

**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
QUALITY ASSURANCE ADMINISTRATIVE PROCEDURE**

TITLE: CERTIFICATION OF AUDIT PERSONNEL

Procedure No.: QAAP 18.1	Revision: 0	Date: 3/27/89	Page: 1 of 21
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Director, OCRWM <i>[Signature]</i>	Date: 12/1/88	Director, OQA <i>[Signature]</i>	Date: 7/1/89
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1.0 PURPOSE

This procedure establishes the responsibilities and requirements for training, qualification, and certification of audit personnel for performance of quality audits by the Office of Civilian Radioactive Waste Management (OCRWM).

2.0 SCOPE

This procedure applies to all personnel who perform quality audits for OCRWM.

3.0 REFERENCES AND DEFINITIONS

3.1 REFERENCES

- 3.1.1 "Quality Assurance Requirements for the Civilian Radioactive Waste Management Program," (QAR) DOE/RW-0214, 1988.
- 3.1.2 "Quality Assurance Program Description for the Civilian Radioactive Waste Management Program," (QAPD) DOE/RW-0215, 1988.

3.2 DEFINITIONS

- 3.2.1 The definition of standard terms may be found in the Glossary contained in reference 3.1.1.
- 3.2.2 Auditor - An individual who is qualified and certified to participate in any portion of a QA audit.
- 3.2.3 Auditor-in-Training - An individual who is learning auditing techniques and practices in order to become a qualified auditor.
- 3.2.4 Lead Auditor - An individual who is certified to organize, perform, and direct a QA audit; report audit findings; and evaluate related corrective actions. The Lead Auditor may be referred to as the Audit Team Leader (ATL).

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3.2.5 Observer - An individual who is not an active participant in the audit. An observer may be involved with the audit to observe how the audit is conducted, or to become familiar with the auditee's organization and activities. An observer must accompany a qualified auditor during the performance of an audit.

3.2.6 Technical Specialist - An individual assigned to provide advice to the audit team in preparing for and/or performing a QA audit when the scope, complexity, and/or special nature of the activities to be audited warrant a technical specialist to assure an adequate audit.

4.0 RESPONSIBILITIES

4.1 ASSOCIATE DIRECTORS, OCRWM

The Associate Directors, OCRWM, or designees are responsible for:

- 4.1.1 Supporting the audit process;
- 4.1.2 Providing technical specialists to participate in audits; and
- 4.1.3 Nominating staff as auditor candidates, as required.

4.2 DIRECTOR, OFFICE OF QUALITY ASSURANCE, (OQA)

The Director, OQA, or designee is responsible for:

- 4.2.1 Preparing and maintaining this QAAP;
- 4.2.2 Implementing the requirements of this procedure;
- 4.2.3 Training of prospective auditors and Lead Auditors;
- 4.2.4 Examining, qualifying and certifying auditors and Lead Auditors; and
- 4.2.5 Ensuring that QA records generated as a result of the implementation of this procedure are maintained.

4.3 LEAD AUDITOR

The Lead Auditor is responsible for:

- 4.3.1 Supervising and evaluating auditors-in-training;



- 4.3.2 Assuring that audit team members are competent to perform their assigned portion of the audit; and
- 4.3.3 Documenting audit records stating that auditors were competent, received specific orientation, and were independent of activities which they audited.

4.4 AUDITOR/LEAD AUDITOR CANDIDATES

Auditor and Lead Auditor candidates are responsible for acquiring the requisite orientation and training to assure their competence in auditing skills.

5.0 GENERAL

- 5.1 Personnel selected for QA audit assignments shall have sufficient experience and training commensurate with the scope, complexity, or special nature of the activities to be audited.
- 5.2 Competence of personnel to perform required audit functions shall be established by the following:
 - 5.2.1 Orientation that provides a working knowledge of the OCRWM QA program;
 - 5.2.2 Formal training in general and specialized aspects of audit performance; and
 - 5.2.3 On-the-job training, guidance, and counseling under the direct supervision of a Lead Auditor.
- 5.3 The Director, OQA, when designated by the Director, OCRWM, as Auditor Examiner, is exempt from satisfying the requirements for Lead Auditor qualification and maintenance of proficiency as outlined in this procedure.

6.0 PROCEDURE

6.1 AUDITOR QUALIFICATION

- 6.1.1 Prospective auditor candidates will be provided training and orientation to develop their competence for performing QA audits.
- 6.1.2 Auditor training includes orientation in auditing techniques and the understanding of applicable codes, standards, directives, regulations, DOE Orders, and appropriate procedures.



