

## SEMP COMPLIANCE QUESTIONNAIRE

### Element 8: Assurance of Quality and Mechanical Integrity of Critical Equipment

Date: \_\_\_\_\_

Organization Name: \_\_\_\_\_ Facility Name: \_\_\_\_\_

**Additional Information about Auditee and Audit Site:**

**Auditors:**

\_\_\_\_\_

No.	Q. Code (F/P/B)	Questions and Expectations	Finding (C/N/NA)	Refs.	Observations
1	P	<p>Does the management program require that procedures are in place and implemented so that critical equipment for the facility is designed, fabricated, installed, tested, inspected, monitored, and maintained in a manner consistent with appropriate service requirements, manufacturer's recommendations, or industry standards?</p> <p><b>Example Expectations:</b></p> <ol style="list-style-type: none"> <li>1. Evidence of the use of design, fabrication, and installation specifications that prescribe industry standards of practices.</li> <li>2. Written procedures and schedules for the testing, inspection, and maintenance of critical equipment.</li> </ol>		RP 75, 8.1	

Question Codes: F -- Facility Related; P -- Program Related; B -- Facility and Program Related.  
 Finding Codes: C -- Conforming; N -- Non-conforming; NA -- Not Applicable.

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2	B	<p>Are human factors considered in the processes for mechanical integrity of critical equipment?</p> <p><b>Example Expectation:</b></p> <p>1. Evidence that consideration of human factors, including accessibility was/is addressed in the facility design, possibly through separate studies or as part of the facility process hazards analysis.</p>		RP 75, 8.1	
3	B	<p>Does the quality assurance strategy carry over into the operating and maintenance procedures and management of change?</p> <p><b>Example Expectations:</b></p> <p>1. Evidence that operating and maintenance procedures for critical equipment address any applicable quality assurance issues, as required by the design basis.</p> <p>2. Evidence that applicable critical equipment quality control requirements are covered by the management of change procedures.</p>		RP 75, 8.1	

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4	B	<p>Are written procedures for procurement of critical equipment developed as part of the overall quality and mechanical integrity assurance program to verify equipment compliance with applicable design and material specifications?</p> <p><b>Example Expectation:</b></p> <p>1. Documented process for confirming that procured critical equipment conforms to applicable design and material specifications.</p>		RP 75, 8.2	
5	B	<p>Are written quality control procedures and specifications for critical equipment established and implemented to confirm that materials and construction, during the fabrication stage, are in accordance with the design specifications?</p> <p><b>Example Expectation:</b></p> <p>1. Documented process for confirming that fabricated critical equipment conforms to applicable design and material specifications.</p>		RP 75, 8.3	

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6	B	<p>Are maintenance programs established and implemented to include appropriate inspection and testing for critical equipment to sustain ongoing mechanical integrity?</p> <p><b>Example Expectation:</b></p> <p>1. Program guidance governing required inspection intervals, acceptable inspection results, and a process for resolving inspection findings to manage integrity risks.</p>		RP 75, 8.5	
7	B	<p>Are maintenance activities structured to enhance safety and protect the environment?</p> <p><b>Example Expectation:</b></p> <p>1. Maintenance procedures that address potential safety and environmental hazards as part of their development and performance.</p>		RP 75, 8.5	
8	B	<p>Does the maintenance program apply to both the operator and/or contract personnel involved in maintenance?</p> <p><b>Example Expectation:</b></p> <p>1. Integrity maintenance processes that address the roles and responsibilities of involved employees (operator and contract).</p>		RP 75, 8.5	

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No.	Q. Code (F/P/B)	Questions and Expectations	Finding (C/N/NA)	Refs.	Observations
9	B	Does the maintenance program include: <ul style="list-style-type: none"> <li>a. Procedures and work practices to maintain the mechanical integrity of equipment?</li> <li>b. Training of maintenance personnel in the application of the procedures, relevant hazards, and safe work practices?</li> <li>c. Quality assurance and control procedures to verify that maintenance materials and spare equipment and parts meet design specifications?</li> <li>d. A system to confirm that maintenance personnel are qualified?</li> <li>e. Procedures to review all changes to the maintenance program in accordance with management of change?</li> </ul>		RP 75, 8.5	

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10	P	<p>Do the testing, inspection, and monitoring programs include:</p> <ul style="list-style-type: none"> <li>a. A list of critical equipment and systems that are subject to inspection and testing? Does the list specify the method and interval of testing and inspection, acceptable limits, and criteria for passing the test or inspection?</li> <li>b. Testing and inspection procedures that follow commonly accepted standards and codes?</li> <li>c. Documentation of completed testing and inspection?                             <ul style="list-style-type: none"> <li>1) Are pressure vessel testing and inspection documentation retained for the life of the equipment?</li> <li>2) Are all other documentation retained for a minimum of 2 years or as needed with regard to:                                     <ul style="list-style-type: none"> <li>a) frequency of testing, inspection, and preventive maintenance,</li> <li>b) requirements of regulatory agencies, and</li> <li>c) requirements for the preparation or revision of hazards analysis?</li> </ul> </li> </ul> </li> <li>d. Procedures to document and correct critical equipment deficiencies or operations that are outside acceptable limits?</li> </ul>		RP 75, 8.6	

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		e. A system for reviewing and authorizing changes in tests and inspections?			