**-Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during discovery.
   B. **Investigative Actions**-Describe the investigative actions performed to determine the extent and impact of the deficiency and the results of the investigation. This will include a determination of the acceptability of any data generated prior to resolution of the deficiency.
   C. **Causal Analysis**-Identify the causal factor(s) of the CAR condition. Refer to Step 5.3.2 if the CAR was issued to CBFO or Step 5.3.3 if the CAR was issued to a participant organization.
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