

## CORROSERV (M) SDN BHD

## CASE HISTORY ~ CH0139

## COLD WATER INTAKE PIPELINE REHABILITATION

**THE CHALLENGE:** The internal of a 1.83m I.D., 500m length steel pipeline exhibits heavy barnacle and marine growth formation. The barnacles had penetrated the epoxy coating to attach to the substrata (steel surface), thus causing heavy and pitted corrosion. The original wall thickness of the pipe was reduced to almost 50% and replacement is inevitable.

**THE SOLUTION:** The entire internal area was subjected to manual scraping/hi-pressure washing to remove thick barnacles and marine growth. Followed by abrasive air blasting to remove rust scales and other contaminants. Corro-Dur<sup>TM</sup> 561 was used to patch all pitch all pitted areas and smoothen corroded portions including weldments. Then Corro-Dur<sup>TM</sup> 258 was applied on the entire area and final coating with CeRam-Kote 99 at a total DFT of 700 to 1200 microns.



Figure 1.0: External view of the 500-meter pipeline



Figure 2.0: Manual scrapping of barnacles and marine growth



Figure 3.0: Applied Corro-Dur™ 258 over blasted surfaces



Figure 4.0: Final Topcoat using CeRam-Kote 99

APPLIED SYSTEM: YEAR: LOCATION: LINING 2000 PRAI, PENANG

NO SEA TOO DEEP, NO JOB TOO TOUGH!