


Case History – Inverell ‘Standpipe’ Tank Repair

Month/Year Jan 03

Products **NMP 1720 Heavy-duty protective coating with Kevlar**

The Problem A small ‘standpipe’ tank at Delungra has begun to leak after many years of service. It was assumed that the internal pipe work had corroded away due to age, causing the loss of water.

The Solution A thorough inspection after cleaning by the dive team revealed all the pipe work to be in fair condition and therefore not the cause of the leakage. The concrete floor had no cracks, but the surface was rough and uneven, with several ‘bony’ areas diagnosed as the only possible cause of the leakage.

A batch of NMP epoxy was mixed and applied over the identified areas. There was an immediate reaction to this procedure, with the epoxy being drawn into the floor by the surrounding water pressure. This proved that the ‘bony’ concrete was porous over an extended area, and the cause of the external water loss. Permanent repairs were then conducted, using ‘modelling clay’ to initially seal the damaged areas, followed by the application of NMP 1720 epoxy.

Notes/Comments Following discussions with the client, it was revealed that the water supply feeding the tank had been changed in the last three years, to overcome a problem with ‘hardness’ caused by extremely alkaline water from the local bore. The ‘softer’ water from the alternative source was causing the accumulated calcium deposits within the tank to dissolve, and the previously sound concrete to become porous. A new concrete floor seems to be the only long-term solution to the problem, as follow-up inspections have revealed continued deterioration throughout the floor.