

## Management System: Quality Assurance and Oversight

### Subject Area: Issues Management, Performance Trending and Improvement

## Procedure 1: Corrective Action

**Issue Date:**  
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### 1.0 Applicability

The purpose of this procedure is to provide direction and guidance to Environmental Management Consolidated Business Center (EMCBC) and participating Small Site Federal Project Managers. This is achieved through effectively managing issues or findings identified through the U.S. Department of Energy (DOE) oversight activities; describing the processes required to ensure issues (Significant Deficiencies, Deficiencies, or Observations) are adequately analyzed to determine level of significance and underlying causes; developing preventive and corrective actions and successfully implementing them in order to resolve the issues and prevent recurrence.

This procedure applies to all Independent Assessment, Management Assessment and Facility Representative Oversight activities performed by the EMCBC and Participating Small Sites. This procedure meets the requirements of EM-QA-001 *EM Quality Assurance Program (QAP)*; DOE Order 414.1D, *Quality Assurance Criteria 3, Management/Quality Improvement*; DOE O 232.2, *Occurrence Reporting and Processing of Operations Information*; and DOE O 226.1B, *Implementation of Department of Energy Oversight Policy*. This Correction Action procedure also uses guidance and expectations provided in DOE P 226.1B, *Department of Energy Oversight Policy*; DOE G 414.1 1B, *Management Assessment and Independent Assessment Guide*; and DOE G 414.1-2B, Change 1, *Quality Assurance Program Guide*.

This procedure is consistent with DOE requirements and expectations for conducting causal analyses, developing and implementing corrective actions, and tracking issues or findings and preventive and corrective actions to closure from all oversight sources. However, it does not address tracking occurrences identified and tracked through Contractor Systems or the following DOE systems: Occurrence Reporting System (ORPS), Non-Compliance Tracking System (NTS), Departmental Audit Response Tracking System (DARTS), Safeguards and Security Information Management System (SSIMS), the cyber security Plan of Actions and Milestones (POA&M) process, or the employee concerns program. The reporting, concurrence, and approval of preventive and corrective actions for those systems that are governed by DOE requirements are addressed in other management systems.

## 2.0 Required Procedure

<b>MANAGING ISSUES IDENTIFIED IN OVERSIGHT ACTIVITIES</b>	
<b>Step 1</b>	The EMCBC Office of Technical Support and Asset Management Quality Assurance Engineer serves in the role as the Corrective Action Coordinator (CAC) for the EMCBC. Participating Small Sites shall identify a CAC for their site. The EMCBC or Small Site CAC is responsible for managing the Corrective Action Database and tracking issues to resolution.
<b>Step 2</b>	<p>Issues identified because of oversight activities conducted by DOE Headquarters (HQ) or Field Offices should be categorized as a Significant Deficiency, Deficiency, or Observation. When these priority categories are not provided, the CAC shall review the issue and assign the appropriate priority level.</p> <ul style="list-style-type: none"> <li>a. Significant Deficiencies: Issues that if left uncorrected, could have a serious effect on the environment, safety, health, security, or operational integrity. This includes Concerns and Significant Conditions Adverse to Quality.</li> <li>b. Deficiencies: Issues that represent non-compliances with procedural, contractual or regulatory requirements identified. This includes Findings and Conditions Adverse to Quality and inadequacies or safety issues that warrant a management attention.</li> <li>c. Observation: Issues identified that do not meet the definition of a deficiency. This includes noteworthy practices that may serve as a model for other organizations or an opportunity for improvement.</li> </ul>
<b>Step 3</b>	<p>For each issue, the CAC works with the responsible manager to resolve the issue as follows:</p> <ul style="list-style-type: none"> <li>a. For Significant Deficiencies or Concerns, the CAC: <ul style="list-style-type: none"> <li>i. Ensures root cause and any contributing causes are identified consistent with Steps 6-11, <i>Performing Causal Analysis</i></li> <li>ii. Ensures corrective actions are developed and documented consistent with the requirements in Steps 12-19, <i>Developing, Approving, Implementing, and Verifying Preventive and Corrective Actions</i>.</li> </ul> </li> <li>b. For Deficiencies or Findings, the CAC: <ul style="list-style-type: none"> <li>i. Ensures the identification of the apparent cause and when appropriate, determines the root cause consistent with Steps 6-11, <i>Performing Causal Analysis</i></li> <li>ii. Ensures corrective actions are developed and documented consistent with the requirements in Steps 12-19, <i>Developing,</i></li> </ul> </li> </ul>

