Quality Assurance Auditors & Industry Conference February 2023 | New Orleans, LA





2.21 Internal Audit

Ray Morgan Greenbrier

MxV Rail is a subsidiary of the Association of American Railroads (formerly TTCI)

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Auditing Internal Audits

Best Practices



Internal Audit

- What it is
- What is required
- How to Audit





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Internal Audit

What it is

- Represents a snapshot in time verification of compliance and effective implementation of a Quality Assurance Program
- Systematic, disciplined approach to evaluate and improve the effectiveness of processes...
- Means to support continuous improvement as well as compliance
- Requirement



Internal Audit

• Requirements

- Procedure
- Checklist

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- Schedule
- Frequency
- Trained/Qualified Personnel
 - Organizational Freedom
- Documented Results/Report
 - Evidence of compliance/noncompliance
- Corrective Actions
- Follow-up Actions



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Review

- Procedure
- Audit Results
- Corrective Actions
- Follow-up Actions
- Auditor Credentials



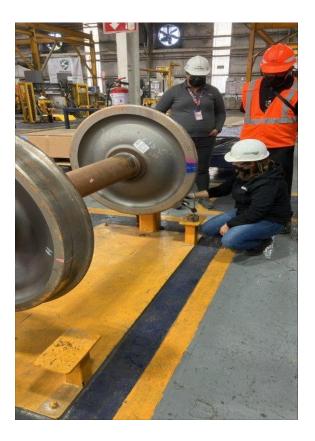




Internal Audit Procedure

- Current revision
- Contain or reference requirements
 - Checklist
 - Scheduling
 - Frequency
 - Personnel
 - Training
 - Reporting (Evidence)
 - Corrective actions
 - Follow-up actions





Review Audit Results (cont.)

- Document(s)
 - Report
 - Including evidence
 - What the auditor reviewed, observed, audited, interviewees, etc.
 - Photos
 - Notes
 - Completed checklist
 - Procedure or form(s) reviewed
 - Compliance
 - Noncompliance



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INTERNAL AUDIT REPORT

Date:	12/21/22	
To:	Joe Smith Jim QA	Plant Manager Quality Assurance Manager
From:	Sam Auditor	Manager Internal Auditing
Cc:	Mr. Quality	Director of Quality

Subject: Quality System Internal Audit Report

This is a report of the results of the Internal Quality System Audit and Process Audit(s) conducted at ABC Company. There was a physical audit conducted at the facility 12/20/22. A closing meeting was held on 12/20/22. The audit checklist, evidence, and results are documented in the Greenbrier Intelex Auditing Program.

Purpose: The purpose of the audit was to determine the conformity of the Facility Quality System to the requirements of AAR M-1003, and to verify effective implementation of the Quality System, with a focus upon identifying opportunities for improvement.

Scope: The scope of the audit included documentation and activities related to the manufacture of railcars and components subject to the requirements of AAR M-1003 at the facility.

Standards/Reference Documents: The audit addressed the requirements of the following documents:

- Association of American Railroads Manual of Standards and Recommended Practices, Section J, Specification for Quality Assurance M-1003, Issue of January 2022 and QAPE Checklist issued 1/10/22.
- 2) GMO Quality Manual

Audit Team: Sam Auditor Lead Auditor

Primary Contacts: Sally Employee

Positives:

Shop clean and organized

Summary: The Facility Quality System was found to be in compliance with the applicable requirements of AAR M-1003, exceptions as noted below. Please respond to the auditor on all noncompliance findings with a completed F-AC-2.6-01 GMO Audit Response Form within 30 calendar days of this report.

Number	2022-1
Element	2.21.1 Internal Auditing
Requirement	2.21.7 Do follow-up actions verify and record the implementation and effectiveness of the action taken?
Finding	No evidence of follow-up actions taken were documented from 2021 audit finding 2021-1.
Туре	Noncompliance



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Evidence of Compliance and Noncompliance



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Example Completed QAPE

	2.12 Final Ins	spection (AAR Rev	1/10/22)
Element	Manual Audit Manual -	Evidence/Comments	Attachments 2.12 Auditor Notes
2.12.1 Does the facility inspect, test, and identify the final activity as required by the inspection and test plan?	Yes, Audit - Yes	Final inspection paint shop demonstration. see notes	
2.12.2 Does the facility review all inspection and test records and verify that the activity has been inspected at all points shown in the inspection and test plan and that these records are complete?	Manual - Yes, Audit - Yes	Demonstration by clerk on reviewing final documents.	
2.12.3 Does the facility retain all inspection records as specified in paragraph 2.17?	Manual - Yes, Audit - Yes	Scanned into Onbase	Manufacturing Job #: Provide file Star B: Las Star B: Star B: Star B: Star B: TTM Annotation the star B: Annotation the star B: Star B: Star B: Star B: </td
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Review Audit Results (cont.)

- When performed
 - Annually conducted within 400 days of previous audit
 - 365 days for M-1002 facilities per CPC 1389
- Who
 - Auditors
 - List all including lead
- Scope of audit
 - Elements



Review Audit Results (cont.)

- Findings
 - Documented and shared with facility POC
- Corrective actions
 - Properly closed / open
- Follow up
 - Who, what, where, when, how, and mitigating actions



Action Required (5 Step RCCA)	Description of Action(s) Taken – Include Objective Evidence	Complet Date
1) Identify the Problem: What is non-conformance? Clearly state finding.		
2) Contain the Problem (Containment): Clearly define <u>immediate</u> action(s) taken to pre the problem from continuing?		
3) Root Cause Analysis (RCA): Clearly define the root cause(s) caused the finding (see: step 1). Use an appropriate RCA tools to determine the Root Cause as examples: 5-Whys, Cause and Effect Diagram, Pareto Chart, S Sigma problem solving tools		
► Identify RCA Tool u	sed:	
4) Corrective Action: Clearly define who, what, & when corrective action(s) taken that will eliminate the root cause(s).		
5) Follow-up: Clearly define the <u>follow-up plan(s)</u> that will ensur corrective action(s) were effective liminating future occurrences.		

Person(s) Conducting Internal Audits



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Review Auditor Credentials

- Training/Qualification records
 - Supporting training procedures





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Example of Auditor Qualifications



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	HAS PARTICIPATED IN THE 24 HOUR (2.5 CEU) ASSOCIATION OF AMERICAN RAILROADS' QUALITY ASSURANCE ADVANCED AUDITOR TRAINING SEMINAR AS ENDORSED BY THE QUALITY ASSURANCE COMMITTEE IN ACCORDANCE WITH SPECIFICATION M-1003, CHAPTER 4	r se
	TRAINING DATES: May 9-11, 2006	R
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	Approved: (Executive Director - Rules and Standards) Approved: (Mánager, Quality Assurance)	FIS
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Association of American Railroads Quality Assurance Committee