Mutawa Corrosioneering:
BURRIED GAS PIPELINE ABRASION AND CORROSION PROTECTION USING SOLARTECH SYSTEM

Project Information	
Client	: Major Oil Company in U.A.E.
Location	: ICAD City, Abu Dhabi, U.A.E.
Equipment	: Undergroud Gas transfer Lines
Products	: SolarTech VE55, SolarSeal, SolarCoat
Year of application	: June 2009

Project Description:

Underground Gas Transfer Lines originally coated with a "Bitumastic" Tape Wrap System. During service the pipes move underground. That is an action caused by expansion and contraction of the pipe. This action causes damage to the Wrap System from abrasion and subsequently exposes the pipe to direct contact with the surrounding desert sand and corrosive chloride elements which if allowed to prevail, will cause the pipe to corrode.

Application took place in 4 stages:
1) Existing wrap system has been removed manually and is then grit-blasted to SA 2.5 with an anchor profile of 75 to 80 microns using Garnet B as a medium.
2) The pipe is immediately cleaned with use of 1st Grade Acetone and followed with a single coat of SolarSeal Resin Primer to a WFT of 250 - 300 microns. The primer coat of SolarSeal is then cured using natural UV light (sunlight).
3) Second coat of SolarSeal resin is applied and the SolarTech VE55 applied immediately as a "wet on wet" application.
4) Folowing a full cure, the carrier top film is removed and the whole system coated in a final top-coat of SolarCoat and cured.

Cured SolarTech system offers excellent abrasion resistance from pipe movement due to it's glass content.

SolarTech is manufactured by Corrotech Construction Chemicals, part of the MCT Group, Dubai, U.A.E.

Before

During repair

Pipe after the repair

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