TEXAS UTILITIES GENERATING CO. CPSES	INSTRUCTION NUMBER	REVISION	ISSUE DATE	PAGE
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QUALIFICATION OF PROTECTIVE COATING INSPECTION PERSONNEL

PREPARED BY: _____ DATE 7/27/83

APPROVED BY: _____ DATE 7/27/83

APPROVED BY: _____ DATE 7/27/83

FOR INFORMATION ONLY

1.0 REFERENCES

1-A CP-QP-2.3, "Documentation Within QA/QC Personnel Qualification File"

1-B CP-QP-2.1, "Training of Inspection Personnel"

2.0 GENERAL

The purpose of this instruction is to define specific inspection functions and capabilities for protective coatings inspection personnel. TUGCO Quality Engineering will assure that the required training is accomplished. The requirements contained herein are not applicable to material, parts or components under the jurisdiction of the ASME Code, Section III, Division I.

3.0 INSTRUCTION

3.1 PROTECTIVE COATING QC TECHNICIAN INSPECTION FUNCTION

Inspection functions may include, but are not limited to, the following:

a. Performing surface preparation inspections

b. Perform surveillance of storage and handling of protective coating materials.

c. Performing protective coating mixing inspections

d. Performing in-process inspections of protective coating applications

e. Preparing reports that give the results of the above tests

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3.1.1 Training and Examination

Protective Coating QC Technicians shall have knowledge and skill to adequately perform their assigned task. The following shall be used as a guide for training and examination of Protective Coating QC Technicians:

a. Construction specifications and procedures

b. Basic inspection plans and procedures

c. Specific instructions, checklist and reports used in performance and documentation of inspections and tests

d. "Hands on" experience using inspection and test equipment

e. Familiarization with required measuring and test equipment

f. Minimum on the job (OJT) requirements are defined on the Protective Coating Technical Outline (Figure 1)

3.2 PROTECTIVE COATING QC INSPECTOR

Inspection functions may include, but are not limited to, the following:

a. May perform duties as a Protective Coating QC Technician in the activities for which qualified/certified

b. Prepares and interprets reports

c. Provides technical direction to Protective Coating QC Technician(s)

3.2.1 Training and Examination

Protective Coating QC Inspectors shall have sufficient knowledge and skill to adequately perform their assigned tasks. The following shall be used as a guide for training and examination of Protective Coating QC Inspectors:

a. Construction specifications and procedures

b. Basic inspection plans and procedures

c. Specific instructions, checklist and reports used in performance and documentation of inspection and test

d. "Hands on" experience using inspection and test instructions

e. Familiarization with required measuring and test equipment

f. Preparation and interpretation of test results.

3.3 TRAINING AND DOCUMENTATION

Qualification of Protective Coating inspection personnel shall be documented in accordance with Reference 1-B.

Protective Coating inspection personnel shall complete the General Training Outline (required by Reference 1-B) and the Protective Coating General Technical Outline (Figure I). On completion of the General Training Outline, the QC Supervisor or his designee shall interview the trainee and sign and date the Outline. In addition to the Protective Coating General Technical Outline, specific Quality Instructions have been developed by Quality Engineering, for each Protective Coating inspection activity. These form the basis of information required for a particular inspection function.

Protective Coating personnel are certified in a given inspection function/activity. A Technical Training Outline (Figure I) documenting qualification requirements for a given inspection function/activity will be completed and verified by the cognizant QA/QC Supervisor.

3.4 QUALIFICATION MATRIX (WORD PROCESSOR PRINTOUT)

A matrix shall be maintained by the Protective Coating QC Supervisor to identify the specific inspections an individual is qualified to perform. The specified inspections shall be indexed by the Quality Procedure or Instruction.

3.5 TRAINING CERTIFICATION

Inspection Certification per Reference 1-B certifying satisfactory completion of training in accordance with this Instruction will be placed in an individual file for each QC employee, signed by the Site QA Supervisor and Quality Control Supervisor or their designees.

Certification in a particular inspection function will be for a period of 1 year.

