Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
AUG 02 2017

To: Distribution

Subject: CBFO Semi-Annual CAR Trend Analysis Report for January 1, 2017 through June 30, 2017

The Carlsbad Field Office (CBFO) Corrective Action Report (CAR) Trend Analysis Report has been completed for the reporting period January 1, 2017 through June 30, 2017. Deficiencies identified during assessment activities conducted by the CBFO of core participants subject to the CBFO Quality Assurance Program Document have been assigned trend codes and are presented for analysis in accordance with CBFO Management Procedure (MP) 3.2, Revision 1, Deficiency Trending and Reporting, including Interim Change Notices 1 through 3.

The trend report is presented in a format that provides statistics and summarizes trend information. The first chart presents the average number of days to closure for CARs closed within the first six-month reporting period for 2017, and compares the new average to the averages of the previous three six-month reporting periods.

Bar charts showing trend codes are provided, including data from both CARs and deficient conditions that were corrected during an assessment (CDA). The trend codes allow identification of issues under two categories, Activity and Deficiency. The Activity category identifies functional areas such as waste characterization, and project activities such as Acceptable Knowledge (AK), Data Validation (DV), definition of Work Processes (WP), and Software (SW). The Deficiency category addresses areas within an activity such as Training (03), Performance of Work (05), and Documentation of Work (06). A trend code key is included in this report.

Significant points of interest regarding trends, events, and issues from the attached charts are provided in the following table:

| Number of CARs Closed During the Reporting Period | One fewer CAR was closed during this reporting period than in the previous reporting period. Corrective action plans for the 49 CARs that remained open at the end of June 2017 indicate an average expected completion time of 168 days. The average expected time to complete CARs from the previous trend report was 175 days. The closure of CARs in a trend reporting period is impacted by the planned closure time frame. Ten of the CARs closed during this reporting period had been open longer than 170 days. This compares to 12 CARs closed during the previous reporting period that had been open longer than 170 days. |
| Number of Assessments Performed and Number of CARs Generated | Previous Report Period | This Report Period |
| Assessments | CARs | Audits | Performed | Generated |
| Surveillances | |
| Total | |
| Average Number of Days to CAR Closure | The average time to close CARs during this reporting period decreased by 8 days compared to the previous period.

CBFO:OQA:MRB:BA:17-2100:UFC 2300.00
Comparison of Activity Trend Codes With the Last 6-month Period

<table>
<thead>
<tr>
<th>Activity Code</th>
<th>Jul-Dec 2016</th>
<th>This Period</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>2</td>
<td>3</td>
<td>+1</td>
</tr>
<tr>
<td>PD</td>
<td>0</td>
<td>3</td>
<td>+3</td>
</tr>
<tr>
<td>RM</td>
<td>0</td>
<td>3</td>
<td>+3</td>
</tr>
<tr>
<td>TQ</td>
<td>4</td>
<td>2</td>
<td>-2</td>
</tr>
<tr>
<td>WP</td>
<td>7</td>
<td>4</td>
<td>-3</td>
</tr>
</tbody>
</table>

DC – Document Control  
PD – Performance Demonstration Program (PDP)  
RM – Records Management  
TQ – Training and Qualifications  
WP – Work Processes  

NOTE: There were 5 fewer CARs issued during this reporting period compared to the previous report (27 CARs issued this reporting period and 32 CARs issued last reporting period). The Activity codes above are the items with the highest number of codes identified during the 6-month reporting period of January through June 2017.

Comparison of Deficiency Trend Codes With the Last 6-month Period

<table>
<thead>
<tr>
<th>Deficiency Code</th>
<th>Jul-Dec 2016</th>
<th>This Period</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>1</td>
<td>3</td>
<td>+2</td>
</tr>
<tr>
<td>05</td>
<td>10</td>
<td>5</td>
<td>-5</td>
</tr>
<tr>
<td>06</td>
<td>7</td>
<td>10</td>
<td>+3</td>
</tr>
</tbody>
</table>

04 – Untrained Personnel  
05 – Performance of Work  
06 – Documentation of Work  

NOTE: The Deficiency codes above are the items with the highest number of codes identified during the 6-month reporting period of January through June 2017.

Managers are requested to review the trends on the attached chart with appropriate personnel within their organizations.

If you have any questions regarding this report, please contact me at (575) 234-7476.

Sincerely,

Michael R. Brown, Director  
Office of Quality Assurance

Enclosure
Distribution: w/enclosure

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CBFO QA File
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Carlsbad Field Office Corrective Action 6-Month Trend Report

Report Period: 1/1/2017 to 6/30/2017

Prepared By: [Signature] 7/1/17

Approved By: [Signature] 8-2-17

CBFO QA DIRECTOR

Descriptive Statistics for those CARs Closed During the Report Period (Current 6-Month Period)

<table>
<thead>
<tr>
<th>Number of CARs Closed:</th>
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<tbody>
<tr>
<td>Average Days to Closure:</td>
<td>183</td>
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<tr>
<td>Maximum Days to Closure:</td>
<td>618</td>
</tr>
<tr>
<td>Minimum Days to Closure:</td>
<td>40</td>
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</tbody>
</table>

Activity Trend Codes (Current 6-Month Period)

Deficiency Trend Codes (Current 6-Month Period)

Assumptions:
Days to Closure: Number of days between date of CAR notification letter to date CBFO Quality Assurance Director signs CAR with closure.
6-month Periods: Only CARs that are actually CLOSED are considered in a given 6-month period.
The final value shown in the Average Number of Days to CAR Closure chart is the average of the four 6-month periods.
Activity and Deficiency Trend Code charts cover CARs that were either opened or closed during the current 6-month period.
<table>
<thead>
<tr>
<th>Code</th>
<th>Activity Description</th>
<th>Code</th>
<th>Activity Description</th>
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</thead>
<tbody>
<tr>
<td>AK</td>
<td>Acceptable Knowledge</td>
<td>01</td>
<td>Definition of Work Process and Proceduralization</td>
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<tr>
<td>AA</td>
<td>Audits and Assessments</td>
<td>02</td>
<td>Identification of Work Steps</td>
</tr>
<tr>
<td>CA</td>
<td>Corrective Action Program (CARs and NCRs)</td>
<td>03</td>
<td>Training Materials and/or Training Presentations</td>
</tr>
<tr>
<td>CD</td>
<td>Characterization Data</td>
<td>04</td>
<td>Untrained Personnel</td>
</tr>
<tr>
<td>DC</td>
<td>Document Control</td>
<td>05</td>
<td>Performance of Work</td>
</tr>
<tr>
<td>DE</td>
<td>Design Control and Engineering</td>
<td>06</td>
<td>Documentation of Work</td>
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<tr>
<td>DV</td>
<td>Data Validation</td>
<td>07</td>
<td>Records Processing</td>
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<tr>
<td>GG</td>
<td>Gas Generation Testing (GGT)</td>
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<tr>
<td>HG</td>
<td>Headspace Gas Sampling and Analysis (HGAS)</td>
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<td>MA</td>
<td>Management</td>
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<td>MT</td>
<td>Control of Measuring and Test Equipment (M&amp;TE)</td>
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<td>ND</td>
<td>Non-Destructive Assay (NDA)</td>
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<tr>
<td>OR</td>
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<td>Receiving/Receipt Inspection</td>
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July 27, 2017