

---

TEXAS UTILITIES GENERATING COMPANY  
COMMANCHE PEAK STEAM ELECTRIC STATION

PRELIMINARY COATING EXEMPTION LOG  
SEPTEMBER, 1983

GIBBS & HILL, Inc.  
NEW YORK, NEW YORK

8502210284 850213  
PDR ADOCK 05000445  
S PDR

INTRODUCTION

The attached log includes the following items:

1. Coating which did not meet QC requirements as documented by DCAs.
2. Coatings which did not meet QC requirements for primer documented by PCRs (back-fit inspection reports).
3. Coatings applied to equipment installed inside which does not meet the requirements for coatings to be used inside containment.

Please note the following concerning the above:

- Regarding Item 1: In most cases the DCA established the area of unsatisfactory coating; in other cases a conservative estimate was made.
- Regarding Item 2: Liner-plate PCRs were not included. The field should confirm if any of the noted areas have been repaired to a satisfactory condition. Final PC inspection reports should be used to close out the violating PCRs.
- Regarding Item 3: Westinghouse equipment is not included. Estimates of mil thickness are conservatively based on the generic type of paint used.

This log is preliminary and represents a starting point for the ongoing logging of protective coating deviations by field personnel. It is felt that sufficient information is presented and that the field should modify the format to suit their needs.

SUMMARY

Per Table 1, the total area and volumes of unsatisfactory coatings are as follows:

	<u>Area</u> <u>Square Feet</u>	<u>Volume</u> <u>Cubic Feet</u>
Category 1	5,100	4.25
Category 2	1,800	1.50
Category 3	<u>4,500</u>	<u>1.12</u>
	11,400	6.87
Contingency (10 Percent)	<u>1,100</u>	<u>.7</u>
Total	12,500	7.6

The area of unsatisfactory coating represents less than 4 percent of the coated surface inside containment. The potential volume of coating represents a film of 0.3" thickness across the available 300 square feet of the containment recirculation sump screen area.

TABLE 1  
CATEGORY 1

Total Unsatisfactory Area:

Structural, Liner-Plate	-	2900
Other	-	800
Electrical	-	330
Mechanical	-	<u>1050</u>
		5080 ft <sup>2</sup> ,
		use 5100 ft <sup>2</sup>

Total Volume of Unsatisfactory Coating:

Basis: 10-Mil Thickness:

$$5100 \text{ ft}^2 \times \frac{0.010 \text{ inch}}{12 \text{ inch/ft}} = 4.25 \text{ ft}^3$$

TABLE 1  
CATEGORY 2

Total Unsatisfactory Area:

Miscellaneous Steel	-	1600
Pipe Supports	-	70
Cable Tray Hangers	-	130
Conduit Supports	-	<u>40</u>
		1840 ft <sup>2</sup> ,
		use 1800 ft <sup>2</sup>

○ Total Volume of Coating:

Basis: 10-Mil Thickness:

$$1800 \text{ ft}^2 \times \frac{0.010 \text{ inch}}{12 \text{ inch/ft}} = 1.50 \text{ ft}^3$$

TABLE 1  
CATEGORY 3

Total Unsatisfactory Area:

Electrical - Lighting Panels	-	200
Light Fixtures	-	1000
Light Fixture Reflectors	-	2500
Mechanical - Piping	-	60
Valves	-	100
Tank	-	100
Pump Motors	-	50
Other Equipment	-	300
Instrumentation	-	185
		<hr/>
		4495
		Use 4500 sq. ft.

Total Volume of Unsatisfactory Coating:

Basis : 3.0-Mil Thickness (assumed standard industrial grade enamel)

$$4500 \text{ sq. ft.} \times \frac{0.003 \text{ inch}}{12 \text{ inch/ft}} = 1.12 \text{ ft}^3$$

---

-6-

CATEGORY 1  
Detailed Listing (2 Sheets)

CATEGORY 1

(Coatings which do not meet QC requirements as documented by DCAs.)

<u>DCA No/ Rev. No.</u>	<u>Description of Item</u>	<u>Unsatisfactory Area (ft<sup>2</sup>)</u>	<u>Remarks</u>
✓ 13156/6	Liner-Plate	1700	St
✓ 6230/0	Liner-Plate	350	St
✓ 6114/0	Liner-Plate	100	St, 1
✓ 5975/0	Liner-Plate	425	St
✓ 5482/0	Liner-Plate	125	St
✓ 4640/0	Liner-Plate	100	St, 1
✓ 6174/0	Liner-Plate	100	St, 1
✓ 13156/5	Junction Box Support	20	El, 1 (assumed as small item)
✓ 2951/0	11 Lighting Panels	110	El, 1 (assumed 10 ft <sup>2</sup> each)
✓ 893/0	Electrical Panel Boxes on Polar Cranes	100	El, 1
✓ 5002/0	Electrical Penetration Flanges	100	El, 1
✓ 7973/1	Fans (4)	40	Me, 1 (assumed 10 ft <sup>2</sup> each)
✓ 4926/1	6 Preaccess Filtration Units	100	Me, 1
✓ 9045/0	Work Area between HVAC Ducts and Concrete	100	St, 1
✓ 8685/0	HVAC Duct Section Em- bedded in Concrete	100	Me, 1
✓ 1836/1	Elevator Enclosures	100	St, 1
✓ 7571/0	Torque-Lift Equipment	100	Me, 1
✓ 9366/0	Reactor Equipment Hatch Cover	100	Me, 1
✓ 7864/0	Containment Side Personnel Air-Lock	100	Me, 1