- 6.1.3 After successful completion of the training, auditor candidates shall participate in at least one audit as an auditor-in-training before becoming a certified auditor.
- 6.1.4 A certified Lead Auditor supervises auditors-in-training during an audit, observes the trainee's ability in auditing skills, and submits a written evaluation of the trainee's performance to the Director, OQA.
- 6.1.5 The Director, OQA, based on the prospective auditor's previous experience, possession of adequate audit skills, training, the Lead Auditor's evaluation of the auditor-in-training, and a review of the related documentation, certifies the individual as an auditor. This certification of an auditor's qualification is documented on Attachment I, "Qualification Record Auditor/Lead Auditor".

6.2 LEAD AUDITOR QUALIFICATION

In addition to the requirements of Section 6.1, a Lead Auditor candidate will also meet the requirements of Sections 6.2.1 through 6.2.5 before being certified as a Lead Auditor.

- 6.2.1 The prospective Lead Auditor will demonstrate skills for effective communication, both oral and written. These skills are evaluated and documented by the Director, OQA.
- 6.2.2 The prospective Lead Auditor will have training sufficient to assure competence in auditing skills. This training may include, but is not limited to, on-the-job training. The following areas are considered in determining training needs:
- a) Knowledge and understanding of the OCRWM QA program, ANSI/AMSE NQA-1 and other related codes, standards, regulations and regulatory guides, as applicable;
 - b) Knowledge and understanding of the general structure of quality assurance programs as a whole;
 - c) Knowledge and understanding of auditing techniques, planning, examining, questioning, evaluating, reporting, follow-up and close-out;



- d) Knowledge and understanding of audit planning in the quality-affecting functions for activities such as design, purchasing, fabrication, handling, shipping, storage, cleaning, erection, installation, inspection, testing, statistics, nondestructive examination, maintenance, repair, operation, modification of nuclear facilities or associated components, safety aspects of the work and records management; and
- e) Knowledge and understanding of quality assurance administrative procedures applicable to audits.
- 6.2.3 The prospective Lead Auditor shall have participated in a minimum of five (5) quality assurance audits within the three (3) years prior to qualification. Audits performed prior to certification by OCRWM may be used to meet this requirement. At least one of the audits shall have been a nuclear QA audit within one year prior to qualification.
- 6.2.4 The prospective Lead Auditor will successfully complete an examination which evaluates comprehension of, and ability to apply, the body of knowledge identified in 6.2.2. This examination may be oral, written, practical, or any combination of the three types.
- 6.2.5 The prospective Lead Auditor will provide verifiable evidence that a minimum of ten (10) credits have been accumulated when credits are awarded per subparagraphs (a) through (d) below:
- a) Education (4 credits maximum)
- Associate degree from an accredited institution, score one (1) credit, or if the degree is in engineering, physical sciences, mathematics or quality assurance, score two (2) credits; or
- A Bachelor degree from an accredited institution score two (2) credits, or if the degree is in engineering, physical sciences, mathematics or quality assurance, score three (3) credits. In addition, score one (1) credit for a Master's degree in engineering, physical sciences, engineering management, or quality assurance from an accredited institution.
- b) Experience (9 credits maximum)
- Technical experience in engineering, manufacturing, construction, operation, or maintenance, score one (1) credit for each full year with a maximum of five (5) credits for this aspect of experience.



If two (2) years of this experience have been in the nuclear industry, score one (1) additional credit; or

If two (2) years of this experience have been in quality assurance, score two (2) additional credits; or

If two (2) years of this experience have been in auditing score three (3) additional credits; or

If two (2) years of this experience have been in nuclear quality assurance, score three (3) additional credits; or

If two (2) years of this experience have been in nuclear quality assurance auditing, score four (4) additional credits.

c) Other Credentials of Professional Competence (2 credits maximum)

For certification of competency in engineering, science, or quality assurance specialties issued and approved by a state agency or national professional or technical society, score two (2) credits.

d) Rights of Management (2 credits maximum)

The Director, OQA, may grant up to two (2) credits for other performance factors applicable to auditing which may not be explicitly called out in this instruction. Examples of these factors are leadership, sound judgment, maturity, analytical ability, tenacity, past performance and quality assurance training courses.

