

**CONDUCTING A INTERNAL QUALITY
ASSURANCE AUDIT ON THE
TRANSPORTATION OF
RADIOACTIVE MATERIAL BY TRACTOR AND
TRAILER**

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SCOPE

- ASME NQA-1-2004
- 10 CFR 71, Subpart H
- U.S. Department of Transportation (DOT)
- Client contract requirement
- Program/Project Quality Assurance requirement

ORGANIZATION

- Is there documentation that defines the organizational structure?
- Are roles/responsibilities established, and being implemented?
- Are documented safety meetings being held with staff?

QUALITY ASSURANCE PROGRAM

- Are transportation personnel/drivers well qualified and trained to perform assigned work (e.g., transportation QA requirements, safety hazards, initiate stop work action, meet DOT/other regulatory requirements, Preventive Maintenance (PM) inspections, transportation plans and procedures)?
- Is responsible management keeping staff up-to-date on applicable plans/procedures?
- Is responsible management maintaining a record of client direction?
- Is responsible management reviewing Drivers log books/ inspections?

DESIGN

- Are documented reviews being done on container package design drawings prior to awarding supplier contracts?
- Are source inspections being done at suppliers fabrication sites on container packages?
- Are inspections being done on each trailer and tractor model in accordance with manufacturers specifications? DOT requirements?

PROCUREMENT DOCUMENT CONTROL

- Is there traceable documentation on procured items, spare parts or services?
- Are documented reviews being done on procurement documents to ensure they contain all pertinent information?
- Is there a list of approved supplier's that has been verified by a documented quality assurance evaluation?

INSTRUCTIONS, PROCEDURES, AND DRAWINGS

- Are staff implementing required plans and procedures?
- Do staff demonstrate they understand how required plans and procedures are to be implemented?
- Is the level of detail in procedures easily followed by users?

DOCUMENT CONTROL

- Are documents being used controlled?
- How are document users verifying they are using the correct revision
- Are inspections conducted regularly to ensure only controlled documents are being used?

CONTROL OF PURCHASED ITEMS

- Is there well documented evidence that clearly identifies that items (e.g., equipment, stored parts and services) obtained by staff are checked upon receipt to ensure they meet procurement requirements?
- Are the un-acceptable items segregated from acceptable items and hold tags used?
- Are documented checks made for suspect foreign-counterfeit items (e.g., parts & materials)?

IDENTIFICATION AND CONTROL OF ITEMS

- Are identification of material, parts and components verified during source inspections at the suppliers sites?
- Are items received marked so they identify what they are?
- What documented checks ensure only correct and accepted items are used or installed during tractor and trailer PM activities?

CONTROL OF SPECIAL PROCESSES

- What ensures major subcontracted work is awarded to a qualified vendor (e.g., tractor-trailer preventive maintenance, calibration of radiation monitors, fabrication of container packages)?

INSPECTION

- Is all pertinent transportation documentation checked to ensure DOT regulations are met?
- Is vehicle Preventive Maintenance (PM) safely performed by qualified inspectors in accordance with DOT requirements? Are specific checklists used? Missing information identified? are safety items checked? un-acceptable items identified?
- Are inspections done by certified inspectors?

TEST CONTROL

- Are applicable tests being done to verify the expected performance (e.g., tractor after maintenance or repair)?
- Are applicable tests being done to verify DOT safety requirements are met/

CONTROL OF MEASURING AND TEST EQUIPMENT

- Have all types of tools and equipment to be used during tractor and trailer preventive maintenance activities been identified?
- Is there documented calibration records on the radiation monitoring instruments be used?
- Are out-of-calibration instruments segregated and documented on a non-conformance report?

HANDLING, STORAGE, AND SHIPPING

- How are specific requirements for handling, storage and shipping identified by (e.g., contract, clients, regulatory, or other) being complied with?

INSPECTION, TEST, AND OPERATING STATUS

- Do radiation monitors have calibration stickers on them to show calibration status?
- Are hold tags placed on other items that are not to be used, to prevent inadvertent use?

CONTROL OF NON-CONFORMING ITEMS

- Is there a process for identifying and reporting items and activities that do not conform to specified requirements?
Incident/accident reporting?
- Are non-conforming items (parts, equipment, instruments, tools, other) tagged with a QA hold tag and kept segregated from acceptable items?

CORRECTIVE ACTION

- Is staff familiar with how to use the required Issue and Corrective Action Documentation Process?
- Is corrective action being taken to resolve problems identified with non-conforming (parts, equipment, tools, etc.)?

QUALITY ASSURANCE RECORDS

- Are pertinent QA records (e.g., preventive maintenance, shipment records, contractual, other) being maintained?
- Are hard copy QA records kept that are easily traceable/retrievable, adequately protected, accurate, legible, appropriately signed, and completed? What about electronic records?
- Are QA records maintained in a dual records system to provide adequate protection if the terminal facility is not capable of providing adequate protection?

AUDITS

- Is the present staff responding to any external audits/assessments/client requests?
- Are all incidents/accidents occurring on shipments being reported as required to the client?
- Is the staff aware of information that it will need to be supply to the client or regulators on incidents or accidents?