CATEGORY 1

2  
M/G  
Yield  
Count

M/G  
Yield  
Count

<u>DCA No/ Rev. No.</u>	<u>Description of Item</u>	<u>Surface Area (ft<sup>2</sup>)</u>	<u>Remarks</u>
-15578/0	Block-out	100	St, 1
✓ 5504/0	Areas Behind CCW Drain Tank	100	St, 1
-11016/0	Sump Pit	100	St, 1
- 7859/0	Handrails, Platform Sup- ports, Ladders and Embed- ments (Room 753)	100	St, 1
-10786/0	Pipe Hangers	15	St
- 9642/1	Pipe Hangers	70	St
-13156/5	Pipe Hangers	20	St
- 9231/0	Valve Operator	10	Me
- 5195/0	Valves Attached to 4-in. line	100	Me, 1
✓ 16151/0	Universal Joints for Valve Reach Rods	100	Me, 1
-9885/0	Pipe Stubs (1/4-in. to 1/2-in. Diameter, 4-in. to 8-in. long)	100	Me, 1
- 4966/0	Reactor Vessel Column Support	100	St, 1
- 6384/0	Clevises and U-Clamps Under 2 in.	100	Me, 1
- 6236/0	Brackets and/or Bolts	18	Me
- 5092/0	Brackets and/or Bolts	10	Me
- 9927/0	Brackets and/or Bolts	10	Me, 1 (assumed small items)
-9360/0	Brackets and/or Bolts	50	Me
✓ 8640/0	Brackets and/or Bolts	12	Me

Notes:

- 1 - Area assumed as noted or 100 square feet used.
- St - Structural item.
- El - Electrical item.
- Me - Mechanical item.

CATEGORY 2  
Detailed Listing (8 Sheets)

CATEGORY 2

(Coatings which do not meet QC requirements for primers as documented by PCRs.)

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatisfactory Area</u>	<u>Remarks</u>
633	Rigging Clip El 1046 AZ-222	2	1,4,5
808	PC Bracket El 939-949 A-124	50	2,4
809	PC Bracket El 939-949 AZ-150	75	2,4
811	PC Bracket El 939-949 AZ-291	4.5	3
858	Terminal Box "E" Seal Table Room, El 832 ft-6 in	2	1,4
994	OP Beam 17-505-AF1 El 841 (C-1) SG No. 1	10	2,4
997	OP Beam 19-505-D1 El 841 (C-3) SG No. 3	20	2,3
1003	Platform No. 9 El 883 AZ-135	10	2,3
1005	Ladder to Platform No. 9	10	2,3
1076	Instrument Cover El 808 Rad 22 AZ-91	0.2	3
1140	Stairway Riser, Outer El 808-815 AZ-137-148, Rad 66'-6"	20	2,4
1141	Stairway Riser, Inner 808-815 AZ-137-148, Rad 66' 6"	20	2,4
1166	Platform Channel El 826 AZ-30-35 Rad 65'	25	2,4
1179	RC Pump Support (C-1) El 812 Rad 32' Loop No. 1	10	2,4,5
1249	SG Support Column (C-2) El 812	10	2,4,5
1258	Pipe Whip Restraint El 812 A200 (C-2)	100	2,3
1271	RC Pump Support (C-2) El 812 AZ-215	10	2,4,5
1333	SG Lateral Support El 834 C-3	25	2,4
1400	RC Pump Sway Support E. 830 (C-3)	25	2,4
1415	Structural Steel Brace, El 814 ft, 6 in between RCP Supports and SG (C-3)	10	2,4,5

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatis- factory Area</u>	<u>Remarks</u>
1430	SG Support (C-3) El 812	15	2,4
1432	RCP Sway Structure (C-4) El 830	0.5	1,4,5
1437	Pipe Whip Restraint El 827 (C-4) West Wall	10	2,4,5
1493	PC Runway Support Bracket 940-950 AZ-47	10	2,4,5
1495	PC Runway Support Bracket El 948-950-AZ-218	50	2,4

