

## Third PTSP enhances water supply security

Admin | March 312, 2021



THE third Penang Twin Submarine Pipelines (PTSP) has been commissioned to deliver up to 315 million litres of treated water per day (MLD), from Seberang Perai to Penang island.

Penang Water Supply Corporation (PBAPP) chief executive officer Datuk Jaseni Maidinsa said that with the third PTSP in service, the combined total capacity of the three existing twin submarine pipelines is now 708 MLD.

The first PTSP has a maximum capacity of 143 MLD, while the second PTSP has a maximum capacity of 250 MLD.

“The work on the third PTSP project started on Oct 3, 2016. This project was commissioned as scheduled on Nov 19 last year.

“The total cost of the project was RM114.3 million, involving four packages of works.

“Package 1 involved laying 0.9km of a 1,800mm pipeline in the Macallum Area (Penang island); Package 2A (laying 0.4km of a 1,800mm pipeline in Butterworth); Package 2B (laying 0.4km of a 1,800mm pipeline in Butterworth); and Package 3 (laying 3.2km of twin 1,200mm submarine pipelines in the channel between Butterworth and the Macallum Area).

“The Package 1 was conducted between Oct 3, 2016 and Nov 2, 2017.

“Meanwhile, Package 2A and 2B both started on Nov 6, 2017. However, Package 2A was completed on July 26, 2019, while Package 2B was completed on Aug 7, 2019.

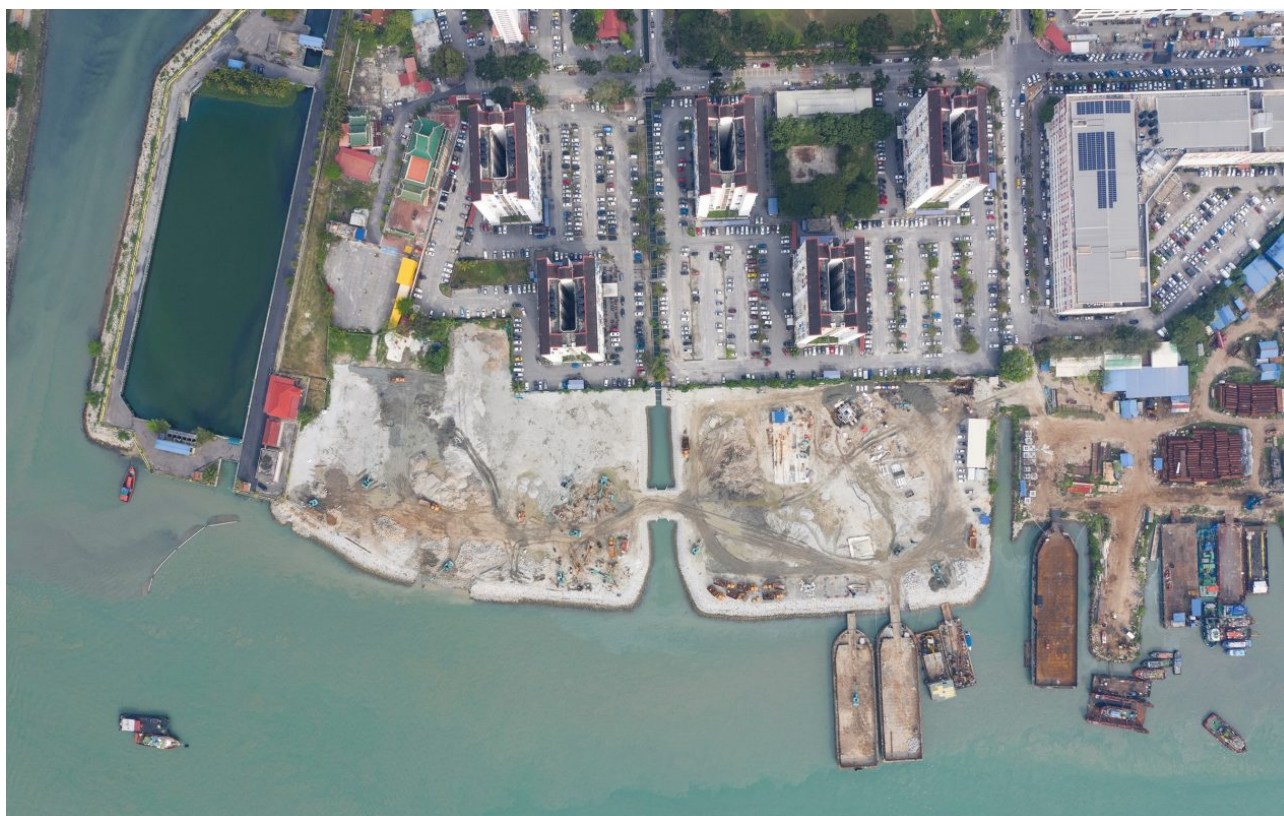
“The work on Package 3 was conducted from Sept 18, 2018 to Oct 3, 2020,” Jaseni said in a media statement today.

Jaseni said that the third PTSP was commissioned from Nov 19 last year as a key component of PBAPP's ongoing contingency plan to ensure sufficient water supply on Penang island in this age of climate change.

"This new set of twin submarine pipelines is delivering treated water from the Sungai Dua Water Treatment Plant (Sungai Dua WTP) in Seberang Perai to the Bukit Dumbar Reservoir and Pumping Station on Penang island.

"From Bukit Dumbar, the treated water is primarily pumped to the highly-populated and economically-significant southern areas of the island, including the Bayan Lepas Industrial Park.

"Treated water from Bukit Dumbar may be pumped to reach as far as Balik Pulau to support continuous good water supply, especially during prolonged dry seasons," he said.



*The third PTSP project at the Macallum site.*

Jaseni added that the third PTSP would enhance water supply security for all domestic and trade water consumers on Penang island.

"PBAPP can now pump more water safely from the Sungai Dua WTP to the island on a daily basis. The availability of more treated water helps to mitigate the risks of climate change and increasing water demand on the island.

"It will also help to mitigate raw water risks on Penang island during prolonged dry seasons.

"With more water available through the third PTSP, PBAPP has the option to further minimise drawdowns from the Air Itam Dam and the Teluk Bahang Dam daily during dry seasons.

"This will prolong the reserves of the two dams until the rain arrives to replenish the dams from September to December yearly," he said.

Jaseni added that the third PTSP and the expanded Mengkuang Dam (which was handed back to Penang on Oct 26 last year by the Ministry of Environment and Water) were the two newest key components of Penang's water supply infrastructure.

"Both are strategic components that will play significant roles in mitigating the risks of a water shortage in Penang until 2025," he said.

Chief Minister Chow Kon Yeow had described the third PTSP project as a forward-thinking water supply project.

"The third PTSP project will enhance water supply security for people living in the southern areas of Penang island, stretching from Bukit Dumbar to Teluk Kumbar. Some of the treated water will also reach Balik Pulau.

"It will benefit about 500,000 residents living in these areas," he was quoted as saying.

Chow added that thousands of trade water consumers would also benefit from the project.

Story by Christopher Tan  
Pix courtesy of PBAPP