6.2.6 When the prospective lead auditor meets the requirements of Sections 6.1 and 6.1.1 through 6.2.5, the Director, OQA, will certify on Attachment I, that the individual is qualified as a Lead Auditor.

6.3 MAINTENANCE OF PROFICIENCY

6.3.1 Lead Auditors and auditors shall maintain their proficiency through one or more of the following activities:

a) Participation in at least one QA audit per year (Lead Auditors will participate in at least one QA audit a year, either as a Lead Auditor or auditor); or

b) Review and study of the codes, standards, procedures instructions, books and other documents related to quality assurance program and program auditing; or



c) Documented participation in training programs.

- 6.3.2 The activities performed by Lead Auditors and auditors to maintain their proficiency will be listed on Attachment II, "Auditor/Lead Auditor Qualification Maintenance", by the Director, OQA, for each auditor and Lead Auditor.
- 6.3.3 Based on annual evaluations, the Director, OQA, may extend the certification, require retraining or require requalification. Attachment II identifies the activities performed, the date the activity was performed, and the type of proficiency maintenance activity (i.e., audits performed, reviews/studies conducted, or participation in training programs) for each activity performed. The Director, OQA, dated signature on Attachment I, indicates results of the evaluation are satisfactory and the certification is extended for a period of one year from the date of the evaluation.
- 6.3.4 Lead Auditors who fail to maintain their proficiency for a period of two (2) years or more shall require requalification. Requalification includes retraining and reexamination in accordance with the requirements of Paragraphs 6.2.2 and 6.2.4 and participation as an auditor in at least one (1) quality assurance audit. The recertification of an individual is documented by the Director, OQA, on Attachment I.
- 6.3.5 Auditors who fail to maintain their proficiency for a period of two (2) years or more shall require recertification in accordance with the requirements of Section 6.1. The recertification of an individual is documented by the Director, OQA, on Attachment I.

6.4 TECHNICAL SPECIALISTS

- 6.4.1 Technical specialists are assigned by the Director, OQA, for use in QA audits as advisors in technical matters when the scope, complexity, and/or special nature of the activities to be audited warrant the need of a technical specialist to assure an adequate audit.
- 6.4.2 Technical specialists may be auditors qualified in accordance with Section 6.1, who participate in the preparation and conduct of the QA audit. Technical specialists who are not qualified auditors will receive training identified in QAAP 2.1, "Indoctrination and Training" and will read Attachment III, "Audit Guide For Technical Specialists", prior to the QA audit. This guide addresses the basics of the QA audit process, the conduct of personnel during the QA audit, and identifies applicable QA auditing documents.



6.5 RECORD OF AUDIT PARTICIPATION

- 6.5.1 When a QA audit is complete, the assigned Lead Auditor prepares a letter to the Director, OQA, that identifies the QA audit number, date(s) of the QA audit, the title or name of the audited organization, and the name of each audit team member that participated in the QA audit.
- 6.5.2 A listing of each QA audit (Attachment IV, "Audit Participation Record") in which a Lead Auditor or auditor participates is maintained by the Director, OQA, and is updated upon receipt of the letter(s) (see Section 6.5.1) documenting participation in a QA audit.
- 6.5.3 A file for each Lead Auditor, auditor, and technical specialist is established and maintained by the Director, OQA, and contains copies of the individual's resume, documentation relating to or supporting the individual's qualifications, educational degree(s), training course certificates, training attendance records, audit participation records and applicable examination results.
- 6.5.4 The Director, OQA, monitors the performance of Lead Auditors and auditors and reviews their qualifications annually. He/she may extend the qualification, require retraining or requalification. These evaluations shall be documented on Attachment I.

6.6 ADMINISTRATIVE REQUIREMENTS

- 6.6.1 The Director, OQA, develops and administers the examination for a Lead Auditor.
- 6.6.2 An independent organization may be delegated this responsibility, however the Director, OQA, retains overall responsibility to see that the examination and its administration conform to this procedure.
- 6.6.3 Integrity of the examination is maintained by the Director, OQA, or other responsible organization through appropriate confidentiality of files and, where applicable, proctoring of examination.
- 6.6.4 The Director, OQA, retains a record of the objective evidence of the examination contents.
- 6.6.5 The Director, OQA, maintains a list of personnel qualified as Lead Auditors.



