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Expanded Mengkuang Dam a reserve solely for Sg Dua plant: PBAPP

It cannot function as backup for any others, says CEO



GEORGE TOWN – The Penang Water Supply Corp (PBAPP) today explained that the Expanded Mengkuang Dam (EMD) in Bukit Mertajam near here is a strategic drought reserve dam that supports only the Sg Dua water treatment plant.

PBAPP chief K. Pathmanathan said EMD is not a “daily dam” like the Air Itam Dam or Teluk Bahang Dam, and it also does not release raw water when there is enough water for abstraction from Sg Muda to fully support water treatment at the Sg Dua plant.

“Last March, PBAPP abstracted an average of 1,254 million ℓ per day (MLD) of water from Sg Muda to produce 1,028 MLD from the Sg Dua plant and PBAPP will release water from EMD only when it cannot abstract 1,254 MLD of water from Sg Muda.

“Therefore, EMD acts as a ‘backup’ source of raw water to the Sg Dua plant when the level of Sg Muda gets lower and PBAPP has also released water from EMD (for use at the Sg Dua plant) during emergency scenarios such as the Sg Muda water-level incident on May 14,” he said in a statement today.

He said a main physical limitation for the use of EMD as a backup source of raw water is its maximum release capacity of 300 MLD, which means PBAPP currently abstracts an average of 1,254 MLD of water from Sg Muda to fully support water treatment at the Sg Dua plant.

Pathmanathan said EMD by itself could only support about 23.9% of the production of fully treated water at the Sg Dua plant and raw water from EMD could also only be channelled to the Sg Dua plant.

He said the raw water cannot be pumped to any other treatment plant or dam in Penang and therefore EMD cannot function as a backup source of raw water for any other plant or dam.

“EMD was built to support the production of treated water exclusively for only one treatment plant, which is the Sg Dua plant, because it produces more than 80% of the treated water supplied by PBAPP in the Seberang Prai area and the South West district every day – the Sg Dua plant’s service area covers approximately 453,954 residential and business premises,” he said.

He said the total number of consumers in Penang last year was 676,857 and the remaining 222,903 water users were accommodated by the Air Itam, Bukit Pancur, and Teluk Bahang dams, as well as eight other treatment plants.

“In conclusion, the maximum effective capacity of EMD is 86,400 MLD but PBAPP can only release 300 MLD until the federal government completes the Mengkuang Dam Expansion Project (MDEP) to increase the release capacity to 1,000 MLD,” he said.

According to him, MDEP was started in 2011 but is yet to be completed and due to high demand this year, water supply for all users in Penang can only be maintained at 100% for 24 hours a week, if all four dams including EMD and nine treatment plants work optimally.

He said PBAPP is working hard to ensure that the shrinking reserves of the Air Itam and Teluk Bahang dams do not dry up until the rains arrive this September, but all users must reduce their water consumption immediately. – Bernama