

Penang working on contingency plans to address future raw water issues



Penang Water Supply Corporation (PBAPP) chief executive officer Datuk Jaseni Maidinsa said PBAPP had commissioned a feasibility study on its proposed PWSI 2050 projects. - NSTP/DANIAL SAAD.

GEORGE TOWN: Penang has outlined three contingency plans under the 'Penang Water Supply Initiative 2050' (PWSI 2050) to mitigate the state's future raw water risks.

The three PWSI 2050 projects include the Penang Desalination Water Supply Scheme (PDWSS), which will see the construction of a sea water desalination facility in the southern area of Penang island, the Sungai Dua Water Treatment Plant and the Sungai Prai Water Supply Scheme (SPWSS).

Penang Water Supply Corporation (PBAPP) chief executive officer Datuk Jaseni Maidinsa said PBAPP had commissioned a feasibility study on its proposed PWSI 2050 projects.

"The study is expected to be completed at the end of this year or the latest by January 2021.

"Once completed, we will make the necessary recommendations to the Penang government.

"The PWSI 2050 is aimed at ensuring Penang will not face any water supply issues come January 2025 and thereafter," he told newsmen here today after PBA Holdings Bhd (PBAHB)'s 20th annual general meeting.

Present was Chief Minister Chow Kon Yeow, who is PBAHB chairman.

Elaborating, Jaseni said phase one of the PDWSS would see the construction of a sea water desalination facility in the southern area of Penang island, to address the increasing water supply needs in Balik Pulau and the surrounding areas, as well as for the Penang South Reclamation (PSR) project towards 2030.

"Phase one is scheduled for commissioning in December 2024.

"Subsequent phases may be implemented until 2050 since Penang is surrounded by sea, with theoretically unlimited access to sea water.

"With the three man-made islands to be created under the PSR, we expect more development to take place and we need to cater for that," he added.

On the Sungai Dua Water Treatment Plant, Jaseni said the project would involve the construction of a new 114 million litres per day (MLD) water treatment module in the Sungai Dua water treatment plant, the largest water treatment plant in the country.

He added that it would allow PBAPP to produce more treated water to meet water supply needs in Penang until the Sungai Perak Raw Water Transfer Scheme (SPRWTS) comes online.

As for the SPWSS, Jaseni said it is aimed at tapping Sungai Prai, the last big river in Penang, as an additional raw water resource for the state.

"Previous engineering studies have indicated that raw water from this river may not be safely treated using conventional water treatment technology.

"As such, the SPWSS will explore the possibility of employing alternative water treatment technologies to 'treat' the raw water properly for human consumption," he added.

Jaseni said the contingency plans were necessary due to three key factors, namely climate change which had altered rainfall patterns in the state.

He noted that significantly less rainfall last year had depleted the effective capacities of the Air Itam Dam and the Teluk Bahang Dam, thereby endangering water supply security in Penang.

"Also, it had been projected that Sungai Muda may only be able to meet Penang and Kedah's combined raw water needs until 2025.

"Moreover, the threat of logging in Ulu Muda, the water catchment area for Sungai Muda in Kedah, has re-emerged this year.

"The SPRWTS has also yet to be implemented by the federal government. To date, direct talks with Perak have reached a stalemate, with Penang willing to buy raw water but Perak wishes to only sell treated water.

"And based on the 2009 projections, the SPRWTS will take seven years to complete and commission. If the project is implemented from 2021, it may be operational from 2027," he said, adding that Penang may face a raw water shortage by 2025.