7.0 RECORDS

7.1 Documentation generated as a result of this procedure is collected and maintained in accordance with requirements specified in QAAP 17.1, "Records Management". At a minimum, attachments I, II, III and IV are considered QA Records.

8.0 ATTACHMENTS

- 8.1 Attachment I - Qualification Record Auditor/Lead Auditor
- 8.2 Attachment II - Auditor/Lead Auditor Qualification Maintenance
- 8.3 Attachment III - Audit Guide for Technical Specialists
- 8.4 Attachment IV - Audit Participation Record
- 8.5 Attachment V - QAAP Flowchart



ATTACHMENT I (TYPICAL)

<p>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</p>		<p>SHEET ____ OF ____ WBS NO. _____</p>
<p>QUALIFICATION RECORD AUDITOR/LEAD AUDITOR</p>		
NAME _____		DATE: _____
EMPLOYER _____		
QUALIFICATION CREDIT REQUIREMENTS		CREDITS
<p>EDUCATION - University/Degree/Date</p> <ul style="list-style-type: none"> • Undergraduate Level • Graduate level <p style="text-align: right;">4 Credits Max.</p>		
<p>EXPERIENCE - Company/Dates</p> <ul style="list-style-type: none"> • Technical (0-5 credits) and • Nuclear Industry (0-1 credits) or • Quality Assurance (0-2 credits) or • Auditing (0-4 credits) <p style="text-align: right;">9 Credits Max.</p>		
<p>PROFESSIONAL ACCOMPLISHMENTS - Certificate/Date</p> <ul style="list-style-type: none"> • Professional Engineer • Society <p style="text-align: right;">2 Credits Max.</p>		
<p>MANAGEMENT - Justification</p> <p>Justification _____</p> <p>_____</p>		
<p>Evaluated by _____</p> <p style="text-align: center;">Name and Title</p>		<p>_____</p> <p style="text-align: center;">Date</p> <p style="text-align: center;">2 Credits Max.</p>
TOTAL CREDITS AWARDED		
<p>AUDIT COMMUNICATION SKILLS</p> <p>Evaluated by _____</p> <p style="text-align: center;">Name and Title</p>		
		<p>_____</p> <p style="text-align: center;">Date</p>

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ATTACHMENT I (cont'd)

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WASHINGTON, D.C.

SHEET 2 OF _____
WBS NO. _____

QUALIFICATION RECORD AUDITOR/LEAD AUDITOR (continuation sheet)

AUDITOR TRAINING COURSES
(Course Title or Topic)

_____	_____	Date
_____	_____	Date

ON-THE-JOB TRAINING AND/OR ORIENTATION
Description

_____	_____	Evaluated by	_____	Date
_____	_____	Evaluated by	_____	Date
_____	_____	Evaluated by	_____	Date

AUDIT PARTICIPATION ORGANIZATION	LOCATION	AUDIT NO.	DATES
----------------------------------	----------	-----------	-------

EXAMINATION	<input type="checkbox"/> WRITTEN	<input type="checkbox"/> ORAL	PASSED <input type="checkbox"/> YES <input type="checkbox"/> NO	DATE _____
ADMINISTERED BY _____	Signature and Title			DATE _____

QUALIFICATION

AUDITOR
CERTIFIED BY _____
Director, OQA _____ Date _____

LEAD AUDITOR
CERTIFIED BY _____
Director, OQA _____ Date _____

ANNUAL EVALUATION: Certification is valid for a period of one year from latest date.

Signature	_____	_____	_____
Date	_____	_____	_____



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ATTACHMENT II (TYPICAL)

**OFFICE OF CIVILIAN
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WASHINGTON, D.C.**

SHEET ____ OF ____
WBS NO. _____

AUDITOR/LEAD AUDITOR QUALIFICATION MAINTENANCE

NAME	PERIOD COVERED BY THIS RECORD
	FROM _____ TO _____

TRAINING (Courses, Self study, Program documents read, etc.)

SUBJECT COVERED	DATE
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

AUDIT PARTICIPATION

LOCATION	AUDITOR OR LEAD AUDITOR	AUDIT NO.	DATE

CONCURRENCE _____ DATE _____
Supervisor's Signature

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"EXAMPLE"

ATTACHMENT III

AUDIT GUIDE FOR TECHNICAL SPECIALISTS

Technical Specialist

Date

Director, OQA

Date



AUDIT GUIDE FOR TECHNICAL SPECIALIST (cont'd)

I. INTRODUCTION

This document is written on the basis of the current requirements of OCRWM QAR and QAPD, that relate to QA audits, and QAAP 18.2, "Audit Program". These requirements apply to the preparation, performance, reporting, and follow-up of QA audits.

