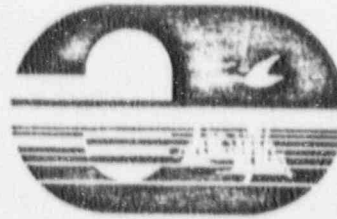


YANKEE ATOMIC ELECTRIC COMPANY



SEABROOK STATION

FIELD QUALITY ASSURANCE PROCEDURE

TITLE: Field Quality Assurance
Check Lists

NUMBER: 4

REVISION: 5

DATE:

PREPARED BY: F. W. Bean

DATE: January 27, 1977

APPROVED FOR USE: Walter J. Miller

2/23/77

YAEC QA MANAGER

REVISIONS

NO.	DATE	PREP. BY	APPROV. BY	NO.	DATE	PREP. BY	APPROV. BY
1	2/2/78	J. W. Singleton	W. J. Miller	9			
2	2/25/79	J. W. Singleton	W. J. Miller	10			
3	5/11/81	J. W. Singleton	<i>[Signature]</i>	11			
4	8/05/82	J. W. Singleton	<i>[Signature]</i>	12			
5	9/6/83	J. W. Singleton	<i>[Signature]</i>	13			
6				14			
7				15			
8				16			

FIELD QUALITY ASSURANCE

MANUAL AND PROCEDURE

PROCEDURE NUMBER 4

Record of Revision

Revision 1, change: Complete Re-write

Revision 1 has been reviewed and approved:

By: Kathy Mills Date: 2-2-78
Quality Assurance Manager

Revision 2, Change: Para. 2.1 changed "all" to "the" & other minor changes (1)
Annual review completed July 25, 1979.

Revision 2 has been reviewed and approved:

By: Kathy Mills Date: 7-31-79
Quality Assurance Manager

FIELD QUALITY ASSURANCE

MANUAL AND PROCEDURE 4

RECORD OF REVISION

Revision #3, May 27, 1981

I. General

A. Change Procedure Form

B. Renumbered Pages 1 thru 22

II. Specific Change:

A. Rewrite the following paragraphs:

Para. 2.1, 2.3, 2.4, 5.1.2, 5.3.5, 5.4.1, and 5.4.3

B. Rewrite sample attachment numbers attachment # 1, 4, 5, 6, and 7
Annual Review has been completed and changed
as required.

Revision 4 has been reviewed and approved:

By: Walter J. Smith
Quality Assurance Manager

Date: 5/27/81

FIELD QUALITY ASSURANCE

MANUAL AND PROCEDURE 4

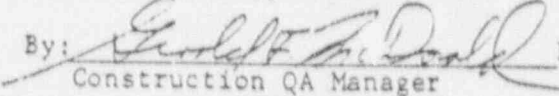
RECORD OF REVISION

Revision #4, August 5, 1982

1. Specific Change:

- A. Para. 5.3.3 added "Where a Master Check List is used in its entirety, only the Surveillance cover sheet is added to the Master Check List".

Annual Review Completed, Change 4
Reviewed and Approved

By: 
Construction QA Manager

Date: 8/12/82

CFQA MANUAL & PROCEDURE

PROCEDURE NUMBER 4

RECORD OF REVISION

Revision Number 5, 9/6/83

I. General Change - Revised title and references:

- A. Change Field Quality Assurance Group to Construction Field Quality Assurance Group.

II. Specific Change

- A. Rewrite para. 3.2.2, 3.2.3
- B. Revised para. 4.4
- C. Rewrite para's. 5.2.2, 5.2.7
- D. Delete Attachment 7.2
- E. Revise para. 5.3.3, 5.4.3, 7.0
- F. Revise Attachments 7.1, 7.3, 7.4, 7.5, 7.6, 7.7

Revision 5 has been reviewed and approved:

By: G.F. McDonald

Date: 9/6/83

CONSTRUCTION FIELD QUALITY ASSURANCE CHECK LISTS

1.0 PURPOSE

- 1.1 To establish the requirements and procedural methods for preparing, and controlling check lists to be developed and utilized by the CFOAG.

