

Sample Annual Audit for Computed Tomography (CT) X-ray Systems

5/12/2022

Chapter 4732.0540 requires the registrant to ensure that the quality assurance program, its content, and implementation are reviewed annually for compliance with the rule. The registrant must ensure that all radiation program audits are performed according to procedures established by the registrant or radiation safety officer. Any noncompliance issues found during the audit must be corrected and documented. The radiation safety officer must review any corrective actions taken.

The following page contains an example of a checklist that could be used for a facility's audit. The facility may have existing forms, a way to retrieve the information electronically or would prefer computer generated forms. These are all acceptable, provided the information is complete and available at the time of inspection. ***The sample program audit below may not be complete for all facilities and may include items that are not applicable to all facilities. Each facility should create a site-specific audit form.***

Audit History

Audit Item	Rule Part	N/A	Yes	No
Date of the previous audit:				
Were previous audits conducted annually?	4732.0540	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are records of previous audits maintained?	4732.0540	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deficiencies identified?	4732.0540	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were the deficiencies corrected?	4732.0540	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have all records been maintained?	4732.0330		<input type="checkbox"/>	<input type="checkbox"/>

Organization and Scope of Program

Audit Item	Rule Part	N/A	Yes	No
Is the Radiation Safety Officer identified?	4732.0500		<input type="checkbox"/>	<input type="checkbox"/>
1. Does the RSO meet MDH training requirements?	4732.0500		<input type="checkbox"/>	<input type="checkbox"/>
2. Is RSO fulfilling all duties?	4732.0505		<input type="checkbox"/>	<input type="checkbox"/>
3. Is the written agreement in place for the RSO?	4732.0500	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. All x-ray equipment registered with the MDH?	4732.0200		<input type="checkbox"/>	<input type="checkbox"/>
5. Changes in program since the last audit?	4732.0520	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Operating and Emergency Procedures

Audit Item	Rule Part	N/A	Yes	No
Are the procedures current?	4732.0520		<input type="checkbox"/>	<input type="checkbox"/>
ALARA program?	4732.0530		<input type="checkbox"/>	<input type="checkbox"/>
Technique charts completed and in place?	4732.0550		<input type="checkbox"/>	<input type="checkbox"/>
Holding procedures in place?	4732.0510	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garments monitored for integrity?	4732.0550	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orders include all required information?	4732.0560		<input type="checkbox"/>	<input type="checkbox"/>
Provisions for declared pregnant staff?	4732.0415	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Individual Monitoring Device

Audit Item	Rule Part	N/A	Yes	No
Are individual monitoring devices in use?	4732.0440	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ANNUAL AUDIT FOR CT X-RAY SYSTEMS

Audit Item	Rule Part	N/A	Yes	No
Users notified in writing of annual exposure?	4732.0440		<input type="checkbox"/>	<input type="checkbox"/>
Reports maintained for 30 years?	4732.0440		<input type="checkbox"/>	<input type="checkbox"/>
Is the monitoring worn in the proper locations?	4732.0440		<input type="checkbox"/>	<input type="checkbox"/>

Shielding Plan

Audit Item	Rule Part	N/A	Yes	No
Shielding plan documentation?	4732.0355	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shielding plan submitted for new or remodeled construction?	4732.0360	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permanent placards?	4732.0360	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiation survey? (change in facility or equipment)	4732.0860	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Retake/Reject Analysis

Audit Item	Rule Part	N/A	Yes	No
Retake analysis written procedure?	4732.0535		<input type="checkbox"/>	<input type="checkbox"/>
Reasons listed for rejected studies?	4732.0535		<input type="checkbox"/>	<input type="checkbox"/>
Repeat rate calculated quarterly?	4732.0535		<input type="checkbox"/>	<input type="checkbox"/>
1. Include the quarterly analysis on annual audit?	4732.0535		<input type="checkbox"/>	<input type="checkbox"/>
1 st Quarter:	2 nd Quarter:	3 rd Quarter:	4 th Quarter:	

Computed Tomography Requirements

Audit Item	Rule Part	N/A	Yes	No
Visual control of all entrances?	4732.0355		<input type="checkbox"/>	<input type="checkbox"/>
2-way audio communication?	4732.0860		<input type="checkbox"/>	<input type="checkbox"/>
Quality Control procedures in place?	4732.0860		<input type="checkbox"/>	<input type="checkbox"/>
CT unit daily QA quarterly review?	4732.0860		<input type="checkbox"/>	<input type="checkbox"/>
Laser film printer QC daily?	4732.1100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment evaluations (EPE) performed within 12 months?	4732.0860/1100		<input type="checkbox"/>	<input type="checkbox"/>
EPE performed after tube replacement or installation?	4732.0860/1100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Audit Item	Rule Part	N/A	Yes	No
Utilization log maintained and complete?	4732.0545		<input type="checkbox"/>	<input type="checkbox"/>

Computed Tomography Self-Referred Screening

Audit Item	Rule Part	N/A	Yes	No
CT screening approved by MDH?	4732.0565	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renewal submitted 30 days prior to expiration?	4732.0565	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CT screening revisions submitted to MDH?	4732.0565	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

X-ray Operator Training

Audit Item	Rule Part	N/A	Yes	No
X-ray operators qualified?	4732.0580		<input type="checkbox"/>	<input type="checkbox"/>
New x-ray operators received initial training?	4732.0510/0860		<input type="checkbox"/>	<input type="checkbox"/>
Training program implemented?	4732.0510/0860		<input type="checkbox"/>	<input type="checkbox"/>
1. Operating procedures?	4732.0510		<input type="checkbox"/>	<input type="checkbox"/>
2. Emergency procedures?	4732.0510		<input type="checkbox"/>	<input type="checkbox"/>
Training for changes in program? (new scanner/software change)	4732.0510	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Findings

Corrective and Preventive Actions

Audit Conducted By

Signature _____

Date _____

Title _____

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To obtain this information in a different format, call: 651-201-4545.