The purpose of this document is to provide sufficient information to technical specialists so that they can effectively advise audit team members and make optimum contributions to the QA audit. The established methods and requirements for QA audits are delineated in QAAP 18.2.

QA audits are unique opportunities to gain further understanding of activities which are normally related to the technical specialist's work or area of expertise. The management systems, procedures, work controls, and other mechanisms which are included in the audit scope are frequently unfamiliar because of the pressures of day-to-day problems in one's own discipline. The QA audit experience provides an opportunity to participate in an orderly analysis of such systems. Therefore, time spent in preparation for, and participation in a QA audit can be worthwhile and can significantly improve the overall value of the QA audit.

You are urged to take sufficient time prior to the first meeting of the audit team to become as familiar as possible with the information provided herein. If you have questions about the audit process, talk to the audit team leader before the QA audit.

II. THE AUDIT PROCESS

As an advisor to the audit team, you will be primarily concerned with the preparation and performance of the audit. You may also participate in writing the report as directed by the audit team leader. The audit follow-up is the responsibility of the audit team leader.

The first audit function in which you may participate is the development of the audit plan. This plan will identify the audit scope, which activities are to be audited, the applicable documents to be audited against, the audit schedule, and the written checklists to be utilized by the auditors.

One of the major activities in planning the audit will be a review of deficiencies or problems reported during previous audits and surveillances or past experience with the audited organization. The past audit records and other related reports provide information pertaining to both past problems for which corrective action has been implemented and for open items which have not yet been closed out.



AUDIT GUIDE FOR TECHNICAL SPECIALIST (cont'd)

The audit team leader will conduct a pre-audit team meeting to discuss details of the audit plan and establish individual responsibilities. A pre-audit meeting will be conducted with the audit team and representatives of the audited organization to outline the audit scope, the audit plan, and other details of the audit. The pre-audit meeting will also introduce the auditors and other participants to personnel of the audited organization with whom the auditors will work. The proposed sequence of events for the audit will be reviewed, and tentative plans for the post-audit meeting will be made.

During the conduct of the audit, it may be advantageous to split the audit team into several groups. The technical specialist of the audit team will be in a group which includes the audit team leader or another auditor. This will assist the technical specialist in concentrating on his/her specialized areas.

The principal audit method is to verify compliance with the Quality Assurance Program and other stated requirements. Objective evidence may take the form of records such as, drawings, specifications, logs, data sheets, test results, or other documents which will assist the auditor in drawing meaningful conclusions in regard to effective implementation of applicable requirements. The audit team leader should be kept fully aware of any needs for special information and should be advised if it is necessary to talk to people or examine records outside the scope of the audit as originally planned. Whenever deficiencies are identified during an audit they should be pointed out to the responsible members of the organization being audited.

The purpose of the post-audit meeting is to review the audit findings with responsible management of the audited organization. This is essential so that if there are any misunderstandings based on insufficient or incorrect information, they can be clarified. In addition, the exit interview gives the audited organization a good understanding of the overall findings so that appropriate corrective action can be initiated as expeditiously as possible - often even before the audit report is returned to the audited organization for formal acknowledgement.

After the QA audit has been completed, the audit team usually meets one or more times to develop the audit report. This report will be prepared in accordance with QAAP 18.2 and be signed by the audit team leader. It will include a summary of the findings and a statement of effectiveness of the QA Program audited. Deficiency Reports which identify deficiencies noted during the audit, will be issued prior to the audit report in accordance with QAAP 18.2 and are attached to the audit report for information purposes. The audit report is to be issued by the audit team within 30 days of completion of the audit.



AUDIT GUIDE FOR TECHNICAL SPECIALIST (cont'd)

III. PERSONAL CONDUCT

One subject of prime importance is the matter of personal conduct of the audit team members. Audits will have various degrees of personal involvement on the part of the audit team and members of the organization being audited.

Conflicts of opinion are frequently unavoidable; however, conflicts of personalities can almost always be avoided by a skillful team member. The point to remember is that an audit evaluates the performance of others. To varying degrees, differences of opinion are almost always factors in the auditor-auditee relationship. Consequently, it is imperative that an auditor be fully aware of the sensitivity of his/her position. The following guidelines are provided to minimize the impact of personal involvements in the audit process.

