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Galveston Bay SWRO Proposed

Canada-based EPCOR Utilities has announced that it has filed a discharge permit application as one of the first steps required for the state's approval to develop and operate a proposed seawater desalination plant near Bacliff, on the south shore of Galveston Bay. If approved by the Texas Commission on Environmental Quality (TCEQ), EPCOR said that it will initiate construction, and own and operate, the 26.5 MGD (100,300 m^3/d) SWRO facility.

The proposed project - the Bayshore Desalination Facility - will be located on the site of the former P.H. Robinson Power Generating Station, which was decommissioned in 2009 and demolished in 2012. The site is located on the San Leon Peninsula, approximately 30 miles (19km) southeast of Houston. A 2002 study, led by the Gulf Coast Water Authority (GCWA) and the power plant's previous owner, proposed the site for a possible 20 MGD SWRO plant, that was never built.

EPCOR will use the former power plant's existing 2.3 mile (3.7km) long intake and 2 mile (3.2km) long discharge channels, which were designed for a cooling water flow of over 1,680 MGD (6.3 million m^3/d).

In addition to the TCEQ-required information, EPCOR's discharge permit application includes two independent environmental studies conducted by Texas A&M University - Galveston (TAMUG). One study looked at localized effects on marine habitats near the intake and discharge channels, as well as the facility's effects bay wide. The second study focused on the discharge's effect on the bay's wildlife and concluded that the discharge's average 21,200 mg/L salinity falls within the optimal range for these species to thrive, supporting healthy growth and reproduction.

More details of the project, including TAMUG's environmental studies, and an aerial video of the project site and its existing intake and outfall channels, are available at bayshorewatertx.com.

EPCOR currently provides wholesale water supply and wastewater services to communities and industrial customers throughout the state. Michael Irlbeck, EPCOR's Texas-based business development director, told WDR that the company is currently in discussions with several interested offtakers and anticipates that the SWRO plant could be operational by 2031.