Cortec Corporation

• Established In 1977

• 10 Production Facilities

• ISO 17025 Certified Laboratories

• Professional Corrosion Engineering & Field Services (CEFS) can offer turnkey solutions
Corrosion Prevention Solutions

➢ AFIC was formed in 1982 and has been serving the kingdom’s O&G, Utilities and Petrochemical companies, in the protection of their assets, for over 30 years.

➢ Specialists & Leading turnkey provider of cathodic protection solutions, products and services.

➢ Highest Number of NACE Certified Engineers, available in Kingdom.

➢ Manufacturing & Service Facility covering 10,000 msq

**Mission**

AFIC’s mission is to provide customers with a diverse range of latest technological solutions and services for the Corrosion Prevention & Mitigation Industry
What Are VpCIs?

- **VpCI** = Vapor phase Corrosion Inhibitor
- Chemical description: an amine carboxylate
- Protects in **three phases**: vapor, liquid and interface of vapor & liquid
- Forms a protective mono-molecular film on the metal’s surface
- Inhibits the electrochemical reaction on the metal surface.
Cortec VpCl® Technology

- There is a growing industrial awareness about the added value of using suitable vapor phase corrosion inhibitors
- They are organic salts that possess enough vapor pressure to enable them to diffuse through sand and provide protective layer
VpCI Delivery Forms
Mitigation of Soil Side corrosion on Above storage tank bottom
• Effective control of soil-side corrosion on aboveground storage tank bottoms during the complete life cycle of the tank is key, from both operational and environmental perspective.

• CorroLogic™ material is a Vapor phase Corrosion Inhibitor (VpCI®) that acts to reduce soil-side corrosion by a combination of volatilization from the VpCI® media, vapor transport in the headspace between floor plates and the tank pad atmosphere, and adsorption onto surfaces in the space.

• It can be applied on CP protected and unprotected new or existing tanks, in-service or out of service. We also have design solutions for the tanks that have oily/bituminous sand and asphalt/concrete pad beneath the floors.
Preservation and protective solutions using Cortec VpCl
# Types of Equipment to be Preserved

## Static Equipment and Piping
- Vessels and columns
- Furnaces
- Boilers
- Shell-and-tube heat exchangers coolers, condensers
- Air-cooled heat exchangers
- Piping and fittings
- Valves and attachments
- Stuffing box packings
- Gaskets
- Relief valves
- Flares and flare lines
- Cooling water systems
- Fire-fighting systems

## Rotating Equipment
- Centrifugal pumps
- Reciprocating pumps
- Compressors and blowers
- Steam turbines
- Gas turbines
- Internal combustion (gas and diesel) engines
- Bearings/Gears/Couplings
## Types of Equipment to be Preserved

### CIVIL ENGINEERING ITEMS
- Storage tanks and spheres
- Stacks
- Structural steelwork
- Steel wire ropes
- External insulation
- Fireproofing
- Drainage system

### ELECTRICAL EQUIPMENT
- Electric motors
- Generators
- Transformers
- HV and LV switchgear
- Rectifiers and inverters
- Batteries

### EQUIPMENT INSTRUMENTATION
- Plant instrumentation
- Indoor instrumentation
Internal Preservation of Tanks using Cortec VpCI