2.0 SCOPE

- 2.1 To provide a set of master check lists that include the requirements for construction activities affecting the quality of safety related structures, systems and components.
- 2.2 To provide a source for selecting characteristics in developing surveillance check lists which will be used in performing surveillance activities.
- 2.3 To provide current indices of Construction Field Quality Assurance Master Check Lists developed and referenced documents used.
- 2.4 To provide check lists that have unique numbering systems or codes compatible with the YAEQ/QAD computerized "Summary and Status of Corrective Action" for deficiencies.

3.0 GENERAL

3.1 Definitions

- 3.1.1 Characteristic - Any property or attribute of an item, process or service that is distinct, describable and measurable, as conforming or nonconforming to specified quality requirements. Quality characteristics are generally identified in specification and drawings which describe the item, process or service.
- 3.1.2 Quality Assurance - All those planned and systematic actions necessary to provide adequate confidence that an item or a facility will perform satisfactorily in service.
- 3.1.3 Surveillance - A review, observation or inspection for the purpose of verifying that an action is accomplished as specified.
- 3.1.4 Master Check List - A comprehensive list of attributes developed to cover each specific area of construction activity and to be used in selecting characteristics for developing surveillance check lists.
- 3.1.5 Surveillance Check List - A list of attributes taken from the Master Check List. The Surveillance Check List is developed to cover the specific area of construction activities being performed during a phase of construction.

3.2 Responsibilities

- 3.2.1 The Construction Field Quality Assurance Group personnel shall be responsible for the development of check lists.
- 3.2.2 The Construction Field Quality Assurance Discipline Supervisor or his designee shall be responsible for the review and approval of developed master check lists.
- 3.2.3 The Construction Field Quality Assurance Surveillance Supervisor or his designee shall be responsible for assuring that all master check list and referenced document indices are current and up-to-date.

4.0 REFERENCES

- 4.1 Appendix B to 10CFR50
- 4.2 ANSI N45.2 Series
- 4.3 Seabrook Station Quality Assurance Manual (YAEC)
- 4.4 Seabrook Station FSAR
- 4.5 Applicable Code Standards

5.0 PROCEDURE

5.1 General

- 5.1.1 A Master Check List is a predeveloped Check List covering the applicable attributes for a specific construction or Quality Assurance function. It may combine one or more requirements, such as an applicable criteria of 10CFR50, Appendix "B", an ANSI N45.2 section, the applicable Regulatory Guide, etc. Personnel developing Master Check List may elect at his discretion, single or multiple inclusions.
- 5.1.2 The Master Check Lists shall provide a list of characteristics available for selection in developing the surveillance check lists.
- 5.1.3 The Surveillance Check Lists shall be the working check lists that will provide documented evidence of all surveillance activities performed.

5.2 Preparation of Master Check Lists

- 5.2.1 Master Check Lists shall be developed to provide a complete listing of the requirements for specific safety related construction activities prior to the performance of those activities.

- 5.2.2 The Master Check Lists shall be developed by Construction Field Quality Assurance personnel and approved by the Construction Field Quality Assurance Discipline Supervisor.
- 5.2.3 Each Master Check List shall be comprised of characteristics selected by thorough review of the latest applicable documents (i.e. procedures, standards, specifications, drawings, referenced codes, etc.) for the specific activity.
- 5.2.4 The attributes that makeup a Master Check List may be organized and arranged in a sequential progression that coincides with the sequence of construction activities. This arrangement aids in the development of surveillance check lists.
- 5.2.5 Each characteristic shall have provisions in the right hand column of each page for reflecting the results of examinations by providing "Yes", "No" and "N/A" columns.
- 5.2.6 Normally the attributes of a Master Check List will be selected from more than one source. Each source and it's revision shall be listed on the Title Sheet. (See Attachment 7) It shall be the responsibility of the individual developing a check list to utilize one of the following methods of traceability from the check list characteristic to the reference document:
 - 5.2.6.1 Identify the source and paragraphs from which the attributes were extracted.
 - 5.2.6.2 Identify the source and paragraph from which a section of a check list was developed.
 - 5.2.6.3 Add a "Table of Contents" relating the sources with the specific pages in the more complex check lists.
- 5.2.7 The attributes that makeup a Master Check List shall be uniquely numbered and utilize the YAECS NSD Quality Assurance Department Procedure Q-113; Deficiency Coding System, in order to issue computerized "Summary and Status of Corrective Action". (See Attachmentd 7.3) Utilizing the deficiency code should facilitate nonconformances by a given contractor or for any given construction activity.
- 5.2.8 Each Master Check List shall include a Title Sheet. It shall have provisions for the title, check list number, signature of preparer, approval signature and date, revision blocks, and list of referenced documents, their revision and/or date and the specific section or paragraph used. (See Attachment 7.1)