	<p><i>Approving, Implementing, and Verifying Preventive and Corrective Actions.</i></p> <p>c. For Observations the CAC:</p> <ol style="list-style-type: none"> <li>i. Reviews the Observation to determine if a potential non-conformance could result if the Observation is not addressed. If preventative actions are taken to prevent a non-conformance, the preventive actions are, for all practical purposes, a corrective action and are therefore managed and tracked as a corrective action.</li> </ol>
<b>Step 4</b>	The CAC tracks to closure all preventive and corrective actions as specified in Steps 20-24, <i>Tracking Issues, and Preventive and Corrective Actions.</i>
<b>Step 5</b>	The CAC ensures Significant Deficiencies, Deficiencies and Observations are tracked and trended for continuous improvement.
<b>PERFORMING CAUSAL ANALYSIS</b>	
<b>Step 6</b>	The CAC works with the responsible manager to perform causal analysis of issues.
<b>Step 7</b>	The CAC leads the collection, organization, and review of data to understand the issues and impacts.
<b>Step 8</b>	<p>The CAC selects the appropriate causal analyses methodology and conducts the analysis (i.e., Event and Causal Factor Charting, Change Analysis, Barrier Analysis, and Human Performance Evaluations).</p> <p><b>NOTE:</b> The DOE O 232.2, <i>Occurrence Reporting and Processing of Operations Information</i>, is the preferred method in DOE for identifying causal factor codes.</p>
<b>Step 9</b>	<p>The CAC identifies the root cause and ensures the root causes meet the following criteria:</p> <ol style="list-style-type: none"> <li>a. The issue would not exist if the root cause(s) were not present,</li> <li>b. The issue will not recur if the root cause(s) are corrected and eliminated, and</li> <li>c. Correction of the root cause(s) will prevent recurrence of similar conditions.</li> </ol>
<b>Step 10</b>	<p>The CAC documents the results of causal analyses and provides at a minimum:</p> <ol style="list-style-type: none"> <li>a. For Significant Deficiencies, the CAC provides the root cause and any contributing causes.</li> <li>b. For Deficiencies, the CAC provides the apparent cause and when appropriate, the root cause causes.</li> </ol>
<b>Step 11</b>	The CAC provides the results of the causal analysis to the responsible manager for development of corrective actions per steps 12-19, <i>Developing, Approving, Implementing, and Verifying Preventative and Corrective Actions</i> and for the generation of Lessons Learned.

	NOTE: See EMCBC Corporate Operating Experience/Lessons Learned Procedure for more information.
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**DEVELOPING, APPROVING, IMPLEMENTING, AND VERIFYING PREVENTATIVE AND CORRECTIVE ACTIONS**

<b>Step 12</b>	The Responsible Manager develops corrective actions for Significant Deficiencies and Deficiencies and preventive actions identified from the analysis of Observations.  <b>NOTE:</b> The extent of condition must be considered in development of the resolution of the Significant Deficiencies and addressed in the CAP.
<b>Step 13</b>	The Responsible Manager documents preventive and corrective actions identified as discrete tasks.  <b>NOTE:</b> DOE G 414.1-2B, Change 1, <i>Quality Assurance Program Guide</i> , provides additional guidance in the development of corrective actions and CAPs.
<b>Step 14</b>	The Responsible Manager approves corrective actions consistent with his or her internal reporting relationships, roles, responsibilities, and authorities as outlined in his or her applicable Functions, Responsibilities and Authorities Manual (FRAM) and/or Missions and Functions Statement.
<b>Step 16</b>	The Responsible Manager or equivalent management level that approved the initial actions and commitments needs to approve requested changes to corrective actions.
<b>Step 17</b>	The Responsible Manager completes the corrective actions, maintains the objective evidence, and tracks them to closure in accordance with Steps 20-24, <i>Tracking Issues, and Preventive and Corrective Actions</i> .
<b>Step 18</b>	The CAC ensures an effectiveness review is conducted for Significant Deficiencies and other issues as appropriate.  <b>NOTE:</b> For additional guidance on effectiveness reviews, see DOE G 414.1-2B, Change 1, <i>Quality Assurance Program Guide</i> .
<b>Step 19</b>	The effectiveness reviewer documents the results of the effectiveness review, updates the tracking system, and advises management whether corrective actions can be closed.

**TRACKINGS ISSUES, AND PREVENTATIVE AND CORRECTIVE ACTIONS**

<b>Step 20</b>	The Responsible Manager ensures issues and associated corrective actions and preventive actions are entered into a formal tracking system, and tracked to closure.  <b>NOTE:</b> EMCBC and Participating Small Site issues and their associated corrective actions and preventive actions are tracked to closure, retained for auditability, and trending purposes. DOE provides oversight of contractor issues identified by DOE. The contractor is expected to have its own mechanism for
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	tracking and auditability of contractor issues and associated corrective actions and for trending and analysis.
<b>Step 21</b>	The CAC ensures that deliverables identified as objective evidence for corrective action implementation are documented and maintained.
<b>Step 22</b>	The CAC assigns functional area codes to issues or findings in the tracking system for ease of binning and trending.
<b>Step 23</b>	<p>The Responsible Manager ensures:</p> <ul style="list-style-type: none"> <li>• Changes to corrective action commitments and justification for the changes are approved by the appropriate approving authority and entered into the tracking system.</li> <li>• Corrective action commitments are monitored and completed on schedule.</li> <li>• Objective evidence supports the closure of corrective action and can be readily retrieved.</li> <li>• The tracking system documents the disposition of issues from EMCBC or Small Site Significant Deficiencies and Deficiencies.</li> <li>• The integrity of the data entered in the tracking system.</li> </ul> <p><b>NOTE:</b> JTrac is an example of a tracking system that provides this functionality.</p>
<b>Step 24</b>	<p>The CAC ensures issues are trended in order to identify precursor conditions that could signify repeat problem areas, processes or system weaknesses, or other vulnerabilities prior to these conditions initiating a reportable event.</p> <p><b>NOTE:</b> In order to be effective, trend codes should be consistently applied, and the number of trend codes should be limited.</p>

### 3.0 Records Generation

Records generated through implementation of this procedure are identified as follows, and are maintained by the Office of the Technical Support and Asset Management in accordance with the EMCBC Organizational File Plan:

RECORDS TABLE

<b>Records Category Code</b>	<b>Records Title</b>	<b>Responsible Organization</b>	<b>QA Classification (Lifetime or Non-Permanent)</b>
ENV 01-B-04-B	Corrective Action Plan	Office of Technical Support and Asset Management or applicable Field Office	Non-Permanent maintained as QA record for one year after fiscal year the Corrective Actions are closed.