

Third submarine pipeline project is forward thinking, says CM Chow

Admin

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WORK on the final phase of the third Penang Twin Submarine Pipeline (PTSP) project is progressing smoothly and is on track for completion by end-2020.

Chief Minister Chow Kon Yeow described the RM114.3 million project from Macallum in George Town to Jalan Pantai in Butterworth as a forward-thinking water supply project.

“This 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,” Chow said in his speech during a technical visit at the Macallum site today. “It will benefit about 500,000 residents living in these areas.

“Moreover, there are thousands of businesses which operate in these areas, including international high-tech manufacturing companies, SMIs and SMEs in Bayan Lepas and Batu Maung.

“As such, thousands of trade water consumers will also benefit from the project.

“We will definitely need to deliver more water to these areas in the future, in line with the projected population and socioeconomic growth.”



An aerial view of the rows of mild steel pipes at Macallum that would be laid across the channel for the 3rd Penang Submarine Pipeline project from George Town to Butterworth.

The first twin 900m submarine pipelines were laid in 1973 while the second twin 1,100m submarine pipelines were laid in 1996.

Chow, in praising the Penang Water Supply Corporation (PBAPP) for its forward-thinking approach in water supply engineering for the state, said one of the three key benefits of the third PTSP project was to support the state government's "no water rationing" policy in future.

When the project is completed, he said it would enable more efficient delivery of 315 million litres of treated water per day (MLD) from Seberang Perai to Penang island.

The project will deliver treated water from the Sungai Dua Water Treatment Plant in Seberang Perai to the Bukit Dumbar Pumping Station on Penang island. From Bukit Dumbar, the water will then be re-pumped to the southern areas of the island.

Furthermore, Chow said Penang's first twin submarine pipelines which were commissioned in 1973, are considered "old pipelines" that have almost reached end-of-life (EOL) after 46 years of service.

The pipe design life is 50 years.



Chow (third from right), Jaseni (fourth from right), Gooi (fifth from right) posing with other invited guests in front of the steel pipes, each of which has a diameter of 1,200mm and a pipe steel thickness of 14mm.

Chow added that the Masterplan Study for Potable Water Supply in Penang towards 2050 has projected that the demand for water in Penang would increase from 840 MLD in 2018 to 1,483 MLD by 2030, 1,696 MLD by 2040 and 1,884 MLD by 2050.

As envisaged in the Penang2030 vision for a family-focused green and smart state that inspires the nation, Chow said Penang must avoid a water supply crisis at all costs.

That's why he said the third PTSP project was also part of PBAPP's key performance index.

Chow said PBAPP has even looked to 2050 and beyond by working on a proposal to build the Sungai Perak Raw Water Transfer Scheme (SPRWTS).

"We don't want to be over dependent on the water supply from Sungai Muda.

"We've submitted a proposal to the ministry (Water, Land and Natural Resources Ministry) and is awaiting their reply for discussion on the best possible model.

"Our proposal is to look at the best option for the satisfaction of all states involved."

Penang is keen on seeking raw water from Sungai Perak while Perak is keen on selling treated water from Sungai Perak to Penang.

KATS may also look at a 'hybrid' option to incorporate both raw water and treated water to Penang and Perak's water supply infrastructure.



Jaseni (left) says PBAPP prepares ahead to avoid any water rationing in Penang in future. With him is Chow.

PBAPP chief executive officer Datuk Jaseni Maidinsa, who was also present, said SPRWTS would cost RM1.4 billion.

“We did a study on this project way back in 2009. We would like the water to start flowing in 2025 and this means we have to start work next year. We hope we can achieve this through the discussion (with the ministry, Perak government and other related authorities),” Jaseni said.

Jaseni said the third PTSP project was divided into three distinct phases with Package One and Package Two already completed in November 2017 and August this year (2019).

Package One involved the laying of 0.9km of 1,800mm land pipelines in the Macallum area at a cost of RM9.2 million while Package Two related to the laying of 0.8km of 1,800mm land pipelines in Butterworth at a cost of RM15.2 million.

Package Three, involving the laying of 3.2km of twin 1,200mm submarine pipeline across the channel separating the mainland from the island, is ongoing. The cost for this package is RM89.9 million.

Jaseni said for Package Three, works on excavating undersea trenches for the laying of submarine pipelines were 40% completed against 45% as scheduled, land reclamation was 70% completed against 50% as scheduled and shore protection was 50% completed against 25% as scheduled.

He added that future works would include laying of 3.2km of submarine pipelines in trenches (March to May 2020), cleaning and pressure testing of submarine pipelines (May to September 2020), back-filling work to entrench the submarine pipelines in place (June to September 2020), final connection of submarine pipelines to land pipelines (June to September 2020) and cathodic pipe protection (September 2020).

Also present at the technical visit were Pengkalan Kota assemblyman Daniel Gooi, MBPP secretary Datuk Addnan Mohd Razali, PDC senior general manager (Implementation) Datuk Yeoh Leng Huat, state Land and Mines Department director Akmar Omar, Northeast District officer Rosli Halim and Chief Minister Incorporated (CMI) deputy general manager S. Bharathi.

Others included state Drainage and Irrigation Department deputy director Ooi Soon Lee, Penang Department of Environment (DoE) director Marzuki Mokhtar, SMHB managing director Teo Chok Boo, SMHB associate director Tor Chin Cheong and Vizione managing director Datuk Ng Aun Hooi.

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