THE CHALLENGE: The largest aquarium in Australia is located in Canberra, home of the Australian parliament. The centerpiece attraction in this facility was the “shark encounter” in which visitors walk through a Plexiglas™ tunnel set inside the tank so that the fish are on the outside and visitors are in the inside of the exhibit.

After years of service there were several slow leaks inside the visitor tunnel which appeared to come from the fiber optic lighting fixtures exiting the “rocks” on the outside base of the tunnel. Draining the tank to fix these leaks was not an option and sealing from the outside using conventional sealers had not been successful.

THE SOLUTION: A TFT technician accompanied two aquarium divers into the 18 foot deep tank equipped with BIO-DUR 561, 100% solids epoxy coating and various abrasive pads and tools for cleaning around the fiber-optic terminals.

After scouring the immediate area BIO-DUR 561 was applied over and around the five terminals using spatulas. Adhesion to the “rock” and glass areas was strong and immediate. The high density of the BIO-DUR 561 and its paste viscosity assured neat working and absence of contamination within the tank. The one repair which could be seen by visitors through the tunnel window was camouflaged by sprinkled sand onto the uncured BIO-DUR 561 repair before leaving the tank.

The fishy residents of the aquarium remained in the tank throughout this repair and showed no more than mild curiosity during the work. One of the reasons BIO-DUR 561 was selected for this repair was its potable water approval in Australia which was strong indicator of its safety to the tank residents.

RESULT: BIO-DUR 561 has a long track record of successful underwater applications to ship hulls, piers, pipelines and similar structures. In this instance BIO-DUR 561 enabled a neat, professional underwater repair from the “pressure-side” of the leak with no disruption to the normal activities of the facility and with no discomfort to the animals.

For more information regarding this project, contact Jeff Longmore, TFT Technical Director Email: Jeff@thinfilmtech.net