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatisfactory Area</u>	<u>Remarks</u>
1497	PC Runway Bracket, A-2	40	2,4
1498	PC Runway Bracket, AZ-349	50	2,4
1499	PC Runway Bracket, El 948 ft-3 in to 950 ft-8 in AZ-339	50	2,4
1521	PC Runway Bracket AZ-323	30	2,4
1522	PC Runway Bracket AZ-311	20	2,4
1529	PC Runway Bracket AZ-259	30	2,4
1592	PC Runway Bracket AZ-233	30	2,4
1600	PC Runway Girder AZ-278 to 291	11.7	1,3
1602	PC Runway Girder AZ 304 to 317 Instrument Plate SW Wall	4	1,3
1616	Valve Room El. 824 ft, 4 in.	5	1,3
1622	Neutron Detector Positioner El 812 ft, 6 in (C-2)	5	2,4
1628	Neutron Detector Positioner El 812, 6 in (C-3)	5	2,4
1635	Neutron Detector Positioner El 812, 6 in AZ-90	5	2,4
1643	PC Runway Bracket 948 ft, 5 in to 950 ft, 8 in AZ-169	50	2,4
1645	Lighting Conduit Junction Box Support El 949 AZ-165	0.8	1,3
1682	PC Support Girder El 947 ft, 6 in to 950 ft, AZ-188 to 201	1.9	1,3,5
1749	Lighting Conduit Junction Box Support El 948 ft, 6 in, AZ345	0.8	1,3
1756	Lighting Conduit Junction Box Support El 948 ft-6 in AZ-358	0.8	1,3
1795	PC Runway Girder El 947 ft-6 into 950 ft, AZ48 to 111	6	1,3
1802	PC Runway Bracket El 948 ft, 6 in to 951 ft, 2 in, AZ-53	50	2,4

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatis- factory Area</u>	<u>Remarks</u>
1804	PC Runway Bracket El 948 ft, 6 in, to 951 ft, 2 in, AZ-143	50	2,4
1805	PC Runway Bracket El. 948 ft, 6 in, to 951 ft, 2 in, AZ-131	50	2,4
1808	PC Runway Bracket El. 948 ft, 6 in, to 951 ft, 2 in, AZ-156	50	2,4
1894	Platform Support El 870 ft, 6 in AZ-70	13	2,3

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatisfactory Area</u>	<u>Remarks</u>
1901	Pressurizer Room Grating Support El 861	5	2,4
1909	Pressurizer Room Grating Support El 861	5	2,4
1940	Pipe Whip Restraint No. FW-1-018-901/A/CS7	10	2,4,5
1961	Instrument Stand in Q4, El 861 ft, 4 in	5	1,4
2003	Embedded Support Operating Platform El 822	5	1,4
2143	Pressurizer Room Operating Platform El 886 ft, 4-1/2 in	5	1,4
3551	PC Bottom of Girder and Catwalk	25	1,3
3554	PC Trolley	100	2,4
3557	PC End Girder Support South	15	3
3558	PC Northwest Wheel Assembly	10	3
3559	Hoist Support (Room 156 Cavity Entrance)	90	2,4
3581	Outer Side of PC Main Girder	5	1,3,5
3633	PC Main Girder inside (East Girder)	4	1,3,5
3634	PC Main Girder inside (West Girder)	4	1,3,5
3635	Wheel Assembly PC Northeast	20	3
3636	Bottom and Back-End Support	36	3
3639	North End East Girder Bottom	8.3	3
3641	PC Trolley Bottom Southwest inside Wheel Assembly	18	3
3642	PC Bottom Catwalk on Southeast End of Trolley	20	2,4
3644	PC Bottom Catwalk West Side of Trolley	80	2,4
3667	South Rail Guide in West Girder	40	2,4
1626	Neutron Detector Positioner El 812 ft, 6 in	5	2,4

CATEGORY 2

CTH = CABLE TRAY HANGERS

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatis- factory Area</u>	<u>Remarks</u>
47	CTH No. 233 E1 808	5	2,4
50	CTH No. 237 E1 808	1.5	2,3
62	CTH No. 5826 E1 808	1.5	2,3
66	CTH No. 5856 E1 808	5	2,4
67	CTH No. 5815 E1 808	1.25	2,3
70	CTH No. 5845 E1 808	5	2,4
71	CTH No. 5846 E1 808	0.5	2,3
72	CTH No. 5849 E1 808	0.75	2,3
82	CTH No. 5834 E1 808	1	2,3
113	CTH No. 5819 E1 808	5	2,4
114	CTH No. 5853 E1 808	5	2,4
129	CTH No. 5850 E1 808	10	2,4
255	CTH No. 1227 E1 808	3	2,3
264	CTH No. 1223 E1 808	3	2,3
279	CTH No. 1233 E1 808	6	2,3
289	CTH No. 46 E1 808	1.2	2,3
1240	CTH No. 5727 E1 832	5	2,4
1241	CTH No. 5728 E1 832	5	2,4
1243	CTH No. 5802 E1 832	5	2,4
1264	CTH No. 5729 E1 832	5	2,4
1268	CTH No. 5795 E1 832	5	2,4
1290	CTH No. 5985 E1 832	1.25	2,3
1291	CTH No. 5786 E1 832	1.2	2,3
1340	CTH No. 5756 E1 832	5	2,4
1359	CTH No. 5752 E1 832	1	2,3
1362	CTH No. 5740 E1 832	2.75	2,3
1735	CTH No. 2360 E1 847	1	2,3
1734	CTH No. 2359 E1 847	5	2,4
1774	CTH No. 2362 E1 849	5	2,4
1816	CTH No. 1229 E1 860	2	2,3
1839	CTH No. 4737 E1 868	5	2,4
1842	CTH No. 4740 E1 867	10	1,4
3501	CTH No. 10137 E1 842	1.8	2,3
3503	CTH No. 9996 E1 832	5	2,4



