



Maintenance Painting Management System

CONDITION ANALYSIS

A Condition Analysis of the TECO – Polk Power Station was conducted to determine the condition of the various components of these areas, as of the survey date.

Four criteria were assessed or evaluated during the Condition Analysis:

Type and severity of **Environment**,

Corrosion, based on the degree of Corrosion per ASTM D-610/SSPC-VIS-2 and type of corrosion present.

Visibility (for high profile areas)

Scheduling **Priority** based on cost-effective painting practices.

In addition to the evaluation criteria, each "Section", or scope of painting work, was assigned a "Scope", to identify the type of work involved, along with a Difficulty factor (to indicate the relative difficulty of each scope) and the Painting Specification recommended for the work.

The following pages show the grading system used in the evaluation criteria, as well as definitions of the scopes of work, difficulty factors, and specifications.

A Condition Analysis - report has been generated for each individual "Section" detailing the results of the Condition Analysis. In addition, photographs are shown that are indicative of the reported conditions. These reports are located in a separate section of this book.

TECO – Polk Power Station

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PRIORITIES

1. **Advanced Corrosion** - Metal loss has or will soon occur
2. **Optimum** – Coatings are wearing, chalking or have low milage, minor corrosion or coating damage is occurring, minimal surface preparation with spot prime is adequate.
3. **Wearout** – Coating has worn through, uniform corrosion is occurring, full prime coat is necessary, delay could cause preparation upgrade.
4. **Substandard Coating** - Significant portion of coating is in poor condition, spot blasting may be appropriate, delays could cause a preparation upgrade.
5. **Localized corrosion or coating damage** – Majority of coating is in acceptable condition, spot repair may be necessary.
6. **Blast** – Full blasting appropriate, can delay without upgrade.
7. **Fair** - Minor coating wear, chalking, contamination (without damage) is occurring, no action necessary
8. **Design** - Coating is performing as designed and/or substrates are recently painted.
9. **Not Scheduled** - Out of service, scheduled for demolition, or otherwise excluded from program.

VISIBILITY

1. High Public Visibility Tank
2. High Public Visibility or Parade Route
3. Tank or large surface area
4. High Employee Traffic or Visibility
5. Moderate Traffic or Visibility
6. Low Traffic or Visibility

ENVIRONMENTS

<u>Rating</u>	<u>Code</u>	<u>Description</u>
1 Very Severe	AS	Acid Spills
	CA	Caustic Area
	CT	Cooling Tower
	EF	Effluent Vapors
	PF	Process Fumes
	SA	Salts Exposure
2 Severe	AA	Acid Area
	BR	Brine Area
	CF	Cooling Tower Fallout
	CH	Coal Handling
	SW	Wet, Sweating
	ET PS	Elevated Temperatures Process Spills
3 Moderate	GF	General Fallout
	GO	Grease and Oil Contamination
	PC	Product Contamination
	SF	Stack Fallout
4 Mild	IW	Indoor, Warm
	OS	Offsite
	TF	Tank Farm

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Scopes

BLK	Block, Brick, CMU, Fireproof ing
BUL	Bullet Tanks and horizontal vessels
CRT	Cone Roof Tank
CT	Cooling Tower area
ELEC	Electrical Transformers, Switchgear, Panel, etc.
EQUIP	Operating Equipment and associated items
FFAN	Fin Fan & associated supports & motors
FLT	Floating Roof Tank
FURN	Furnace, Heater & associated items
LDG	Loading Rack
MISC	Misc. small job or scope of work
PR	Piperack
PROC	Process area
PRS	Sleeper Piperack
SHP	Shop, Warehouse
SPH	Sphere Tank
STK	Stack
STR	Structure
TNK	Small Tank & associated items
TNKI	Painted surfaces on insulated tanks and drums
TWR	Tower, Silos, Reactors
VES	Vessels, drums, & associated items

Difficulty

1	-- 17%
2	-- 8 %
3	Typical
4	+ 8%
5	+ 17%

Exposure

I	Interior
E	Exterior
C	Covered
P	Partially covered