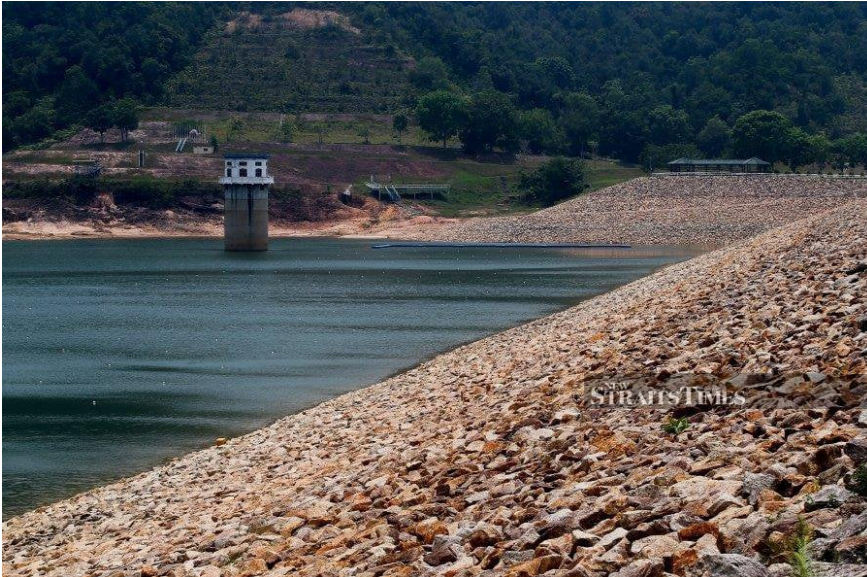


May 19, 2023

EMD is strategic drought reserve dam, back-up when Sg Muda levels run low - PBAPP



The Expanded Mengkuang Dam (EMD) is a "strategic drought reserve dam" that supports the Sungai Dua WTP and not a "daily dam" like the Air Itam Dam or Teluk Bahang Dam.- NSTP/MIKAIL ONG

GEORGE TOWN: The Expanded Mengkuang Dam (EMD) is a "strategic drought reserve dam" that supports the Sungai Dua Water Treatment Plant (WTP) and not a "daily dam" like the Air Itam Dam or Teluk Bahang Dam.

Penang Water Supply Corporation (PBAPP) chief executive officer K. Pathmanathan said he PBAPP would draw down water from the EMD only when it cannot abstract 1,254 MLD of water from Sungai Muda.

He said in March, PBAPP abstracted an average of 1,254 MLD (million litres per day) of water from Sungai Muda to produce 1,028 MLD from the Sungai Dua WTP.

"As such, the EMD is meant to serve the Sungai Dua WTP as a 'back-up' raw water resource when Sungai Muda levels run low.

"PBAPP has been drawing down water from the EMD (for use in the Sungai Dua WTP) during emergency scenarios such as the May 14 Sungai Muda river level incident," he said today.

Damage to the Sungai Muda barrage gate in Kedah last Sunday resulted in a sudden drop in water level at Sungai Muda, which affected more than 600,000 consumers all over Penang, as well as Kuala Muda, Kulim and Baling in Kedah.

Pathmanatham said there were two key physical limitations for the use of the EMD as a "back-up" raw water resource, namely:

* this dam's maximum drawdown capacity is 300 million litres per day (MLD). PBAPP is presently abstracting an average of 1,254 MLD of water per day from Sungai Muda to support 100 per cent treated water production at the Sungai Dua WTP. As such, the EMD, by itself, can only support about 23.9 per cent of the full treated water production at the Sungai Dua WTP; and

* the raw water from the EMD can only be channeled to the Sungai Dua WTP. This raw water cannot be pumped to any other WTP or dam in the state. So, the EMD cannot serve as a "back-up" raw water resource for any other WTP or dam.

Bagan member of parliament and Air Putih state assemblyman Lim Guan Eng recently said there was an urgent need for PBAPP to improve on crisis management and contingency planning to overcome sudden disruption in water supply.

He said the recent breakdown in water supply in many parts of Penang island had caused misery to hundreds of thousands of consumers. This was the third time that consumers in Penang faced sudden water cuts over the last year.

He had said the cause of the latest round of water supply cuts was due to PBAPP's inability to source and treat water from Sungai Muda, which supplied 80 per cent of Penang's water needs.

"Whether or not Sungai Muda's river water dried up through an accident, near the barrage on the Kedah side of the river, is still to be determined.

"What about our strategic water reserve of the Mengkuang Dam with its capacity of 86,400 million litres of water? The expanded Mengkuang Dam began construction in 2011 after the then state government surrendered PBAPP's assets in exchange for a federal government grant.

"The grant expanded the Mengkuang dam by more than three times its size and also constructed a water pipe transferring 300 million litres a day from Mengkuang Dam to the Sungai Dua WTP. Both were duly completed by 2017.

"I have said that even if there is no rain in Penang for a year, the expanded Mengkuang Dam will cover Penang's water needs (the 20 per cent of water demand sourced in Penang)," Lim was quoted as saying.

Pathmanathan said the EMD was built to exclusively support treated water production at one WTP, the Sungai Dua WTP. The Sungai Dua WTP produces more than 80 per cent of the treated water that PBAPP supplies in Seberang Prai and the Southwest district of Penang island daily.

The service area of the Sungai Dua WTP encompasses about 453,954 residential and business premises in Seberang Prai Utara (SPU), Seberang Prai Tengah (SPT) Seberang Prai Selatan (SPS) and the southwest district of Penang island.

There were 676,857 water consumers recorded in Penang in 2022. Other than the 453,954 water consumers in the service area of the Sungai Dua WTP, there are 222,903 other water consumers by three dams and eight WTPs.

"PBAPP manages all of these dams and WTPs to specifically meet the water supply needs of water consumers in specific areas. Every operating dam and WTP in Penang has a role to play to sustain 100 per cent urban and 99.8 per cent rural water supply coverage," he said.