CATEGORY 2

PS = Pipe Support Hangers

<u>PCR No.</u>	<u>Description of Item</u>	<u>Total Unsatisfactory Area</u>	<u>Remarks</u>
147	PS No. DD-1046009C45R	5	2,4
505	PS No. CT-1-090-015-C92R	2.7	2,3
534	PS No. CT-1-091-002-C92R	2.7	2,3
536	PS No. CT-1-032-002-C92R	50	2,4
547	PS No. CT-1-032-012-C92R	5	2,4
579	PS No. CT-1-068-024-C92R	5	2,4
565	PS No. CT-1-091-024-C92R	0.7	2,3,5
588	PS No. CT-1-068-003-C92R	5	2,4
593	PS No. CT-1-068-008-C92R	5	2,4
596	PS No. CT-1-068-011-C92R	5	2,4
599	PS No. CT-1-068-014-C92R	5	2,4
825	PS No. CC-1-205-011-C53R	5	1,4
989	PS No. FW-11809-C72K	0.5	2,3,5
1532	PS No. CT-1-013-406-C82R	1.75	2,3
1572	PS No. FW-1-096-023-C62R	1.5	1,3
1724	PS No. HB-223-VB-1-058	5	1,4
1725	PS at EL-787, AZ-295	5	1,4
1727	PS No. HD-24-4-VD-1-054	5	1,4
2057	PS No. CT-1-053-402-C62K	1.2	1,3

CATEGORY 2

CS = Conduit Supports

<u>PCR No.</u>	<u>Total Area</u>	<u>Total Unsatis- factory Area</u>	<u>Remarks</u>
243	CS No. C-14K10129-2 El 808	5	2,4
263	CS No. C-14W18090-5 El 808	5	2,4
410	CS No. C-12K11565-4 El 808	5	2,4
660	CS No. C-14012624-9 El 1022	2.5	2,4
671	CS No. E-7906 El 1023	5	2,4
707	CS No. 13868-13 El 905	10	2,4
1763	Lighting Conduit Support El 984, AZ-22	0.25	2,3,5
2104	CS No. 07299-01 El 832	5	2,4
2171	CS No. 053524 El 832	2.5	2,4
2172	CS No. C14K14840-2 El 832	5	2,4
2173	CS No. C12K11910-1	2.5	2,4
2174	CS No. 09007-1	1.25	---

Notes:

1. Area obtained from PCR.
2. Area assumed or 100 square feet used for miscellaneous steel.  
Area assumed or 10 square feet used for pipe supports.  
Area assumed or 10 square feet used for cable tray hangers.  
Area assumed or 5 square feet used for conduit supports.
3. Unsatisfactory area obtained from PCR.
4. Unsatisfactory area (percent) estimated from PCR.
5. Less than 10 percent of total area.

---

CATEGORY 3

Detailed Listing (3 Sheets)

CATEGORY 3

Sheet 1 of 3

Electrical Equipment

<u>Description</u>	<u>Item Designation</u>	<u>B/M No.</u>	<u>Area, Sq. Ft.</u>
Lighting Panels & Contactors	SC3	L45 G4	200 (total)
	C2 & C3	L56 V	
	C5 & C6	L56 W	
	C9 & C10	L45 H1	
	SC4	L45 G5	
	C11 & C12	(By Field)	
	SC2	L45 G3	
	C1, C4, C7, & C8	L56 X	
	DCC1	L45 C1	
	SC1	L57 C	
	C1 thru C4	L45 U	
	Lighting Fixtures	C1/C1A	
C3		L56 L	
C4		L45 M	
C6/C6A		L45 N	
C7/C7A		L45 P	
C8/C8A		L45 Q	
C9		L45 R	
C10		L45 S	
C11		L45 Y	
B		L45 T	
E 15		L42	
Light Fixture Reflectors		---	---

