

February 2, 2024

PBAPP aims to increase Air Itam dam's water level to 50 pct by the end of April



The water supply from the Air Itam Dam will only last for less than a month if the current dry season persists. The effective capacity of the Air Itam Dam was at 36.6 per cent, Teluk Bahang Dam was at 87.8 per cent and Mengkuang Dam was at 90 per cent. -NSTP/MIKAIL ONG

GEORGE TOWN: The Penang Water Supply Corporation (PBAPP) is finalising the Air Itam Dam Action Plan 2024 (AIDAP 2024) proposal to the state government that may potentially increase the effective capacity of the dam from 34.6 per cent today to 50 per cent by the end of April.

PBAPP chief executive officer K. Pathmanathan said the concept was to drawdown less water from the dam than the average inflow of raw water into the dam daily. He said the Air Itam dam received about 15 million litres of water per day (MLD) from three intakes namely Balik Pulau Intake, Side Stream Intake and Sungai Pinang West Intake.

"PBAPP plans to reduce the daily drawdown from the Air Itam dam to the Air Itam Water Treatment Plant (WTP) by 75 per cent, from 44 MLD to 11 MLD.

"As such, there will be an average daily surplus that will be 'deposited' into the Air Itam dam.

"Over a three-month or 90-day period, the accumulated deposits will potentially increase the effective capacity of the dam by about 15 per cent," he said today.

Yesterday, the Penang government said it would take several measures to control the further dwindling of the Air Itam dam's water level. As of 11am yesterday, the dam's water level further dropped to 35.4 per cent from 36.6 per cent on Wednesday. The water supply from the Air Itam dam would only last for less than a month if the current dry season persists.

The Air Itam WTP produces 50 MLD of treated water to meet the needs of about 30,000 consumers in its service area. It is presently drawing 44 MLD of raw water from the Air Itam dam as well as six MLD from Main's Intake and Tat's Intake.

Pathmanathan said, hence, the success of the AIDAP 2024 would be dependent on three key factors:

I sustainability of six MLD raw water intake from Main's Intake and Tat's Intake;

I 33 MLD treated water support from the Sungai Dua WTP in Seberang Prai which will be re-pumped at the Padang Brown pumping station into the service area of the Air Itam WTP. This will make up for the 33 MLD shortfall in drawdown from the Air Itam dam; and

I cloud seeding operations to induce sufficient rainfall in the water catchment areas of the five intakes involved: Balik Pulau Intake, Side Stream Intake, Sungai Pinang West Intake, Main's Intake and Tat's Intake.

"PBAPP will check and verify all facts and figures as well as reconfirm the engineering viability of the AIDAP 2024 proposal before presenting it to the Penang government for approval," he added. The effective capacity of the Air Itam dam is at 34.6 per cent today.

This "effective capacity" is the capacity that matters for water supply operations.

There is a remaining 20 per cent of water "below" this effective capacity.

However, it has been confirmed last night that this "dead storage" cannot be used due to heavy siltation because the Air Itam dam has been in service for 62 years.