1. The audit plan and checklist should be used as a guide; however it should not restrict the audit investigation. Departure from the audit checklist should be discussed with the audit team leader.
2. Be objective and listen carefully to responses. Remember that the audited organization will normally understand its system better than you.
3. Avoid personal accusations in audit related conversations with the audited organization.
4. Arguments with individuals from the audited organization should be avoided. If you feel you are correct, accurately document the finding. Next, summarize the audited organization's opinion and acquire concurrence on their position.
5. Tentatively classify each finding at the time it is found. The reason(s) which prompted the classification should be carefully noted for future reference.
6. Record names, titles, places, etc. of individuals you contact during the audit. Material which will be required to support findings should be reproduced, if possible, or its' identity carefully recorded.
7. A finding which is deemed severe enough to warrant immediate action should be brought to the attention of the audit team leader.



AUDIT GUIDE FOR TECHNICAL SPECIALIST (cont'd)

IV. REFERENCES*

These references provide more detailed information relative to QA audits and should be consulted for answers to specific questions. The audit team leader can direct you to the reference which addresses your question.

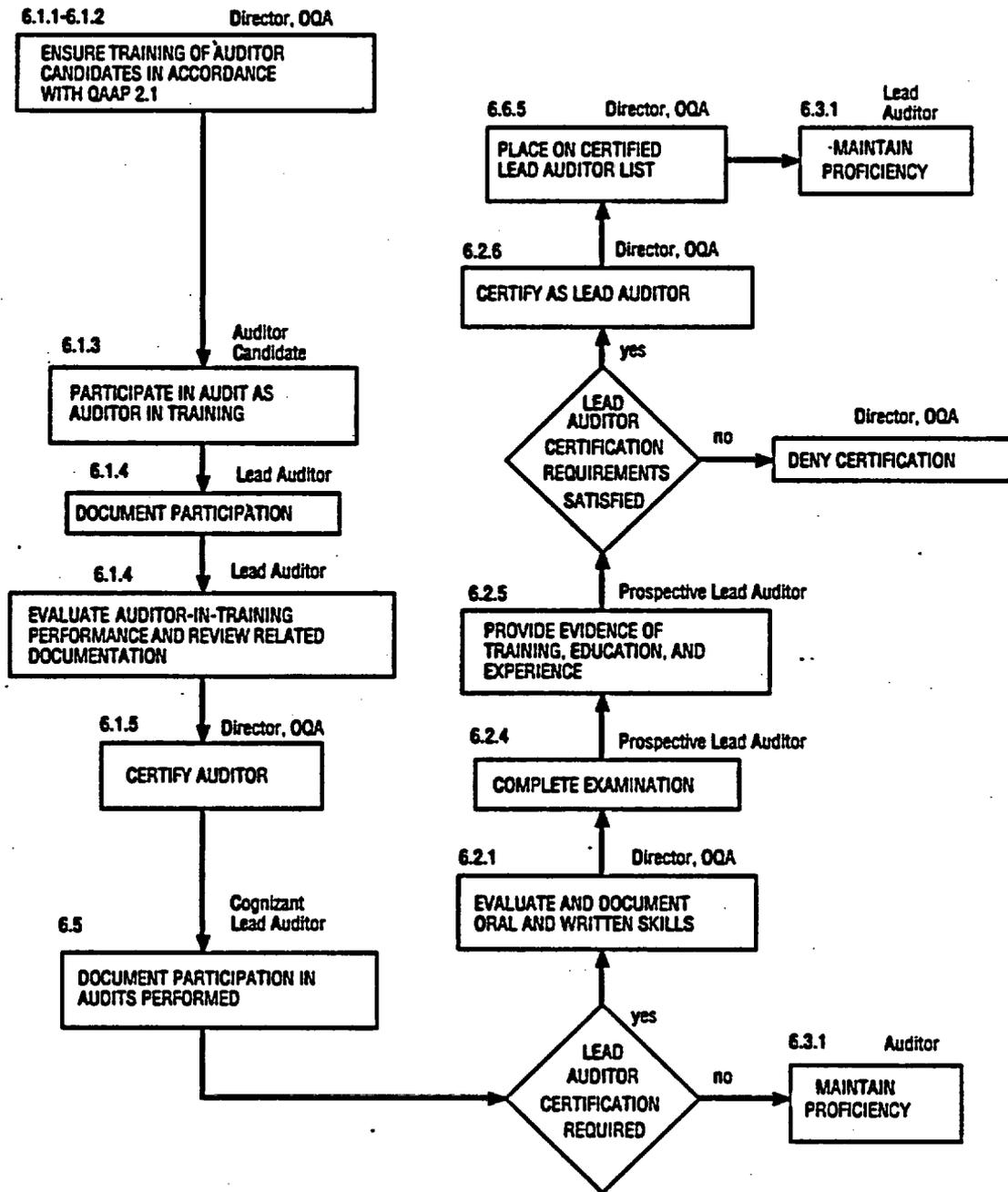
1. 10 CFR 50 - Appendix B - Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
2. 10 CFR 60 - Subpart G - Quality Assurance
3. 10 CFR 71 - Subpart H - Quality Assurance
4. 10 CFR 72 - Subpart G - Quality Assurance
5. ANSI/ASME NQA-1 - 1986, Quality Assurance Program Requirements for Nuclear Facilities
6. DOE 5700.6 - Quality Assurance
7. DOE/RW-0005 - Mission Plan
8. DOE/RW-0215 - Quality Assurance Program Description for the Civilian Radioactive Waste Management Program
9. DOE/RW-0214 - Quality Assurance Requirements for the Civilian Radioactive Waste Management Program
10. QAAP 18.1, Certification of Audit Personnel
11. QAAP 16.1, Corrective Action
12. QAAP 18.2, Audit Program