CATEGORY 3

Sheet 2 of 3

Mechanical Equipment

<u>Description</u>	<u>Designation</u>	<u>Item No.</u>	<u>Area, Sq. Ft.</u>	
Fire Protection Piping	11' -6" Dia.	NA	2	59
	60' -4" Dia.	NA	6	
	150' -3" Dia.	NA	12	
	200' -2 1/2" Dia.	NA	13	
	500' -2" Dia.	NA	26	
	7' -1 1/1" Dia.	NA	1	
			60 (total)	
Hose Station Cabinets	11 - 3'x3'x8"	NA	100	
Misc. HVAC Equipment	None	NA	50	
CCW Drain Tank	Steel Tank	CP1-CCATDT- 02	100	
Pump Motors	Sump Pump Motors	CP1-CCAPDP- 03, 04	50	
		CP1-WPAPCS-01 thru 04		
		CP1-WPAPRS- 01, 02		
	Skimmer Pump Motor	CP1-SFAPRS-01		
Valves	Misc. Small Valves	NA	100	
Misc. Mech. Equipment	None	NA	150	

Instrumentation

<u>Item Description</u>	<u>Designation</u>	<u>Item No.</u>	<u>Area, Sq. Ft.</u>
Switches	51 at 0.5 sq. ft.	NA	16
Transmitters	28 at 2.0 sq. ft.	NA	56
Indicators	5 at 0.5 sq. ft.	NA	3
Valve Operators	50 at 2.0 sq. ft.	NA	100



PROTECTIVE COATINGS EXEMPT LOG

ENTRY NO	ITEM OR AREA	COATING SYSTEM	SQ. FT.
1	Portions of Hoistlers (pipe, cable trays, and whip extensions) (TUBCO MEMO QTR-4/16) Work 10/4/82 Unit I	inorganic zinc - phenolic epoxy	4325
2	Portions of Equipment (cranes, tanks, pumps, missile structures, etc) Unit I (TUBCO MEMO QTR-4/16) Work 10/4/82	inorganic zinc - phenolic epoxy	1730
3	Portions of Conduit Support Unit I (TUBCO MEMO QTR-4/16) Work 10/4/82	inorganic zinc - phenolic epoxy	1925
4	Portions of Miscellaneous Steel/Unit I (Inch Nails, Bolters, etc) (TUBCO MEMO QTR-4/16) Work 10-4-82	inorganic zinc - phenolic Epoxy	125
5	Category 1 from Gibbs still report (attached) dated 10/12/82 - Unit I - Coatings that do not meet AC requirements permet Check 10/12/82 TUBE 11/7/82	inorganic zinc - phenolic epoxy	5100
6	Category 3. Edna Sibbs & Hill report dated 10/12/82 Unit I attached. that does not meet AC requirements permet Check 10/12/82 TUBE 11/7/82	unknown	4500
7	11/12 Unit Assembly for Fuel Room Handling CRANE Unit 1 - 20700 - 11/7/82	unknown	40

11/15



# PROTECTIVE COATINGS EXEMPT LOG

ENTRY N <sup>o</sup>	ITEM OR AREA	COATING SYSTEM	SQ. FT.
8	Liner P. Coatings, .5 MIL Primer, AZ 9L°-9B° @ EL 1055'-1091' Re. FER # 00679	Catholine CZ11 w/ Catholine 305 Topcoat.	1.5
9	Liner P. Coatings, 1.0 <sup>mil</sup> Primer, AZ 220°-250° @ EL 1040'-1061', RE. FER. 00577	Catholine CZ11 Primer w/ Catholine 305 Topcoat.	7.5
10	Liner P. coatings, .5 MIL Primer, AZ 227°-230° @ EL 1044'-1045'-L" RE. FER. 00630	Catholine CZ11 Primer w/ Catholine 305 Topcoat	4.5
11	Liner P. coatings, .5 MIL Primer, AZ 225°-227° @ EL 1045'-L" - 1046'-L". RE. FER. 00630	Catholine CZ11 Primer w/ Catholine 305 Topcoat	2.0
12	Liner P. coatings, .5 MIL Primer, AZ 304°-306° @ EL 1048'-L" - 1051', RE. FER. 00637	Catholine CZ11 Primer w/ Catholine 305 Topcoat	7.0
13	Liner P. coatings, .5 MIL Primer, AZ 21°-24° @ EL 1044'-L" - 1047'-L". RE. FER. 00690	Catholine CZ11 Primer w/ Catholine 305 Topcoat	9.0
14	Liner P. coatings, 1.0 MIL Primer, AZ 290°-300° @ EL 1053'-1054'. RE. FER. 00617	Catholine CZ11 Primer w/ Catholine 305 Topcoat	7.5
15	Liner P. coatings, .5 MIL Primer, AZ 267°-271° @ EL 1038' to 1042'. Re FER. 00631	Catholine CZ11 Primer w/ Catholine 305 Topcoat.	16.0
16	Liner P. Coatings, .5 MIL Primer, AZ 288°-295° @ EL 1047'- 1049'. RE. FER. 00636	Catholine CZ11 Primer w/ Catholine 305 Topcoat	22.0
17	Liner P. coatings, .5 MIL Primer, AZ 272°-274° @ EL. 1039'-1042'. RE. FER. 00636	Catholine CZ11 Primer w/ Catholine 305 Topcoat	60.0
18	Liner P. coatings, .5 MIL Primer, AZ 275°-276'-30' @ EL 1030'-1044'. Re. FER. 00636	Catholine CZ11 Primer w/ Catholine 305 Topcoat	21.0
19	14 Above sleeve Field Above stubs and weld holes on MAB 0574' DCA at EL 902'	catholine 191 Primer w Catholine 305 Top coat	1.0

