In the Shanghai Chemical Industrial Park, a France-based company, Sino-French Water, handles all water services. With recent improvements to China’s wastewater regulations, especially in industrial service areas, and a nationwide promotion of clean production, the company took strides to upgrade its infrastructure. Part of this scope included upgrading large concrete basins for emergency water services.

Sino-French decided to specify a lining system from Tnemec for one of its 35,000 sq. ft. emergency tanks. These basins require abrasion- and chemical-resistant linings to fight the corrosion caused by the contaminants in the wastewater. Tnemec’s distributor in China offered a tough, tightly cross-linked epoxy lining system capable of chemical containment and immersion service to help protect the concrete block from penetrating chemical corrosion.

All cast-in-place concrete surfaces in the tank were prepared in accordance with SSPC-SP13/NACE No. 6 Surface Preparation of Concrete by abrasive blasting before Series 218 MortarClad was troweled onto the surface. The epoxy-modified cementitious resurfacer, Series 218, was used to fill voids and bugholes and to create a level surface.

After Series 218 was applied, two coats of Series 61 Tneme-Liner were spray-applied at 10.0 mils (255 microns) dry film thickness (DFT). Built for chemical containment, wastewater treatment, and fuel and crude oil storage, Series 61, a cycloaliphatic amine epoxy lining, exhibits excellent corrosion and chemical resistance in immersion environments.

Sino-French Water Development Company is a successful partnership between SUEZ of France and NWS Holdings Limited of Hong Kong. It has been active in the China water industry since 1992 and currently serves a population exceeding 14 million inhabitants.