- 5.2.9 The Master Check Lists shall be an internally controlled document. They shall be numbered and reflect the current revision and date. Each page shall be numbered for accountability and shall also include the check list number and revision in the upper right hand corner. When a revision occurs, the actual revised portion will be noted by an asterisk (*) placed in the right hand margin adjacent to the revision. In addition to the change being noted in the test, a "List of Changes" will be made a part of each revised Master Check List. (See Attachment 7.4) It shall be the responsibility of the Construction Field Quality Assurance Engineer to review revised reference documents and determine whether a Master Check List needs to be revised to incorporate these changes or not.

5.3 Preparation of Surveillance Check Lists

- 5.3.1 Surveillance Check Lists shall be developed to coincide with the progress of construction activities.
- 5.3.2 The Surveillance Check Lists shall be prepared by the individuals within the Construction Field Quality Assurance Group who will be performing the surveillance function.
- 5.3.3 Each Surveillance Check List shall be developed by selecting characteristics from a Master Check List. Where the Master Check List is used in its entirety, only the Surveillance cover sheet is added to the Master Master Check List. In order to maintain traceability, each characteristic on the Surveillance Check List shall carry the same number as on the Master Check List. Each characteristic shall have provisions in the right hand column for reflecting the actual results of examinations by providing "Yes", "No" and "N/A" columns.
- 5.3.4 It shall be the preparers' responsibility to assure that the characteristics are selected from the latest revision of the Master Check List in accordance with the index.
(See Attachment 7.5)
- 5.3.5 Surveillance Check Lists shall be developed and used to ensure depth and continuity of surveillance activities. These check lists should not restrict surveillance activities to only the characteristics as listed on the Surveillance Check List.
- 5.3.6 Surveillance Check Lists shall not be controlled documents requiring a check list number and revision. They may be changed each time they are used or the same check list may be used on several occasions depending on construction activities being covered and results on past surveillance activities.

5.4 Use of Surveillance and Master Check Lists

- 5.4.1 Master Check Lists are to be utilized as a source of attributes for the development of Surveillance Check Lists.
- 5.4.2 Surveillance Check Lists shall be utilized as working check lists.
- 5.4.3 Should "No" be checked for a certain characteristic on the check list, the deficiency code for the deficiency shall be entered in the "N/A" column.

6.0 CHECK LIST CONTROLS

- 6.1 An Index of Master Check Lists shall be developed. This index shall reflect the latest revision and date for each check list. The users of Master Check Lists shall ensure that the current issue is utilized. (See Attachment 7.3)
- 6.2 An Index of Referenced Documents shall be developed listing all references used in the development of Master Check Lists. The index shall reflect the latest revisions and/or dates of the documents. It shall also indicate the Master Check Lists for which they were utilized. (See Attachment 7.7)
- 6.3 A historical file shall be maintained for all obsolete Master Check Lists. This will provide an available source of the requirements that a contractor may have been committed to prior to any subsequent revisions to the referenced documents.

7.0 ATTACHMENTS

- 7.1 Title Sheet - Master Check List (sample 7.1)
- 7.2 Summary and Status of Corrective Action (sample 7.3)
- 7.3 List of Changes - Master Check List (sample 7.4)
- 7.4 Index of Master Check Lists (sample 7.5)
- 7.5 Surveillance Check List (sample 7.6)
- 7.6 Index of Referenced Documents (sample 7.7)