# PROTECTIVE COATINGS EXEMPT LOG

ENTRY NO	ITEM OR AREA	COATING SYSTEM	SQ. FT.
20	portals 2' inside shell floor units see also CBA-00091	Carboline CZ-11 primer w/ Carboline 305 Topcoat	0.25
21	26 Tone deep dips on base plate Unit I approx EL 10.27' Re NR CBA 0101C	Carboline 191 primer w/ Carboline 305 Topcoat	39.0
22	MAGNETIC CYLINDER UNIT (TDSX-F115CMC-01 EL 8.60'-0" RE. DCA 17142	AMORPH DLG / NAFKON 1060 / PHENOLINE 305 TOPCOAT IMPERIAL NUTEC 115 / 111 / 1201	500 <sup>sq</sup> 2300 6.0
23	FLOOR COATING APPLIED W/ MINIMUM 7 DAY DRY TIME EITHER THAN 28 DAY - AZ 300 @ EL 205'-9" RAD 59% TO 612" AZ NOTED IS 4 - BE RE TRAILER # III-003422 IRMS CHECKER JL ON UNIT 1 POLAR CRANE <del>AREA</del>	CZ II PRIMER W/ PHENOLINE 305 TOPCOAT	2,400.0
24	TRASH COMPACTOR REST #CPI-LJBSABW-DI	TOUCH UP VENTURE COAT (UNICERT) W/ 191/305 SYSTEM	98.0
25	COATINGS ON POLAR CRANE GIRDERS (BEHIND) BACK SIDE NEXT TO LINER, AREA OF BUS BAR ASST & GARDER SUPPORT BRACKETS (REC DCA 3270)	CZ II PRIMER W/ PHENOLINE 305 TOPCOAT	2,700.0
26	COATINGS APPLIED TO THE 8 INSPECTION CHAMBERS UNIT 1 @ ELEVATION 824'-8.52' REFERENCE DCA 60114 R1	CARBOLINE CZ II PRIMER W/ PHENOLINE 305 TOPCOAT, TOUCH UP W/ CARBOLINE 191 PRIMER & 305 TOPCOAT.	3000.0
27	NUMBER COATINGS IN AREA OF LOCK LOIRE TRAPS= SMA 4, 2, 01, 03, 10; SMA 4, 2, 01, 03, 10. REVERSE DCA 20127	CARBOLINE CZ II / PHENOLINE 305 & POSSIBLE TOUCH UP W/ CARBOLINE 191 / PHENOLINE 305	110.0
28	LI BAR SADDLES FOR PIPE WHIP RESTRAINTS REFERENCE DCA 20128	CARBOLINE CZ II / PHENOLINE 305	385.0
29	RICHMOND INSERTS IN REIT. REFERENCE AS-31 SECTION 20: SUBPARAGRAPH 2 & DCA 12, STA REV 1 which was INCOR INTO E.2 of AS-31	CARBOLINE CZ II / POSSIBLE IMPERIAL 115 OR 11 THEN TOPCOAT OF NUTEC 1201	2,258.0