FIGURE 1

CPSES QUALITY CONTROL DEPARTMENT

PROTECTIVE COATING GENERAL TECHNICAL OUTLINE

NAME: _____ DATE COMMENCED: _____

A. Read and discuss the following documents with designated Lead Inspectors:

1. G&H Specification AS-31. "Protective Coatings"

Trainee	Date	Lead Inspector	Date

2. CP-QP-2.J, "Implementation of CPSES Program"

Trainee	Date	Lead Inspector	Date

3. CP-QP-3.0, "CPSES Site QA/QC Organization"

Trainee	Date	Lead Inspector	Date

4. CP-QP-11.4, "Inspection of Protective Coatings"

Trainee	Date	Lead Inspector	Date

5. QI-QP-11.4-1, "Inspection of Steel Substrate Surface Preparation and Primer Application"

Trainee	Date	Lead Inspector	Date

6. QI-QP-11.4-5, "Inspection of Steel Substrate Primer Repair and Seal and Finish Coat Application and Repair"

Trainee	Date	Lead Inspector	Date

7. QI-QP-11.4-8, "Inspection of Special Coating Operations"

Trainee	Date	Lead Inspector	Date

8. QI-QP-11.4-9, "Inspection of Shop Primed Equipment"

Trainee	Date	Lead Inspector	Date

9. QI-QP-11.4-10, "Inspection of Concrete Substrate Surface Preparation & Coatings Application & Repair"

Trainee	Date	Lead Inspector	Date

FIGURE 1 (Cont.)

PROTECTIVE COATINGS GENERAL TECHNICAL OUTLINE
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10. QI-QP-11.4-17, "Surveillance of Storage and Handling of Protective Coatings"

Trainee _____ Date _____ Lead Inspector _____ Date _____

11. QI-QP-11.4-20, "Final Inspection of Steel Substrate Finish Coats"

Trainee _____ Date _____ Lead Inspector _____ Date _____

12. QI-QP-11.4-21, "Final Inspection of Concrete Substrate Finish Coats"

Trainee _____ Date _____ Lead Inspector _____ Date _____

13. QI-QP-11.4-22, "QC Verification of Protective Coatings Unique Identification Number Transfer"

Trainee _____ Date _____ Lead Inspector _____ Date _____

14. QI-QP-11.4-23, "Reinspection of Coatings Applied on Steel Substrates"

Trainee _____ Date _____ Lead Inspector _____ Date _____

15. QI-QP-11.4-24, "Reinspection of Protective Coatings on Concrete Substrates for which Documentation is Missing or Discrepant"

Trainee _____ Date _____ Lead Inspector _____ Date _____

16. CCP-30, "Coating Steel Substrates Inside Reactor Building & Radiation Areas"

Trainee _____ Date _____ Lead Inspector _____ Date _____

17. CCP-30A, "Coating Steel Substrates Inside Reactor Building & Radiation Areas"

Trainee _____ Date _____ Lead Inspector _____ Date _____

18. CCP-40, "Protective Coating of Concrete Surfaces"

Trainee _____ Date _____ Lead Inspector _____ Date _____

19. CP-QP-13.0, "Control of M&TE"

Trainee _____ Date _____ Lead Inspector _____ Date _____

FIGURE 1 (Cont.)

PROTECTIVE COATINGS GENERAL TECHINICAL OUTLINE
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20. CP-QP-15.0, "Tagging System"

Trainee _____ Date _____ Lead Inspector _____ Date _____

21. CP-QP-16.0, "Nonconformances and Deficiencies"

Trainee _____ Date _____ Lead Inspector _____ Date _____

22. CP-QP-18.0, "Inspection Report"

Trainee _____ Date _____ Lead Inspector _____ Date _____

B. Perform a minimum of 100 hours "on-the-job" training in this activity.

QC Supervisor _____

C. Demonstrate proficiency in performing inspection.

QC Supervisor _____

D. Demonstrate proficiency in completing the inspection checklist(s).

QC Supervisor _____

E. Attend formal training session for this activity.

QC Supervisor _____

F. Examination completed.

Score: Concrete _____

Steel _____

Backfit _____

QC Supervisor _____

Comments: _____

Training Completed: _____ QC Supervisor _____ Date

TEXAS UTILITIES GENERATING COMPANY

OFFICE MEMORANDUM

To Historical File Glen Rose, Texas 7-23-84

Subject Re-numbering/Deletion of Procedures/Instructions

This Procedure/Instruction CP-QP-15.4 has been deleted as of this date.

