



The Northern Powerstation in South Australia underwent repairs to its concrete structures this year to extend their service life. Several sections of the site were protected with Dry-Treat 100N, a penetrating waterproofing sealer for concrete in marine environments. The material is manufactured by Dry-Treat (Australia) Pty Ltd, based in Sydney. The Northern Powerstation, located at Port Augusta, has a saltwater inlet/outlet channel. The concrete seawall and the deck concrete adjacent to this channel were treated with two coats of Dry-Treat 100N at a rate of 0.6L/m². Also various pits and chambers subject to contamination by waterborne chloride ions, were treated. The application was done by Spraymasta Civil. The application technique involved the use of a low-pressure high-volume spray pump, maximising the application rate and minimising labor costs. Dry-Treat 100N is 100% active alkoxy silane designed to give a uniform depth of penetration of more than 4mm. The material hydrolyses and bonds directly with the concrete lattice to form a hydrophobic zone which lets the concrete breathe while simultaneously forming a waterproofing barrier. According to the manufacturer, the material will reduce chloride ion ingress and the ongoing cost of concrete maintenance in a marine environment. The company warrants its performance for 25 years.