# PROTECTIVE COATINGS EXEMPT LOG

ENTRY No	ITEM OR AREA	COATING SYSTEM	SQ. FT.
31	COATINGS APPLIED TO INTERIOR OF PIPE SUPPERS REF DCA 19050 INCORPORATED INTO R20205 A3-31	CARBOLINE CZ11/ PhenOLINE 305 TOPCOAT	200.0
32	COATINGS INADVERTENTLY APPLIED TO INTERIOR OF TURSE STEEL SUPPERS REF DCA 16 106	CARBOLINE CZ11/ PhenOLINE 305 TOPCOAT	9000.0
33	COATINGS ON TOP OF POLAR CRANE SUPPORT GIRDERS UNIT 1 BLDG. RE DCA 19707	CARBOLINE CZ11/ PhenOLINE 305 TOPCOAT	1,040.0
34	SUPPORT L'S FOR LIFELINES @ EL 1000'-4" & SUPPORT CLIPS FOR LIFELINES @ EL 253'-8" RE DCA 20170	CARBOLINE 191/ PhenOLINE 305 TOPCOAT	58.0
35	RE1 AREA 40 & 39, EMBEDDED PIPE UNITS PRIMED UNDER AS 30 REQUIREMENTS - RE DCA 20252 (UNIT 1)	CARBOLINE 191 PRIMER	3.0
36	WESTINGHOUSE EQUIPMENT MEETING THE CATEGORY 3 REQUIREMENTS AS REFERENCED IN WESTINGHOUSE POSITION LETTER RG1.54RD	UNKNOWN	200.0
37	UNIT 1 REACTOR BIDE ROTATING ACCESS TRAYLEY L57 ITS ASSOCIATED MECH EQUIPMENT.	KEELER & LONG 6548 PRIMER W/ #7475 TOPCOAT.	500.0
38	UNIT REACTOR BIDE POLAR CRANE CABLE DRUMS RE. NCR CB4 01494	CARBOLINE CZ11 PRIMOR / 305 TOPCOAT	288.0
39	CONTAINMENT ACCESS ROTATING PLATFORM HAND RAIS, SINR TREAD GRATING	KEELER & LONG 6548 PRIMER LIT #7475 TOPCOAT.	170.0
40	FACE OF CONNECTING IR'S ON EAST SIDE OF SOUTH END GIRDER ON UNIT 1 POLAR CRANE - RE. NCR CB4 01508	CARBOLINE 191 PRIMER / 305 TOPCOAT	5.0
41	RIS1 ROOM 153 CONCRETE COATINGS	IMPERIAL NUSÉC 115 / III/201 SYSTEM	3135
42	WESTINGHOUSE EQUIPMENT MEETING THE CATEGORY 2 REQUIREMENTS AS REFERENCED IN WESTINGHOUSE POSITION LETTER RG1.54 RD (UNIT 1)	UNKNOWN	3950

# PROTECTIVE COATINGS EXEMPT LOG

ENTRY NO	ITEM OR AREA	COATING SYSTEM	SQ. FT.
43	EXPOSED COATINGS ON THE EXCESS KILN/DOWD HEATERS AND COVER R'S AND ASSOCIATED MECH. EQUIP FOR THE CONTAINMENT SUMP DRAIN PUMPS. (ITEMS LISTED UNIT 1 ONLY) REF DLA#	CARBOLINE C211/305	100.0
44	PROTECTIVE COATINGS APPLIED TO NUTS, BELTS, AND SPODS THREADED END AND URGAS IN RBI	CARBOLINE C211 OR 191 PRIMER W/ 305 TOPCOAT	2950.0
45	CONTAINMENT ACCESS RADIATING PLATFORM (UPPER L) REF NCR 681-01381 OUT OF TOL THICKNESS COATINGS	KEPLER 2 LONG PRIMER 6548 W/ 1201 SERIES EPOXY ENAMEL (7A75 WHITE) TOPCOAT	2.50.0
46	CONTAINMENT ACCESS RADIATING PLATFORM (LOWER L) & MINOR REPAIR ON UPPER L. REF NCR C-84-01488 R 4	KEPLER 2 LONG PRIMER 6548 W/ 1201 SERIES EPOXY ENAMEL (7A75 WHITE) TOPCOAT	1650.0
47	RBI ACCESS LADDER @ ELEV MINIMUM FROM 259'-9" TO 100.3'-2" INCLUDING LADDS, LAGE, ATTACHS, & REPAIR TO LINER COATINGS. SEE DCA 20759	CARBOLINE C211 PRIMER OR 191 TOPCOAT W/ CARBOLINE 305	225.0
48	CONCRETE COATINGS INTERIOR TO ELEVATOR ENCLOSURE UNIT 1 RBI REF DLA 1836 R3 COLS UP	IMPERIAL MUEC 1201 TOPCOAT	2700.0
49	PROTECTIVE COATINGS ON STEEL JOISTERS INTERIOR OF ELEVATOR ENCLOSURE RBI REF DLA 1836 R3	CARBOLINE C211 PRIMER W/ Phenobline 305 TOPCOAT.	600.00
50	PROTECTIVE COATINGS INADVERTENTLY APPLIED TO EXPANSION JOINT MTL RBI.	UNKNOWN	125%

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 4

- a) Provide the basis for area figure in item 30 of CEL.

Response:

- a) A takeoff was made from design drawings to determine number of Richmond Inserts inside the containment building. The area on the exempt log represents the total area of all Richmond inserts.

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 6

- a) How much area is involved? Provide the basis for the area. Identify the NCR/DCA that places this item in the CEL.

Response:

- a) The information requested is not available. These areas are not on the exempt log.

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 7

- a) What is your method for incorporating updated manufacturer's recommendations into CPSES procedures?
- b) When were the recommendations in Imperial's January 16, 1983 letter incorporated into CPSES procedures?

Response:

- a) Information received from coatings manufacturers are incorporated into application procedures by issuance of a Document Change Notice or formal revision to the procedure.
- b) The only recommendation made on January 19, 1983, was to pay particular attention to application parameters outlined in the letter. CCP-40 was already in accordance with these application parameters.

