

26-7-2024

Penang implements crisis management plan due to water supply issues



GEORGE TOWN: Abnormally low rainfall is causing water supply issues that are affecting about 7,400 water consumers on Penang island.

Penang Water Supply Corporation (PBAPP) said low rainfall in the water catchment areas (WCAs) of the Penang Waterfall in the northeast district and Sungai Pinang Water Treatment Plant (WTP), which is the nearest to the Titi Kerawang intake in the southwest district, have reduced the water supply available from these "traditional" raw water resources.

PBAPP chief executive officer K. Pathmanathan said data showed the Penang Waterfall only received 100.5mm of rainfall this month while Sungai Pinang WTP, 54mm.

"As a result, treated water output from the Waterfall Water Treatment Plant (WTP) has dropped by about 42.9 per cent from 14 million litres per day (MLD) to 8 MLD.

"Meanwhile, the treated water output from the Sungai Pinang WTP (which is dependent on the Titi Kerawang Intake) has also dropped by 33.33 per cent, from 7.2 MLD to 4.8 MLD.

"As such, there is a resulting shortfall in water supplied to George Town, Mount Erskine, Air Itam, Balik Pulau, Lebuhraya Thean Teik, Pulau Betong, Tanjung Bungah and Bayan Lepas," he said today.

Under normal circumstances, according to Pathmanathan, PBAPP will make up for this shortfall by diverting water from other WTPs to the affected areas.

However, due to the 2024 El Niño phenomenon, PBAPP has to also manage the issues related to the low effective capacities of dams and the river level of Sungai Muda at the Lahar Tiang Intake in Seberang Prai.

As at yesterday, the effective capacities of the Air Itam Dam and Teluk Bahang Dam were 42.3 per cent and 32.2 per cent respectively.

The former only received 48mm of rainfall while the latter 39mm.

Pathmanathan said PBAPP was defending the reserves of the Air Itam Dam under its Air Itam Dam Action Plan 2024 (AIDAP 2024).

He said PBAPP was also carefully managing water supply in the service areas of the Teluk Bahang Dam and Batu Ferringhi WTP (Teluk Bahang, Batu Ferringhi and areas in Tanjung Bungah and Tanjung Tokong).

Meanwhile, Pathmanathan said the effective capacity of the Muda Dam (in Kedah) had reportedly plummeted to 9.9 per cent yesterday.

"Fortunately, the effective capacity of the Beris Dam (Kedah) is at 60.2 per cent and Kedah is releasing water into Sungai Muda.

"However, the river level at PBAPP's Lahar Tiang Intake has dipped below the '2.0m safe level' for 15 consecutive days since July 11.

"Accordingly, PBAPP is drawing down on the reserves of the Expanded Mengkuang Dam (EMD) daily to supplement raw water abstraction from Sungai Muda.

"As at yesterday, the effective capacity of the EMD is 'healthy', at 88.4 per cent," he added, noting that a contributing factor to the low river level at Lahar Tiang was raw water abstraction for irrigation purposes at the Bumbung Lima Department of Irrigation and Drainage intake upstream.

He said PBAPP was working with the relevant authorities to minimise irrigation abstraction so as not to jeopardise water supply operations in the state.

"PBAPP must abstract sufficient raw water from Sungai Muda (and draw down water from the EMD) to sustain optimal water production operations at the Sungai Dua WTP, Penang's most important WTP.

"Treated water from the Sungai Dua WTP is supplied to 465,000 water consumers in Seberang Prai and the southwest district on Penang island," he said.

Elaborating, Pathmanathan said September usually marks the beginning of a wet season in Penang and the northern region.

He said, accordingly, PBAPP was implementing phase one of its Crisis Management Plan to ensure water supply sufficiency until September.

Actions being undertaken include:

- * Optimising water production at the Batu Ferringhi WTP and Guillemard WTP without overly compromising the effective capacity of the Teluk Bahang Dam. This action may allow PBAPP to deliver as much treated water into the service areas of the Waterfall and Sungai Pinang WTPs as possible;
- * Stepping up production of treated water at the Air Itam WTP without overly compromising the effective capacity of the Air Itam Dam. This action will reduce Air Itam's dependency on treated water from Sungai Dua which may then be diverted to the peripheral service area of the Waterfall WTP;
- * Controlling valves and pumping operations to deliver as much treated water as possible into the service areas of the Waterfall WTP and Sungai Pinang WTP stations to make up for the shortfalls;
- * Deployment of water tankers and static water tanks to the affected areas to provide water during high demand periods;
- * Controlling valves and pumping operations during off-peak hours on weekends to optimise the refilling of three key reservoirs at Bukit Dumbar, Bukit Gedung and Teluk Kumbar. This action should sustain continuous good water supply in the southwest district on Penang island during peak hours on working days when water demand is high in the industrial areas;
- * Liaising with Badan Kawal Selia Air (BKSA) Penang daily to manage irrigation water abstractions from Sungai Muda. This action is necessary to avoid issues with PBAPP's water abstraction for public water supply in Penang at Lahar Tiang; and
- * Communicating with BKSA to request for cloud seeding operation to be carried out by the National Disaster Management Agency (NADMA) and Royal Malaysian Air Force (RMAF).

Pathmanathan said the present water supply scenario was causing some temporary water supply issues in Penang.

"The implementation of this crisis management plan may result in some additional inconveniences.

"As such, PBAPP seeks the kind understanding, patience and support of Penang water consumers until the rains arrive in September. We apologise for all inconveniences caused but we have to take action to avoid a water crisis in Penang," he noted.

It was recently reported that PBAPP was drawing water from the EMD in Seberang Prai to maintain good water supply services throughout the state.

This followed a dip in the [Sungai Muda water level](#) (Penang) that had plummeted below the 2m safe level.