

**QUALITY PLAN IMPLEMENTING MATRIX  
 CRITERION 3, “QUALITY IMPROVEMENT”**

Item No.	Requirement	Source Document*	Implementation Location
<b>General Requirements</b>			
1.	Establish and implement processes to detect and prevent quality problems. AND A quality improvement process shall be established and implemented to continually develop and improve the quality system.	10CFR830.122(c)(1) AND DOE O 414.1C Attachment 2(3)(a)	ISD 328-1.0, <i>Independent Assessment</i> , Section 1.4, Summary; ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , Section 2.1, Issues and Corrective Action Management Process Overview; and ISD 330-9.1, <i>Suspect/ Counterfeit Items</i> , Section 1.3, Purpose, address these requirement.
2.	Identify, control, and correct items, services, and processes that do not meet established requirements.	10CFR830.122(c)(2) AND DOE O 414.1C Attachment 2(3)(b)	ISD 330-6.1, <i>Nonconformance Reporting</i> , Section 2.1, Applicability, addresses this requirement.
3.	Identify the causes of problems and work to prevent recurrence as a part of correcting the problem. AND Identify the causes of problems, and include prevention of recurrence as a part of corrective action planning.	10CFR830.122(c)(3) AND DOE O 414.1C Attachment 2(3)(b)	ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , Section 2.1, Issues and Corrective Action Management Process Overview, addresses these requirement.

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4.	Responsible management must encourage all workers to pursue quality improvement in every aspect of their work by applying lessons learned, analyzing work for unacceptable risk, and by continuously reporting and preventing or mitigating problems that may affect the quality of the work performed.	IP 330.0, LANL Quality Assurance Program, Section 3.2.1, Detecting and Preventing Quality Problems	ISD 322-5, <i>Lessons Learned</i> (currently not available); ISD 330-1.0, <i>Graded Approach for Work Activities</i> ; and ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , address this requirement.
5.	When a quality problem is detected, established procedures must be followed to report, analyze, and acceptably mitigate the problem and improve the process.	IP 330.0, LANL Quality Assurance Program, Section 3.2.1, Detecting and Preventing Quality Problems	ISD 330-9.1, <i>Suspect/Counterfeit Items</i> , Section 1.3 Purpose, and ISD 330-6.1, <i>Nonconformance Reporting</i> , Section 1.2 Applicability, address this requirement.
6.	Workers must be responsible for identifying quality problems and for reporting developing or existing conditions adverse to quality.	IP 330.0, LANL Quality Assurance Program, Section 3.2.1, Detecting and Preventing Quality Problems	ISD 330-6.1, <i>Nonconformance Reporting</i> , Section 3.0, Responsibilities, and Section 3.4, LANL Personnel, address this requirement.

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7.	Inspection, testing, acceptance, occurrence reporting, surveillance, management assessments, and independent oversight activities are designed to identify, document, evaluate, and correct quality concerns, deficiencies and nonconformances.	IP 330.0, LANL Quality Assurance Program, Section 3.2.1, Detecting and Preventing Quality Problems	ISD 322-1.0, <i>Management Assessment</i> ; ISD 328-1.0, <i>Independent Assessment</i> ; ISD 330-6.1, <i>Nonconformance Reporting</i> ; and ISD 330-8.0 <i>Inspection, Test, and Acceptance</i> ; address this requirement.
8.	All quality deficiencies must be documented, cause(s) determined and corresponding corrective actions determined, corrected, verified, and closed out in accordance with a formal corrective action management system.	IP 330.0, LANL Quality Assurance Program, Section 3.2.1, Detecting and Preventing Quality Problems	ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , Section 2.1, <i>Issues and Corrective Action Management Process Overview</i> , addresses this requirement.
<b>Basic Requirements</b>			
9.	<p>Conditions adverse to quality shall be identified promptly and corrected as soon as practicable.</p> <p style="text-align: center;">AND</p> <p>Conditions adverse to quality must be identified promptly and require the implementation of immediate corrective action, requirements for control of the items and services to prevent inadvertent use or further processing of nonconforming items.</p>	<p>ASME NQA-1-2000, Requirement 16, Corrective Action, 100, Basic</p> <p>AND</p> <p>IP 330.0, LANL Quality Assurance Program, Section 3.2.2, Resolving and Correcting Quality Deficiencies/Discrepancies</p>	ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , Section 2.1, <i>Issues and Corrective Action Management Process Overview</i> ; and ISD 330-6.1, <i>Nonconformance Reporting</i> , Section 4.1.1, <i>Nonconformance Identifier</i> , address these requirements.

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10.	<p>In the case of a significant condition adverse to quality, the cause of the condition shall be determined and corrective action taken to preclude recurrence.</p> <p style="text-align: center;">AND</p> <p>In the case of a significant condition adverse to quality, the cause of the condition must be determined and corrective action taken to preclude recurrence using the LANL Issues Management Tracking System (LIMITS).</p>	<p>ASME NQA-1-2000, Requirement 16, Corrective Action, 100, Basic            AND            IP 330.0, LANL Quality Assurance Program, Section 3.2.2, Resolving and Correcting Quality Deficiencies or Discrepancies</p>	<p>ISD 322-4.2, <i>Issues and Corrective Action Management Process</i>, Section 5.5.5, CAT-2 Significant Issues, addresses this requirement.</p>
11.	<p>If conditions adverse to quality cannot be corrected expeditiously, compensatory measures must be implemented pending completion of the identified corrective action.</p>	<p>IP 330.0, LANL Quality Assurance Program, Section 3.2.2, Resolving and Correcting Quality Deficiencies or Discrepancies</p>	<p>ISD 322-4.2, <i>Issues and Corrective Action Management Process</i>, Section 5.1, Issue and Submittal, addresses this requirement.</p>
12.	<p>The identification, cause, and corrective action for significant conditions adverse to quality shall be documented and reported to appropriate levels of management.</p>	<p>ASME NQA-1-2000, Requirement 16, Corrective Action, 100, Basic</p>	<p>ISD 322-4.2, <i>Issues and Corrective Action Management Process</i>, Section 2.1, Issues and Corrective Action Management Process Overview, addresses this requirement.</p>

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13.	Corrective actions to resolve quality deficiencies must include the following documentation: <ul style="list-style-type: none"> <li>• Investigation to determine the extent of the adverse condition or similar conditions (e.g., is this an example of a widespread problem?).</li> <li>• Determination of the cause and a corrective action plan for similar conditions.</li> <li>• Determination of the actions and objective evidence necessary to preclude recurrence of the condition, as warranted (e.g., should procedures, standards, or training need to be changed?).</li> <li>• Correction of the affected larger population and system (e.g., procedures standards or training).</li> <li>• Verification and documentation of the effectiveness and objective evidence of appropriate correction.</li> <li>• Thresholds for collective significance based on repetitive quality deficiencies (e.g., nonconformance reports and audit finding trends).</li> </ul>	IP 330.0, LANL Quality Assurance Program, Section 3.2.2, Resolving and Correcting Quality Deficiencies or Discrepancies	ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , Section 2.1, Issues and Corrective Action Management Process Overview; and ISD 322-6.0, <i>LANL Causal Analysis and Trending</i> , Section 5.0 Trend Analysis Techniques, address this requirement.
15.	Completion of corrective actions shall be verified.	ASME NQA-1-2000, Requirement 16, Corrective Action, 100, Basic	ISD 322-4.2, <i>Issues and Corrective Action Management Process</i> , Section 2.1 Issues and Corrective Action Management Process Overview, address these requirements.

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