Lisa M Bielefeldt

HISTORICAL FILE

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3.2 DOCUMENT REVIEW

Design change documents requiring verification shall be reviewed to ascertain if incorporation into the physical plant has taken place. The review shall be accomplished under the direction of the Quality Assurance Specialist Supervisor or his designee. The review process will utilize records found in the Permanent Plant Record Vault (PPRV) such as Inspection Reports, computer data, Operation Travelers, Item Removal Notices, cable pull cards, etc. The results of the review shall indicate whether all attributes of the design change have been complied with ("closed") or if further inspection is required ("open").

3.3 DESIGN CHANGE VERIFICATION

When the review, as denoted in paragraph 3.2, indicates further inspection is required, the Design Change Verification Group (DCVG) shall transmit a copy of the "open" design change document to the appropriate inspection group for field verification. Upon receipt of a "Sat" Inspection Report the DCVG shall "close" the design change document. Quality Engineering personnel shall be utilized when necessary to assist the DCVG for resolution of design change incorporation problems.

The results of the design change document search shall be documented on a data sheet in preparation to entering the accumulated data into the appropriate computer data base.

3.4 DATA TRACKING FILE PREPARATION

Each design change document type (DCA and CMC) shall be tracked through a computer data file. Each file shall list the individual document number, affected hardware and closing reference documents, as well as other pertinent data. These files shall be created such that the files may be sorted in various ways and to facilitate speedy recall of data.

Each file shall be kept current by continually adding to the data file newly issued or revised design change document data.

Working File, Coatings #1 and #6

Letters in re Allegation #21

Liner Adhesion Tests

Concrete DFT's + Adhesion tests

Miscellaneous Steel Todka Tests

Audit of Miscellaneous Steel

Coatings Exempt Log

Audit of SG #1 + #4 Concrete

Early Data on DFT's + Adhesion Tests on Liner and Concrete

SS Kirslis

Audit of Miscellaneous Steel

Early Data on DFT's +
Adhesion Tests on
Liner and Concrete

DFTA + Pull Tests on

Audit of Misc Steel

42/252 DFT = 15.5%

39/252 = NCR-C-83-03105

PCR	Addition	DFT	Qua	
2137	—	(2 HP 1 laur) 6	<10	
2145	-30 400	(1 HP laur) 6	<5	"
2700	—	(1 HP laur) 6	"	"
2101	-30 250	(2 HP laur) 6	<5	"
2102	—	— 6	<5	NCR-C-81-01371 R
2103	-30 200	(1 HP laur) 6	<10	03105
2105	-30 200	1 HP laur 6	<5	"
2515	-30 — 225 (2-3-83) —	2 — 6	?	NCR-C-84-01242 DCA 1-14-85
2106	—	— 6	<5	
2107	—	(1 HP laur) 6	<5	3105
2109	-30 250 (12-16-82 2324) —	1 HP 1 laur 6		"
2162	-30 300 —	— 6		
2164	-30 — — 200	— 6		
2165	— 300 100 → 100 150	— 6		"
2166	-30 -30 225 200 300	— 6		C-83-03105
2167	(2325, 12-16-82) -30 250 — —	— 6		"
2168	-30 300 — 250	— 6		"
2169	-30 300 —	— 6		"
2170		— 6		"
2171	— -30 2324 12-17-82 225	(1 laur) 6		
2178	—	— 6	<5	
2176	—	— 6	"	
7	—	— 6	<10	"
6	-30 2324, 12-17-82 225 225 275	— 6		
5	-30 200	— 6	<5	"
4	-30 225 VALIDATION #	1 dig 6	<5	03103 03104
3	-30 300	(2 laur) 6	<5	"
2	-30 300	1 laur 6	<10	"
2181	—	— 6	<5	03105
2150	-30 250	— 6		"

Audit of Wire Check (P.2)

PCR	Addition	DFT	Ohms	Disposition
1299	—	—	6	<10	C-82-07103 #1
2141	300 -20 --	(2 hour)	6		03105
0	375 -20	(3 hour)	6	<10	"
2139	—	"	6	<10	"
8	-30 2341, 12-17-82 300 - 225	"	4		"
2157	350 -30	—	4	<10	"
9	300 -30	— ?	6	<5	"
2160	— — —	—	6	?	"
1	— — —	—	4		"
2	— — —	—	6		"
2161	— — —	(2 high)	6	Use as is	03105
2	— — —	(4 high)	6		"
1742	NA	inaccessible (tipping conduit supports)			
1		"			C-81-1271R
0		"			"
1739		"			"
8		"			"
7		"			"
1745		"			"
6		"			"

42 PCRs 16 failed readings out of 78