*Latest applicable revision



ATTACHMENT V

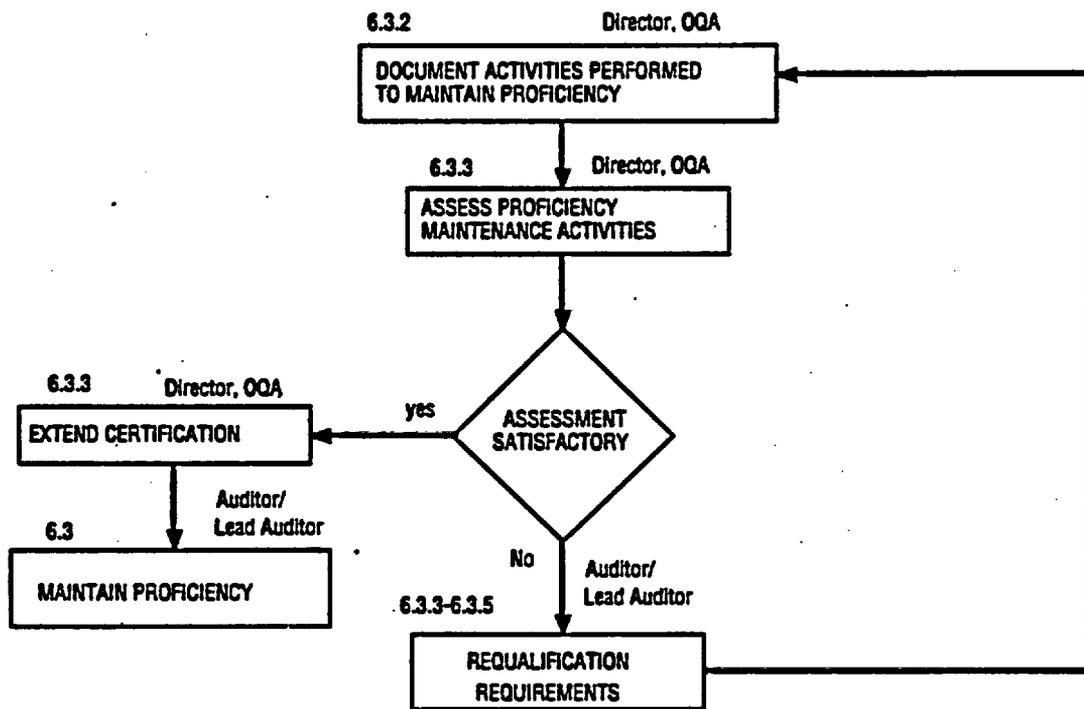
CERTIFICATION OF AUDIT PERSONNEL





ATTACHMENT V (cont'd)

AUDITOR/LEAD AUDITOR PROFICIENCY MAINTENANCE





ATTACHMENT V (cont'd)

QUALIFICATION OF TECHNICAL SPECIALISTS

