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Media Release

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PENANG WATER SUPPLY ALERT: PBAPP IMPLEMENTING PHASE 1 OF ITS CRISIS MANAGEMENT PLAN

- **Low rainfall causing water supply issues in some areas on Penang Island.**
- **No. of consumers affected: 7,400**

PENANG, Friday, 26.7.2024: Abnormally low rainfall is causing water supply issues that are affecting about 7,400 water consumers on Penang Island.

Penang Waterfall and Titi Kerawang

Low rainfall in the water catchment areas (WCAs) of the Penang Waterfall in Daerah Timur Laut (DTL) and Sungai Pinang Water Treatment Plant (WTP), which is the nearest to Titi Kerawang intake in Daerah Barat Daya (DBD) have reduced the water available from these “traditional” raw water resources.

Recorded rainfall data in the WCAs for the month of July 2024 are as follows:

Water catchment area (WCA)		July 2024 rainfall (mm)
a.	Penang Waterfall	100.5
b.	Sungai Pinang WTP	54.0

As a result, treated water output from the Waterfall Water Treatment Plant (WTP) has dropped by about 42.9%, 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%, from 7.2 MLD to 4.8 MLD.

There is a resulting shortfall in water supplied to the following neighbourhoods:

1.	George Town	5.	Mount Erskine
2.	Air Itam	6.	Balik Pulau
3.	Lebuhraya Thean Teik	7.	Pulau Betong
4.	Tanjung Bungah	8.	Bayan Lepas

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

Air Itam Dam and Teluk Bahang Dam

As at 25.7.2024, the effective capacities of the Air Itam Dam and Teluk Bahang Dam are as follows:

Dams		Effective capacity 25.7.2024 (%)	July 2024 rainfall (mm)
a.	Air Itam Dam	42.3%	48
b.	Teluk Bahang Dam	32.2%	39

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

Sungai Muda

The effective capacity of the Muda Dam (in Kedah) has reportedly plummeted to 9.9% on 25.7.2024. Fortunately, the effective capacity of the Beris Dam (Kedah) is at 60.2% 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 11.7.2024. 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 25.7.2024, the effective capacity of the EMD is "healthy", at 88.4%.

A contributing factor to the low river level at Lahar Tiang is raw water abstraction for irrigation purposes at the Bumbung Lima JPS (Department of Irrigation and Drainage) intake upstream. PBAPP is working with BKSA/JPS to minimise irrigation abstraction so as to not jeopardise water supply operations in the State of Penang.

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 Perai and DBD on Penang Island.

PBAPP's Phase 1 Crisis Management Plan

September usually marks the beginning of a wet season in Penang and the Northern region. Accordingly, PBAPP is implementing Phase 1 of its Crisis Management Plan to ensure water supply sufficiency until September.

Actions being undertaken include:

1. 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;
2. 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;
3. 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 to make up for the shortfalls;
4. Deployment of water tankers and static water tanks to the affected areas to provide water during high demand periods;
5. Controlling valves and pumping operations during off-peak hours on weekends to optimise the refilling of 3 key reservoirs at Bukit Dumbar, Bukit Gedung and Teluk Kumbar. This action should sustain continuous good water supply in DBD on Penang Island during peak hours on working days when water demand is high in the industrial areas.
6. 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.
7. Communicating with BKSA to request for cloud seeding operation to be carried out by National Disaster Management Agency (NADMA) and Royal Malaysian Air Force (RMAF).

The present water supply scenario is causing some temporary water supply issues in Penang. The implementation of this crisis management plan may result in some additional inconveniences.



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.

Thank You.

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