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 10

- a) Our initial observations are that IR's do not record specific surface preparation tools that were used. Identify documents that show which specific tools were used.
- b) We understand that there was a time period during which there were no inspection or IR records for surface roughness. What was the time period involved? Identify documents which demonstrate acceptable substrate surface preparation of hand and power tool cleaned surfaces during this period.
- c) If you cannot provide the information for a & b above, provide engineering basis and test results which show that coatings in question will adhere to the substrate.
- d) If you cannot provide information in (c) above, provide the total surface area involved and the basis for these figures. Are these areas in the CEL? Identify the NCR/DCA that covers these items.
- e) Determine whether any updated coating manufacturer's independent DBA tests were performed which would provide an acceptance basis for these items.

Response:

- a) Inspection documents do not record specific preparation tools which were used.
- b) The time period involved is August, 1983 to approximately March 1984. All inspection reports during this time period verified proper surface preparation prior to coating application.
- c) N/A
- d) N/A
- e) N/A



TXX-4249 .

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 12

We see sufficient dissimilarities in the test data attached to your response to conclude that the test data do not apply to this allegation.

- a) What is the size of the total surface area having this coating system?
- b) Explain the basis for this total surface area.
- c) Are these areas entered in the coatings exemption log? Identify the NCR/DCA that covers these items.

Response:

In resolving this matter, it must be kept in mind that the 102 mil concrete coating thickness is merely a theoretical possibility and not fact. Accordingly, we believe the data previously submitted to be applicable and definitive.

- a&b) The information requested is not available.
- c) No, these items are not entered on the Coatings Exempt Log.

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 15

- a) What is the size of the total surface area having this coating system (Inorganic zinc over organic topcoat)?
- b) Explain the basis for this total surface area number.
- c) Are these areas entered in the coatings exemption log? Identify the NCR/DCA that covers these items.
- d) We have reviewed a Request for Information or Clarification (RFIC), dated 10/20/83 that authorizes the use of the inorganic zinc top over epoxy. We have also reviewed an earlier RFIC, dated 01/07/83 that does not permit zinc to be applied over epoxy. What is the engineering justification for this change in requirements?
- e) Has inorganic zinc actually been applied over epoxy in overlap areas? If so, identify the applicable IR's.

Response:

- a) The requested information will be provided at a later date.
- b) N/A
- c) No
- d) The referenced RFIC's were addressing degree of overlapping coating systems. In a repair area, there is not a well defined separation between topcoat, primer and substrate. Within the repair area, there is a "feathered" area which has inorganic zinc applied over topcoat.
- e) All primer repairs will probably contain areas where inorganic zinc was applied over epoxy. Inspection records of primer repair areas are available for review.

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 17

- a) Identify those IR's that document cases where defects due to foreign matter in the compressed air were detected and corrected.
- b) When was the defective air compressor for paint application replaced?

Response:

- a) Inspection reports are available for review.
- b) Replacement equipment for the air supply system was installed in September 1983.

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 18

From previous BNL inspections, we understand that the Comments section of the Backfit Program IR's could be used by QC inspectors to identify visual defects. Identify, if any, IR's that document visual defects during the Backfit Program.

Response:

We previously provided a copy of all Backfit Inspection Reports as part of our response to Section III.A.3 of the BNL Interim Report. (Refer to TXX-4225 dated July 16, 1984).

TXX-4249

August 10, 1984

QUESTIONS RELATIVE TO ALLEGATION NO. 19

- a) Provide list of Backfit Program coatings inspectors.
- b) Provide copy of indoctrination and training (I and T) records for these inspectors.
- c) Provide copy of training procedures.
- d) How many times were procedures 11.4-23/24 revised and when?
- e) Identify documentation of the I and T provided for each revision.

The above requested information should cover all levels of personnel involved in the Backfit Program, including quality control supervision and personnel who conducted training of inspectors.

Response:

- a&b) This information was provided in response to Section III.B.6 of BNL Interim Report. (Refer to TXX-4225 dated July 16, 1984).
- c) A copy of the training procedure is attached.
- d) 

<u>QI-QP-11.4-23</u>		<u>QI-QP-11.4-24</u>			
R-0	11/19/81	R-8	07/14/83	R-0	02/05/82
R-1	11/23/81	R-9	07/29/83	R-1	02/10/82
R-2	12/17/81	R-10	08/12/83	R-2	02/25/82
R-3	01/20/82	R-11	08/18/83	R-3	06/29/82
R-4	02/25/82	R-12	10/24/83	R-4	03/01/83
R-5	04/05/82	R-13	04/18/84	R-5	07/05/83
R-6	03/01/83			R-6	07/14/83
R-7	07/05/83			R-7	04/18/84
- e) Documentation of indoctrination and training of revisions after initial certification is not required or retained.